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Specializing in fasteners, tools and equipment for the construction trades



## COMPANY PHILOSOPHY



#### Dear patrons and friends,

his catalog was designed to be the most complete and informative fastener and tool reference guide in the construction industry. Since our inception in 1984 our hallmark has been personalized service and quality products at competitive prices. Exceptional service, combined with our personable and knowledgeable sales staff, has made FSI a leader in the fastener industry. FSI is a national company with customers in all fifty states, Canada and over-seas.

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I look forward to the mutual benefits of new partnerships as well as continued relationships with our customers, our friends. As president of FSI I am personally involved in the everyday operation and I guarantee that FSI conducts business the way business should be conducted – the customer is number one and always will be number one. As always, my staff and I look forward to serving you, our valued customer.

Your business partner,

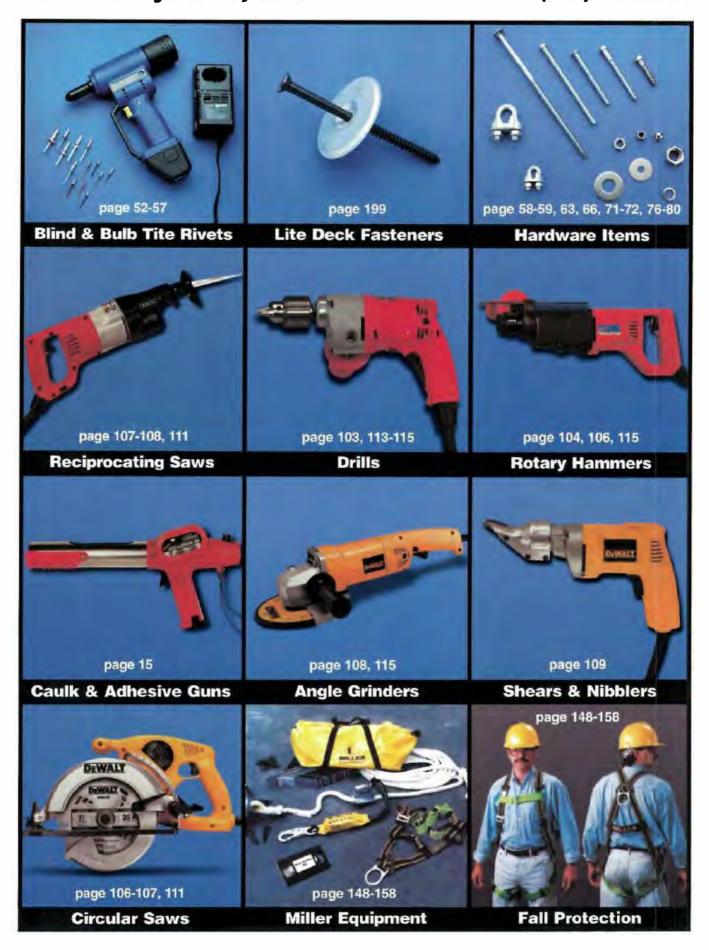
John J. Sipple

President











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STUDS, THREADED	



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S-T

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### List of Manufacturers Whose Products We Stock

Albion Engineering Co.

American Allsafe Co.

American Saw & Mfg. Co.

Atlas Bolt & Screw Co.

Band-It-Idex, Inc.

Camcar Division of Textron, Inc.

Celus Fasteners

Construction Fasteners, Inc.

Dalloz Fall Protection

Desa International

Deuer Mfg., Inc.

**Dewait Power Tools** 

**ES Products** 

Eagle Mfg. Co.

Elco Textron, Inc.

Firestone Building Products Co.

Flexible Products Co.

Geocel Corp.

Gesipa Fasteners U.S.A., Inc.

Gulf States Specialties, Inc.

Gunnebo Fasteners, LLC

Hitachi Koki U.S.A., Ltd.

Humphrey's Textile Products

ITM – International Tool Mfg. Corp.

ITW Buildex

Kett Tool Co.

Kidde Safety Co.

MFM Building Products Corp.

Metabo Corporation

Michigan Ladder Co.

Mid-State Mfg. Corp.

Milwaukee Electric Tool Corp.

M.K. Morse Co.

NAC Construction Equipment

Olympic Manufacturing Group, Inc.

Pecora Corp.

Poly-America, Inc.

Powers/Rawl Fastening, Inc.

Pyramex Safety Products

Red Devil, Inc.

Remington

Reynolds Fasteners, Inc.

SFS Stadler, Inc.

Schuller Int'l., Inc.

Simplex Nails, Inc.

Star Stainless Screw Co.

Swan Secure Products, Inc.

Tamperproof Screw Co.

Tru-fast Corp.

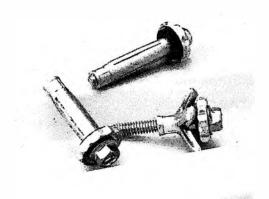
U.S. Anchor Corp.

Venture Tape Corp.

Watson Metal Products Corp.

Wiss Snips

#### Fab-Lok® fasteners maintain panel integrity in high-stress environments



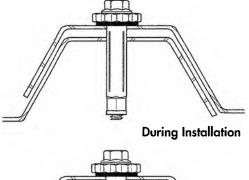
Vibration, either from inside or outside a building, can make ordinary fasteners loosen and back out. Fab-Lok\* fasteners are a unique combination of a slotted aluminum sleeve and fastener with the simplicity and strength benefits of both elements.

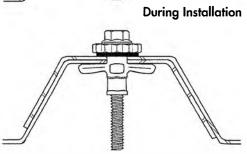
#### **F**EATURES

- Hex washer head machine screw assembled to a slotted aluminum sleeve and EPDM sealing washer
- Carbon steel or stainless steel screws
- Installs with power drive equipped with Fab-Lok® holding sleeve
- Also available in TORX PLUS® truss head

#### BENEFITS

- Easy and speedy installation
- Resists loosening caused by contraction and expansion or external or internal vibrations
- After tightening, the clamping tines remain secure even if the screw is removed



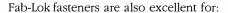


After Installation

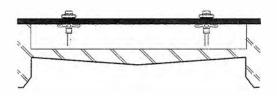
#### **APPLICATIONS**

Fab-Lok fasteners are recommended for any metal-clad building:

- where heavy internal movement occurs from operating machinery
- where excessive external movement occurs from high winds, jet engines, etc.



- repairing separated panels
- blind hole applications (e.g., attaching insulated panels)



LARGEST FAB-LOK DISTRIBUTOR IN THE U.S.A.

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### **FAB-LOK Performance**

#### **Features:**

Pull-out tests were performed on a Model L Dillon Dynamometer. FAB-LOK fasteners were installed in single sheet and two sheets of metal and pulled over the tines of the FAB-LOK to determine holding values.

Information provided herein is based upon tests believed to be reliable. Inasmuch as Fabco Fastening Systems has no control over the exact manner in which others may use this information, it does not guarantee the results to be obtained. Nor does the Company make any express or implied warranty of merchantability, or fitness for a particular purpose concerning the effects or results of such use.

#### FABCO® FASTENING SYSTEMS

#### Fatigue Tests

Two thicknesses of 26 gage metal fastened with FAB-LOK and tested on 5000 lb. capacity machine at 1500 cycles per minute, sustained 1,776,500 cycles when failure of sheets occurred. Fastener did not fall.

FAB-LOK, fastening 1/8" aluminum plate to 3/16" steel of a railroad freight car, held without failure when the car was subjected to jarring vibration by a Hewitt-Robins Car Shaker at 900 cycles per minute for ten minutes.

FAB-LOK Type	FAC	FAS	FAB-LOK Type	FAS	FAB-LOK Type	H₂O Pressure	Length of Test	Result
Average Shear	1885 lbs.	2400 lbs.	Maximum Residual	900 lbs. 860 lbs.	FAC-10-4	100 psi	5 Days	No Leaks

Failure

Lbs.

Fallure

Test conducted with two 3/16" hardened steel plates moving at

Sheet Material	Sheet Thickness	*Fallure Lbs.	*Type of Fallure		
	24 ga.	833	Sheet Split		
Steel	20 ga. 858		Sheet Split		
	18 ga.	1050	Sheet Split		
	16 ga.	1293	Sheet Split	•	
·	14 ga.	1400	Fastener Broke	f	
Failurevalues are averages of a series of tests on Type FAC.					

			Opin		
Steel	20 ga.	1345	Sheet Bent, Fastener Tines Broke		
Aluminum	.032"	915	Sheet Split		
*Double sheet tests are averages of a series of tests on Type					

Sheet

Thickness

26 qa

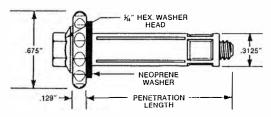
Material

Torque Tests

Sheet Material	FAB-LOK FAS-10-4	#14 Sheet Metal Screw		
Strip Test in .032" Aluminum	75 inch-lbs.*	65 inch-lbs.		
Strip Test in 26 ga. Steel	75 inch-lbs.*	45 Inch-lbs.		
Strip Test in 24 ga. Steel	75 inch-lbs.*	55 Inch-lbs.		

<sup>\*</sup>FAB-LOK, even when stripped, retains a residual clamp-up and remains effective. Sheet metal screws are loose when

### **FAB-LOK** Data



■ Airplane Hangers ■ Steel Mills ■ Warehouses ■ Power Plants ■ Factory "clean rooms" ■ Gymnasium Roofs ■ Manufacturing Plants ■ Pent House Siding, Screening ■ Covered Conveyor Systems ■ Heavy Crane Track Covers ■ High-Rise Apartments & Offices ■ Carports ■ Soffits & Marquees ■ Store Fronts & Fascia ■ Pre-engineered Metal Buildings ■ Covered Walkways ■ Walk-in Coolers ■ Pierside Buildings ■ Steam Generator Covers ■ Cooling Towers

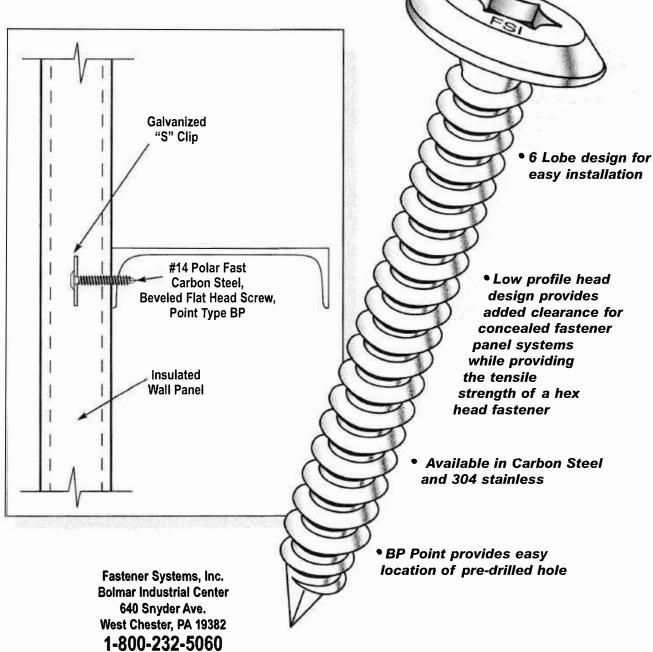
All Carbon and Stainless Steel Components are Cadmium Plated.

Part Number	Screw Material	Rivet/Sieeve Material	Grip* Range	Penetration Length
FAS-10-4	1038 Carbon Steel	5052-H32 Aluminum	.062"	4 0707
FAC-10-4	305 Stainless Steel	5052-H32 Aluminum	to .250"	1.373″
FAS-10-8	1038 Carbon Steel	5052-H32 Aluminum	.250" to .500"	1.612"
FAC-10-8	305 Stainless Steel	5052-H32 Aluminum		
FAS-10-12	1038 Carbon Steel	5052-H32 Aluminum	.500"	4 0078
FAC-10-12	305 Stainless Steel	5052-H32 Aluminum	to .750"	1.807"

\*Grip Range is total material tickness Fab-Lok will fasten.

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# POLAREAST

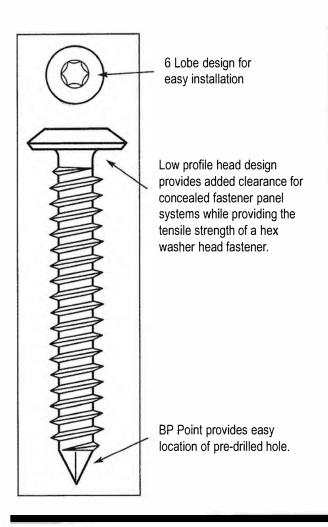


We Put The Fast in Fastener

ALSO AVAILABLE IN SELF DRILLERS

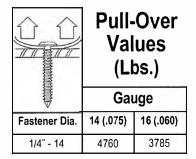
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# **POLARFAST**



# **Engineering Test Reports**

Specifications				
	Points:	1/4" 2" through 8" Type BP Carbon Steel		



# Strength Characteristics

for Self-Tapping fasteners

		., .	
Fastener Size	Minimum Tensile (pounds)	Minimum Torque (inch-pounds)	Fastener Shear (pounds)
1/4-14	3850	150	2600

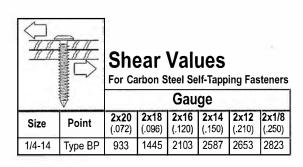
# Suggested Drill Size and Pull-Out Test Results

for Self-Tapping Sheeting Fasteners

To determine the tension required to pull a properly applied screw out of a structural steel member

Steel Thickness	Point Type	Drill Size	Average Ultimate Pullout
<sup>1</sup> / <sub>4</sub> " (.250)	BP	#1 (.221)	3355 lbs.

Fastener Systems, Inc. Bolmar Industrial Center 640 Snyder Ave. West Chester, PA 19382 1-800-232-5060



All test results are based on laboratory tests. Specific job site conditions should be taken into consideration when specifying the proper fastener. Because applications vary, we assume no liability for use of this information.

# New From Fastener Systems:

Especially
Formulated
For
Insulated
Panel
Construction

Fastener Systems, Inc Bolmar Ind. Center 640 Snyder Avenue West Chester, PA

19382

610-692-6658 800-232-5060 FAX:610-692-8151 **FSI-96** 

Butyl Rubber
Insulated Panel
Sealant

Non Drying
Permanently Resilient
Non-Bleeding
Non-Hardening
Mildew Resistent
USDA Accepted
Compatible with
Polystyrene

- Other Uses:
- Metal Curtain Wall
- · Lap Joints
- · Bedding Compound
- Adoustical Sealant
- · Gutter Sealant
- · Corrugated Roofing & Siding
- Bedding Glass in Sash

Net Content 11 Fluid Ozs. (325 ml)

- **SUSDA** Accepted
- **P Non-Hardening**
- **PReduced Webbing**
- **©** Controlled Viscosity
- Mildew Resistant
- © Compatible with Polystyrene
- Easy Clean-up
- **Economical**
- Available in 11oz., 30 oz. tubes, and 5-gallons pails.
- **American Made**



# SPECIFICATION DATA

# PRODUCT NAME FSI-96 Butyl Rubber Insulated Panel Sealant

#### 2. MANUFACTURER

Fastener Systems, Inc. 640 Snyder Avenue West Chester, PA 19382 Phone: 610-692-6658 800-232-5060 FAX: 610-692-8151

#### 3. PRODUCT DESCRIPTION

FSI-96 is a formulated for use in insulated metal panel and metal building construction. It has been modified to reduce webbing characteristics, improve extrusion and reduce mildew.

**Basic Uses:** FSI-96 is typically used for but not limited to:

- Sealing base track to slab
- Polyethylene vapor barrier sheet overlaps
- Panel top cap and panel joints.

#### Advantages:

- FSI-96 exhibits phenomenal tackiness for permanent bonding to all surfaces.
- · Non-drying and non-bleeding.
- Non-hardening.
- Gunnable in all working temperatures.
- Has USDA approval for use in meat and poultry plants.

#### 4. INSTALLATION

Surfaces receiving FSI-96 must be clean, dry and free of dust or other foreign matter. The sealant may be applied with a caulking gun or knife to metal, wood or plastic. Excess smears should be removed as work progresses.

**Note:** Keep FSI-96 from sight line as it cannot be painted.

**Packaging:** FSI-96 is available in 11 oz. or 30 oz. cartridges, or 5-gallon pails.

**Precautions:** Combustible, Keep away from heat and open flame.

#### FOR PROFESSIONAL USE ONLY. KEEP OUT OF THE REACH OF CHILDREN

#### 6. AVAILABILITY AND COST

FSI-96 is available from Fastener Systems, Inc. For more information, please contact us at 610-692-6658 or 800-232-5060.

#### 7. WARRANTY

Fastener Systems, Inc. warrants its products to be free of defects. Under this warranty, we will provide, at no charge, replacement materials for, or refund the purchase price of, any product proven to be defective when installed in accordance with our published recommendations and in applications considered by us as suitable forthis product. This warranty is in lieu of any and all otherwarranties, expressed or implied, and in no case will Fastener Systems, Inc. be liable for incidental or consequential damages.

#### 5. TECHNICAL DATA

5. TECHNICAL DATA					
	FSI-96 Test Requirements				
Aging	Firm but rubbery. Good tack after 50 days conditioned at 160° F.				
Accelerated Aging	Firm but rubbery. Excellent adhesion and no significant change in characteristics after 260 hrs. in Weatherometer.				
Non-Staining	Non-Staining when used as recommended.				
Slump	0.10.2 inches (ASTM D2202)				
Weight/gal.	9.8-9.9 lbs. (FTMS 141a-4184-1)				
Non-Volatile Solids	88.5-91.5% (OHAUS MDB-6010)				
Oil Migration	Does not exude oil when applied between two metal panels bolted together allowing 1/16" seal. Assembly conditioned for one week at 158° F.				
Penetration	290-310 1/10 mm (ASTM D 217)				
Color	White				
Ambient Temperatures	Lowest: -20°F Highest: 150°F				



#### PECORA CORPORATION

## 1. PRODUCT NAME DYNATROL® I

One-Part Polyurethane Sealant

#### 2. MANUFACTURER

Pecora Corporation 165 Wambold Road Harleysville, PA 19438

#### 3. PRODUCT DESCRIPTION

Dynatrollis amoisture-curing, singlecomponent, non-sag polyurethane sealant that when cured offers the performance of a two-part with the ease of installation of a one-part. It is designed to maintain an effective bond and seal between materials of similar and dissimilar surfaces, porosities and coefficients of expansion.

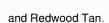
Basic Uses: Dynatrol I is intended for use in expansion and control joints in precast panels, tilt-up walls, metal curtain walls, copings, window and door perimeters, panel bedding and glazing details.\*

**Limitations:** Dynatrol I should not be used:

- \*as a cap, heel or toe bead in certain glazing installations with highperformance glass or plastic.
- in joints less than 1/4" (6 mm) in depth.
- in joints where contact may be made with polysulfide sealants.
- •in areas exposed to harsh chemicals.
- on certain architectural paints and finishes without laboratory or field testing.
- in horizontal joints subject to vehicular traffic unless protected by a wearing surface.

**Colors:** Black, Limestone, Aluminum Stone, Off-White, Bronze, Tan, Beige

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**Packaging:** 10.3 oz. (305 ml) cartridges and two-gallon (7.57 L) pails.

#### 4. TECHNICAL DATA

Applicable Standards: Meets Federal Specification TT-S-00230C, Type II, Class A and ASTM C-920 Type S, Grade NS, Class 25, Use NT, M, A, G and O. U.S.D.A. acceptance for use in meat and poultry plants.

Movement Capability: 25% extension; 25% compression. Joint sealants do not change volume with expansion or compression, only shape; the greater the change in shape, the greater the stress on the sealant

Joint Design: The width of the joint should be a minimum of four (4) times the anticipated movement. The width or depth of the joint should not be less than 1/4" (6 mm). In joints up to 3/8" (9 mm) wide, the depth of the sealant



should be equal to the width. In joints wider than 3/8" (9 mm), but not exceeding 1-1/4" (31 mm), the depth should be maintained at 3/8" (9 mm), please consult Technical Services.

#### 5. INSTALLATION

Surface Preparation: Joint surfaces and backer rod must be dry and free of all contaminants such as oil, grease, wax, dust, corrosion, tar, asphalt, loose aggregate, frost, form-release agents and decorative and protective coatings. Precast panels using form release agents other polyethylene film must be sandblasted or mechanically abraded and blown or brushed dust free. Glass, metal and other nonporous surfaces must be free of any coatings and wiped clean with solvent.

#### **TEST DATA - DYNATROL I**

Cured Sealant	Requirements	
Properties	and Test	Typical Value
100% Modulus	ASTM D412-75	70 psi
Tensile Strength	ASTM D412-75	275 psi
Ultimate Elongation	ASTM D412-75	950%
Hardness, Shore A	ASTM C-920, 15-50	40
Service Temperature Range Weep & Sag	-40°F to +180°F (-40°C to ASTM C-920	82°C)
Weight loss after heat aging	Max. 3/16" (4 mm) ASTM C-920	Passes
	Max. 10%	Passes
Tack-free time ASTM C-679	Max. 72 hrs.	16 hrs.
Stain & Color change Durability	ASTM C-920	Passes
(Bond and cohesion after 7	ASTM C-920	
days water immersion)	Class 25	
Alum., Glass, Mortar Adhesion-in-Peel	Max. loss 1.5 sq. in. ASTM C-920	Passes
(after 7 days immersion)	Min. 5# pli	30 pli
Alum., Glass, Mortar	Max. 25% adhesion loss	Passes*

\*with P-75 on mortar



# SPECIFICATION DATA

1. PRODUCT NAME
Urexpan® NR-201
(Pool 'n Patio)
One-Part Urethane
Traffic Grade Sealant

#### 2. MANUFACTURER

Pecora Corporation 165 Wambold Road Harleysville, PA 19438

#### 3. PRODUCT DESCRIPTION

Urexpan NR-201 is a self-leveling, moisture-curing elastomeric polyurethane sealant that when fully cured has the desirable proven properties of a two-part urethane while offering the convenience and ease-of-application of a one-part sealant.

Basic Uses: NR-201 is designed specially for use in small-to-medium width interior or exterior horizontal joints in plazas, malls, patios, swimming pool decks and copings, sidewalks, driveways, parking lots and garages. Cured sealant is not affected by pool chemicals.

Because of the normal slow cure of a one-part and the extra time required for NR-201 to achieve its full strength and abrasion resistance, NR-200 two-part self-leveling urethane sealant is recommended for joints larger than one-inch wide.

However, NR-200 and NR-201 are fully compatible and adhere well to each other without primer; thus, NR-201 is excellent for repairing damaged areas in the Pecora Dynaspan System.

**Limitations:** NR-201 is not to be used as a structural component or in longitudinal expansion joints that are intended to be used as a constant traveling surface.

**Packaging:** One-quart (.946 L) cartridges (10 per carton); 2 and 5-gallon (7.57 and 18.9 liter) pails.

**Colors:** Limestone and Aluminum Stone.

#### 4. TECHNICAL DATA

Applicable Standards: Federal Specification TT-S-230C, Type I, Class A; and ASTM C-920, Type S, Grade P, Class 25, Use T,M,A & O, USDA acceptance for use in meat and poultry processing plants.

#### 5. INSTALLATION

Joints should be designed for a maximum of 25% movement at the narrowest dimension for sealant to perform properly. It is essential to removeall traces of moisture, powder, dirt, dust, grease, oil, and other foreign matter. Methods of removal may include sandblasting, wire brushing, air blasting, or sawcutting. If the

joint contains asphalt-impregnated fiberboard, this must be cut back to allow for proper backer rod or barrier beneath the sealant. There must be no contact between the sealant and any amount of asphalt or tar or there will be no adhesion to the substrate.

Joint Backing: A closed-cell polyethylenerod should be used as a backer for the NR-201. Use a size that will compress about 25% when inserted into the joint. In joints too shallow for backer rod, use a polyethylene bondbreaker tape to prevent three-sided adhesion of the sealant

#### **TEST RESULTS**

Conformance of Pecora NR-201 Urexpan to ASTM C-920

TEST	REQUIREMENTS	VALUES
Rheological ASTM C639	Must self-level @ 40°F (5°C)	Passes
Extrusion rate ASTM C603	20 seconds	Passes
Hardness ASTM C661	25-50 Shore A	35
Effects of heat aging	10% max. weight loss	7.8%
ASTM C792	No cracking or chalking	Passes
Tack-free time ASTM C679	72 hrs. max. @ 77°F (25°C), 50% R.H.	24-42 hrs
Stain & color change ASTM C510	Shall not stain white cement mortar. No color change	Passes
Cyclic movement	Max. loss 1 1/2	Alum. passes
Class 25 ASTM C719	square inches	*Concere passes
Adhesion-in-peel	5 lbs. min.	Alum. 23 psi
ASTM C794		*Concrete 23 psi
Effects of accelerated weathering	No cracking	Passes
ASTM C793		*with P-75 Primer

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### **Architectural Glazing Sealants**

#### Pecora 895 Silicone

A high-performance, medium-modulus, neutral-curing silicone designed specifically for structural and non-structural glazing of glass, plastic and metal and the recommended weatherseal in such applications. With a ±50% movement capability, 895 is also excellent for sealing expansion and control joints in metal curtainwalls and precast panels and perimeter sealing of windows, doors and other building components. 895 has outstanding unprimed adhesion to glass, reflective glass, anodized aluminum, most plastics, wood, masonry and paints, including fluoropolymer-based paints. It is compatible with most laminated glass, acrylic and polycarbonate glazing sheets.

#### Pecora 864 Silicone

A high-performance, low-modulus, neutral-curing silicone designed primarily for those dynamic conditions requiring a sealant with exceptional adhesion, a high extension/compression ratio and recovery properties which can withstand long-term movement of ±50%. With primerless adhesion to most common substrates including fluoropolymer-based paints and coatings, plastics, concrete, stone, marble, wood, steel and anodized aluminum, 864 is ideal for sealing expansion and control joints in metal curtainwalls and perimeter sealing of windows, doors and other building components and may also be used as the weatherseal in structural glazing details.

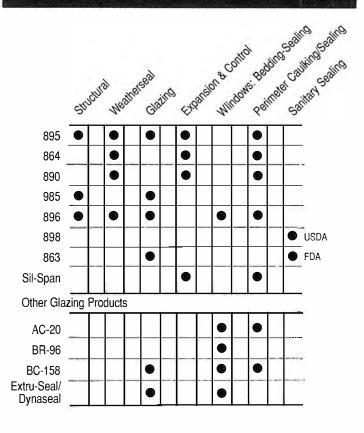
#### Pecora 890 Silicone

A high-performance, ultra low-modulus, neutral-curing silicone designed primarily for sealing expansion and control joints in precast panels and metal curtainwalls, perimeter sealing of doors and windows and numerous other areas requiring a high-movement sealant. It adheres tenaciously to concrete, stone, masonry, steel, fluoropolymer painted and powder coated aluminum, wood, vinyl and many other plastics, generally without need for a primer, and performs equally well in new or remedial construction.

#### Pecora 985 Silicone

A high-modulus, neutral-curing silicone, 985 is a two-component structural sealant specially formulated for shop fabrication and structural glazed systems. Pecora provides single-source reliability for demanding structural and non-structural glazing details by offering 985 for factory applications and 895, 896 and 864 for field applications.

#### **Product Selector Quick Reference Chart**





#### Color Matching

Pecora's Color-Flex System provides wide flexibility in matching sealants to substrates. The Color-Flex Designer Guide features 12 Standard and 32 Special colors with major sealants keyed to the colors available in each product. Pecora two-part, non-sag urethanes are available from stock in all Standard and Special colors. Silicones are available from stock only in Standard colors; Specials are available in low minimum quantities.



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### PECORA CORPORATION

### **Pecora Standard Sealant Guide**

SEALANT & DESCRIPTION	MAXIMUM MOVEMENT	PRACTICAL JOINT DESIGN	JOINT DIMENSIONS 1 Width - min./max. Depth - min./max.
NR-200 UREXPAN - Two-part, self-leveling polyurethane traffic grade sealant. Uses: Expansion and control joints.	25% Extension	4X Expected	1/4 - N.A.
	25% Compression	Movement	1/4 - 1/2
NR-201 UREXPAN - One-part, self-leveling, moisture-curing polyurethane traffic grade sealant. Uses: Horizontal joints, pool decks, plazas, sidewalks.	25% Extension	4X Expected	1/4 -1
	25% Compression	Movement	1/4 - 1/2
Uses: Expansion & control joints where extreme structural movement is anticipated.	50% Extension	4X Expected	1/4 - 2
	50% Compression	Movement	1/4 - 1/2
<b>DYNATROL IXL -</b> One part, non-sag, moisture-curing polyurethane rubber sealant. Uses: General caulking & glazing purposes.	25% Extension	4X Expected	1/4 - 1-1/4
	25% Compression	Movement	1/4 - 3/8
© YNATRED - Two-part, non-sag traffic grade polyurethane sealant. Uses: V-Joints, expansion and control joints in stadiums, warehouse floors, swimming pools, fountains.	25% Extension	4X Expected	1/4 - 2
	25% Compression	Movement	1/4 - 1/2
©DYNAFLEX - Two-part, non-sag, security grade polyurethane sealant. Uses: Control joints and window and door perimeters where sealant may be exposed to physical abuse.	12-1/2% Extension	8X Expected	1/4 - 2
	12-1/2% Compression	Movement	1/4 - 1/2
GC-5 SYNTHACALK - Two-part, non-sag, polysulfide rubber sealant. Uses: Building materials with similar and dissimilar porosities, textures and expansions.	25% Extension 25% Compression	4X Expected Movement	1/4 - 2 1/4 - 1/2
GC-9 SYNTHACALK One-;:art, non-sag, moisture-curing polysulfide rubber sealant. Uses: General purpose caulking & glazing.	16% Extension	6X Expected	1/4 - 1
	16% Compression	Movement	1/4 - 1/2
860 SILICONE - One-part, acetoxy silicone sealant. Uses: Glass shop glazing jobs, industrial applications, general purpose sealing. (Not for use on masonry).	25% Extension	4X Expected	1/8 -1
	25% Compression	Movement	1/8 - 3/8
863 SILICONE - One-part, acetoxy construction silicone. Uses: Glass, ceramics, steel, aluminum and most plastic coated surfaces. (Not for use on masonry).	25% Extension	4X Expected	1/8 - 1
	25% Compression	Movement	1/8 - 3/8
864 SILICONE- One-part, neutral-curing, low-modulus, silicone sealant. Uses: Expansion and control joints, in precast panels and metal curtain walls, perimeter sealing.	50% Extension	4X Expected	1/8 -1
	50% Compression	Movement	1/8 - 3/8
890 SILICONE - One-part, neutral-curing, ultra low-modulus silicone building sealant. Uses: Expansion and control joints in precast panels & metal curtain walls, perimeter sealing, and in EIFS Systems.	100% Extension	4 X Expected	1/8 - 1
	50% Compression	Movement	1/8 - 3/8
895 SILICONE - One-part, neutral-curing, medium-modulus silicone building sealant. Uses: Structural and non-structural glazing.	50% Extension	4X Expected	1/8 - 1
	50% Compression	Movement	1/8 - 3/8
898 SILICONE - One-part, very low odor, neutral-curing sanitary sealant Uses: Tub and shower enclosures, sinks, countertops, appliances, etc.	50% Extension	4 X Expected	1/8 - 1
	50% Compression	Movement	1/8 - 3/8
AC-20 + SILICONE - One-part, non-sag, acrylic latex caulk. Uses: General purpose interior and exterior caulking.	7.5% Extension	12X Expected	1/4 - 3/4
	7.5% Compression	Movement	1/4 - 3/8



### **Pecora Standard Sealant Guide**

PRIMERS <sup>2</sup> <u>Masonry</u> Metal	SERVICE TEMPERATURE RANGE	†STOCK COLORS	PACKAGING *Special Order	BACKER RODS (Recommended)	ASTM & FEDERAL SPECIFICATIONS
<u>P-200</u> P-100	-20 to +180	Limestone & Aluminum Stone	1-1/2 gal. 3 gal.	Closed-cell Polyethylene	ASTM C-920, D-1850 TT-S-227E
<u>P-75</u> N.R.	-20 to +180	Limestone & Aluminum Stone	30 oz. ctg. *2 gal. *5 gal.	Closed-cell Polyethylene	ASTM C-920, D-1850 TT-S-230C
<u>P-75</u> P-120	-20 to +180	Color Flex Standards & Specials	1-1/2 gal.	Soft Polyethylene or Denver Foam Polyurethane	ASTM C-920, D-1850 TT-S-227E
<u>P-75</u> P-120	-20 to +180	Black, Bronze, Limestone, Aluminum Stone, Off-White, Beige, Tan, Natural Stone	10.3 oz. ctg. *2 gal.	Soft Polyethylene or Denver Foam	ASTM C-920 TT-S-230C
P-75 P-120	-20 to +180	Color Flex Standards & Specials	1-1/2 gal.	Closed-cell Polyethylene	ASTM C-920, D-1850 TT-S-227E ASTM C-1247
P-200 P-120	-20 to +180	Color Flex Standards & Specials	1-1/2 gal.	Closed-cell Polyethylene	ASTM C-920 TT-S-227E
<u>P-53</u> N.R.	-20 to +180	Limestone, Tru-White, Buff, Aluminum Stone, Tan	1-3/4 gal.	Polyethylene or Denver Foam Polyurethane	ASTM C-920 TT-S-227E
<u>P-75</u> N.R.	-20 to +180	Limestone, Tru-White, Aluminum Stone, Bronze	10.3 oz. ctg. *2 gal., 5 gal.	Denver Foam Polyurethane	ASTM C-920 TT-S-230C
N.A. N.R.	-75 to +400	Black, Bronze, Tru-White, Aluminum & Translucent	10.3 oz. ctg. *5 gal.	Denver Foam Polyurethane	ASTM C-920 TT-S-1543A
N.A. N.R.	-75 to +400	Tru-White & Translucent	10.3 oz. ctg. *5 gal.	Denver Foam Polyurethane	ASTM C-920 TT-S-1543A 19-GP9
P-64 N.R.	-65 to +300	Black, Limestone, Precast, Bronze, Tru-White, Aluminum Stone & Tan	10.3 oz. ctg. 2 gal. *5 gal.	Denver Foam Polyurethane	ASTM C-920 TT-S-1543A 19-GP9
<u>P-64</u> N.R.	-65 to +300	Black, Limestone, Tru-White, Precast, Bronze, Aluminum Stone	10.3 oz. ctg. 2 gal.	Denver Foam Polyurethane	ASTM C-920 TT-S-1543A 19-GP9
P-64 N.R.	-65 to +300	Black, Bronze, Tru-White, Aluminum Stone & Translucent	10.3 oz. ctg. 2 gal. *5 gal.	Denver Foam Polyurethane	ASTM C-920 TT-S-1543A 19-GP9
<u>P-64</u> N.R.	-65 to +300	Tru-White & Translucent	10.3 oz. ctg.	Denver Foam Polyurethane	ASTM C-920
<u>N.R.</u> N.R.	0 to +180	See AC-20 Color Card	10.5 oz. ctg. 30 oz. ctg., 5 gal.	Soft Polyethylene or Denver Foam	ASTM C-834

N.A. = Not Applicable

N.R. = Not Required
1. Ideally, depth should be 1/2 the width without exceeding Min./Max. limits.
2. For details, refer to Technical Bulletin #51 or consult Technical Service.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151







Red Devil Industrial Grade 100% Silicone Sealant is a superior high-performance sealing and glazing compound. This acetoxy Silicone forms strong, flexible, durable, weather-resistant seals for joints by providing excellent adhesion to non-porous surfaces. This product is appropriate (except #0816/41) for use in Federally Inspected Meat and Poultry Plants. It also conforms to Food and Drug Administration requirements. Underwriters Laboratories recognized component.

Item #	Color	02.	UPC code	Mr.	Chps	Size	
0816/01	White	10.1	0-75339-81601-1	11 lbs	.33cu.ft.	8 x 6 x 12	
0816/21	Almond	10.1	0-75339-81621-9	11 lbs	.33cu.ft.	8 x 6 x 12	
0816/41	Bronze	10.1	0-75339-81641-7	11 lbs	.33cu.ft.	8 x 6 x 12	
0816/51	Gray	10.1	0-75339-81651-6	11 lbs	.33 <b>c</b> u.ft.	8 x 6 x 12	
0816/61	Black	10.1	0-75339-81661-5	11 lbs	.33cu.ft.	8 x 6 x 12	
0826/01	Clear	10.1	0-/5339-82601-0	11 lbs	.33cu.ft.	8 x 6 x 12	l
						1	

11 1 C CUITO 1120 C358 C358 C358

#### RI

Meets or exceeds the requirements of TT-S-00230C; TT-S-001543A; C.G.S.B. 19C9-9; Din 18540, Part 2; Mil Spec 46106A; ASTM C920; CEBTP 432.65 140-2; OREX 150031-2; FDA No. 21 CFR 177.2600

#### **ADVANTAGES**

- · Applies below freezing
- · Remains permanently elastic
- 50 year durability
- · Quick curing
- Mildew resistant
- High temperature resistance

#### WHERE TO USE

- · Window & door frames
- Baseboards
- Sidina
- Countertops/ sinks
- Showers/ tubs
- Gutters
- · Plumbing fixtures
- · Loose tiles

#### WARRANTY

Red Devil warrants the performance of its products when used as directed and within one year of purchase. User shall determine the suitability of the product for its intended use and assume all risk and liability in connection therewith. Under no circumstance will Red Devil, Inc., or the seller be liable for more than the purchase price of this product.

Typical Properties	#0816/0I, #0816/2I, #0816/4I, #0816/5I, 0816/6I, 0826/0I
Extrusion-viscosity (TT-S-1543A)	45 ± 5 seconds (Semco@ 50 psi)
Weight per gallon	8.7 ± 0.1 lbs.
% Solids (TNV)	99.5 ± 0.5
Toxicity (TT-S-1543A)	Non-toxic when used as directed
Shore A Hardness (D-2240)	22
Color	White, Almond, Bronze, Gray, Black, Clear
Odor	Acetic Acid
Weight Loss (TT-S-1543A)	5% Maximum
Application Temperature Range	10°F to 100°F (-13°C to 38°C)
Tack-free time (TT-S-1543A)	Less than 1 hour
Full cure	24 hours
Paint over time	Not paintable
Flash point	Greater than 200°F (94°C)
Durability (TT-S-1543A)	Complies
Movement Capability	± 25% (Min. 4.1 Safety factor)
Freeze/thaw stability	Passes 3 cycles
Stain resistance (TT-S-1543A)	No color change
Slump resistance	Excellent
Water resistance	Excellent
Crack resistance	Excellent
Chemical resistance	Excellent
Weatherability	Excellent @ 10,000hrs. in Q.U.V. weather tester
Peel strength-glass (TT-S-1543A, 3.5.9)	45 ppi
Peel strength-concrete (TT-S-1543A, 3.5.9)	40 ppi
Percent elongation at break (D-412)	450
Tensile strength at break	240 psi
Tear Strength (D-624: Die B)	30 ppi
Dielectric strength (D-887/D-149)	22 KV/MN
Dielectric constant (D-924/D-150 @ 1 MHZ)	2.7
Dissipation factor (D-924/D-150 @ 1 MHZ)	0.002
Volume Resistivity (X-CM)	2 x 10 <sup>15</sup>
Coverage	50-55 linear feet (3/8" bead)
Service temperature range	-60°F to 400°F (-51°C to 204°C): 500°F (260°C) Intermittent
Clean-up solvent (before cure)	Mineral Spirits
Sheff life	1 year unopened @ 77°F (25°C)
Storage	Store in a cool, dry area. Avoid temps. over 100°F (38°C).
Standard container	10.1 fl.oz. H.D.P.E. cartridge

Recommendations for use of this product are based on tests we believe to be reliable. Manufacturer and seller are no responsible for results where this product is used under conditions beyond our control. Under no circumstances will Red Devil, Inc. or the seller be liable to anyone in excess of the purchase price of this product.

#### **NOT RECOMMENDED FOR**

Marine use • Mirrors • Materials that bleed oils, solvents or plasticisers • Areas below water line • Unpredictably porous surfaces • Heavy traffic-bearing joints

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151





Red Devil Architectural Butyl Sealant is a high quality sealant that is ideal for outdoor jobs requiring a durable, watertight seal. Immediately water resistant and specifically made for use on metal buildings, aluminum gutters, downspouts, and metal windows and doors. Remains permanently flexible and is suitable for below-grade applications.

Meets or exceeds the requirements of U.S. Federal Specifications: Fed Spec. TT-S-001657, Fed Spec. TT-C-00598C, Fed Spec. TT-C- 1796A. This sealant is appropriate for use in Federally Inspected Meat and Poultry Plants.

#### WARRANTY

Red Devil warrants the performance of its products when used as directed and within one year of purchase. User shall determine the suitability of the product for its intended use and assume all risk and liability in connection therewith. Under no circumstance will Red Devil, Inc., or the seller be liable for more than the purchase price of this product.

#### NOT RECOMMENDED FOR

Vinyl or plastic • Fireplaces

#### **ADVANTAGES**

- Stays permanently flexible
- · Resists cracking
- · Resists staining
- · Resists sagging
- Paintable
- No priming required on porous surfaces
- · Usable below grade

#### WHERE TO USE

- Window & door frames
- Skylights
- · Aluminum gutters
- · Chimneys/roofs
- Marine applications above water line
- · Leaders & siding
- Concrete foundations
- Below-grade areas

Item #	Color	Fluid 02	UPC code	M1 C326	Cnp <sub>6</sub> Cs <sub>26</sub>	case Case
0697/01	White	10.1	0-75339-00274-2	13 lbs	.33cu.ft.	8 x 6 x 12
0697/BI	Bronze	10.1	0-75339-00276-6	13 lbs	.33cu.ft.	8 x 6 x 12
0697/GI	Gray	10.1	0-75339-00275-9	13 lbs	.33cu.ft.	8 x 6 x 12

Packaging: 10.1 (300ml) fluid oz. cartridge 12 per case.

#### **PRECAUTIONS**

Avoid temperatures in excess of 100°F (38°C)

Typical Properties	#0697/01, 0697/G1 & 0697/B1
Extrusion-viscosity	6 ± 1 grams /15 seconds (Semco @ 30 psi )
Weight per gallon	11.5 <sup>+</sup> 0.25 lbs.
% Solids (TNV)	81.0 <sup>+</sup> 2%
Color	White, Aluminum Gray & Bronze
Odor	Solvent
Shrinkage	Less than 20%
Application temperature range	Greater than 35° F (2°C)
Tack-free time	2 Hours
Full cure	7 Days
Paint over time (latex & oil-based)	Latex: 12-24 hours Oil - based: After full cure
Flash point	Greater than 100°F (38°C) - Combustible
Freeze/ thaw stability	Passes 3 cycles
Stain resistance	Excellent
Slump resistance	Excellent
Water resistant	Excellent
Clean-up Solvent (before cure)	Mineral Spirits or Paint Thinner
Coverage	50-55 linear feet (3/8" bead)
Service temperature range	-40°F to 225°F (-40C to 107°C)
Shelf life	1 year unopened @ 77°F (25°C)

F.S.I. HANDLES FULL LINE OF RED DEVIL PRODUCTS Same day color match - In house painting



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# ALBION 139-3 DELUXE MODEL for Spouted 1/10 Gallon Cartridges

For the professional or the particular "Do-It-Yourselfer." Features Albion's Original ¼" Smooth Square Rod with instant thumb pressure release. Stroke adjusts for hand size. Superior thrust and speed yet comfortable and easy-to-use.



# ALBION DL-45-01 DELUXE MODEL for Bulk Loading

Holds 1½ pints of material. Heavy duty professional tool for storm window, siding installers and others who want a top quality tool. Develops up to double the thrust of competing guns for the same effort. Stroke adjusts to fit hand. Heavy gauge, zinc plated steel construction.



For continuous operation on repetitive jobs. Designed for use with standard 8½" cartridges holding 1/10 gallon of material. Swivel handle. Trigger-actuated three-way valve provides excellent flow control.



# ALBION DL-45-TO3 SPECIAL DELUXE MODEL for Bulk Loading

A 1½ pt. bulk capacity model for thick, stiff material. This rugged tool is equipped with "T" pull and thumb activated pressure release mechanism for ease of operation. It is provided with a "conical ejector" to push-out the last bit of material from the nozzle. Gun is zinc plated and built to provide added years of service.



# ALBION 365-2 AIR POWERED MODEL for Spouted Quart Cartridges

A sturdy lightweight all metal tool. It's trigger actuated three-way valve provides superior flow control. Quick acting coarse threads afford easy rear-end loading and a trouble-free air seal.



"Sausage

ALL MODELS

NEW

EPOXY-COATED

HANDLES

for Comfort

and Corrosion

Resistance

# BULK

Reinforced Construction for high-pressure applications

MODEL	FEATURES	CAPACITY	CHAMBER	WT (lb)
DL-45-T13	General purpose. Dur most popular model.	11/2 pint	2"D x 14"L	4
DL-45C-T13	Fast action clip-on cap.	1 <sup>1</sup> / <sub>2</sub> pint	2"D x 14"L	4
DL-59-T13	Increased capacity minimizes reloading. Best price/performance 1 qt model.	1 quart	2"D x 18"L	41/2
DL-59C-T13	Fast action clip-on cap.	1 quart	2"D x 18"L	41/2
770-10	Full-barrel with reducer, 2" ring cap and cone for confined areas.	1 quart	25/s"D x 12"L	41/2
103-15	JUMBD diameter. High volume, lower density.*	21/2 quart	3 3/8"D x 16"L	7

\* For higher density materials we recommend Albion Air-Powered models.
NOTE: All 2" dia models have conical ejectors to squeeze out all material from chamber.
All 2" dia models have quality screw-on type caps with rolled threads for a tighter seal (except DL-45C-T13 and DL-59C-T13).
All 2%" dia and 3%" dia models have cut threads.

All 2% dia models have cut thread: Model 103-15 supplied with 32-35 nozzle.

All 2 dia models supplied with 32-55 nozzle.





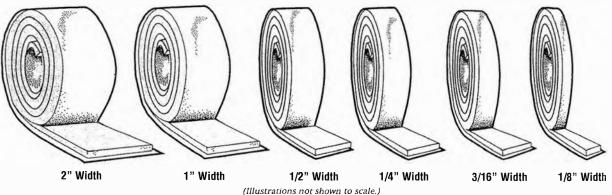
**Built for ROUGH SERVICE** 

MODEL	FEATURES	CAPACITY	CHAMBER	W1 (lb)
DL-24-T14	Solid Teflon piston also accepts bulk load.*	10 oz	2"D x 9"L	3
DL-24-T15	Finger design piston, prevents pinching.	10 oz	2"D x 9"L	3
DL-45-T14	Solid Teflon piston, accepts bulk.* (Holds 10 or 20 oz chub)	20 oz	2"D x 14"L	4
DL-45-T15	Finger design piston. Prevents pinching. (Holds 10 or 20 oz chub)	20 oz	2"D x 14"L	4
DL-59-T15	Finger design piston. (Holds 10 oz, 20 oz, or future 30 oz 2" dia chub)	30 oz	2"D x 18"L	41/2

 Chub models not recommended for frequent bulk use.
 NOTE: All -T15 models supplied with three 235-3 plastic cones. All other chub models supplied with 32-55 nozzles.

### **Butyl Sealant / Preformed Caulk**

### Elastomeric Butyl rubber-based on silicone release paper

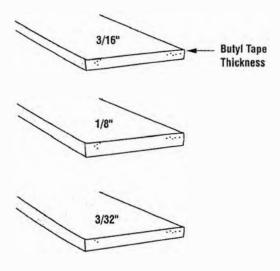


(IIIUSTRATIONS NOT SNOWN to Scale.)

Designed for sealing a variety of construction joints, this product meets the requirements of the pre-engineered metal building, the modular housing and window glazing industries and is very resistant to ultraviolet light. Our Butyl Sealant/Preformed Caulk is designed to withstand extreme roof temperatures while offering superior low temperature compressibility and resistance to cold flow. A large selection of tape widths and thicknesses are available to meet

Call your Fastener Systems Representative for ordering and application assistance at 1-800-232-5060

most joint configurations.



ALL SIZES IN STOCK AVAILABLE FOR SAME DAY SHIPPING

### MB-10A Sealant Tape - Asbestos Free

#### PRODUCT DESCRIPTION

Uses: MB-10A is an elastomeric butyl rubber-based extruded sealant on silicone release paper, designed for sealing a variety of construction joints. This product meets the critical requirements of the pre-engineered metal building, as well as the modular housing and window glazing industries and is very resistant to ultraviolet light. MB-10A is engineered to withstand extreme roof temperatures while superior low temperature compressibility and resistance to cold flow. A wide selection of shapes, sizes and lengths are available to meet most joint configuration. MB-10A is packaged in water-resistant cartons suitable for export shipment.

Composition: Polyisobutylene-Isoprene (butyl rubber), inert fillers, tackifying resins, ultraviolet inhibitors, surfactants. DOES <u>NOT</u> CONTAIN ASBESTOS.

#### TECHNICAL DATA

See properties and Performance Data. Meets or exceeds the following specifications:

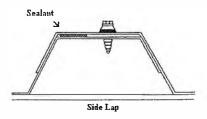
- Military Spec MIL-C-18969B Type II Class B
- Federal Spec TT-C-1796A Type II Class B
- \* N.A.A.M.M. SS-1C-68
- A.A.M.A. 804.1 AND 807.1
- M.B.M.A. Ice Damming-Five (5) inch static water head test
- F.D.A. Regulations All new materials used in MB-10A comply with regulations for pressure-sensitive adhesives (#175.125)

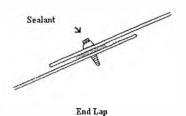
#### INSTALLATION

Surface Preparation: All surfaces to be sealed should be free of dust, dirt, oil and moisture before applying scalant.

Working Conditions: Apply in dry conditions above 40°F. Below 40°F atmospheric condensation on surfaces may inhibit adhesion and should be avoided.

Application: Apply MB-10A to surface directly from roll. Press sealant through the silicone release paper with a smooth, even hand motion. NOTE: For metal roofing and siding applications, be certain to place sealant on the "wet" side of the fasteners to prevent wind blown rain from leaking through the fastener holes.



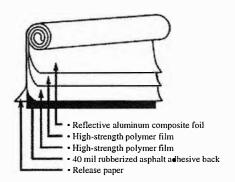


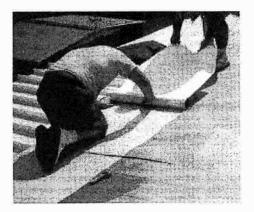
	PROPERTIES AND PERFORMANCE DATA	
TEST METHOD	TEST	TYPICAL RESULTS
GSTM*	Color	Light Gray
ASTM D-217-68	Cone Penetration @77° F, 105g/5 sec, 1/10 mm	55
ASTM C-771-74	Non-Volatiles, % weight @ 212 ± 3°F	99+
ASTM D 792-66	Weight/gallon @77°F, lbs.	12.5
ASTM D 792-66	Specific Gravity @ 77°F	1.55
GSTM 11*	Service Temperature - Range, °F	-60 to 275°F
GSTM 16*	Sag (Three weeks @ 160°F)	None
ASTM C-765-73	Cold Temperature Flexibility (1/2 "Mandrel Bend @ -60°F)	No cracking or loss of Adhesion
GSTM 9*	Webbing and Elongation: @ 77°F @ 32°F	1,050% + 3,050% +
GSTM 1*	Adhesive/Cohesive Failure Mode @ 77°F	3% / 97%
ASTM D-897-72	Tensile Strength, p.s.i. @ 77°F	25
ASTM D-750-68	Weatherability - 1,000 hours in Q.U.V. Weatherometer (Cycle of 8 hours U.V. @ 150°F; then 4 hours of condensation @ 104°F)	No discoloration, cracking, crazing or loss of adhesion

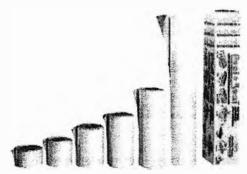
Test Methods available upon request.

### Peel & Seal Self-Stick Aluminum

- Aluminumized surface reflects heat, reduces rooftop temperature as much as 22.5%, cuts cooling costs, is self-cleaning and resists UV radiation.
- Extra durable, multi-layers resists abrasion, self-seals around most punctures, needs no additional coating.
- Lightweight, doesn't reduce the load bearing capacity of the roof.
- Cold applied, no fire hazard from hot tar kettles or torches.
- Stretches to allow for building movement, won't crack or dry out, impervious to fungus, algae or bacteria.







**Peel & Seal** is packaged 100 square feet per carton and is available in widths of 4", 6", 9", 12", 18" and 36".

Available in Aluminum <u>or</u> White Coated Surface

# Peel off the release paper, press the material into place. It's that simple!

The perfect solution for low slope and dozens of other roofing problems, Peel & Seal installs using only a utility knife. You can forget big crews, hot kettles, torches, adhesives & fasteners. No coating is necessary. Peel & Seal adheres to most surfaces and saves time, labor and money. It won't crack or dry out.

Peel & Seal replaces old-style rolled roofing products. It's rugged, lightweight and reflects heat... and it seals around most punctures. It's quick and economical to install and is a perfect answer to roofing, waterproofing, patching and repair... any job requiring tough, weatherproof protection.

### **IDEAL FOR MANY COLD STORAGE APPLICATIONS**

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

### Peel & Seal Self-Stick Aluminum

Why Peel & Seal is the fastest easiest and most economical solution to your waterproofing problems.

#### What is Peel & Seal?

It starts with a reflective aluminum foil. Under the foil are rugged, water-proof, polymer films. Laminated beneath the films is a thick layer of rubberized asphalt. The asphalt compound adheres to most surfaces and seals around most punctures, forming a protective waterproof barrier. Finally, a high-quality release paper is applied to shield the adhesive surface until the **Peel** & **Seal** is installed.

#### Why an Aluminum Foil?

The high density aluminum foil used in the manufacture of **Peel & Seal** reflects sunlight and reduces rooftop temperatures by an estimated 22.5%. This membrane may be exposed to direct sunlight without the use of coating, which saves time, labor and money.

#### Where should I use Peel & Seal?

Use this product anywhere you want a fast, dependable waterproofing barrier. Applying waterproofing materials is generally a messy, complicated process requiring much labor, equipment and skill. **Peel & Seal** simplifies the operation—you just peel off the release paper and apply the waterproof sheet to any prepared surface. **Peel & Seal** may be used for roofing, waterproofing, patching & repair or any job requiring tough, weatherproof protection.

#### How is it installed?

Simple... align sheet and apply to clean, dry surface by removing the release paper as the material is carefully unrolled and pressed into place. **Peel & Seal** bonds to itself at overlaps. No heat, glues, tapes, fasteners or special tools are required... you need only a pair of scissors or utility knife. Some surfaces will require cleaning and/or priming.

#### Can Peel & Seal be used for repair work?

It's an excellent choice for patching smooth asphalt roofs. The old roof should be cleaned and primed as necessary, any blisters or irregularities repaired to present a smooth surface and the **Peel & Seal** applied to leaking areas. A minimum of 12" of solid contact should be allowed between the edge of the **Peel & Seal** and any known leaks. A bead of caulk will help to protect exposed edges. Narrow rolls are available for repairs and flashing.

#### **Product Description**

Peel & Seal is a self-adhering waterproofing material with a reflective aluminum surface. The sheet features multiple laminations of special aluminum foil, high density polymer films and a thick layer of rubberized asphalt waterproofing compound. The aluminum foil reflects the sun to lower rooftop temperature and reduce energy costs. The films stabilize and reinforce the sheet and act as the first line of defense against leaks. The rubberized asphalt seals tightly at the overlaps and around most punctures, and forms a long-lasting waterproof barrier. Peel & **Seal** requires no coating.

#### **Special Features**

**Peel & Seal** offers the contractor and property owner these extra features:

- Eliminates leaks—multiple layers of protection seal out water. Rubberized asphalt won't crack or dry.
- Sticks to most surfaces—Peel & Seal sticks to roof deck for ease of application and to eliminate movement of water under the membrane.
- No Coating Necessary— with **Peel & Seal** you simply peel off the release paper, apply to any prepared surface... and the job is done!
- Easy & Fast to Install—Peel & Seal eliminates the need for big crews, hot kettles, torches, adhesives, fasteners, etc. Following the simple instructions anyone can install Peel & Seal using only scissors.

(See complete instructions in box before applying.)

#### General:

Peel & Seal is a multipurpose waterproofing material. Apply Peel & Seal in fair weather at temperatures above 60°F. A minimum slope of 1/2" per foot is required. Not designed for ponding areas. NO TOP COATING IS RE-QUIRED. Storage: Keep rolls dry, protect from sunlight.

#### **Surface Preparation:**

Peel & Seal may be applied directly to roof decks including wood, metal, masonry and existing smooth asphalt roofs. Because of the unpredictable condition of existing roofs, we cannot guarantee the performance of Peel & Seal over mineral surfaces. The surface to receive Peel & Seal must be clean, dry and free from oil, grease or debrisprime where necessary.

#### Installation:

Peel & Seal is easily installed by removing the release paper and pressing the aluminized membrane into place. Peel & Seal can be cut to fit using scissors or razor knife. Peel & **Seal** adheres to the deck and to itself when overlapped. When overlapping the product, 3" side laps and 6" end laps are required. Align sheet. Peel off first 2' of release paper and adhere sheet to the substrate being careful to maintain proper alignment. Carefully unroll, peeling the release paper and pressing into place as you go. Small wrinkles are not desirable, but can be smoothed out and will not effect the roof's performance. Large ones should be avoided and repaired by cutting and patching before the next roll is applied.

#### **Typical Properties**

Roll Size\* 36" x 33.5'
Roll Weight 32 lbs.
Thickness 45 mil
Shipping 30 rolls/pallet
•Also 4", 6", 9", 12" and 18" rolls.

Warning: Peel & Seal is slippery. Use caution when walking or standing on the product. Peel & Seal is reflective and can contribute to sunburn. Protect skin and eyes.



### Venture Tape

### **Insulation Tapes**

### Waterproof Cloth Duct Tape

#### 1500



A high strength premium quality polyethylene coated cotton cloth tape coated with an aggressive high tack natural rubber adhesive system. Adheres well to sheet metal ducts and conforms well to corners and irregular surfaces. Will not curl when unwound, tears readily.

Silver, Black and White available.

*Primary use*: Vapor sealing sheet metal ducts; general purpose, heavy duty service.

Thickness: 12 mils (300  $\mu$ ) Adhesion: 34 oz./inch width (9.6 N/2.5 cm)

Tensile: 22 lbs./inch width (99.6 N/2.5 cm)

Widths: Silver 1, 1½, 2, 3 inches (2.5, 3.8, 5.1, 7.6 cm)
Black 2 inches (5.1 cm)

While 1, 11/2, 2 inches (2.5, 3.8, 5.1 cm) Length: 60 yards (55 m) on 3 inch (7.6 cm) core

### Utility Grade Coated Cloth Duct Tape

#### 1501



An economical, polyethylene coated cotton cloth duct tape with a natural rubber, pressure sensitive adhesive system. High tack, adheres well to metal surfaces, conforms well to corners and irregular surfaces. Silver color.

*Primary use:* Sealing sheet metal ducts and general purpose industrial applications.

Thickness: 10 mils (250  $\mu$ ) Adhesion; 50 oz./inch width (14.2 N/2.5 cm) Elongation: 10% Tensile: 25 lbs./inch width (113.2 N/2.5 cm) Widths: 2 inches (5.1 cm) Length; 60 yards (55 m) on 3 inch (7.6 cm) core

### 1 mil (25 micron) Aluminum Foil Tape

### 1513CW



A high strength 1 mil (25  $\mu$ ) aluminum foil tape coated with Venture's C.W. cold weather acrylic adhesive. High quick stick at normal temperatures; excellent performance at low temperatures and high humidity.

*Primary use:* Vapor sealing for fiberglass ductboard. sheet metal ducts and FSK systems.

Thickness: 2.3 mils (58 µ) (exclusive of liner) Adhesion: 64 oz./inch width (18 1 N/2.5 cm) Elongation: 7% Tangile: 13 lbs./inch.width (58 9 N/2 5 cm)

Tensile: 13 lbs./inch width (58.9 N/2.5 cm) Widths; 2,  $2^1/_2$ , 3, 4 inches (5.1, 6.4, 7.6, 10.2 cm) Length: 50 yards (46 m) on 3 inch (7.6 cm) core



### High Tack 1.5 mil (38 micron) Aluminum Foil Tape

### 1521CW



A special 1.5 mil (38  $\mu$ ) high strength Aluminum Foil Tape with a higher tack, special C.W. cold weather acrylic adhesive system. This formulation combines extremely high quick stick at normal temperatures with superior performance at low temperatures and high humidity.

Primary use: Thinner material allows for superior conformability in vapor sealing of fiberglass ductboard and FSK systems.

Thickness: 3.0 mils (75  $\mu$ ) (exclusive of liner) Adhesion: 98 oz./inch width (27.7 N/2 5 cm) Elongation: 4.4% Tensie: 21 lbs./inch width (95 N/2.5 cm) Widths: 2.2½, 3.4 inches (5.1.64, 7.6, 10.2 cm) Lengths: 50, 100 (46, 91 m) yards on 3 inch (7.6 cm) core U.S. Coast Guard Approval No: 164.012/120/0 for interior finish. Conforms to British Standard BS 476: Part 7, Class 1; Part 6, Class 0.



### 2 mil (50 micron) Aluminum Foil Tape

#### 1520CW<sup>NT</sup>



A 2 mil (50  $\mu$ ) high strength Aluminum Foil coated with special cold weather acrylic adhesive system that combines superior quick stick at normal temperatures with superior low temperature performance at freezing (32°F or 0°C). The ultimate in cold weather tapes. Recommended for use at normal and high temperatures also.

*Primary use*: Improved vapor sealing of fiberglass ductboard ductwrap and FSK systems.

Thickness: 3.5 mils ( $88\,\mu$ ) (exclusive of liner) Adhesion: 96 oz /inch width ( $27.1\,N/2.5\,cm$ ) Elongation: 4.4% Tensile. 27 lbs /inch width ( $122\,N/2.5\,cm$ ) Widths:  $2,2/3.3.4\,i$  inches ( $5.1,6.4,7.6.10.2\,cm$ )

Widths: 2, 2½, 3, 4 inches (5.1, 6.4, 7.6, 10.2 cm) Lengths: 50. 100 (46, 91 m) yards on 3 inch (7.6 cm) core U.S. Coast Guard Approval No: 164.012/120/0 for interior finish. Conforms to British Standard BS 476:

Part 7, Class 1; Part 6, Class 0.



### 1.5 mil (38 micron) White Aluminum Foil Tape

#### 1511CW



A 1.5 mil (38  $\mu$ ) white aluminum foil coated with an aggressive cold weather acrylic adhesive system which offers superior quick stick at below zero and elevated temperatures. Zero temper, dead soft aluminum foil conforms well to smooth and embossed surfaces

*Primary use:* Matching lap joint and vapor seal for both smooth and satin foil faced board. Matches Thermax® and Atlas\* products

Thickness: 3.5 mils (88  $\mu$ ) (exclusive of liner) Adhesion; 100 oz./inch width (28.3 N/2.5 cm)

Elongation: 5% Tensile: 34 lbs /inch width (154 N/2.5 cm) Widths: 2, 3, 4, 5 inches (5,1, 7.6, 10.2, 12.7 cm) Length; 50 yards (46 m) on 3 inch (7.6 cm) core

### 3 mil (75 micron) Aluminum Foil Duct Tape

#### 1519CW



High strength, 3 mil (75  $\mu$ ) aluminum foil tape coated with 2 mils (50  $\mu$ ) of an aggressive, high temperature acrylic adhesive system. Conforms well to corners and irregular surfaces. Superior adhesion to both fibrous and metal ducts, providing an excellent vapor seal. Meets Mil-T-23397B.

Primary use: Moisture and vapor barrier for duct systems. For roofing applications, flashing, joints and insulation. Used as a protective layer during welding.

Thickness: 5.0 mils (125  $\mu$ ) (exclusive of liner) Adhesion: 96 oz./inch width (27.1 N/2.5 cm) Elongation. 16%

Tensile: 27.8 lbs./inch width (125.9 N/2 5 cm) Widths: 2. 2<sup>1</sup>/<sub>2</sub>, 3, 4 inches (5 1, 6.4, 7.6, 10.2 cm) Length: 50 yards (46 m) on 3 inch (7.6 cm) core



### Clear Polyethylene Tape 921CW



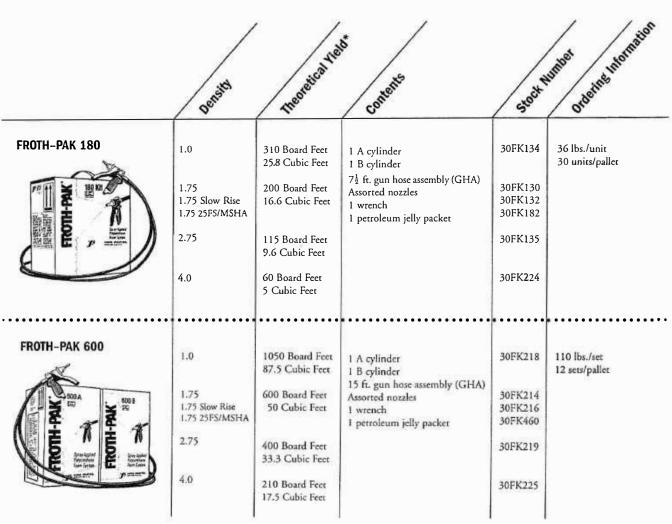
A 5 mil (125 µ) thin, strong and conformable transparent polyethylene film tape with a very high shear, UV resistant cold weather acrylic adhesive with excellent holding properties and cold stick. Excellent resistance to moisture, acids, chemicals, alkalis, oils, abrasion and weathering.

Primary use: Weather seal for applying plastic storm windows, door jams, window casings in low temperature environment. Also used for film can sealing, ink container sealing and splicing polyethylene film.

Thickness: 6.2 mils (157 µ)
Adhesion: 75 oz./inch width (21.2 N/2.5 cm)
Elongation: 250%
Tensile: 12.5 lbs./inch width (56.6 N/2.5 cm)
Sizes: 1" x 45 leet, 2" x 25 leet, 2" x 108 leet

(2.5 cm x 13.7 m, 5.1 cm x 7.6 m, 5.1 cm x 33 m)

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



### FROTH-PAK Nozzles (now Anti-Crossover)

Backcap Color	Nozzle Type	Spray Pattern	Stock #
Yellow	Caulking	Bead, ultra fine coverage	30A2120
White	NS	Spray, small area coverage	30A2021
White	Fan	Fan spray, wide area coverage, spray paint finish	30A2221
Gray	NS	Spray, small area coverage, medium output	30A2022
Black	Pour	Pour, high volume filling of large cavities	30A2323
Other nortles avai	ilable - please call	for information	

### **FROTH-PAK Accessories**

Stock #
3060T
300050
30A301
300043
30A302
30A347

LARGEST
DISTRIBUTOR
OF
INSTA-FOAM
180 FROTH PAK
IN THE U.S.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

	Densith	Theoretical	Contents	Stack	State in a late of the state of
FROTH-PAK 12  Funday of Neutrine Ameliahi Ni to m Co	1.75	12 Board Feet 1 Cubic Foot	12 Kits, each contain: 1 A can 1 B can 1 thumb controlled spray dispenser with hoses 2 spray nozzles	30FK110	12 units/case 37 lbs./case 12 cases/pallet
FROTH-PAK 12 Refill  TO SET ASSAULT  TO SET AS	1.75	12 Board Feet 1 Cubic Foot	12 Kits, each contain: 1 A can 1 B can 2 spray nozzles per kit Insta-Flo Dispenser Starter Kit Case: 5 A cans 5 B cans 1 Insta-Flo 12 dispenser 10 spray nozzles	30FK111 30A347 30FK112	12 units/case 34 lbs./case 24 cases/pallet  1 each  5 units/case 14 lbs./case 32 cases/pallet
FROTH-PAK 110  Spray Applied Polyweithane Foam State S	1.75 1.75 25FS/MSHA	110 Board Feet 9.2 Cubic Feet 110 Board Feet 9.2 Cubic Feet	1 A cylinder 1 B cylinder Spray nozzles 5½ ft. gun hose assembly (GHA) 1 wrench 1 petroleum jelly packet	30FK137 30FK195	28 lbs./unit 36 units/pallet

<sup>\*</sup> The theoretical yield has become an industry standard for identifying certain sizes of two component kits. Theoretical yield would be perfect laboratory conditions, without taking into account the loss of blowing agent or the variations in application methods and types.

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### INSTA-SEAL POLYURETHANE FOAM SEALANT & ADHESIVE

### MYTHS ABOUT FILLING AND SEALING GAPS AND HOLES.

#### STUFFING FIBERGLASS S AROUND GAPS AND HOLES IS EFFECTIVE IN CONTROLLING AIR LEAKAGE.

Wrong. Yet, that's what most people think! This technique is ineffective in controlling air leakage because fiberglass is porous and has no sealing qualities. In fact, fiberglass insulation is the worst air sealing material available.

#### **CAULK IS THE** MOST EFFECTIVE PRODUCT TO SEAL GAPS AND HOLES.

Wrong. Insta-Seal has greater expansion properties than caulk or any other sealant products. Unlike caulks Insta-Seal expands to fill a gap or hole. When cured, the foam assumes the shape of the cavity. It does not shrink or crack and will retain its sealing properties permanently. Insta-Seal is much more economical than caulk. One 24 oz. can of Insta-Seal yields about 8 gallons of cured foam or about 40 tubes of caulk. That's 1/10th the cost of caulk!

#### THERE IS NO NEED TO FILL AND SEAL **HOLES AND GAPS IN AREAS** WHERE THEY CANNOT BE SEEN.

Wrong again. Today's home buyers are smarter and better educated about energy conservation. Air leakage in homes is the single biggest cause of energy loss. It accounts for roughly 30% to 50% of the energy used in most houses. According to a survey in Professional Builder magazine, over 90% of home buyers would spend \$600 or more for an energy tight home. With Insta-Seal, builders or contractors can add extra value to the homes they build at very little expense.

### WIDEST RANGE OF PRODUCT SIZES AND DISPENSERS

PRODUCT AND DISPENSER GUIDE	Insta-Seal 12 oz.	Insta-Seal 3x 12 / 24 oz.	Insta-Seal Eco-Blend 12 oz.	Insta-Seal 3x Eco-Blend 12 20 oz	Insia-Seal Gun System 24 oz.	Insta-Pro Foam System 24 oz.	insta-Seal 10 Lb.	Insta-Seal	Insta- Clear 12 oz
Straw	<b>A</b>		•	<b>A</b>					
Brass Nozzle							•		
NBS Gun					<b>A</b>		(Wid) adapter)	(With adapter)	•
Insta- Pro Gun (can)						•			
Insta- Pro Gun (hose)							_	<b>A</b>	
COWING CONTRACT	HCFC	HCFC	HYDRO- CARBON	HYDRO- CARBON	HCFC	HCFC	HOFO	HCFC	Å L
TELD 7  Ann 1 m 3 s beard  An van secendag un serbiva e and hom an posici six	250	250/500	250	275/460	650	650	3,500- 4,300	5,600-	n/a

CLASSIFICATIONS. BUILDING CODES, **AND STANDARDS** 

- ASHBAE 90-75 ICBO
- BOCA · SBCCI
- CCMC #08239-B
- · HUD Section 507-6 • U.L. Classified Caulking and Sealants R-13655

### OTHER GREAT PRODUCTS FROM INSTA-FOAM



### FROTH-PAK®

Two component expanding polyurethanc spray foam for void filling, insulation, and air scaling.



### INSTA-STIK®

Single component polyurethane roofing adhesive for attaching insulation boards to commercial roof deck.



### **ROOFPAK®**

Two component portable polyurethane foam kit used as a temporary roof tie-off to prevent water damage.



### **INSTA-GRIP®**

Single component moisture and chemical resistant polyurethane construction adhesive.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



### INSTA-SEAL POLYURETHANE FOAM SEALANT & ADHESIVE

### **HOW DOES INSTA-SEAL COMPARE TO OTHER SEALANTS?**

### • GREATER SEALING PROPERTIES.

Unlike caulks and other sealants, Insta-Seal expands to fill the gap or hole. When cured, the foam assumes the shape of the cavity and forms an airtight seal. It does not shrink and will retain its sealing properties permanently.



Foam expands around pipe to form an airtight scal.

### **STRONGER ADHESION QUALITIES.**

Insta-Seal sticks to most surfaces including wood, metal, masonry, glass, and most plastics. It is also compatible with polystyrene and polyurethane foam insulation board.

#### ♦ HIGHER INSULATION VALUE.

Caulk has no insulating properties whereas Insta-Seal provides both insulation and sealant benefits.

### SUPERIOR ECONOMY.

Insta-Seal is much more economical than caulk. One 24 oz. can of Insta-Seal yields about 8 gallons of cured foam. This is equivalent to about **40 tubes** (11 oz.) of caulk or about 1/10 the cost of caulk.

#### **♦ LONGER LIFE.**

Insta-Seal uses no solvent. It will not dry out, crack or shrink. Because it is semi-rigid when cured, it withstands expansion and contraction, without pulling away as conventional seals do.

### HVAC



### ◆ JOINTS & GAPS → WINDOWS & DOORS



### PLUMBING



### \* ELECTRICAL



### PEST CONTROL



### WHAT IS INSTA-SEAL®?

Insta-Seal is a single component polyurethane foam used as an insulating sealant and for adhesive applications.

### WHY USE INSTA-SEAL?

#### **♦** CREATES A DURABLE AIRTIGHT SEAL

- Stops air infiltration.
- Minimizes outdoor noise.
- Prevents pest infiltration.
- Prohibits transmission of odor.
- · Reduces risk of condensation, moisture damage, and ice build-up.
- Minimizes allergy irritants by keeping out pollen, outside dirt and dust.

#### ♦ SAVES ENERGY DOLLARS

- Reduces air conditioning costs.
- Decreases heating costs.
- Provides excellent R-Value.

### **ENHANCES OCCUPANT COMFORT**

- Helps maintain a comfortable humidity level.
- Stabilizes temperature inside building by eliminating cold drafts in winter and keeping warm air outside in summer.

### WHAT IS AIR INFILTRATION/ **EXFILTRATION?**

Air infiltration/exfiltration is the uncontrolled leakage of air through cracks and gaps in walls of buildings around doors, windows, electrical outlets, pipes, vents, baseboards, wall and ceiling joints, etc.

The average house has a multitude of hidden cracks and holes. Add them up and it's like having a four square foot opening letting air leak in and out of a home.

The U.S. Department of Energy estimates that air leakage through cracks and gaps in homes is the single biggest cause of residential heating and cooling loss. It accounts for approximately 30% to 50% of the energy used in most homes.

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# POLY SHEETING Plastic Construction Film

PRODUCT CODE		DTH X NGTH	OPTIONS	SQ FT/ ROLL	ROLL WEIGHT	ROLLS/ Pallet		PRODUCT CODE	WIDTH X LENGTH	OPTIONS	SQ FT/ ROLL	ROLL WEIGHT	ROLLS/ Pallet	NET PLT WEIGHT
			.7 N	11L				1		4 MIL (C	ont.)			
07509	9' >	x 400'	С	3600	12.0	99	1188	412	12' x 100'	B,C,FR	1200	22.9	64	1466
07512	12' >	x 400'	С	4800	16.0	80	1280	414	14' x 100'	С	1400	26.8	48	1286
0759100	00 9' >	x 1000'	С	9000	30.1	36	1084	514	14' x 300'	WH	4200	80.4	16	1286
			4 88					416	16' x 100'	B,C	1600	30.6	48	1469
			1 M	IL				420	20' x 100'	B,C,FR,WH	2000	38.2	35	1337
109	9' >	x 400'	C, PF	3600	17.2	80	1376	424	24' x 100'	B,C	2400	45.9	35	1607
112	12' >	x 400'	С	4800	22.9	64	1466	428	28' x 100'	B,C,WH	2800	53.6	28	1501
			1.2 N	/II				432	32' x 100'	B,C	3200	61.2	28	1714
4000								440	40' x 100'	B,C	4000	76.5	24	1836
1220	20' x	k 200'	PF	4000	22.9	56	1282			6 MI				
			1.5 N	ΛIL				610-50	10' x 50'	B,C	500	14.3	99	1416
15161	16' x	k 100'	С	1600	11.4	96	1094	612-50	12' x 50'	B,C	600	17.2	80	1376
15100	8'4" x	< 200'	С	1667	11.9	108	1285	616-50	16' x 50'	B,C	800	22.9	56	1282
1512	12' x	₹ 200'	С	2400	17.2	80	1376	620-50	20' x 50'	B,C	1000	28.7	56	1607
1520	20' x	< 200'	B,C	4000	28.7	56	1607	606	6' x 100'	B,C	600	17.2	56	963
			0.84					608	8' x 100'	B,C	800	22.9	56	1282
			2 M	IL				6100	8'4" x 100'	С	833	23.9	56	1338
SW2050			С	833	7.97	96	765	609	9' x 100'	С	900	25.8	56	1445
2100	8'4" x	< 200'	С	1667	15.9	96	1526	610	10' x 100'	B,C FR	1000	28.7	56	1607
212	12' x	( 200'	С	2400	22.9	64	1466	612	12' x 100'	B,C,FR	1200	34.4	49	1686
220	20' x	< 200'	С	4000	38.2	35	1337	614	14' x 100'	B,C	1400	40.2	20	804
			י טב ו	MII				616	16' x 100'	B,C	1600	45.9	20	918
		4001	2.25 l					620	20' x 100'	B,C,FR,WH	2000	57.4	20	1148
22503	3' x	( 100'	B (4/cs)	300	3.23	64	825	RE-620 620	20' x 100'	C,FR	2000	57.4	20	1148
			3 M	11				624	20' x 100' 24' x 100'	ASFR B,C	2000 2400	57.4 68.9	20 25	1148 1723
320-50	20' x	, 50'	C	1000	14.3	80	1144	628	28' x 100'	B,C B,C	2800	80.4	20 20	1608
308		(100'	C	800	11.4	108	1231	632	32' x 100'	B,C	3200	91.9	20	1838
320	20' x		B,C	2000	28.7		1205	640	40' x 100'	B,C	4000	114	20	2280
320	20 1	. 100	0,0	2000	20.7	42	1203	640	40' x 100'	BPL	4000	114	16	1824
			4 M	lL				640-120	40' x 120'	BPL	4800	137	16	2192
403-50	3' x	50'	B,C (12/cs)	150	2.87	384	1102	Flash-12	12" x 300'	В	300	8.61	168	1446
406-50		50'	B,C (6/cs)	300	5.74	144	827	Flash-18	18" x 300'	В	450	12.9	104	1342
408-50		50'	B,C	400	7.65		1346	l		O MAI	1			
410-50	10' x		B,C	500	9.57		1206	l		8 MI				
412-50	12' x		B,C	600	11.4	72	821	820	20' x 100'	B,C	2000	76.5	20	1530
416-50	16' x		C	800	15.3		1469	l		10 M	11			
420-50	20' x		B.C	1000	19.1		1528	1020	20' v 100'		2000	95.7	10	1140
SW403		100'	C	300	5.74	96	551		20' x 100' 20' x 100'	B,C,FR C,FR				1148
403		100'	B,C	300	5.74	168	964	NE-1020	20 X 100	U,FN	2000	95.5	20	1910
SW404		100'	C	400	7.65	96	734		A	GRICULTUR	AL FI	LM		
404		100'	B,C	400	7.65		1285	635	32' x 150'	Black & White		118	12	1424
406		100'	B,C	600	11.4		1186	640	40' x 100'	Black & White		114		1824
408	8, x		B,C	800	15.3		1469	645	40' x 150'	Black & White		148		2368
4100	8'4" x		C, FR	833	15.9		1526	650	50' x 100'	Black & White		143		1287
409	9' x		C	900	17.2		1376	655	50' x 150'	Black & White	7500	185		2220
494	9'4" x		C,FR	933	17.8		1424							
410	10' x		B,C	1000	19.1		1528							
710	10 X	100	ט,ט	1000	13.1	00	1320							

Options:

ASFR Anti-Static & Flame Retardant Film

B Black Construction Film

BPL Black Pit Liner

C Clear Construction Film

FR Flame Retardant Film

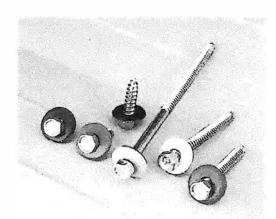
PF Ice Blue

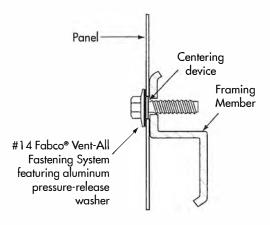
RE Reinforced Film

SW Single-Wound Film (no folds)

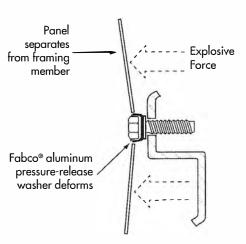
WH White Opaque Film

### Vent-All™ explosion-venting fasteners limit damage from explosions





**Normal Installed Condition** 



Interior Explosion Release Conditions

Vent-All™ explosion-venting fasteners, a series of collapsible washers on stainless steel fasteners, are designed to minimize injury and destruction of property from explosions caused by agricultural or industrial operations.

### **F**EATURES

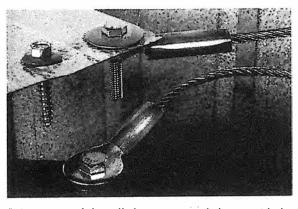
- ◆ .729" O.D. washer with special aluminum alloy bonded with EPDM or neoprene sealant
- Washers designed to collapse under force of explosion, allowing panel to separate and vent shock waves

### BENEFITS

- Maintains standard building integrity
- Minimizes destruction from explosion by quickly dissipating explosive forces
- May be used with any sheet or panel, with or without insulation, in field-assembled or shop-assembled walls

Washer Designation	Color Code	Release Value per Fastener
EXA-74	Green	70#
EXA-76	Blue	110#
EXA-79	Tan	1 <i>75</i> #
EXA-84	Light Green	435#
EXA-19	Light Blue	885#

These are the average release pressures for each washer.



It is suggested that all sheets or panels be provided with restraint cables, about three feet long, anchored to the structure to prevent sheets from becoming flying projectiles.

### FABCO® FASTENING SYSTEMS

### FABCO EXPLOSION VENTING FASTENERS

### ■ For Damage-Limiting Construction in case of Explosions.

#### **EXPLOSION HAZARDS**

As long as highly volatile liquids subject to fume emission are present in manufacturing processes, or operations involve dry materials so fine and light they easily escape into plant air, an explosion is an everpresent danger. These solids, gasses and vapors in industrial structures can generate shock waves from 35 to 120 psi. Pressures can rise from 200 to 2200 psi/second. Otherwise harmless materials, such as flour, sugar, dust, plastic can create havoc in industrial structures.

This peril has continued to exist despite precautionary training programs for workers, carefully balanced ventilating and make-up air systems, totally enclosed motors and electrical control equipment—even physical separation of processing stages to prevent the possible accumulations of conditions which could trigger an explosive blast.

Since the best efforts of industry have not completely eliminated the explosion hazard, considerable attention has been directed toward *minimizing* the loss of life and the destruction of plant buildings and equipment by "explosion venting"—in effect, providing a "path" by which the force of an explosion can escape and be dissipated.

### ■ Reduce Hazards to Personnel. SEARCH FOR VENTING SYSTEM

Save Equipment from Damage.

The fastener desired would be required to maintain construction integrity under windstorm conditions as well as release when rapidly accelerating shock waves of an explosion occur inside a building.

In the early 1950's, Fabco Fastening Systems initiated experiments in the development of "explosion venting" or "pressure release" fasteners, based on their experience in designing and marketing fasteners for the Metal Building Industry. After private tests were made to develop the fastener concept, an initial series of tests was performed by Factory Mutual Research in 1958. These tests at Factory Mutual Research showed the merits of the system for venting pressures inside structures.

Research and private testing continued, and finally the product was introduced to the Construction Industry. Of the many installations on which FABCO pressure release fasteners were used, a small number of reports were received that explosions had occurred, and the shock waves had vented satisfactorily.

In 1974 FABCO, with confidence in this product, initiated a new series of tests at Factory Mutual Research. Formal approval was granted by Factory Mutual Research

#### **FABCO SYSTEM FOR EXPLOSION VENTING**

The FABCO System of Explosion venting is based upon five bearing and sealing washers. These washers are designed to collapse under impact of the shock wave of an explosion, allowing panels to blow off. These washers are .729" OD special aluminum alloy vulcanized to neoprene or EPDM elastomer sealant.

Washers are assembled to 4" diameter stainless steel fasteners which have 4" hexagon heads, are 4" to 6" in length, and may have a centering sleeve, depending on the application.

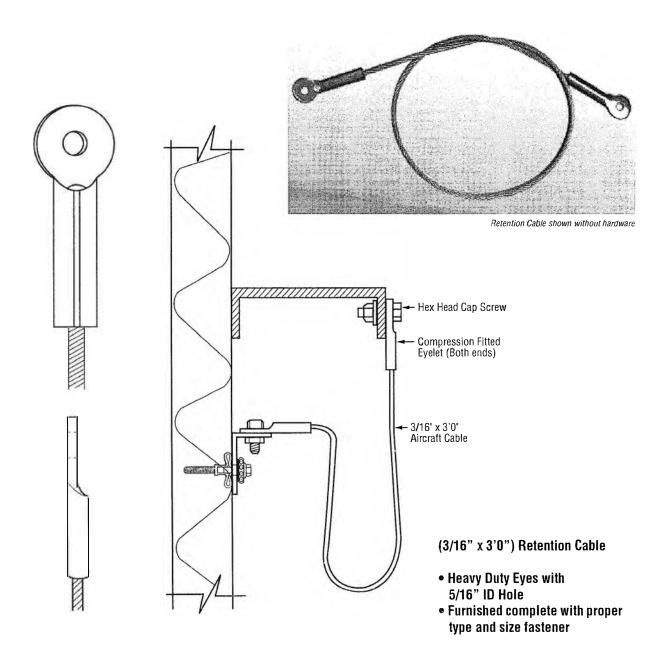
FABCO pressure-relieving fasteners may be used with any sheet or panel, with or without insulation, in field-assembled or shop-assembled walls.

Washer Designation	Color Code	Release Value/Fastene
EXA-74	Green	70#
EXA-76	Blue	110#
EXA-79	Tan	175#
EXA-84	Light Green	435#
EXA-19	Light Blue	885#

### **PERSONNEL SAFETY**

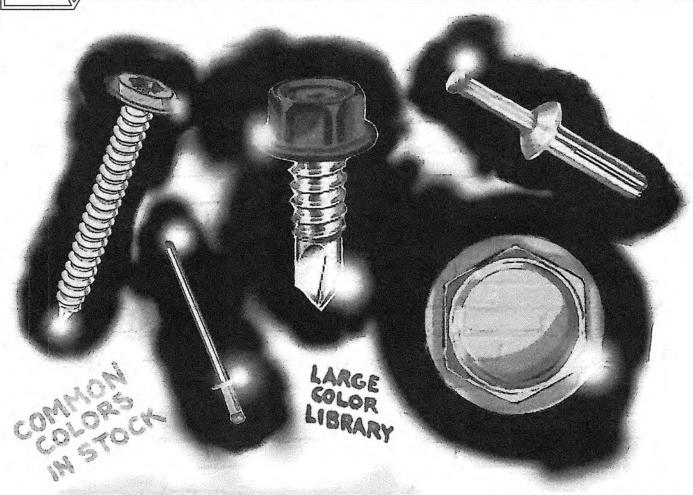
For personnel safety it is suggested that all sheets or panels be provided with arresting chains or cables about 3' long to be anchored to the structure to prevent the sheets from becoming flying projectiles.

### **Retention Cable**



# AVAILABLE IN STAINLESS STEEL AND CUSTOM MADE LENGTHS

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



IN HOUSE PAINTING

TUFF BAKED ON FINISH

FSi

640 Snyder Avenue Bolmar Industrial Center West Chester, PA 19382 Phone: (610) 692-6658 Fax: (610) 692-8151



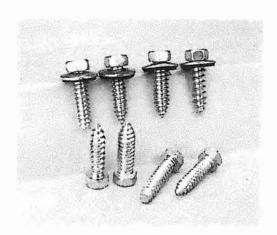
Self-tapping fasteners roll-form threads as they are driven into the mating material, eliminating expensive tapping operations.

### **FEATURES**

- Three thread/point styles available to match your specific application
- Available in carbon steel, stainless steel or Monel

### BENEFITS

- Save time and labor by eliminating tapping operations
- Standard thread designs allow easy field replacement



### **APPLICATIONS**

Best performance depends on proper hole size.



#14 Type A

Uses: Cladding and sheet overlap (stitching), for attaching flashing, and for attaching cladding to 18 gage and lighter framing.



1/4" Type B

*Uses:* The tighter thread configuration is designed for attaching cladding to 18 gage and heavier framing members, while the blunt point minimizes the appearance of the fastener inside the building.



1/4" Type AB

Uses: The tighter thread configuration plus pointed tip make this ideal for aligning sheets during attachment to 18 gage and heavier framing members.

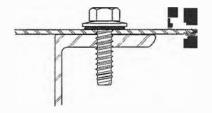


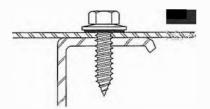
#17 Type AB

Uses: The larger diameter and close thread configuration allow greater resistance to strip-out and shear and results in tighter overlap joints.

This can also be used to replace 1/4" fasteners that have stripped through.









# **Self-Tapping Carbon Steel Fasteners**

• Indented Hex Head • Zinc Plated Sheet Metal Screws • With Neo-Bond® Galvanized Washers

	Size	Point	Description	Per M	Quantity
CARBON STEEL	10-16 x 5⁄8″ H <b>W</b> H	Α	Indented Hex Head Carbon Steel	9.1	5,000
	12 x 3/4"	Α	Indented Hex Head	10.1	2,500
	12 x 1"	Α	Carbon Steel	12.9	2,500
	12 x 1½″	A		17.0	2,000
	14 x 3/4"	A-AB-B	Indented Hex Head	14.7	2,500
	14 x 1"	A-AB-B	Carbon Steel	17.0	2,500
	14 x 11/4"	A-AB-B		19.0	2,000
_1	14 x 1½″	A-AB-B		21.4	1,500
- mannaman	14 x 1¾″	A-AB-B		23.4	1,500
	14 x 2"	A-B		26.0	1,000
4	14 x 2½"	A-B		30.0	1,000
	14 x 3″	A-B		34.0	1,000
	14 x 3½"	A-B		38.0	500
•	14 x 4"	A-B		44.6	500
	14 x 5″	A-B		53.5	300
	14 x 6"	A-B		61.5	250
	14 x 8"	A-AB-B		89.4	250
	17 x <sup>3</sup> / <sub>4</sub> "	A-B	Indented Hex Head	17.0	2,500
	17 x 1″	A-B	Carbon Steel	21.0	2,000
	17 x 1½″	A-B		27.0	1,500
	Size	Point	Description	Weight Per M	Std. Box Quantity
<b>MODIFIED 300 SERIES</b>	12 x <sup>3</sup> / <sub>4</sub> "	A-AB-B	Indented Hex Head	10.1	2,500
STAINLESS STEEL	12 x 1″	A-AB	Carbon Steel	12.9	2,500
√Dm	14 x <sup>3</sup> / <sub>4</sub> "	A-AB-B	Indented Hex Head	14.7	2,500
- Contradiction of the Contradiction	14 x 1"	A-AB-B-BP	Carbon Steel	17.0	2,500
	14 x 11/4"	A-B		19.0	2,000
d mmm	14 x 1½″	A-AB-B-BP		21.4	1,500
V-	14 x 1 ¾"	A-B-BP		23.4	1,500
	14 x 2"	A-AB-B-BP		26.0	1,000
	14 x 2½″	A-B-BP		30.0	1,000
<b>A</b>	14 x 3″	A-B		34.0	1,000
	14 x 3½″	A-B		38.0	500
- MANAGANA	14 x 4"	A-B		44.6	500
	14 x 4½"	A-B		53.5	300
	14 x 5″	A-B		53.5	300
<b>^</b>	14 x 6"	A-B	h	61.5	250
	14 x 8"	A-B		61.5	250
	17 x 3/4"	AB	Indented Hex Head	17.0	2,000
	17 x 1"	AB	Carbon Steel	21.0	2,000
V	17 x 1½″	AB		27.0	1,500

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# **Carbon Steel Self-Drilling Fasteners**

With Neo Bond Sealing	Washers • Hex Wa Size	asher Head Description	Weight Per M	Std. Box Quantity
STITCH/LAP POINT	#10 -12 x 7/8"	Hex Washer Head,	10.2	5,000
	1/4 -14 x 7/8"	Type 1 with	13.2	2,500
	1/4 -14 x 11/2"	Bonded Neoprene	19.8	2,500
	#18-9 x 1"	Sealing Washer	18.2	2,000
#2 POINT	#8-18 x ½"	Hex Washer Head,	6.5	10,000
-M	#8-18 x 5/8″	Type 2 with	7.0	10,000
	#8-18 x <sup>3</sup> / <sub>4</sub> "	Bonded Neoprene	7.7	7,500
W	#8-18 x 1"	Sealing Washer	8.4	7,500
	#8-18 x 1½"	<b>3</b>	12.6	5,00
#2 LONG PILOT POINT	#12-14 x <sup>7</sup> /8"	Hex Washer Head,	11.7	2,500
di	#12-14 x 1"	Pilot Point Type 2 with	13.9	2,500
	#12-14 x 11/4"	Bonded Neoprene	15.0	2,500
W	#12-14 x 11/4"	Sealing Washer	16.7	2,000
	#12-14 x 2"	Sealing Washer		1,500
#3 POINT		11	20.0	
A CIVINI	#10-16 x ½"	Hex Washer Head,	8.3	10,000
	#10-16 x 5/8"	Type 3 with	9.1	7,500
	#10-16 x <sup>3</sup> / <sub>4</sub> "	Bonded Neoprene	9.7	5,000
	#10-16 x 1"	Sealing Washer	10.3	5,000
	#10-16 x 11/4"		12.1	5,000
	#10-16 x 1½″		13.5	2,500
	#10-16 x 2"		14.9	2,500
	#12-14 x 3/4"	Hex Washer Head,	12.7	2,500
	#12-14 x 1"	Type 3 with	14.7	2,500
	#12-14 x 11/4"	Bonded Neoprene	16.8	2,500
	#12-14 x 1½″	Sealing Washer	18.0	2,000
1	#12-14 x 2"		20.5	1,500
	#12-14x 2½″		24.5	1,000
1.	#12-14 x 3"		28.0	1,000
10	1/4 -14 x 3/4"	Hex Washer Head,	16.4	2,500
7	1/4 -14 x 1"	Type 3 with	18.6	2,500
1	1/4 -14 x 11/4"	Bonded Neoprene	19.9	2,000
	1/4 -14 x 11/2"	Sealing Washer	22.4	2,000
	1⁄₄ -14 x 2″		27.0	1,500
	1/4 -14 x 21/2"		32.6	1,000
	1/4 -14 x 3"		37.1	500
	1/4 -14 x 4"		47.2	500
#4 POINT	#12-24 x 1/8"	Hex Washer Head,	14.8	2,500
-1	#12-24 x 1"	Type 4, with	15.0	2,500
	#12-24 x 11/4"	Bonded Neoprene	17.0	2,500
-4		Sealing Washer		
#5 POINT	#12-24 x 11/4"	Hex Washer Head,	17.4	2,500
A VIIII		Type 5, with	16.5	2,000
The state of the s	#12-24 x 1½″	Bonded Neoprene	21.6	1,500
- Dadingo	#12-24 x 2"	And the second s	26.7	1,500
	#12-24 x 3"	Sealing Washer Hex Washer Head,	47.2	500
	1/4 -14 x 4"	•	57.3	300
	1/4 -14 x 5"	Type 5, with	1	250
	1/4 -14 x 6"	Bonded Neoprene	67.4	
	1/4 -14 x 8"	Sealing Washer	90.4	250

All the above parts are available painted and without sealing washers.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# 410 Stainless Self-Drilling Fasteners

<ul> <li>Without Sealing Washers</li> </ul>	s • Hex Was Size	her Head Description	Weight Per M	Std. Box Quantity
STITCH/LAP POINT	#10-12 x 1/8"	Hex Washer Head,	7.8	5,000
	1/4 -14 x 3/4"	Type 1	12.2	2,500
	1/4 -14 x 1/8"	турет	12.5	2,500
	#14-10 x 1"		12.1	2,500
	#18-9 x 1"		15.4	2,000
#2 POINT	#8-18 x ½"	Hex Washer Head,	3.3	10,000
	#8-18 x ¾″	Type 2	4.5	7,500
	#8-18 x 1"		5.6	7,500
	#12-14 x ¾"		9.7	5,000
#2 LONG PILOT POINT	#12-14 x 1"	Hex Washer Head,	10.3	2,500
	#12-14 x 11/4"	Pilot Point Type 2	11.5	2,500
	#12-14 x 1½″	71	13.7	2,000
#3 POINT	#10-16 x ½″	Hex Washer Head,	5.3	7,500
-A	#10-16 x 3/4"	Type 3	6.8	5,000
	#10-16 x 1"	Туре о	7.8	5,000
	#10-16 x 1½"		10.5	2,500
	#12-14 x 3/4"	Hex Washer Head,	9.7	2,500
	#12-14 x 1"	Type 3	11.7	2,500
1	#12-14 x 11/4"	,,	12.3	2,500
1	#12-14 x 1½"		12.9	2,000
	#12-14 x 2"		15.5	1,500
	1/4 - 14 x 3/4"	Hex Washer Head,	12.2	2,500
	1/4 -14 x 1"	Type 3	15.5	2,500
	1/4 -14 x 11/4"		17.5	2,000
	1/4 -14 x 11/2"		20.3	1,500
1	1⁄4 -14 x 2″		25.6	1,500
1	1/4 -14 x 21/2"		30.9	1,000
	1⁄4 -14 x 3″		35.0	500
#4 POINT	#12-24 x 11⁄4″	Hex Washer Head, Type 4	14.0	2,500
#5 POINT	#12-24 x 11⁄4″	Hex Washer Head, Type 5	13.9	2,500
STITCH/LAP POINT	#10-12 x ¾"	Hex Washer Head,	10.6	5,000
<b>-</b> 1	1/4 -14 x 3/4"	Type 1 with	15.2	2,500
	1/4 -14 x 1/8"	Bonded Neoprene	16.3	2,500
	#14-10 x 1"	Sealing Washer	15.1	2,500
•	#18-9 x 1″		18.4	2,000

All the above parts are available painted and with sealing washers.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# **410 Stainless Self-Drilling Fasteners**

<ul> <li>With Sealing Washers</li> </ul>	• Hex W	Weight	Std. Box	
	Size	Description	Per M	Quantity
#2 POINT	#8-18 x ½"	Hex Washer Head,	6.8	10,000
	#8-18 x <sup>3</sup> / <sub>4</sub> "	Type 2 with	8.0	7,500
	#8-18 x 1"	Bonded Neoprene	8.6	7,500
	#12-14 x <sup>3</sup> / <sub>4</sub> "	Sealing Washer	11.5	5,000
#2 LONG PILOT POINT	#12-14 x 1″	Hex Washer Head,	13.3	2,500
	#12-14 x 11/4"	Pilot Point Type 2 with	14.5	2,500
	#12-14 x 1½″	Bonded Neoprene	16.7	2,000
		Sealing Washer		,
#3 POINT	#10-16 x ½"	Hex Washer Head,	8.3	7,500
	#10-16 x <sup>3</sup> / <sub>4</sub> "	Type 3 with	9.5	5,000
	#10-16 x 1"	Bonded Neoprene	11.9	5,000
	#10-16 x 1½"	Sealing Washer	13.9	2,500
	#12-14 x <sup>3</sup> / <sub>4</sub> "	Hex Washer Head,	12.7	2,500
P.	#12-14 x 1"	Type 3 with	14.7	2,500
į.	#12-14 x 1¼"	Bonded Neoprene	13.9	2,500
i i	#12-14 x 1½″	Sealing Washer	18.0	2,000
_	#12-14 x 2"		19.5	1,500
	1/4 -14 x 3/4"	Hex Washer Head,	15.2	2,500
	1/4 -14 x 1"	Type 3 with	18.5	2,500
- 1	1/4 -14 x 11/4"	Bonded Neoprene	20.5	2,000
-	1/4 -14 x 11/2"	Sealing Washer	23.3	2,000
	1/4 -14 x 2"	•	28.6	1,500
	1/4 -14 x 21/2"		30.9	1,000
	1/4 -14 x 3"		38.5	500
#4 POINT	#12-24 x 11/4"	Hex Washer Head,	17.0	2,500
_n		Type 4 with		
		Bonded Neoprene		
		Sealing Washer		1, 1
#5 POINT	#12-24 x 11/4"	Hex Washer Head,	16.9	2,500
- M		Type 5 with		
		Bonded Neoprene		
-U		Sealing Washer		

# **Carbon Steel Self-Drilling Fasteners**

<ul> <li>Without Sealing Washers</li> </ul>	<ul> <li>Phillips Pan Head</li> </ul>

#2 POINT	#6-20 x¾″	Phillips Pan Head	1.8	10,000
<b>1</b>	#6-20 x ½"	Type 2	2.2	10,000
	#8-18 x ½″	Phillips Pan Head	3.3	10,000
M.	#8-18 x 5⁄8″	Type 2	4.0	10,000
	#8-18 x ¾″		4.4	10,000
	#8-18 x 1"		5.1	7,500
	#8-18 x 1½"		6.9	7,500
#3 POINT	#10-16 x ½″	Phillips Pan Head	4.8	7,500
	#10-16 x 5/8"	Type 3	5.6	7,500
	#10-16 x ¾″	,,	5.7	7,500
V	#10-16 x 1"		7.2	7,500
	#10-16 x 1½″		9.6	7,500
	#10-16 x 2"		12.0	5,000

All the above parts are available painted and without sealing washers.

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# **Carbon Steel Self-Drilling Wafer Head Fasteners**

• Wafer Head	Size	Description	Weight Per M	Std. Box Quantity
#2 POINT	#8-18 x ½″	Phillips Wafer Head	3.2	10,000
Ammuninanis	#8-18 x ¾″	Type 2	4.1	10,000
	#8-18 x 1"	Low Profile	5.0	8,000
U	#8-18 x 1¼″		5.9	6,000
	#8-18 v 15%"		73	5 000

# **410 Stainless Steel Self-Drilling Fasteners**

• Without Sealing Washers • Phillips Pan Head					
#2 POINT	#8-18 x ½" #8-18 x ¾" #8-18 x 1"	Phillips Pan Head Type 2	3.3 4.2 5.1	10,000 10,000 7,500	
#3 POINT	#10-16 x ½" #10-16 x ¾" #10-16 x 1"	Phillips Pan Head Type 3	4.8 5.7 7.2	7,500 7,500 5,000	

# FLAT-TOP Self-Drilling & Self-Tapping Fasteners

- Carbon Steel Under-Cut Hex Heads and EPDM Sealing Washers OxySeal II Long-Life Coating
- Socket Support
   Deeper Undercut to Entrap Sealant

STITCH/LAP POINT	1/4-14 x 7⁄8″	Hex Head Under-Cut, Type 1 with EPDM Sealing Washer	12.6	2,500
#2 LONG PILOT POINT	#12-14 x 1" #12-14 x 1¼" #12-14 x 1½" #12-14 x 2" ¼ -14 x 1"	Hex Head Under-Cut, Pilot Point Type 2 with EPDM Sealing Washer  Hex Head Under-Cut,	12.9 16.2 17.1 20.0	2,500 2,500 2,000 1,500 2,500
	1/4 -14 x 11/4"	Pilot Point Type 2 with EPDM Sealing Washer	20.0	2,500
SELF-TAPPING	14 x ¾" 14 x 1" 14 x 1½" 14 x 2"	Hex Head Under-Cut, Type A-AB with EPDM Sealing Washer	13.2 17.0 21.0 24.0	2,500 2,500 2,500 1,500
	17-14 x 1"		16.0	1,500

### FLAT-FOP 410 Stainless Steel Self-Drilling & Self-Tapping Fasteners

STITCH/LAP POINT	1/4-14 x 7/6" 1/4-14 x 3/4"	Hex Head Under-Cut, Type 1 and AB with EPDM Sealing Washer	16.3 14.7	2,500 2,500
#3 POINT	12-14 x ¾" 12-14 x 1" 12-14 x 1¼" 12-14 x 1½"	Hex Head Under-Cut, Type 3 with EPDM Sealing Washer	12.7 14.7 15.9 18.0	2,500 2,500 2,500 2,500 2,000
	V4 -14 x 3/4" V4 -14 x 1" V4 -14 x 1V4" V4 -14 x 1V2" V4 -14 x 2"	Hex Head Under-Cut, Type 3 with EPDM Sealing Washer	15.2 18.5 20.5 23.3 28.6	2,500 2,500 2,000 2,000 1,000

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### **Metal to Wood Fasteners**

Carbon Steel • 1/4" Ho	ex Washer Head • With	Neo-Bond® Washers	Weight	Std. Box
	Size	Description	Per M	Quantity
WOODGRIP®	#10-16 x 1"	Hex Head Woodgrip®	8.7	3,000
-M	#10-16 x 1½"	Sharp Point with	10.8	2,500
	#10-16 x 2"	Bonded Neoprene	13.1	2,500
	#10-16 x 2½″	Sealing Washer	15.4	1,000
	#10-16 x 3"	3	17.7	1,000
	#12-14 x <sup>3</sup> / <sub>4</sub> "		15.0	2,500
WOODTITE®	#10-16 x 1"	Hex Head Woodtite®	8.2	2,500
-M	#10-16 x 1½"	Type 17 Point with	10.5	2,500
	#10-16 x 2"	Bonded Neoprene	12.3	2,000
	#10-16 x 2½″	Sealing Washer	14.8	1,500
	#10-16 x 3"	3	17.0	1,000
	#14-10 x 1"	Hex Head Woodtite®	15.0	2,500
	#14-10 x 1½"	Type 17 Point with	18.6	2,000
	#14-10 x 2"	Bonded Neoprene Sealing Washer	22.7	1,500
ZAC WOODGRIP®	#10-16 x 1"	Hex Head Woodgrip®	9.5	2,500
	#10-16 x 1½"	Sharp Point ZAC®	11.5	2,500
	#10-16 x 2"	Cap with Bonded	14.0	2,000
	#10-16 x 2½″	Neoprene Sealing Washer	16.5	1,500
	#10-16 x 3"	, ,	19.0	1,000
	#12 x <sup>3</sup> / <sub>4</sub> "		6.3	2,500
WOOD TO METAL	#10-24 x 17/16"	Phillips Wafer Head Type3 with Wings	10.0	2,500
	#11 1C v 015/-"	Phillips Flat Head	23.0	1,000
	#11-16 x 2 15/16" #11-16 x 3 7/16"	Type4 with Wings	25.0	1,000
	#11-16 x 3 ½16 #11-16 x 3 ½16	Type4 with Wings	30.0	500
	#11-16 x 3 1916 #12-24 x 1 5%"	Phillips Wafer Head	13.6	2,500
		Type4 with Wings	17.6	1,500
	#12-24 x 2"	rype4 with wings	22.1	1,000
	#12-24 x 2½" 1/4-20 x 2¾"	Phillips Wafer Head Type4 with Wings	23.1	1,000

# **Aluminum Self-Drilling Fasteners**

- Hex Washer Head (1/4" Across Flat) with Reduced Diameter Tapered Compression Point
- With Aluminum Neo-Bond® Washers

With Mulliman Nov	Size	Description	Weight Per M	Std. Box Quantity
#1 POINT	#11-13 x 1." #11-13 x 1½" #11-13 x 2" #11-13 x 2½"	Hex Head Aluminum Woodgrip with Bonded Neoprene Sealing Washer	4.0 5.0 6.0 7.0	2,500 2,000 1,500 1,000

### **Self-Tapping 410 Stainless Steel Sheeting Fasteners**

• Indented 3/8" Hex Head • With Stainless Steel Neo-Bond® Washers						
macinida o, o non nou		Std. Box Quantity				
410 STAINLESS STEEL	14 x ¾″	Indented Hex Head,	14.7	2,500		
	14 x 1"	Type A-AB-B, with	17.0	2,500		
- mananana	14 x 1½″	Bonded Neoprene	21.4	1,500		
	14 x 2″	Sealing Washer	26.0	1,000		
d	14 x 2 ½″	ŭ	30.0	1,000		

### **Scrubolt® Sheeting Fasteners**

inuentea 3/8 Hex He	au • zinc Piateu • with Size	Galvanized Neo-Bond® Washer  Description	Weight Per M	Std. Box Quantity
ARBON AND	11/ <sub>32</sub> " x 7/ <sub>8</sub> "	Indented Hex Head,	33.2	1,000
AINLESS STEEL	11/32" X 11/4"	Type AB with	41.3	1,000
	11/32" X 11/2"	Bonded Neoprene	45.3	1,000
–n∕I	11/32" X 13/4"	Sealing Washer	49.4	1,000
	11/32" x 2"	o a constant of the constant o	53.4	1,000
	11/32" x 23/4"		65.6	1,000
-W	11/32" x 31/2"		77.8	500
	11/32"X 5"		90.0	500
	23/64" x 1"	Indented Hex Head,	34.0	1,000
	<sup>23</sup> / <sub>64</sub> " x 21/ <sub>4</sub> "	Type AB with	53.9	1,000
	<sup>23</sup> / <sub>64</sub> " x 3½"	Bonded Neoprene	73.8	500
	<sup>23</sup> / <sub>64</sub> " x 5"	Sealing Washer	93.7	500
	<sup>23</sup> / <sub>64</sub> " x 6"		109.4	500

### **Fastener Systems Tapcon® Type Masonry System**

PHILLIPS SL	OTTED HEX WAS	HER HEAD	PHILLIPS FLAT HEAD		
7	Size	Description		Size	Description
	3/16" x 11/4" 3/16" x 13/4" 3/16" x 21/4" 3/16" x 23/4" 3/16" x 33/4" 3/16" x 3/4" 1/4" x 11/4" 1/4" x 13/4" 1/4" x 23/4" 1/4" x 23/4" 1/4" x 33/4" 1/4" x 33/4" 1/4" x 3/4" 1/4" x 3/4" 1/4" x 3/4" 1/4" x 5" 1/4" x 5" 1/4" x 6"	Phillips Slotted Hex Washer Head  Phillips Slotted Hex Washer Head		3/16" x 11/4" 3/16" x 13/4" 3/16" x 23/4" 3/16" x 33/4" 3/16" x 33/4" 3/16" x 4"  1/4" x 11/4" 1/4" x 21/4" 1/4" x 23/4" 1/4" x 33/4" 1/4" x 33/4" 1/4" x 4" 1/4" x 4" 1/4" x 4" 1/4" x 5" 1/4" x 6"	Phillips Flat Head  Phillips Flat Head

### **304 AND 410 STAINLESS STEEL**

 Size
 Description

 ¼" x 1¾"
 Hex Washer

 ¼" x 1¾"
 Head Tapcon®

 ¼" x 2¼"
 and Phillips

 ¼" x 2¾"
 Flat Head Tapcon®



**INSTALLATION TOOL KIT** 

SDS AND ROUND SHANK CARBIDE DRILL BITS ARE AVAILABLE FOR TAPCON® FASTENING SYSTEM

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# Rigid and Blanket Self-Drilling Insulation Fasteners

iga washigi mgali wi	th High Thread • Zinc Plat Size	Description	Weight Per M	Std. Box Quantity
#3 POINT	#12 (¼ -14) x 1¾ #12 (¼ -14) x 2¾ #12 (¼ -14) x 3″	Hex Washer Head with High Thread Type 3 with 1-1/8" Plastic Washer for interior insulation	25.9 30.4 42.0	750 500 250
#3 POINT	#12 (¼ -14) x 1¾ #12 (¼ -14) x 2¾ #12 (¼ -14) x 3″	Hex Washer Head with High Thread Type 3 with Bonded Neoprene Washer for exterior insulation	22.8 30.3 34.1	1,500 1,000 1,000

# **Low-Profile Panel Clip Fasteners**

Carbon Steel • 410 Stair	iless: Passivated • 30	04 Stainless Steel	Weight	Std. Box
	Size	Description	Per M	Quantity
PANCAKE HEAD SELF-TAPPING Carbon Steel and 410 Stainless	#10-12 x 1" #10-12 x 2" #12-11 x 1" #12-11 x 11/4"	Phillips Pancake Head  Type A  Phillips Pancake Head  Type A	6.9 13.2 10.2 12.0	5,000 5,000 2,500 2,500
PANCAKE HEAD SELF DRILLING Carbon Steel and 410 Stainless	#10-16 x 1" #10-16 x 2" #12-14 x 1"	Phillips Pancake Head Type 3 Phillips Pancake Head Type 3	6.8 13.0 10.0	5,000 5,000 2,500
BEVEL FLAT HEAD Carbon Steel and 304 Stainless	¼"-14 x 2"  ¼"-14 x 3"  ¼"-14 x 4"  ¼"-14 x 5"  ¼"-14 x 6"  ¼"-14 x 7"  ¼"-14 x 8"	Polarfast® Torx® Bevele∎ Flat Hea∎ Type BP	23.0 33.0 43.0 53.0 63.0 73.0 83.0	1,000 1,000 1,000 1,000 1,000 500
FLAT WAFER HEAD SELF-DRILLING Carbon Steel	#10-24 x <sup>3</sup> / <sub>4</sub> " #10-24 x 1" #10-24 x 11/ <sub>4</sub> " #10-24 x 11/ <sub>2</sub> "	Phillips Flat Wafer Hea <b>d</b> Type 3	7.9 9.6 11.3 13.0	5,000 5,000 5,000 3,500



(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# ULTIMAFE LONG-LIFE FASTENERS

	Zinc Die Cast Hea	d Assembled to EPDM Washer  Description	Weight Per M	Std. Box Quantity	
STITCH/LAP POINT	1/4 - 14 x 1/8" 1/4 - 14 x 1"	5/16 Hex Undercut Head with Zinc Cast Head	17.2 19.2	2,500 2,000	
	#18 - 9 x 1"	Type 1 with EPDM Neoprene Washer	26.5	2,000	
STITCH/LAP POINT	1⁄4 - 14 x 1⁄8"	3/8 Hex Undercut Head	18.0	2,500	
	1/4 - 14 x 1"	with Zinc Cast Head Type 1 with EPDM Neoprene Washer	20.3	2,000	
#2 LONG PILOT POINT	#12-14 x 1"	5/16 Hex Undercut Head	15.1	2,500	
	#12-14 x 11/4"	with Zinc Cast Head	18.1	2,000	
	#12-14 x 1½"	Type 2 with	19.2	1,500	
	#12(1/4-14) x 11/8" (Insul-Dril®)	EPDM Neoprene Washer	26.2	1,500	
	#12-14 x 2"		20.7	1,500	
	#12-14 x 3"		31.2	500	
	1/4 - 14 x 11/4"		19.2	1,500	
#2 LONG PILOT POINT	#12-14 x 1"	3/8 Hex Undercut Head	16.1	2,000	
	#12-14 x 11/4"	with Zinc Cast Head	19.6	2,000	
	#12-14 x 1½"	Type 2 with	20.8	1,500	
_	#12-14 x 2"	EPDM Neoprene Washer	23.1	1,500	
#4 POINT	#12-24 x 11/4"	5/16 Hex Undercut Head	18.1	2,000	
The second		with Zinc Cast Head			
WWWW D		Type 4 with			
		EPDM Neoprene Washer			
#4 POINT	#12-24 x 11/4"	3/8 Hex Undercut Head	19.6	2,000	
The state of the s		with Zinc Cast Head		Į.	
		Type 4 with			
AB POINT	1/4 - 14 x 3/4"	EPDM Neoprene Washer  5/16 Hex Undercut Head	15.2	2,500	
	1/4 - 14 x 1"	with Zinc Cast Head	17.9	2,000	
	1/4 - 14 x 1 1/4"	Type AB	19.3	2,000	
September 1	1/4 - 14 x 11/2"	EPDM Neoprene Washer	22.1	1,500	
	1/4 - 14 x 2"		24.1	1,000	
NB POINT	½ - 14 x ¾"	3/8 Hex Undercut Head	15.4	2,500	
	1/4 - 14 x 1"	with Zinc Cast Head	18.5	2,000	
	1/4 - 14 x 11/4"	Type AB	20.0	2,000	
	1/4 - 14 x 11/2"	EPDM Neoprene Washer	22.7	1,500	
	1/ <sub>4</sub> - 14 x 2"		24.5	1,000	
AB POINT	#17-14 x <sup>3</sup> /4"	3/8 Hex Flat with	17.0	2,000	
	#17-14 x 1"	Zinc Cast Head	18.0	1,500	
		Type AB			
1—1		EPDM Neoprene Washer			
AB POINT	11/32" X 7/8"	3/8 Hex Flat with	33.5	1,000	
	11/32" x 11/4"	Zinc Cast Head	49.6	1,000	
	<sup>1</sup> / <sub>32</sub> " x 1 <sup>3</sup> / <sub>4</sub> "	Type AB with 7/8" Diameter	49.6	1,000	
		Bonded Neoprene Washer	A. Company		

All the above parts are available painted and without sealing washers.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

## **Grommet Seal Fasteners**

- •For Fastening Side Lap & Trim in Fiberglass or Vinyl Panels •Hex Head Machine Screw
- Assembled with Black EPDM Grommet with Concealed Brass Nut Insert & Neo Bond® Washer

	Size	Hole Size		Weight Per M	Std. Box Quantity	
MATERIAL	#6-32 <b>X</b> 1″	1/4"	Grommet Seal	8.0	1,500	2.52/11/5
302 Stainless Screw	#10-32 X 1"	3/B″	Fasteners	17.0	1,500	
(With Brass Insert)	#10-32 X 11/4"	3/8″		18.8	1,500	
		XI XI		1		

# **Neo Bond® Flat Bond Sealing Washer**

### •For All Fastener Sizes •Galvanized Steel, 302 Stainless and Aluminum Backing Materials • EPDM

	Outside Diameter*	Inside Diameter*	Standard Carton Quantity	
SPECIFICATIONS	1/2″	#8 .180		
		#10 .200	12,500	
(E)(1)(E)(E)(E)(E)(E)(E)(E)(E)(E)(E)(E)(E)(E)		#12 .230		
		#14260		
	15mm	#12 .240		
		#14 .275	10,000	Availabl <b>e</b> in
1	5/8"	#12 .240		Galvanized
		#14 .275	7,500	Stainless Steel
		#17 .310		and Aluminum
	3/4"	#14 .275		
		5/ <sub>16</sub> " .360	6,000	
		<sup>3</sup> /8″ .410		
	1″	#12 .240	2,500	
	11/8"	#10 .200	2,000	
l		#14 .275		

<sup>\*</sup>Additional Sizes Made to Order

# **Master Flash® Pipe Flashings**

	No.	Pipe Size	Base Dimension	OpeninG Diameter		Box Quantity
SPECIFICATIONS	#1	1/4" - 2"	41/2"	Closed		10 pcs.
	#2	11/4" - 3"	6″	7/8"		10 pcs.
	#3	1/4" - 4"	8″	Closed		10 pcs.
	#4	3″ - 6″	10″	21/2"	Available in	5 pcs.
	#5	4" - 7"	11 "	31/2"	EPDM and	5 pcs.
	#6	5″ - 9″	12″	4"	Silicone	5 pcs.
	#7	6″ - 11 ″	14"	5″		5 pcs.
	#8	7" - 13"	17″	6″		5 pcs.
	#9	10" - 19"	261/2"	7″		2 pcs.
	#10	12" - 26"	34"	10″		5 pcs.

NOTE: Numbers I and 3 are closed top. When using pipe flashing on a very steep pitched roof or on a surface with deep corrugation, use the next largest size for increased flange flexibility. For material specifications, contact our Technical Services Department.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# **Product Capabilities & Technical Data**

### **Head Drive Systems**



Cross









Square Slotted Six Combo-Head

### Decimal (inch) **Equivalents**

Thread

11/32"

of Thread Diameters

Decimal

344

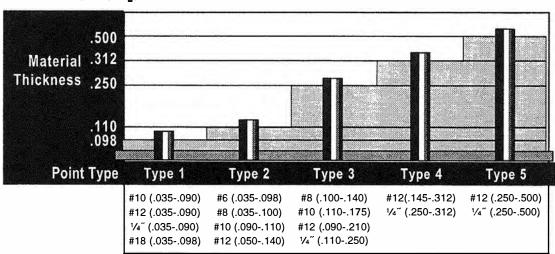
Decimal (inch) Equivalents

of Sheet Metal Gauges

**Thickness** 

Recess	Recess	He	ad	Lobe	Hex Washe and Cross		Diameter	Equivalent	Gauge	(in.)
					una oroso	1100000	#6	.140	26	.018
Uood (	Ctuloc l	Avoilal	hio				#7	.150	24	.024
ncau a	Styles <i>l</i>	kvallal	uic				#8	.160	22	.030
	Hex	Flat			Flat	Oval	#9	.180	_ 20	.036
Hex	Washer	Wafer	Pan	Pancake	Countersunk	Countersunk	#10	.190	18	.048
Head	Head	Head	Head	Head	Head	Head	#11	.200	16	.060
		- Ac-Ac-					#12	.210	14	.075
~~	(TY)		77-212-7				#13	.230	12	.105
	44		$\Leftrightarrow$			$\sim$	1/4"	.240	10	.134
					T		#14	.250	8	.164
	圖		靈	靈	<b>=</b>	圖	#17	.285	4	.224
			墨	會		圖	#18	.304	1/4	.250

### **Drill Point Capabilities**



DISCLAIMER: All test results and recommendations are based on laboratory tests. Specific job conditions should be taken into consideration when specifying the proper fastener. Because applications vary, we assume no liability for use of this information.

For special applications, contact our Technical Services Department for performance test and fastener suggestions. Published test results should be used as a guide only and should not be used for engineering purposes.

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## **Product Capabilities & Technical Data**

#### Metal to Metal Fastening To Determine Drilling Tip Length The length of the tip required on a drilling fastener is determined by adding up the thickness of the top material, any insulation Top Material to be Drilled Total or void between the top material hickness Void or Insulation and bottom material, and the to be **Bottom Material** to be Drilled Drilled thickness of the bottom material. If a hole larger than the screw thread has been pre-drilled or punched into the top material, Total Predrilled Hole Larger than

Diameter

Drilled or Punched

**Bottom Material** 

Void or

Fastener Type	Recommended Driving Speed					
Drilling Fasteners						
#6 through #10 dia	2500 RPM max.					
#12 through #18 dia	1800 RPM max.					
Self-Tapping Fasteners						
Carbon & 410 Stainless	1800 RPM max.					
300 Stainless	800 RPM max.					
Nylon Head Fasteners						
Self-Tapping	800 RPM max.					
Drilling	1800 RPM max.					

Washer O.D.
1/2"
15mm
15mm

### **Fastener Strength**

only the thickness of the bottom

material need be considered.

shank must be long enough to

extendinto and through the bot-

The threaded portion of the

tom material drilled.

Fastener Diameter	Minimum Tensile	Minimum Torque	Minimum Shear
6-20	1125 lbs.	25 in. lbs.	750 lbs.
8-18	1575 lbs.	42 in. lbs.	1000 lbs.
9-16	2350 lbs.	65 in. lbs.	1500 lbs.
10-16	2100 lbs.	61 in. lbs.	1400 lbs.
10-24	2350 lbs.	65 in. lbs.	1500 lbs.
12-14	2800 lbs.	92 in. lbs.	2000 lbs.
12-24	3250 lbs.	100 in. lbs.	2100 lbs.
1/4 -14	3850 lbs.	150 in. lbs.	2600 lbs.
1/4 -20	4275 lbs.	168 in. lbs.	2700 lbs.
17-14	5200 lbs.	175 in. lbs.	3125 lbs.
18-9	4550 lbs.	170 in. lbs.	2575 lbs.

### **Suggested Drill Size & Pull-Out Test Results**

for Self-Tapping Sheeting Fasteners

Thickness

to be

Drilled

Screw Threads

Top Material

to be Drilled

Insulation

To determine the tension required to pull a properly applied screw out of a structural steel member

Steel Thickness	Point Type	Drill Size	Average Ultimate Pullout
26 Ga. (.018)	A, AB	1/8" (.125)	243 lbs.
24 Ga. (.024)	A, AB	5/32" (.156)	340 lbs.
22 Ga. (.030)	A, AB	5/32" (.156)	372 lbs.
20 Ga. (.036)	A, AB	5/32" (.156)	412 lbs.
18 Ga. (.048)	A, AB, BP	3/16" (.187)	518 lbs.
16 Ga. (.060)	A, AB, B, BP	3/16" (.187)	674 lbs.
14 Ga. (075)	AB, B, BP	#7 (.201)	831 lbs.
12 Ga. (.105)	AB, B, BP	#7 (.201)	1681 lbs.
1/8" (.125)	AB, B, BP	#2 (.221)	1780 lbs.
10 Ga. (.134)	AB, B, BP	#2 (.221)	1812 lbs.
3/16" (.187)	B, BP	#2 (.221)	2855 lbs.
1/4" (.250)	B, BP	#2 (.221)	3355 lbs.
3/8" (.375)	B, BP	#2 (.221)	3391 lbs.*
1/2" (.500)	B, BP	#1 (.228)	3500 lbs.*

\*Exceeds tensile strength of fastener.

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# **Product Capabilities & Technical Data**

Shear Valu	<b>ICS</b>				0.000	#19816161		Gauge					
for Carbon Steel	Fastenei Diamete		2x26 (.036)	2x24 (.046)	2x22 (.060)	2x20 (.072)	2x18 (.096)	2x16 (.120)	2x14 (.150)	2x12 (.210)	2x1/8 (.250)	2x3/16 (.375)	2x1/4 (.500)
	12-14	Type1	435	706	756	1021	1455	1	1	1	/	1	1
Drilling	1/4-14	Type1	514	852	888	1247	1767	1	1	1	1	1	1
Fasteners	8-18	Type2	297	499	563	743	1063	1081	I = I	1.	1	$\sim I$	1
	10-16	Type2	315	481	592	833	1209	1271	1	1	1	1	. 1
	12-14	Type2	368	603	626	901	1373	1761	2141	1	1	1	1:
	8-18	Type3	1	1	1	733	1093	1213	1217	1	1	1	1
	10-16	Type3	1	1	1	731	1269	1543	1555	1	1	1	1
	10-24	Type3	1	1	1	754	1211	1557	1697	1	1	1	1
11,11, 11,11,	12-14	Type3	1	1	1	772	1361	1623	1973	1989	1	1	1
	1/4-14	Type3	1	1	1	933	1445	2103	2587	2653	2823		
	12-24	Type4	1	1	1		1		1	2051	2703	1	1
	12-24	Type5	1	1	1	1	1	1	1	1	2703	2723	2765



### Pull-Out Values (Lbs.) for Self-Drilling Fasteners

	A						Ga	uge				
Size	Point	26	24	22	20	18	16	14	12	1/8	3/16	1/4
<b>8-1</b> 8	T/2	122	196	268	301	494	706	962	1561	1	/	/
	T/3	123	194	242	288	473	666	913	1427	2290	1	1
10-16	T/1	151	244	314	360	568	829	1114	1799	7	1	7
	T/2	134	217	275	371	550	787	1036	1656	1	1	1
	T/3	127	211	269	302	502	711	970	1477	2080	1	1
10-24	T/3	124	203	254	336	498	704	903	1378	2073	2615	1
12-14	T/1	161	264	341	393	652	911	1262	1952	1	1	1
	T/2	159	246	286	378	608	851	1184	1859	2571	3523	1
	T/3	145	214	292	344	554	760	1066	1634	2423	3001	1
12-24	T/4	/	1	/	1	498	700	989	1535	2444	3488	3847
	T/5	1	1	1	1	490	702	916	1530	2210	3704	4002
1/4 -14	T/1	211	332	431	565	803	1154	1	1	1	1	1
	T/2	169	268	317	433	648	925	1155	1	1	4696	1
	T/3,T/4,T/5	144	234	296	349	613	883	1148	1861	2409	4553	5036
1/4 -20	T/3	143	228	274	366	559	784	1008	1681	2545	3557	1
	T/4	1	/	1	/	557	791	1119	1806	2553	4300	4592

DISCLAIMER: All test results and recommendations are based on laboratory tests. Specific job conditions should be taken into consideration when specifying the proper fastener. Because applications vary, we assume no liability for use of this information. For special applications, contact our Technical Services Department for performance test and fastener suggestions. Published test results should be used as a guide only and should not be used for engineering purposes.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# **Closure Strips**

G-10: A Semi-Rigid Cross Link Polyethylene, Fused Together for a Plywood-Like Lamination. Excellent Weathering Characteristics.

Perma-Tite: Closed Cell Rubber Closure (EPT) Eliminates Moisture Absorption. Excellent Chemical Resistance. Pliable for Easy Handling.

PANEL PROFILE	Pitch of Corr.	Height of Corr.	Width of Strip	Length of Strip	Pcs. Per Box	Ft. Per Box
11/16 Flat Strip for 2-1/2" Vertical	N/A	11/16	1"	40″	90	300′
2.5" Corrugated	2½″	9/16″	1"	38½"	108	346.5
2.66" Corrugated	2.66″	1/2"	1"	36" 39.9"	120 120	360´ 399´
2.66" Corrugated	2.66″	<sup>9</sup> /16 <sup>″</sup>	1″	36″	108	324′
2.67" Corrugated	2.67″	7∕a″	1″	36″ 41.385″	96 96	288´ 331´
4" Box Rib Inner/Outer	4″ 4″	1" 1"	1" 1"	40″ 40″	66 72	220´ <b>I</b> 240´ <b>O</b>
4.2" Corrugated/Non-Tapered	4.2″	11/16"	1″	39.9″	72	239′
4-7/8" V-Beam	4 <sup>7</sup> /8"	1¾″	1"	36 <sup>9</sup> /16″	48	146′
5.33" V-Beam	5.33″	1¾″	1 "	40″	48	1 60′
Bink Rib/Fabral Hefti-Rib	7.2″	1½"	1"	39.6″	60	198′
Binkley Pan-L Rib Inner/Outer	12" 12"	1½″ 1½″	1" 1"	36″ 36″	42 42	126´ <b>I</b> 126´ <b>O</b>
Inner-Butler Rib II Outer-Shadowrib II	12″ 12″	1½" 1½"	1" 1"	36″ 36″	36 36	108 <b>' I</b> 108 <b>' O</b>
Cincinnati Regal Rib Inner/Outer	12" 12"	<sup>9</sup> /16″ <sup>9</sup> /16″	1" 1"	36″ 36″	72 72	216´ <b>I</b> 216 <b>´ O</b>

ADHESIVE BEAD Additional cost for application of adhesive bead.

All closures also available in other thicknesses. Fire retardant materials available. Many Closure Configurations not shown ARE AVAILABLE. Call for Price & Delivery.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# **Closure Strips**

G-10: A Semi-Rigid Cross Link Polyethylene, Fused Together for a Plywood-Like Lamination. Excellent Weathering Characteristics.

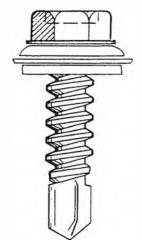
Perma-Tite: Closed Cell Rubber Closure (EPT) Eliminates Moisture Absorption. Excellent Chemical Resistance. Pliable for Easy Handling.

PANEL PROFILE	Pitch	Height	Width	Length	Pcs.	Ft.
	of	of	of	of	Per	Per
	Corr.	Corr.	Strip	Strip	Box	Box
R - Panel Inner/Outer	12"	1 1/4"	1"	36″	50	150′ <b>I</b> O
R - Panel with Dovetail Inner/Outer	12″	11/4"	1"	36"	50	150′ <b>I</b> O
M - Panel with Dovetail Inner/Outer	6″	3/4″	1"	36″	50	150° I O
Granite City Strong Panel	9"	<sup>9</sup> /16″	1"	36″	72	216´ I
Inner/Outer	9"	<sup>9</sup> /16″	1"	36″	72	216´ O
McElroy Max-Rib	9″	3/4"	1 ″	36″	60	180´ I
Inner/Outer	9″	3/4"	1″	36″	60	180´ O
Republic Rigid Rib	3″	1/2"	1″ 36″	30″	132	396′
Reynolds Rain Lock	2.67″	9/16"	1"	48″	120	480′
Robertson Huski Rib	7″	1 1/2"	1"	38½″	60	192.5′
Wheeling Channel Drain	6"	1/2"	1"	36″	90	270′ <b>I</b>
Inner/Outer	6"	1/2"	1"	36″	90	270′ <b>O</b>
Wheeling Panel Drain	3"	1/2"	1"	30″	144	360´ <b>I</b>
Inner/Outer	3"	1/2"	1"	30″	144	360´ <b>O</b>
B Deck Outer(Small plug)/Inner(Big plug)	6″	1½"	1"	36″	36	108´ <b>O</b>
	6″	1½"	1"	36″	36	108´ <b>I</b>

ADHESIVE BEAD Additional cost for application of adhesive bead.

All closures also available in other thicknesses. Fire retardant materials available. Many Closure Configurations not shown ARE AVAILABLE. Call for Price & Delivery.

# Piasta Multi-Metal Self-Drilling Screws Stainless Steel 18-8 A PATENTED PRODUCT BY PIASTA THAT DRILLS THROUGH STEEL AND STAINLESS BECAUSE THE DRILL POINT IS STEEL



Piasta Multi-Metal Self-Drilling Screws have a steel drill point welded onto a Stainless 18-8 (304) screw. This provides the maximum corrosion resistance of a Stainless head and body combined with the superior drilling capacity of a steel self-drilling point. The screw is then coated with Ruspert for added rust protection and lubricity.

### **MECHANICAL PROPERTIES AND DRILLING CAPACITY**

NOMINAL SCREW SIZE	PLATE THICKNESS	TENSIL Strength	SHEAR Breaking Load	TWIST Breaking Load	THREAD FORMING TORQUE	THREAD PULL-OUT LOAD OF	THREAD BREAKING LOAD	MAXIMUM DRILLING CAPACITY
#8	0.039 0.079 0.126	1,411	917	35.8	5.64 23.86 26.03	309 915	16.1 50.08 49.0	.091
(4.2MM)	0.166 0.237				22.99		49.9	
#10	0.039 0.079				7.38 18.66	309 932	14.8 59.4	
	0.126	1,741	1,131	59.0	33.41	1,426	65.1	.126
(4.8MM)	0.166 0.237				36.01 47.29		86.8 89.4	
#12	0.039 0.079				8.68	320 942	12.6	
#12	0.075	2,380	1,547	08.1	19.09 27.33	1,450	52.1 60.7	.126
(5.5MM)	0.166				25.60	2,001	85.5	
	0.237				38.18	2,292	98.9	
	0.039				9.54	881	19.5	
#14	0.079 0.126	2 221	2 102	150.01	22.99	1.014	61.2	177
(6.8MM)	0.126	2,321	2,193	150.01	33.41 36.44	1,748 2,116	63.8 101.5	.177
`	0.237				39.48	2,931	162.3	
	in	1b	1b	1b-in	1b-in	1b-in	1b	in

Sheer Strength Values are between 65-70% of Tensile Strength. Test results have been obtained with Hot-Rolled Steel Sheets.

All results based on manufacturer's tests, except Shear Breaking Load whose source is estimated values based on Japan Industrial Fastener Association findings.

Test results are for Hex Washer screws; values on Phillips recess will be reduced by approximately 15%. Data on Tapping Torque, Thread Breaking Load, and Thread Pull-Out are for #3 Point. Values will be increased for #2

### BONDED SEALING WASHERS

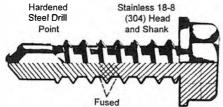
Our Multi-Metal Self-Drilling Screws are available with Neoprene and EDPM bonded Stainless 18-8 washer assemblies to provide seals against liquid, vapor, and air infiltration. The Sealing Washers act as a cushioning agent, dampening vibration and reducing galvanic corrosion between dissimilar metals.

### **CUSTOM COLORS - PAINTED HEADS**

Our screws are available with rugged baked enamel painted heads in an infinite variety of matched colors. Turn-around time is minimal and the quality of the finish is assured.

### RUSPERT COATED FOR ENHANCED CORROSION PROTECTION

Ruspert provides triple protection from corrosion. The zinc layer protects the metal from red rust, the film layer makes the zinc inert and the top layer repulses any corrosion and surppresses white rust. Ruspert offers superior resistance to salt water, chemicals, weatherization, corrosive gases as well as inhibiting galvanic corrosion.



FSI offers 2 types of Stainless 18-8 Self-Drilling Screws. Our **Multi-Metal** screw combines a steel drill point with a Stainless 18-8 head and shank to drill through steel and stainless material. The screw is Rustpert coated for added rust protection and lubricity.

N		SELF-DRIL al Length & Drilling (	LING SCREWS	S
SCREW SIZE	MINIMUM LENGTH UNDER HEAD	MINIMUM LENGTH STAINLESS 18-8 PART	MINIMUM LENGTH STEEL PT. & ATTACHMENT AREA	MAXIMUM DRILLING CAPACITY
#6	1/2"	.275"	.236"	.091"
#8	1/2"	.275"	.236"	.091"
#10	3/4"	.335"	.413"	.126"
#12	3/4"	.394"	.354"	.126"
#14	1"	.413"	.571"	.177"

# **Corrosion-Resistant Fasteners**



### ULTIMATE™ ZINC-HEADED FASTENERS— 5/16" AND 3/8" HEADS.

New from Atlas, UltiMate zinc-headed self-drilling or self-tapping screws offer the most corrosion-resistant way to fasten all types of long-life panels such as Galvalume® or Steelox®.

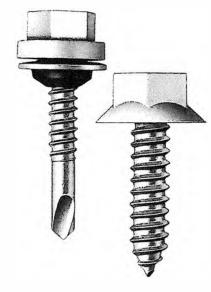
Atlas UltiMate fasteners are not merely capped, they're *cast* with a full 1/16" of zinc alloy. The head is inseparable from the carbon steel shank.

Not only is our zinc head *thicker*, the zinc itself is of better quality because Atlas uses the hardest zinc alloy available. Capped fasteners must use a softer zinc alloy because the cap must be crimped around the head.

Every UltiMate zinc-headed fastener includes a PVC sealing washer housed in the undercut hex head. Tests with these fasteners driven into high-pressure air tanks have proven them to be airtight.

We warrant\* that the zinc-alloy head will remain free of red rust for the life of the building.

UltiMate self-drillers feature the ULTRA-Z milled point that starts cutting faster, with less pressure, to eliminate walking and increase productivity.



### NYLON-HEADED FASTENERS—7/16" HEADS COLORMATE® AND COLORDRILL® NYLON-HEADED SCREWS

Atlas ColorMate and ColorDrill nylon-headed screws, available in carbon or stainless steel, look great and last long. Both have a rigid-collar head molded from a tough thermoplastic—Dupont ZYTEL® 101 nylon resin. The nylon head is reinforced with fiberglass. The chemical bond between the nylon and glass fibers helps the head retain its physical properties regardless of exposure to ultraviolet radiation, heat and moisture. It also increases the resistance to torque damage during application.

The head is permanently joined to a hardened steel shank by injection molding for a good connection and high pull-over values. Choose from two head styles.

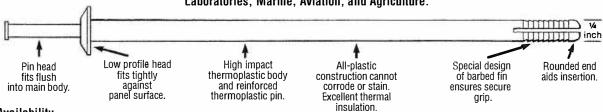
ColorDrill screws feature the ULTRA-Z point which drills faster, eliminates walking and improves productivity.

Uncommonly durable, decorative and economical, nylon-headed fasteners will match or surpass the service life of modern-day industrial sheeting. They are warranted for 20 years. To match your color of sheeting, just let us know. Precise color matching is one of our specialties.

# COLORMATE IS AVAILABLE IN BOTH SELF-DRILLING & TAPPING VERSIONS

### **Drive Rivets - High Impact Thermoplastic**

These Drive Rivets are approved by the USDA and are specified for panel installations and all types of fastening jobs in Building, Construction, Transportation, Food Processing, Kitchens, Cold Storage,
Laboratories, Marine, Aviation, and Agriculture.



### **Availability**

Diameter: 1/4 inch

Lengths: 3/4", 1", 1 1/2", 2, 3, 4, 5, 6

Color: White, Beige, Grey, Blue, Gold, Cream, Pumpkin,

Brown, Yellow, Green, Black

#### Description

These Drive Rivets are very easy to use without the need for special tools or skills.

They are injection molded from top quality compounds which are completely non-toxic, colorfast and fully stabilized for long life and maximum performance.

Correct design ensures that the low profile head gives a snug surface fit to prevent snagging or accumulation of dirt. All-plastic construction cannot corrode or stain and aids thermal insulation.

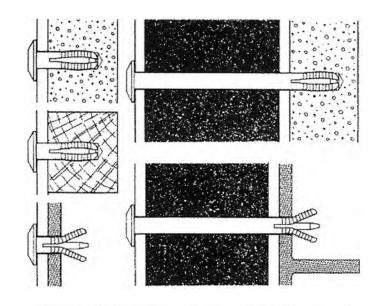
#### Fixing

Instruction leaflet supplied with fasteners.

#### Uses

Instruction leaflet supplied with fasteners. These Drive Rivets are ideal for fastening panels, sheets and wall fixtures. They can be used for fixing to any solid substrate such as brick, stone, concrete, steel, timber and they will also grip securely behind frameworks of metal or wood.

The longer rivets are used for fastening through thick materials such as cork or foam insulation block.



#### Standard Colors:

Standard Colors are White, Beige, Gray, Cream (colonial white/cream) 5" and 6" sizes stocked in white only. Special Colors:

Blue, Gold, Pumpkin, Brown, Yellow, Green and Black

### More versatile and more reliable than adhesives:

- These Rivets do not age-harden, dry out or lose bond strength over a period of time.
- Rivets give permanent, visible evidence of secure fastening. Nothing out of sight to deteriorate.
- Rivets do not give off odors, do not need primers or special surface preparations.
- Rivets can be used just about anywhere, including wet areas. No waiting- No mess.

### FSI STOCKS NYLON THREADED ROD

### Nylon Panel Bolts, Threaded Rod, Nuts & Washers

### Nylon Threaded Rods, Nuts and Washers

- Carriage style bolts available in Hex-head
- 1/4", 3/8", 1/2", 5/8" and 3/4" and other sizes available
- . Lengths up to 36"
- Rod lengths up to 8'

High-quality machine-threaded bolts and rods for medium-heavy duty industrial applications. Full range of injection-molded threaded accessories

Excellent thermal insulation properties, tough, lightweight, sanitary, will not taint, corrode or stain. U.S.D.A. approved.

### **Description and Technical Data:**

- These Nylon threaded fasteners are designed for applications in the light to mediumheavy load range. Although designed especially for cold-storage work, they are also useful for any type of assembly or fastening work requiring a tough, lightweight material.
- Used in many industries such as Cold Storage, Freezer Plants, Food & Drink Processing, Kitchens, Clean-rooms, Laboratories, Hospitals, Transportation, Marine, Aviation, Chemical, Electrical, etc. Ideal for use in sanitation areas.
- These lightweight fasteners are very easy to use without need of special tools. A little extra care in tightening the nuts will ensure a fastening job of excellent appearance and endurance. The maximum safe working loads should be observed.
- Nylon will not taint, corrode, or stain, requires no special surface preparation and can be used immediately - even in wet conditions. Nylon threaded fasteners are accepted by U.S.D.A. in Federally inspected establishments.

#### Material

Nylon type 6, one of the hardest and strongest grades of engineering thermoplastic.

#### Quality

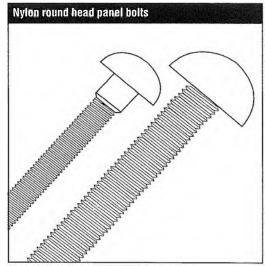
All plain rod used for machining bolts and threaded rods is 100% crack tested and tensile strength is accurately controlled. Careful inspection includes testing each length with the aid of light boxes or ultrasonics to eliminate flaws or inclusions prior to threading. Mechanical strength properties are more critically controlled than for commercial nylon.

#### Sizes

Isometric course to DIN 975
Diameters in mm: M4, M6, M8, M10, M12, M16, M20mm
(Diameters in inches: 1/4", 3/8", 1/2", 5/8", and 3/4")
Lengths
Any length up to 8 inches long.

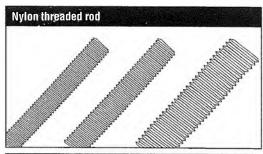
### Tightening & Use of Nuts

Nuts should be tightened by hand and given half-a-turn with a spanner. Care should be taken not to overtighten nuts when used with any threaded plastic. We do not recommend the use of steel nuts with threaded plastics.



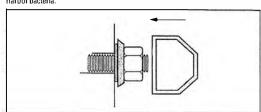
A product offering a range of different head shapes insert-molded onto nylon threaded rod. Far stronger than any all-molded bolt and less costly than machining from solid bar.

Typical applications include: insulation panels, door frames, light fittings, bump rails, suspending lightweight evaporators, ducts, electrical gear, etc.

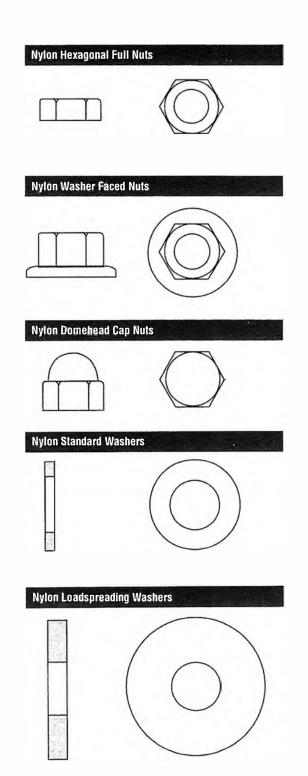


### Nyon snap-on caps

Designed for M6, M10, and M12 sized nuts (1/4", 3/8", 1/2", 3/4", 5/8") these snap-on caps greatly improve the appearance of any installation and can be used with metal or plastic nuts. By concealing nut & exposed thread, they prevent snaggling, staining and possible build-up of dirt or debris which may



### Nylon Panel Bolts, Threaded Rod, Nuts & Washers



Physical Properties- N	ylon Type	6.6	
ASTM Test Methods an	d Results	1	Nylon 6.6
Melting temperature, crys	stalline° C	2	210-220
Tensile strength at break,	psi	D638	6000-24,000
Elongation at break, %		D638	3-100, 300
Tensile yield strength, psi	i	D638	11,700-7400
Compressive strength, ps	i	D695	13,000-16,000
Flexural strength, psi		D790	15,700, 5800
Tensile modulus, 10 <sup>3</sup> psi		D638	380-100
Compressive modulus, 10	O³ psi	D695	250
Izod impact ft-lb/in. of no	otch	D256A	0.6-2.2, 3.0
(1/8" thick specimen)			R119
Hardness Rockwell scale		D785	80-83
Coef. of linear expansion		D696	
10 <sup>-6</sup> in/in/°C			5.8
Thermal conductivity, 10 sec-cm <sup>2</sup> -°C	-4 cal/cm/	C177	
Specific gravity		D792	1.12-1.14
Water absorption %	24hr	D570	1.3-1.9
(1/8" thick specimen)	saturatio	o <b>n</b>	8.5-10.0
Chemical resistance			Good
Flammability		D635	Self-extinguishing
Tolerance on length: plus	or minus	2%	Slow burning
Tolerance on diameter: pl	lus or min	ius 4%	

Resistant to:	Not Resistant to:				
Common solvents	Phenols, cresols				
Lubricants	Formic Acid				
Hydrocarbons,	Concentrated Mineral acids				
Esters, ketones	and alkalis				
Aqueous solutions of acids and	Strong oxidizing agents				
alkalis between pH5 and pH11	including the halogens				

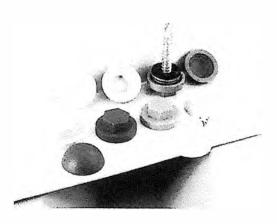
Non-Warranty: All information is offered in good faith but without warranty, either express or implied. Application advice is freely available but all risks must be assumed by the user. We will accept no liability for any consequential loss or damage other than free replacement of any defective product supplied by the corporation, provided that proper storage and handling has been observed. We reserve the right to change design material specifications at any time without notice.

### **F**EATURES

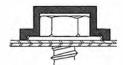
- Hex head or lock rivet shapes
- Made from EVA copolymer resins
- Available in many standard colors; others can be special ordered to meet your needs

### BENEFITS

- Resistant to ultraviolet radiation and weather degradation
- Will not chip or flake, unlike painted fasteners
- Resistant to chemical exposure



HEX HEAD COLOR CAP Roofing or siding applications; covers 3/8" hex head



LOCK RIVET
COLOR CAP
Roofing or siding applications



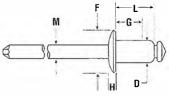
ADDITIONAL STYLES, SIZES AND COLORS
ARE AVAILABLE.
CONTACT YOUR FSI REPRESENTATIVE
FOR COMPLETE DETAILS.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

### **CELUS INDUSTRIAL RIVETS**

### DOMED HEAD

Celus Industrial Quality aluminum/aluminum rivets are a low cost alternative to screws, bolts or spot welding. They conform to the IFI specification 114 and are quick and easy to install with hand or power tools. Both aluminum bodies and mandrels have a polished finish and are sealed to prevent discoloration.



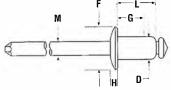
#### ALUMINUM RIVET/ALUMINUM MANDREL

(D) Rivet Size	HOLE SIZE AND DRILL NO.	(M) Mandrel Dia.	(F) Flange Dia.	(H) Head Height	(L) Barrel Length	CELUS PART NUMBER	(G) Grip Range	CONTRACTOR OF THE PARTY OF	ULTIMATE ENGTH *   TENSILE
0			-		275	A/A42D	.020- 125		
					337	A/A43D	.126- 187		
					400	A/A44D	.188- 250		
1/8	129-133	076	250	.032	462	A/A45D	.251312	129 lbs	176 lbs
	#30				525	A/A46D	.313- 375		
		1			650	A/A48D	.376-500		
					300	A/A52D	.020-125		
5/32	160 164	095	312	039	425	A/A54D	126-250	187 lbs	263 lbs
	#20				.550	A/A56D	.251 - 375		
					.325	A/A62D	.020- 125		
					450	A/A64D	.126- 250		
3/16	.192 196	114	375	047	575	A/A66D	251375	262 lbs	375 lbs
	#11				.700	A/A68D	376-500		
					.825	A/A610D	.501- 625		

Max. Barrel Length per (FI 114

### DOMED HEAD

Celus Industrial Quality aluminum/steel rivets also conform to IFI specification 114. The aluminum bodies are polished and sealed to prevent discoloration. The carbon steel mandrels are plain finish with a corrosion protective coating.



ALUMINUM RIVET/STEEL MANDREL

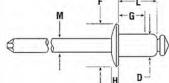
(D) Rivet Size	HOLE SIZE AND DRILL NO.	(M) Mandrel Dia.	CF3 Flange Dia.	CH) HEAD HEIGHT	(L) Barrel Length	CELUS PART Number	(G) Grip Range	The state of the s	ULTIMATE INGTH * TENSILE
1/8	129- 133 #30	076	250	032	275 .337 .400 .525	A/S42D A/S43D A/S44D A/S46D	.020 .125 .126 .187 .188 .250 .251 .312	210 lbs	325 lbs
5/32	160- 164 #20	095	.312	039	.300 .425 .550	A/S52D A/S54D A/S56D	.020125 .126250 .251375	340 lbs	490 lbs
3/16	.192- 196 #11	114	.375	.047	.325 .450 .575 .700 .825	A/S62D A/S64D A/S66D A/S68D A/S610D	.020125 .126250 251375 .376500 .501625	445 lbs	720 lbs

Values shown are a guide only and may vary depending upon the application

Max Barrel Length per IFI 114

### DOMED HEAD

Celus Industrial Quality steel/steel rivets also conform to IFI specification 114. The steel rivet bodies are zinc plated with a dichromate protective coating. The carbon steel mandrels are plain with a corrosion protective coating.



STEEL RIVET/STEEL MANDREL

(D) Rivet Size	HOLE SIZE And Drill No.	(M) Mandrel Dia.	(F) Flange Dia.	CH) Head Height	CONTROL OF STREET	CELUS PART Number	(G) Grip Range		ULTIMATE ENGTH*   TENSILE
1/8	.129133 #30	076	250	035	.275 337 400 525	S/S42D S/S43D S/S44D S/S46D	.020125 .126187 .188250 .251375	295 lbs	425 lbs
5/32	.160164 #20	.095	312	039	300 425 550	S/S52D S/S54D S/S56D	020- 125 126- 250 251- 375	410 lbs	570 lbs
3/16	192196 #11	114	375	047	325 450 575 700 825	S/S62D S/S64D S/S66D S/S68D S/S610D	020125 126-250 251-375 376-500 501-625	590 lbs	815 lbs

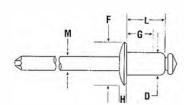
Min Barrel Length per IFI 114

### DOMED HEAD

Celus offers painted rivets from stock in six popular colors. They are offered in our low cost Industrial Guality aluminum/aluminum in white, black, brown, bronze, cream, and ivory, and in steel/steel in white and black. Painted rivets can be packaged in a wide variety of containers including poly bags, plastic tubs, small placon boxes, Celus small packs and bulk containers.

Celus invites your requests for quotation on any custom colored or

special plated rivets with minimum quantities of only 20M required. Private label packaging and poly bag orders can also be arranged.



PAINTED RIVETS - ALUMINUM/ALUMINUM

RIVET	HOLE SIZE AND ORILL NO.	(M) Manorel Dia.	(F) Flange Dia.	State of the last	(L) Barrel Length	CELUS PART NUMBER	(G) Grip Range	THE SECTION AND PARTY.	ULTIMATE NGTH * TENSILE
					275	A/A42DP	020125		
1/8	129133	076	250	032	337	A/A43DP	.126187	129 lbs	176 lbs
	#30				.400	A/A44DP	188-250		
					525	A/A46DP	251-375		

Man Barrel Length per IFI 114

### PAINTED RIVETS - STEEL/STEEL

RIVET	HOLE SIZE AND DRILL NO.	MANDREL	FLANCE	HEAD	BARREL	CELUS PART NUMBER	(G) GRIP RANGE	Stri	ULTIMATE NGTH * TENSILE
1/8	.129133	.076	.250	.032	.275	S/S42DP	.020125	295 lbs	425 lbs

Max Barrel Length per IFI 114

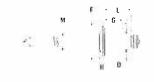
Values shown are a guide only and may vary depending upon the application

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

### CELUS HI-SHEAR RIVETS

#### DDMED HEAD

Celus Hi-Shear stainless steel rivets offer the highest strength and purity and help to improve the quality of the finished product with a neat, mar-free surface. Both rivet bodies and mandrel are 300 series stainless steel and exceed the IFI specification 114.



STAINLESS RIVET/STAINLESS MANDREL

(D) Rivet Size	HOLE SIZE AND DRILL NO.	(M) Mandrel Dia.	(F) Flange Dia.	(H) Head Height	(L) Barrel Length	CELUS PART NUMBER	(G) GRIP RANGE		Ultimate ENGTH * TENSILE
3/32	.096100	.057	188	024	250	SS/SS32D	.020 125	260 lbs	335 lbs
	#41				375	SS/SS340	126 250		
					515	SS/SS41D	020 062		
					275	SS/SS42D	063 125		1
					337	SS/SS43D	126 187		
1/8	129 133	076	250	0.35	4(1)	SS/SS440	188 250	550 lbs	700 lbs
	#30				465	SS/SS450	251 312		
					525	SS/SS46D	313 375		1
					650	SS/SS48D	376 500		Maria Ara Mi
		171			300	SS/SS520	020.125		
5/32	160-164	.095	315	039	425	SS/SS54D	125-250	650 lbs	820 lbs
	#20	1			550	SS/SS56D	251-375		
					675	SS/SS580	376 500		Į
					800	SS/SS510D	501-625		
					325	SS/SS62D	020 125		
					397	SS/SS63D	126 187		
3/16	192-196	114	375	047	459	SS/SS64D	.188 .250	1000 lbs	1375 fbs
	#11				575	SS/SS660	251 375		
				1	700	SS/SS680	376 500		
					825	SS/SS610D	501-625		
					500	SS/SS84D	020 250		
1/4	257-261	151	.500	069	625	SS/SS86D	251 - 375	1400 lbs	1920 lbs
	F				750	SS/SS88D	376-500		
							harmon or the last		1

Max Barrel Length per \$1 114

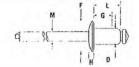


(D) Rivet Size	A CONTRACTOR OF THE	(M) Mandrel Dia.	(F) Flange Dia.	No. of Concession, Name of Street, or other Designation, Name of Street, or other Designation, Name of Street, Online of	(L) Barrel Length	the same of the same of the	(G) Grip Range	ALC: Under Street, Street, St.	ULTIMATE ENGTH * TENSILE
1/8	.129133 #30	.076	.375	.057	.275	SS/SS42LF	,020125	550 lbs	700 lbs
3/16	192196 #11	.114	625	065	575 825 950	SS/SS66LF SS/SS610LF SS/SS612LF	250375 500-625 626750	1000 lbs	1375 lbs

Max Barrel Length cer IFI 114

### **DOMED HEAD**

Celus offers copper rivet bodies with either a solid brass mandrel or a copper plated steel mandrel Recommended where corrosion protection is required or for decorative applications, these rivets exceed the IFI specifications 114
Copper/brass rivet bodies are copper alloy with a bright lacquer finish and have a polished brass mandrel.



Copper/steel rivet bodies are copper alloy with a bright lacquer finish and have a carbon steel, copper plated mandrel.

### COPPER RIVET/SOLID BRASS MANDREL

ROVET		MANDREL	FLANGE	HEAD	BARREL	Cetus Part	(G) Grip Rance	TYPICAL STRE SHEAR	NGTH *
1/8	.129.133	.076	250	035	.275 400	C/B42D C/B44D	.020125 126-250	215 lbs	300 lbs

### **CELUS CLOSED-END RIVETS**

### DOMED HEAD

Aluminum/aluminum closed-end rivets are the choice to make where a tight, leakage resistant seal is required. Conforming to all If I specification 126 requirements, rivet hodies are 1100 aluminum alloy with aluminum mandrels.

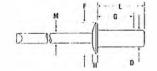


ALUMINUM RIVET/ALUMINUM MANDREL

(D) River Size		(M) Mandrel Dia.	EFJ Flange Dia.	CH) HEAD HEIGHT	(L) Barrel Length	CELUS PART NUMBER	(G) Grip Range	The second	ULTIMATE ENGTH*   TENSILI
					300	A42AD-CE	.020 .125		
1/8	129 133	07.3	538	050	422	A43AD-CE	126 187	100 lbs	110 ths
	#30				485	A44AD-CE	188 250		
					610	A46AD-CE	251-375		
5/32	160 164 #20	ņa1	312	065	500	A54AD-CE	.020- 250	130 lbs	160 lbs
					406	A62AD-CE	020 . 125		
3/16	192 196	109	375	080	531	A64AD-CE	.126250	210 lbs	250 lbs
	#11				659	A66AD-CE	251375		
				1	781	A68AD-CE	376 .500		

#### **DOMED HEAD**

Celus aluminum/steel closed-end rivets offer greater tensile and shear strength than open end rivets and provide much better mandrel retention, as well as leakage resistance. Meeting the IFI specification 126, the rivet bodies are aluminum alloy with carbon steel mandrels. both having a protective cuating



#### ALUMINUM RIVET/STEEL MANDREL

(D) River Size	HOLE SIZE AND DRILL NO.	(M) Manorel Dia.	(F) Flange Dia.	CH) Head Height	(L) Barrel Length	CELUS PART Number	(G) Grip Range	THE RESIDENCE OF THE PARTY OF T	ULTIMATE ENGTH*   TENSILE
1/8	,129 133 #30	073	238	050	.360 .422 .485 610	A42D-CE A43D-CE A44D-CE A46D-CE	.020125 .126187 188250 251375	240 lbs	280 lbs
5/32	160164 #20	091	312	.065	.500	A54D-CE	.020250	350 lbs	480 lbs
3/16	.192- 196 #11	109	.375	.080	.406 .531 .656 .781	A62D-CE A64D-CE A66D-CE A68D-CE	.020125 .126250 .251375 .376500	500 lbs	690 lbs
1/4	.257261 F	142	.500	098	.57D .695	A84D-CE A86D-CE	.126250 .251375	900	1100

Values shown are a guide only and may vary depending upon the application

#### DDMED HEAD

STAINLESS RIVET/STAINLESS MANDREL

RIVET	HOLE SIZE AND DRILL NO.	(M) Manorel Dia.	(F) Flance Dia.	HEAD	(L) BARREL LENGTH		(G) Grip Range		ULTIMATE NGTH * TENSILE
1/B	.125133	.073	.238	.050	.422	SS43SSD-CE	.020187	495 lbs	495 lbs
3/15	.192-196 #11	.109	375	080	531	SS64SSD-CE	126-250	969 lbs	989 lbs

[]



### DESA



- Fastens metal, leather, canvas and vinyl in seconds
- Hardened steel construction
- Extended nose piece for hard to reach locations
- Comfortable nonslip handle grips
- Interchangeable nose pieces included with tool
- Sets 3 sizes of rivets: 1/8", 5/32" and 3/16"

#### **Rivet Tool**

No. 00113

 Ideal for typical DIY applications around the home and workshop Buy Pack
Quantity: 6 Units
Master Pack
Quantity: 24 Units
Weight: 28 lbs. Cube: 0.64
Dimensions: 15-1/4" x 9-1/4"
x 7-3/4"

### Professional Rivet Tool No. 00601

- Ideal for the heavy use DIYer and tradesman
- Longer handles allow for easy use
- Includes nose piece wrench

Buy Pack
Quantity: 6 Units
Master Pack
Quantity: 24 Units
Weight: 34 lbs. Cube: 0.86
Dimensions: 17-3/4" x 11" x
7-3/4"

#### Swivel-Head Professional Rivet Tool No. 37001

- Ideal for the tradesman and heavy use DIYer
- Rivet head swivels 360° for riveting at any angle
- Improved handle leverage allows for easy use
- Includes nose piece wrench

Buy Pack
Quantity: 6 Units
Master Pack
Quantity: 24 Units
Weight: 43 lbs. Cube: 1.02
Dimensions: 17-3/4" x 12-3/4"
x 7-3/4"

Product selection and value that meets

your customers' riveting needs Packaged in reusable vinyl storage pouch

# AccuBird



12 Volt Cordless Riveting

Blind Rivet Diameter	Material	Pcs. per Battery Charge	Standard Nasepiece	Retaining Nosepiece
3/32 (2.4mm)	alu/steel	1,900	17/18	17/18R
1/8 (3.0 and 3.2 mm)	alu/steel	1,300	17/24	17/24R
1/8 (3.0 and 3.2 mm)	all steel	1,100		
1/8 (3.0 and 3.2 mm)	all stainless steel	1,000		
5/32 (4.0 mm)	olu/steel	1,000	17/27	17/27R
5/32 (4.0 mm)	all steel	900		
5/32 (4.0 mm)	all stainless steel	800		
3/16 (4.8 and 5.0 mm)	alu/steel	700	17/32	17/32R
3/16 (4.8 and 5.0 mm)	all steel	500	n	н
3/16 (4.8 and 5.0 mm)	all stainless steel	400		n

Work Capacity: 3/32" to 3/16" blind rivets Weight: 4.8 lbs. (2.2 kg) Working Stroke: .79" (20 mm) Traction Power: 1,900 lbs. (8,500 N) Power Pack: 12 Volt, rechargeable NiCad Battery Charger: 110V/60Hz, 60 minute charge time

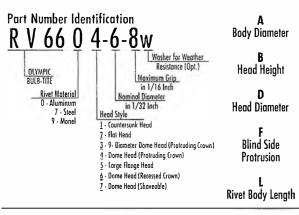


Retaining nosepieces hold rivet securely in the tool nose prior to setting the rivet.

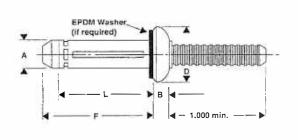
Extra length nosepieces are available.



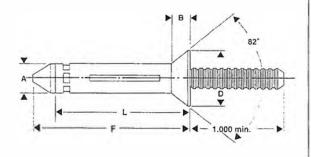
### Fastener Systems, Inc.



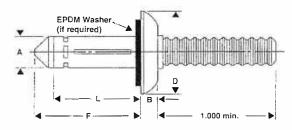
### **RV6604 Dome Head (Protruding Crown)**



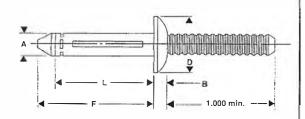
### RV6601 Countersunk Head (82°)



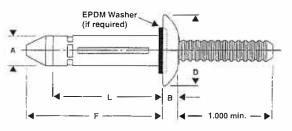
### RV6605 Large Flange Head (Protruding Crown)



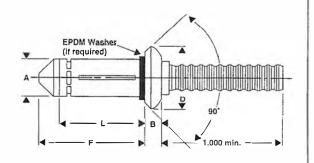
### **RV6602 Low Profile Flat Head**



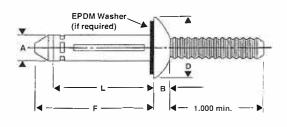
### **RV6606 Dome Head (Recessed Crown)**



### **RV6603 Dome Head (Protruding Crown)**



### **RV6607 Shaveable Brazier Head**



### WE PAINT BULB TITE RIVETS

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



BULB-TITE BLIND RIVETS

Aluminum Rivet/ Aluminum Mandrel

		Company of	ur te secure		erenne.	THE REAL PROPERTY.	THE PERSON NAMED IN	-		-	אט גועבו.
Head Style	Max. A	Part Number	Grip Range	Hole Size Drill No.	ı	Nomina 8	l Dimensi D	ons F	T Shear		ues In Pounds Clamp-up
Countersunk	.205	RV6601-6-4	.106250	(.209 –.221)	.750	.103	.372	.935	740	460	130
		RV6601-6-6	.187375	#4	.875			1.060			
		RV6601-6-8	.312500		1.000			1.185			
		RV6601-6-10	.437625		1.125			1.310			
		RV6601-6-12	.563750		1.250			1.435			
	.246	RV6601-8-4	.150250	(.250263)	.795	.147	.480	1.005	1100	675	250
		RV6601-8-6	.187375	#E	.920			1.130			
low Profile	1/1	RV6601-8-8	.250500	(1/0 1/7)	1.045	042	0/7	1.255	465	045	00
Low Protile Flat Head	.161	RV6602-5-4	.125250	(.162 – .167) #20		.043	.367	.862 .987	400	245	80
riai neaa		RV6602-5-6	.187375 .250500	#20	.832 .957			1.112			
-	.205	RV6602-5-8 RV6602-6-4	.125250	(.209 – .221)	.750	.057	.443	.935	740	460	130
	.203	RV6602-6-6	.187375	(.207 – .221) #4	.875	1007	,443	1.060	/40	400	130
		RV6602-6-8	.250500	#4	1.000			1.185			
		RV6602-6-10	.375625		1.125			1.310			
		RV6602-6-12	.500750		1.250			1.435			
Oome Head	.304	RV6603-9-3	.032187	(.308 – .327)	843	.145	.615	1.000	1500	1100	375
		RV6603-9-6	.032375	5/16	1,090			1.325			5.75
		RV6603-9-10	.250625	3,1.5	1,340			1.575			
		RV6603-9-12	.375750		1,465			1.700			
Oome Head	.161	RV6604-5-4	.067250	(.162167)	.770	.069	.343	.925	465	245	80
		RV6604-5-8	.250500	#20	.957			1.112			
	.205	RV6604-6-3	.050187	(.209 – .221)	.687	.088	.443	.872	740	460	130
		RV6604-6-4	.062250	#4	.750			.935			
		RV6604-6-6	.187375		.875			1.060			
		RV6604-6-8	.312500		1.000	) 11		1.185	1		
		RV6604-6-10	.437625		1.125			1.310			
		RV6604-6-12	.563750		1.250			1.435			
	.246	RV6604-8-4	.062250	(.250263)	.795	.113	.560	1.005	1100	675	250
		RV6604-8-6	.125375	1/4	.920			1.130			
		RV6604-8-8	.250500		1.045			1.235			
		RV6604-8-10	.375625		1.170			1.360			
arge Flange	.304	RV6605-9-6	.042375	(.308327)	1.090	.145	.743	1.325	1500	1100	375
		RV6605-9-10	.250625	5/16	1.340			1.575			
		RV6605-9-12	.375750		1.465			1.700	740	440	100
ow Profile	.205	RV6606-6-3	.050187	(.209 –.221)	.687	.094	.469	.872	740	460	130
Dome Head		RV6606-6-4	.062-,250	#4	.750			.935			
		RV6606-6-6	.187375		.875			1.060			
		RV6606-6-8	.312500		1.000			1.185			
		RV6606-6-10	.437625		1.125 1.250			1.310			
	24/	RV6606-6-12	.563750_	(.250263)	.795	.111	.543	1.435	1100	675	250
	.246	RV6606-8-4 RV6606-8-6	.040250		.920	.111	د4ر. ا	1.130	1100	( ( ( )	230
			.125375	1/4	1.045			1.255	l l		
		RV6606-8-8 RV6606-8-10	.250500 .375625		1.170			1.380			
Countersunk	.246	RV6671-8-4	.150250	(.250263)	.895	.147	.494	1.005	1835	1000	500
,ounter sunk	.240	RV6671-8-6	.187375	1/4	1.020	,	,	1.130	. 305		200
		RV6671-8-8	.250500	1/1	1.145			1.355			
ow Profile	.246	RV6676-8-4	.040250	(.250263)	.795	.111	.542	1.005	1850	1025	500
Dome Head	.270	RV6676-8-6	.125375	1/4	.920			1.130	,		
ome neuu		RV6676-8-8	.250500	1/1	1.045			1.255			
		RV6676-8-10	.375625		1.170			1.380			
Dome Head	.246	RV6696-8-4	.040250	(.250263)	.795	.111	.542	1.005	2100	1455	450
- Jino Heuu	, <u>.</u> 10	RV6696-8-6	.125375	1/4	.920			1.130		"	
		RV6696-8-8	.250500	.,.	1.045			1.255			
		RV6696-8-10	.375625		1.170			1.360			
haveable	.161	RV6607-5-5	.020312		.800	.072	.312	.920	465	245	80
Series	.205	RV6607-6-6	.050375		.875	.094	.469	1.060	740	460	130
	.205	RV6607-6-8	.050500		1,000	.094	.469	1.185	740	460	130
	.246	RV6607-8-8	.050500		1.045	.120	.469	1.235	1100	675	250
	.2 10				la i		1		1		

Steel Rivet/ Steel Mandrel

Monel Rivet/

Aluminum Rivet/ Aluminum Mandrel

Stainless Steel Mandrel

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

#### PORTABLE RIVETING TOOLS

GESIPA applied it's more than 40 years of expertise in the design and manufacture of quality blind rivet tools to the development of a revolutionary new product line. The proven benefits of battery powered portable tooling are combined with innovative design features to form the AccuBird\*, PowerBird\*, and FireBird\* family of blind rivet tools. GESIPA battery powered portables offer high utility and provide performance equal to industrial grade structuralblind rivets. GESIPA'S FireBird\*

pneumatic/hydraulic power riveting tools. All three GESIPA portables come in their own rugged steel carrying case along with battery charger and a 12 volt long life rechargeable battery.

The AccuBird\* sets 3/32" to 3/16" diameter standard blind rivets. Choose the PowerBird\* for heavy-duty applications installing 1/4" diameter standard and installs blind rivet nuts. The tool's precise (spin-on/pull/spin-off) setting method yields consistent quality rivet nut installation. The Fire Bird comes equipped with standard nose tips for 8-32, 10-32, and 1/4-20 size rivet nuts. See the chart for optional nose tip sizes.

Safety, utility, reliability and long service life make the "Bird" family a logical alternative to conventional blind riveting tools.

12 Volt Cordless Riveting



Blind Rivet Diameter	Material	Pcs. per Battery Charge	Standard Nosepiece	Retaining Nosepiece
3/32 (2.4mm)	alu/steel	1,900	17/18	17/18R
1/8 (3.0 and 3.2 mm) 1/8 (3.0 and 3.2 mm) 1/8 (3.0 and 3.2 mm)	alu/steel all steel all stainless steel	1,300 1,100 1,000	17/24	17/24R "
5/32 (4.0 mm) 5/32 (4.0 mm) 5/32 (4.0 mm)	alu/steel all steel all stainless steel	900 900 800	17/27	17/27R "
3/16 (4.8 and 5.0 mm) 3/16 (4.8 and 5.0 mm) 3/16 (4.8 and 5.0 mm)	alu/steel all steel all stainless steel	700 500 400	17/32	17/32R

Work Capacity: 3/32" to 3/16" blind rivets Weight: 4.8 lbs. (2.2 kg) Working Stroke: .79" (20 mm) Traction Power: 1,900 lbs. (8,500 N) Power Pack: 12 Volt, rechargeable NiCad Battery Charger: 110V/60Hz, 60 minute

charge time



Retaining nosepieces hold rivet securely in the tool nose prior to setting the rivet.

Extra length nosepieces are available.

## *PowerBird*



Blind Rivet Diameter	Material	Pcs. per Battery Charge	Standard Nosepiece	
STANDARD				
1/4" (6.4mm) 1/4" (6.4mm) MEGA-GRIP	alu/steel steel/steel	250 150	17/45 17/45	
3/16" (4.8mm) 3/16" (4.8mm) 1/4" (6.4mm) 1/4" (6.4mm) 8ULB-TITE	aluminum steel or stainless aluminum steel or stainless	360 250 250 80	17/31 MG 17/31 MG 17/41 MG 17/41 MG	
1/4" (6.3mm) 1/4" (6.3mm) 1/4" (6.3mm) 9/32" (7.7mm)	aluminum steel stainless/manel aluminum	350 180 230 280	17/42 BT 17/42 BT 17/42 BT 17/48 BT	

Work Capacity: 3/16" and 1/4", and 9/32"BT

Weight: 4.8 lbs. (2.2 kg) Working Stroke: .79" (20mm) Traction Power: 2,900 lbs. (13,000 N) Power Pack: 12 Volt. rechargeable NiCad Battery Charger: 110V/60Hz, 60 minute charge time



12 Volt Cordless Riveting





Rivet Nut	Rivet Nut	Nuts					
Thread Size	Material	Per Charge	Man	drel	Nosepiece		
6-32 (M3)	alum.	600	(6-32)	7262663	(6-32)	7262698	
	steel	550	(M3)	7262019	(M3)	7262086	
8-32 (M4)	alum.	520	(8-32)	7262574	(8-32)	7262620	
	steel	480	(M4)	7262027	(M4)	7262094	
10-32 (M5)	alum.	480	(10-32)	7262582	(10-32)	7262639	
	steel	400	(M5)	7262035	(M5)	7262108	
1/4-20 (M6)	alum.	400	(1/4-20)	7262590	(1/4-20)	7262647	
	steel	300	(M6)	7262043	(M6)	7262116	
5/16-18 (M8)	alum.	340	(5/16-18)	7262604	(5/16-18)	7262124	
	steel	180	(M8)	7262051	(M8)	7262124	
3/8-16 (M10)	alum.	300	(3/8-16)	7262671	(3/8-16)	7262655	
	steel	*	(M10)	7262078	(M10)	7262132	

Work Capacity: 6-32 to 5/16-18 Steel and Aluminum blind rivet nuts (3/8-16 Aluminum only). \*The FireBird tool should not be used with rivet nuts requiring a setting force greater than 2,800 lbs.

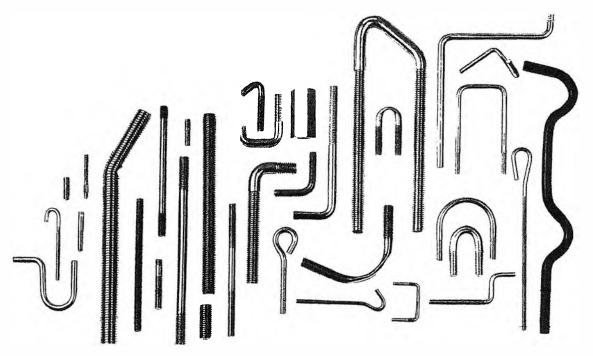
Weight: 4.8 lbs. (2.2 kg)

Working Stroke: adjustable up to .216" (5.5mm)

Traction Power: 3,200 lbs. (14,500 N) Power Pack: 12 Volt, rechargeable NiCad Battery Charger: 110V/60Hz, 60 minute charge time



#### **THREADED RODS & PARTS**



**Coupling Nuts** 

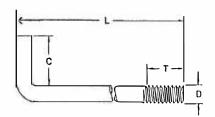
Rods & Studs

**Bent Bolts** 

**U-Bolts** 

**Specials** 

## STEEL ANCHOR BOLTS



D	С	T
3/8-16 All Sizes	1 <sup>յ</sup> չ "	1½"
1/2-13 All Sizes	2"	15"
5/8-11 X 6"-10"	2"	3 "
5/8-11 X 12"+	2"	4 "
3/4-10 All Sizes	3 "	4"
1-8 All Sizes	3 "	5 "

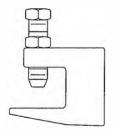
#### **SIZES**

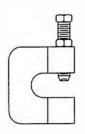
3/8(16) x 6"	1/2(13) x 6"	5/8(11) x 6"	3/4(10) x 8"	1(8) x 12"
3/8(16) ж 8"	1/2(13) × 8"	5/8(11) x 8"	3/4(10) x 10"	1(8) x 14"
3/8(16) x 10"	1/2(13) x 10"	5/8(11) x 10"	3/4(10) x 12"	1(8) x 15"
3/8(16) x 12"	1/2(13) x 12"	5/8(11) x 12"	3/4(10) x 14"	1(8) х 16"
3	1/2(13) x 14"	5/8(11) × 14"	3/4(10) x 15"	1(8) x 18"
	1/2(13) x 16"	5/8(11) x 15"	3/4(10) x 16"	1(8) x 21"
	1/2(13) x 18"	5/8(11) x 16"	3/4(10) x 18"	1(8) x 24
	1/2(13) x 20"	5/8(11) x 18"	3/4(10) x 20"	1(8) x 30"
			3/4(10) x 24"	1(8) ж 36"
			3/4(10) x 30	
		Control of the contro		



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#### **HANGERS**



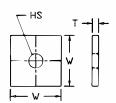












**Square Steel Plate** 

#### **DOCK WASHER / PLATE WASHER**

**SIZE RANGE:** 

7/16" thru 1-5/16" hole size (HS) 1/8" thru 1/2" thickness (T) 2" thru 8" width (W) MATERIAL: Carbon steel

ALTERNATE MATERIAL OR FINISH: EG, HDG

SERVICE: Square steel washer plate used on top of back to back channel

or angle for hanger rod or U-bolt attachment.

ORDERING: Specify HS, T,W, model number and name.

NOTE: Any dimensions HS, W and T may be ordered at P.O.A. Standard

sizes 2" thru 8" square (1" increments).

#### **EYE COUPLINGS**



ITEM CODE	SIZE	BOX/CTN QUANTITY
EC14	1/4"	100/1000
EC38	3/8"	100/1000



#### **CONTINUOUS THREADED ROD**

**MATERIAL:** Carbon steel, threaded complete length.

FINISH: Black or electro-galvanized.

**SERVICE:** Continuous threaded rod can be cut to

required length. Sizes below stocked in 6', 10', and 12' lengths. Other diameters from 6/32 to 2", other materials, SAE National Fine thread, and other lengths can be

furnished to order.

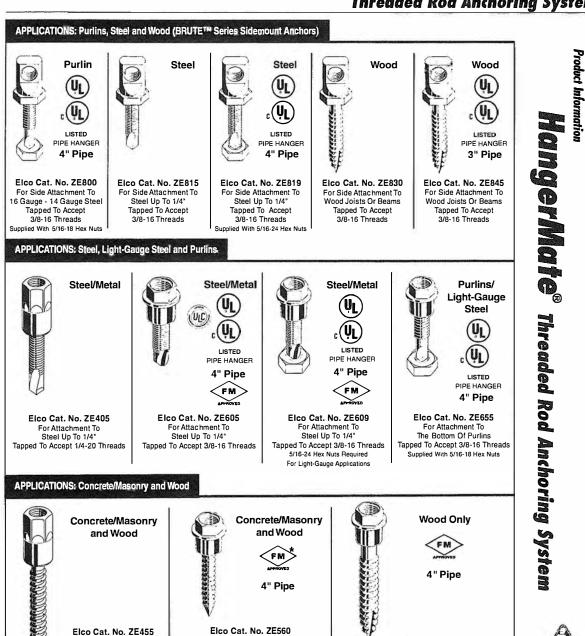
THREADED
ROD
AVAILABLE
IN
STAINLESS
STEEL



ROD	WGT./C	MAX. REC.
SIZE	APPROX.	LOAD, LB.
1/4	12	240
5/16	20	300
3/8	30	610
1/2	54	1130
5/8	85	1810
3/4	120	2710
7/8	170	3770
1	225	4960
1-1/8	280	6230
1-1/4	350	8000
1-3/8	450	9000
1-1/2	500	11630

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151





# FSI STOCKS THREADED ROD IN STAINLESS STEEL AND ZINC PLATED

For Attachment To Concrete/Masonry And Wood

Tapped To Accept 3/8-16 Threads

\*FM Approved in concrete applications only

Elco Cat. No. ZE710

For Attachment To Wood Joists And Beams

Tapped To Accept 3/8-16 Threads

Approved For 3/4\*--4\* Diameter Pipe

For Attachment To

Concrete/Masonry And Wood Tapped To Accept 1/4-20 Threads

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

#### **Installation Components**



Elco Cat. No. ZE240

Drill Bit Adaptor Kit



Elco Cat No. ZE200

Brute' Gold-Colored Recessed Drive Socket (use for metal and wood side-mount applications)



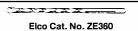
Elco Cat. No. ZE215

Recessed Drive Socket (use for vertical-mount metal and wood applications)



Flco Cat. No. 7F220 Recessed Drive Sleeve

(use for concrete/masonry applications)



Tanged Drill Bit (use with ZE240 Adaptor Kit)



Elco Cat. No. ZE380 SDS Hex Shank Drill Bit



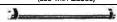
Elco Cat. No. ZE230

Carbide Countersink Tool (use with ZE560 in FM-approved concrete/masonry applications)



Elco Cat. No. ZE235

SDS Drive Countersinking Socket (use with ZE560)



Elco Cat. No. ZE245

(use with ZE455 and ZE280)



Elco Cat. No. ZE280

3/8" Hex Drive (use with ZE405 and ZE455)

The HangerMate® product information presented here was current at time of printing. However, as Elco strives to offer the highest-performing threaded rod anchoring products, we suggest that users obtain the most current HangerMate® product information prior to purchase or

Complete and up-to-date HangerMate® product information, including new products, product performance testing results and code body approvals, is available for each HangerMate® anchor by contacting Elco Textron (800.435.7213 or gmelvin@elco.textron.com) or by visiting your HangerMate® distributor.

	Listings and Approvals										
Catalog #	og # Listings/Approvals Descri		Rod Size	Installation							
HangerMate Vertical-Mount Anchors											
<b>ZE</b> 405	N/A	Self-Drilling Anchor for Steel 16 gage - 1/4"	1/4-20 Rod	Use ZE260 Drive Socket/Steet							
ZE455	N/A	Self-Tapping Anchor for Wood and Concrete	1/4-20 Rod	Use ZE280/Wood Applications Use ZE240, (ZE360 or ZE380 bit), ZE245 & ZE280/Concrete							
<b>ZE</b> 560	Meets NFPA 13 2-6.1/Wood FM/For Concrete/Countersunk 4" Pipe	Self-Tapping Anchor for Wood and Concrete	3/8-16 Rod	Use ZE215/Wood Use ZE240, ZE360 or ZE380 & ZE220 Drive Sleeve/Concrete FM/Approved/Use ZE380 & ZE230, and ZE235 Drive Socket							
ZE605	UL/cUL/ULC/FM 4" Pipe	Self-Drilling Anchor for Steel 16 gage - 1/4"	3/8-16 Rod	Use ZE215 Drive Socket/Steel							
ZE609	UL/cUL/FM 4" Pipe	Self-Drilling Anchor for Steel 16 gage - 1/4"	3/8-16 Rod	Use ZE215 Drive Socket/Sleel Use ZE609 for Light Gage Applications							
ZE655	UL/cUL 4° Pipe	Self-Drilling Anchor for Steel Purfins/16-14 gage	3/8-16 Rod	Use ZE215 Drive Socket/Steet Purlins							
ZE710	FM	Self-Tapping Anchor	3/8-16 Rod	Use ZE215 Drive Socket/Wood							

Product Performance and Technical Data

22003	4" Pipe	16 gage - 1/4"	30-101100	Use ZE609 for Light Gage Applications
ZE655	UL/cUL 4° Pipe	Self-Drilling Anchor for Steel Purlins/16-14 gage	3/8-16 Rod	Use ZE215 Drive Socket/Steel Purlins
ZE710	FM 4" Pipe	Self-Tapping Anchor for Wood		
	f-	HangerMate "Brute"	Side-Mount	Anchors
ZE800	UL/cUL 4" Pipe	Self-Dniling Anchor for Steel Purlins/16-14 gage 3/8-16 Rod Use Zi		Use ZE200 Gold-Colored Drive Socket/Steel Purins
ZE815	N/A	Self-Drilling Anchor for Steel 16 gage -1/4"	3/8-16 Rod	Use ZE200 Gold-Colored Drive Socket/Stee!
ZE819	UL/cUL 4" Pipe	Self-Drilling Anchor for Steel 16 gage - 1/4"	3/8-16 Rod	Use ZE200 Gold-Colored Drive Socket/Steel
ZE830	Meets NFPA 13 2-6.1/Wood	Self-Tapping Anchor for Wood	3/8-16 Rod	Use ZE200 Gold-Colored Drive Socket/Wood
<b>ZE</b> 845	UL/cUL 3" Pipe	Self-Tapping Anchor for Wood	3/8-16 Rod	Use ZE200 Gold-Colored Drive Socket/Wood

#### **Ultimate Average Pullout Values**

				(values	expre	essed in lb	s.)				
ZE406 ZE455 ZE560						SI	eel				
	Concrete	Wood	16 Ga.	16 Ga. w/Nut	14 Ga.	14 Ga. w/Nut	12 Ga.	12 Ga. w/Nut	1/8"	3/16"	1/4"
ZE405	N/A	N/A	516	N/A	649	N/A	1433	N/A	2783	3948	4304*
ZE455	2181	1694	N/A	NVA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ZE560	2181	1694	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ZE605	N/A	N/A	735	N/A	1044	4065	1655	N/A	1889	3255	4545
ZE609*	N/A	N/A	735	2801	1044	4065	1655	4925	1889	3255	4545
ZE655*	N/A	N/A	735	2901	1044	4065	N/A	N/A	N/A	N/A	N/A
ZE710	N/A	2353	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ZE800	N/A	N/A	735	2801	1044	4065	N/A	N/A	N/A	N/A	N/A
ZE815	N/A	N/A	735	N/A	1044	N/A	1655	N/A	2783	3255	4545
ZE819*	N/A	N/A	735	2801	1044	4065	1655	4925	2783	3255	4545
ZE830	N/A	1889	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ZE845	N/A	1889	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Anchors are packed with retainer nuts. \*\*Fastener failed during testing.

These values are for the HangerMate anchors installed in the materials shown; an appropriate safety factor should be applied to these values. For pullout values in steel thicknesses not shown, contact Elco Textron Inc. The tensile strength of the threaded rod may be less than these values and must therefore be determined to be adequate by the end user.

#### **Important Product & Warranty Information!**

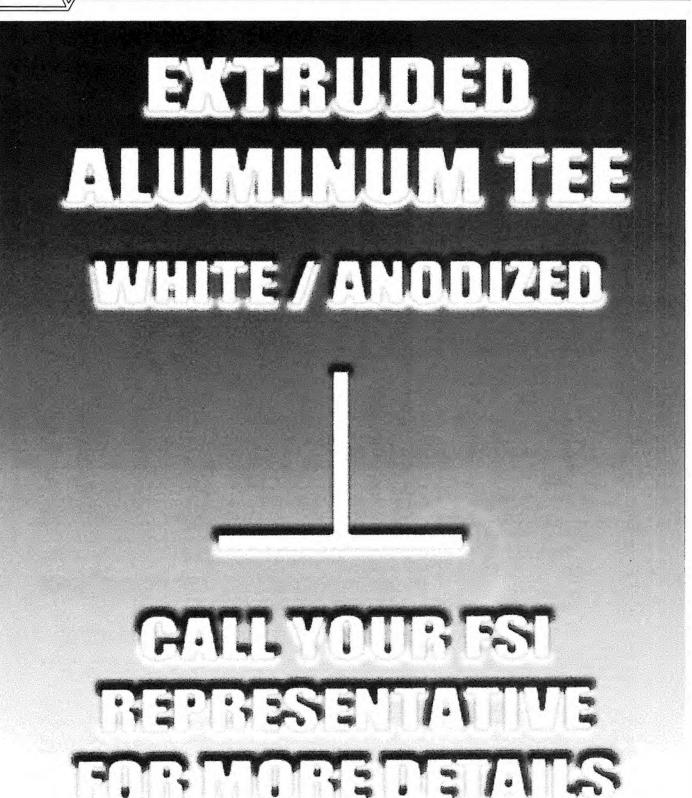
- As with all cutting tools and fasteners, normal safety precautions should be observed to avoid electrical installations, other utilities and reinforcement bars; careful use will provide the utmost safety and reliability.
- The wearing of safety glasses by users and persons in the vicinity is required by Federal Law.
- Shoulders of installed HangerMate anchors must be flush to the metal, masonry or wood substrate materials. HangerMate anchors should not be subjected to vibratory or shock loads resulting from such applications as anchorings for reciprocating machinery, crane rails o
- Care should be taken to not damage HangerMate anchors or the substrate into which they are installed when loading pipe, installing cable tray, or otherwise suspending components from HangerMate anchors. Failure to do so may result in significant loss of holding pow
- Complete HangerMate product information and technical application assistance is available from Eico Textron by calling 800.435.7213.

This literature was prepared as an introductory summary of the HangerMate threaded rod anchoring system from Eico Textron Inc. and is not, therefore, intended to describe all hazards, limitations, warnings, precautions, etc. pertaining to the use of the product. The information and data presented herein are believed to be accurate and reliable, however, due to the wide variety of possible intervening factors, the suitability of the product for the use intended is the sole responsibility of the user. Specifications and other information contained herein supersede all previously published material and are subject to change without notice.

All HangerMate anchors are warranted to be manufactured free from defects in material and workmanship. Under this warranty, Elco Textron will provide, at no charge, replacement product for any HangerMate anchors proven to be defective when installed in accordance with our published recommendations and in applications considered by us as suitable for this product. This warranty is in lieu of any and all warranties, expressed or implied, and in no case will Elco Textron Inc. be liable for incidental, liquidated or consequential damages.

HangerMate anchors are made in the USA and conform to the Buy America Act

HangerMate and Brute are trademarks of Elco Textron Inc.

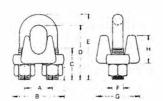


640 SNYDER AVENUE • BOLMAR INBUSTRIAL CENTER • WEST CHESTER • PA • 19382 PNONE: (610) 692-6656 • FAX: (610) 692-8151

#### WIRE ROPE CLIPS

#### FORGED WIRE ROPE CLIPS

Forged • Carbon Steel • Hot Galvanized



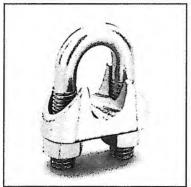
- All clips are supplied with cold-forged double chamfered, heavy hex, UNC-2B nuts.\*
   Meet Federal Specification FF-C-450c, Type I, Class 1.
   Base, U-bolt and nuts are hot-dip galvanized in accordance with ASTM Specification A-153.\*
   Forged wire rope clips are not designed for load carrying purposes therefore, working load limits have not been established.

Stock Size for					Dimer	nsions				Min. No. Clips for Max.	Min. Spacing Between	Approx. Wt. Per
No.	Rope Dia.	A	В	C	D	E	F	6	Ħ	Strength	Clips	100 Pcs.
18500*	1/8	1/2	1	7/16	3/4	15/16	7/32	27/32	7/16	2	3/4	6.0
18505	3/16	19/32	13/32	5/8	31/32	13/16	1/4	15/16	1/2	2	11/8	9.0
18510	1/4	11/16	17/16	7/8	17/32	11/2	5/16	11/8	11/16	2	11/2	18.0
18515	5/16	7/8	111/16	1	15/8	131/32	3/8	15/16	3/4	2	17/8	30.0
18520	3/8	1	115/16	7/8	15/8	2	7/16	11/2	7/8	2	21/4	44.5
18530	1/2	13/16	21/4	11/16	129/32	25/16	1/2	113/16	13/32	3	3	71.6
18540	5/8	11/4	23/8	17/16	23/8	27/8	%16	21/16	11/4	3	3¾	100.0
18545	3/4	11/2	23/4	11/2	213/16	33/8	5/8	25/16	115/32	4	41/2	140.0
18550	7/8	13/4	33/16	11/8	31/8	37/8	3/4	21/16	11/2	4	51/4	200.0
18555	1	17/8	31/2	21/4	31/2	41/4	3/4	211/16	13/4	5	6	245.0
18560	11/8	21/16	311/16	23/16	37/8	45/8	3/4	3	2	6	6¾	285.0
18565	11/4	23/16	41/16	23/8	41/4	51/8	7/8	31/4	25/32	6	71/2	415.0
18570	11/2	219/32	41/2	27/16	5	51/8	7∕8	3%	213/32	7	9	543.0

<sup>\*1/8</sup> only is supplied with regular hex nut and zinc plated U-bolt.

#### **MALLEABLE WIRE ROPE CLIPS**

Carbon Steel . Zinc Plated



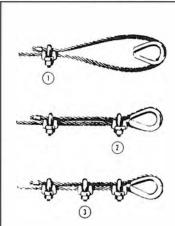
- All regular hex nuts.
- Clips meets Federal Specification FF-C-450, Type I, Class 2
- · Bulk pack

Stock No.	Rope Size	inside Length of U-Bolt	Min. No. of Clips for Max. Strength	Approx. Wt. Per 100 Pcs.
20900	1/16*	23/32	2-4	3.0
20905	1/8*	23/32	2-4	4.5
20910	3/16	15/16	2-4	6.5
20915	1/4	11/32	2-4	12.0
20920	5/16	15/16	2-4	12.0
20925	3/8	11/2	2-4	19.0
20930	7/16	17/8	3-4	21.8
20935	1/2	17/8	3-4	37.0
2 <b>0</b> 940	9/16	21/4	3-4	46.0
20945	5/8	23/8	3-4	54.0
20950	3/4	23/4	4-5	80.0
20955	7/8	31/8	4-5	116.0
20960	1	31/2	4-5	137.0
20965	1-1/8	31//8	6-8	267.0
20970	1-1/4	41/4	6-8	328.0
	55 0 5			

\*NOTE: Not covered by FF-C-450 Type I, Class 2

#### USE CLIPS PROPERLY FOR MAXIMUM EFFICIENCY

- U-Bolt should bear on dead end of rope.
- Use recommended number of clips, depending on safety requirement.
   Spacing between clips should be 6 times the rope diameter.
- 4. Nuts should be re-tightened after initial load.



#### How To Attach Drop Forged Wire Rope Clips

The right way to attach wire rope clips is illustrated at left. The base or saddle should bear on the live end of the rope — U-bolt on the short or dead end. *Staggering* or *reversing* the clips does NOT give additional holding power.

- 1. ATTACH FIRST CLIP one base width from dead end of rope. Tighten nuts securely.
- ATTACH SECOND CLIP as close to loop as possible. Tighten nuts firmly but not completely tight.
- ATTACH ALL OTHER CLIPS (if required) equally spaced between the first two. Tighten nuts firmly.

Apply the initial load to the rope. Alternately and uniformly retighten all nuts securely, to compensate for any reduction of rope diameter. Inspect and periodically retighten. The number of clips shown should be used for 6x19 or 6x37 class, fiber core or IWRC, IPS or XIPS, right regular or long lay Wire Rope, and 8x19 or 8x7 class, fiber core, IPS or XIPS, Wire Rope.

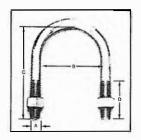
For 6x19 Seale construction or similar large outer wire constructions, add one extra clip for sizes 1" and larger. Where service conditions are unusually severe, or for other classes of rope not mentioned above, add one additional clip.

Drop Forged Wire Rope Clips, when properly applied to new rope will develop high efficiencies (approximately 80%) based upon the catalog breaking strength of the wire rope. Failure to follow the above instructions will cause a reduction in efficiency.

#### U - BOLTS - S - HOOKS - BEVEL WASHERS

Dimensions in inches • Weights in pounds Please include stock number and size when ordering

U-BOLTS
Unassembled
With Nuts
Carbon Steel • Zinc Plated



- All sizes manufactured with rolled threads.
- Cut thread available upon request.
- U-bolts available up to 1¾" diameter rod.
- Square and V-bend bolts available upon request.
- Send drawing for special sizes.
- Bulk packaging.
- Special packaging available upon request.
- Available in 304 Stainless Steel

Stock No.         Thread A No.         Wildth A No.         Inside B B S P C D D         Thread D Size P Size P D Size P Size P D D Size P Size P D Siz									
34020 11/4-20		Dia.	Bet. Legs	Length	Length			No.	100 Pcs.
34020 11/4-20	34010	1/4-20	3/.	11/.	3/	3/	4.8	With Strap	Washers
34030								and Nuts	Unassembled
34070 1/4-20 1 1/4 2/4 9/4 1/2 6.0 35408 10.1 34080 1/4-20 11/6 2 3/4 3/4 6.5 35409 10.8 34080 1/4-20 11/6 2 1/4 3/4 1 7.4 35410 13.3 34100 1/4-20 11/4 20/4 3/4 1 11/4 8.5 35411 14.4 34110 1/4-20 2 3/4 11/4 11/2 9.5 35412 14.6 34120 1/4-20 11/2 31/2 2 1 9.8 35420 16.4 34200 5/16-18 13/6 31/6 11/2 1 16.5 35421 21.2 34210 5/16-18 13/8 311/6 11/2 1 16.5 35422 18.3 34220 5/16-18 13/4 211/6 1 11/4 13.6 35424 19.5 34220 5/16-18 2 211/6 1 11/4 13.6 35424 19.5 34240 5/16-18 2 211/6 1 11/2 13.6 35425 23.2 34250 5/16-18 2 311/6 11/2 11/2 17.2 35427 21.8 34270 5/16-18 2 311/6 11/2 11/2 17.2 35427 21.8 34292 3/8-16 1 21/2 33/16 11/2 2 16.0 35427 21.8 34303 3/8-16 13/8 31/8 11/2 2 16.0 35430 31.8 34304 3/8-16 2 31/6 11/2 11/2 2 24.9 35430 31.8 34304 3/8-16 2 31/6 11/2 21/2 24.9 35430 31.8 34304 3/8-16 2 31/6 11/2 21/2 24.9 35431 38.0 34310 3/8-16 21/2 3/6 11/2 2 24.9 35431 38.0 34304 3/8-16 3 3/6 45/6 11/2 2 24.9 35432 41.2 34320 3/8-16 3 3/6 45/6 11/2 2 24.9 35432 41.2 34320 3/8-16 3 3/6 45/6 11/2 2 2/2 28.0 35433 3/8.0 3/8-16 3/6 3/6 45/6 11/2 2 3/2 58.0 34430 3/8-16 3/6 3/6 45/6 11/2 21/2 58.0 34430 1/2-13 3/2 5 11/2 3 3/2 68.5 34450 1/2-13 55/6 7 2 5 86.5 34450 1/2-13 55/6 7 2 5 86.5 34450 1/2-13 63/4 8 2 6 101.5 34455 1/2-13 63/4 8 2 6 101.5 34455 1/2-13 63/4 8 2 6 6 101.5 34455 1/2-13 63/4 8 2 6 101.5 34455 1/2-13 63/4 8 2 6 101.5 34455 1/2-13 63/4 8 2 6 101.5 34455 1/2-13 63/4 8 2 6 101.5 34455 1/2-13 63/4 8 2 6 6 101.5									
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34410 <b>1/2</b> -13 3½ 5 1½ 3 66.5 34420 <b>1/2</b> -13 4 5½ 1½ 3½ 68.0 34430 <b>1/2</b> -13 45% 6 1½ 4 74.0 34440 <b>1/2</b> -13 55% 7 2 5 86.5 34450 <b>1/2</b> -13 6¾ 8 2 6 101.5 34455 <b>1/2</b> -13 8¾ 10¾ 2 8 125.0	34400	<b>1/2</b> -13	3	41/2	11/2	21/2	58.0	-	
34420 <b>1/2</b> -13 4 5½ 1½ 3½ 68.0 34430 <b>1/2</b> -13 45 <sub>6</sub> 6 1½ 4 74.0 34440 <b>1/2</b> -13 55 <sub>6</sub> 7 2 5 86.5 34450 <b>1/2</b> -13 6¾ 8 2 6 101.5 34455 <b>1/2</b> -13 8¾ 10¾ 2 8 125.0	34410	<b>1/2</b> -13	31/2				66.5		
34430 <b>1/2</b> -13 45% 6 11½ 4 74.0 34440 <b>1/2</b> -13 55% 7 2 5 86.5 34450 <b>1/2</b> -13 63¼ 8 2 6 101.5 34455 <b>1/2</b> -13 83¼ 103% 2 8 125.0	34420	<b>1/2</b> -13				31/2	68.0		
34440 <b>1/2</b> -13 5% 7 2 5 86.5 34450 <b>1/2</b> -13 6¾ 8 2 6 101.5 34455 <b>1/2</b> -13 8¾ 10¾ 2 8 125.0	34430	<b>1/2</b> -13	45/ <sub>8</sub>				74.0		
34450 <b>1/2</b> -13 6¾ 8 2 6 101.5 34455 <b>1/2</b> -13 8¾ 10¾ 2 8 125.0	34440	<b>1/2</b> -13			2		86.5		
	34450	<b>1/2</b> -13		8	2		101.5		
34474 <b>5/8</b> -11 8 <sup>3</sup> / <sub>4</sub> 111/ <sub>2</sub> 4 8 253.0	34455	<b>1/2</b> -13	83/4	103/8	2	8	125.0		
	34474	<b>5/8</b> –11	8¾	111/2	4	8	253.0		

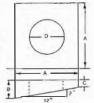
#### S-HOOKS Zinc Plated



Stock No.	Size	Wire Dia.	Inside Length A	I.D. Eye B	Approx. Wt. Per 100 Pcs.
41705	5/32	.134	1	3/8	1.2
41710	3/16	.192	13/8	3/8	3.0
41715	1/4	.250	13/4	21/32	6.7
41720	5/16	.313	11/8	3/4	11.0
41725	3/8	.375	223/84	125/32	20.4

## MALLEABLE BEVEL WASHERS





Stock No.	Bolt Dia.	A	В	С	D	Wt. Per 100 Pcs.
70005	1/4	11/16	7/32	5/84	5/16	1.6
70010	5/16	11/16	5/16	9/64	3/8	6.0
70015	3/8	11/4	11/32	5/32	7/16	9.5
70020	1/2	11/4	11/32	5/32	9/16	10.2
70025	5/8	11/2	13/32	5/32	11/16	15.4
70030	3/4	11/2	15/32	7/32	13/16	16.4
70035	7/8	2	9/16	7/32	<sup>15</sup> / <sub>16</sub>	34.2
70040	1	2	9/16	7/32	13/32	32.5
70045	1-1/8	21/4	5/8	9/32	13/16	50.0
70050	1-1/4	21/2	23/32	5/16	15/16	75.0

FSI STOCKS ALL THREAD
IN ZINC AND STAINLESS STEEL

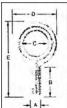
#### STAINLESS STEEL EYE BOLTS

#### STAINLESS STEEL EYE BOLTS

304 Stainless Steel

Plain Pattern

Shoulder Pattern

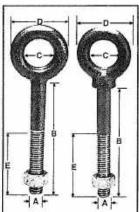




Plain Patt	ern							
Stock No.	Thread Size UNC-2A A	Shank Length B	I.D. Eye C	O.D. Eye D	Overall Length E	Blanks∗	Approx. Wt. Per 100 Pcs.	Rated Capacity
SS13611	1/4-20	1	3/4	13/16	23/8	SSR13611	5.0	460
SS13621	<b>5/16</b> -18	11/8	7∕8	17/16	213/16	SSR13621	9.6	780
SS13631	<b>3/8</b> -16	11/4	1	111/16	3	SSR13631	14.0	1,160
SS13641	<b>1/2</b> -13	11/2	13/16	21/8	321/32	SSR13641	29.5	2,150
SS13661	<b>5/8</b> -11	13/4	13/ <sub>8</sub>	2%16	43/8	SSR13661	58.0	3,440
SS13672	<b>3/4</b> -10	2	11/2	213/16	47/B	SSR13672	88.5	5,140
SS13702	1-8	21/2	113/16	31/16	61/8	SSR13702	226.0	9,370
Shoulder	Pattern			1,0		Blanks		
SS14611	1/4-20	1	3/4	13/16	23/8	SSR14611	5.0	460
SS14621	<b>5/16</b> -18	11/8	7/4	17/16	213/16	SSR14621	9.6	780
SS14631	<b>3/8</b> -16	11/4	1	11/16	31/4	SSR14631	16.0	1,160
SS14641	<b>1/2</b> -13	11/2	13/16	21/8	331/32	SSR14641	34.8	2,150
SS14661	<b>5/8</b> -11	13/4	13/8	29/16	43/4	SSR14661	67.0	3,440
SS14672	<b>3/4</b> -10	2	11/2	213/16	51/4	SSR14672	100.0	5,140
SS14702	1-8	21/2	13/4	3%16	61/a	SSR14702	260.0	9.370

## STAINLESS STEEL NUT EYE BOLTS

Forged • 304 Stainless Steel Plain and Shoulder Pattern



1AF 1AF
WARNING
RATED CAPACITY IS DRASTICALLY REDUCED WHEN LOADING AT ANY ANGLE.
LOADING MUST NEVER BE MADE AT AN ANGLE GREATER THAN 45° FROM BOLT CENTER-

LINE. AT AN ANGLE OF 45°, RATED CAPACITY IS REDUCED TO 1/4 OF THE TABULATED VALUE.

Stock No.	Thread Dia. A	Shank Length B	I.D. of Eye C	O.D. of Eye D	Thread Length E	Blanks +	Approx. Wt. Per 100 Pcs.	Rated Capacity
SS12314	1/4	4	1/2	1	1	SSR12314	8	460
777	1/4	6	1/2	1	1	SSR12316	9	-
SS12323	5/16	4	5/8	11/4	11/4	SSR12323	15	780
-	3/8	6	1	11/2	11/2	SSR12336	29	****
SS12341	1/2	41/2	1	15/16	2	SSR12341	41	2,150
SS12343	1/2	6	1	15/16	2	SSR12343	42	2,150
	1/2	12	1	15/16	2	SSR12348	55	-
SPECIAL	1/2	AL	1	15/16	2	SPECIAL	966	2,150
SS12350	5/8	4	13/8	21/2	21/4	SSR12350	82	3,440
SS12352	5/8	6	13/8	21/2	21/4	SSR12352	98	3,440
-	5/8	12	1%	21/2	21/4	SSR12357	125	-
SPECIAL	5/8	AL	13/8	21/2	21/4	SPECIAL		3.440
SS12362	3/4	6	11/2	213/16	21/2	SSR12362	138	5,140
-	3/4	12	11/2	213/16	21/2	SSR12367	175	_
SPECIAL	3/4	AL	11/2	213/16	21/2	SPECIAL	_	5,140
SS12371	7/8	6	111/16	31/4	21/2	SSR12371	214	7,130
-	7/8	12	111/16	31/4	21/2	SSR12375	300	_
SPECIAL	7/8	AL	111/16	31/4	21/2	SPECIAL	_	7,130
SS12380	1	6	113/16	3%16	3	SSR12380	280	9,370
\$	1	12	113/16	39/16	3	SSR12385	350	_
SPECIAL	1	AL	113/16	3%16	3	SPECIAL		9,370

Shoulder	Pattern					Blanks		
SS17734	3/8	41/2	3/4	11/2	11/2	SSR17334	25	1,160
~	3/8	6	3/4	11/2	11/2	SSR17736	29	
_	3/8	10	3/4	11/2	11/2	SSR17739	34	_
SPECIAL	3/8	AL	3/4	11/2	11/2	SPECIAL	-	1,160
SS17743	1/2	6	1	115/16	2	SSR17743	42	2,150
	1/2	12	1	115/16	2	SSR17745	55	344
SPECIAL	1/2	AL	1	115/16	2	SPECIAL	-	2,150
SS17752	5/8	6	13/8	21/2	21/4	SSR17752	98	3,440
9400	5/8	12	13/8	21/2	21/4	SSR17754	125	-
SPECIAL	5/8	AL	13/8	21/2	21/4	SPECIAL	-	3,440
SS17762	3/4	6	11/2	213/16	21/2	SSR17762	138	5,140
-	3/4	12	11/2	213/16	21/2	SSR17767	175	_
SPECIAL	3/4	AL	11/2	213/16	21/2	SPECIAL	_	5.140
SS17690	1	6	113/16	39/16	3	SSR17690	280	9.370
_	1	12	113/16	39/16	3	SSR17693	350	_
SPECIAL	1	AL	113/16	3%16	3	SPECIAL		9.370

<sup>\*</sup> Rated capacity - Full sized shank and eye - unaltered.

All stainless electropolished.

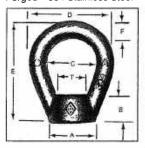
<sup>\*\*</sup> Note — 5/8" to 1" diameter shank lengths can be manufactured longer than 18" on request.

<sup>★</sup> Blanks have no rated capacity.

#### STAINLESS STEEL EYE NUTS - EYE BOLTS - U BOLTS - ROPE CLIPS

#### STAINLESS STEEL EYE NUTS

Forged • 304 Stainless Steel



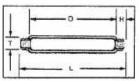
304 Stain	less Stee	1							
Stock No.	Thread Dia. T	A	В	С	D	E	F	Approx. Wt. Per 100 Pcs.	Rated Capacity
SS16037	<b>3/8</b> -16	7/8	5/8	11/4	2	21/2	3/8	22.0	2,700
SS16050	<b>1/2</b> -13	7/8	5/8	11/4	2	21/2	3/8	19.5	2.700
SS16062	<b>5/8</b> -11	13/B	3/4	11/2	21/2	3 2	1/2	60.0	5,000
SS16075	<b>3/4</b> -10	13/8	3/4	11/2	21/2	3	1/2	56.0	5.000
SS16087	<b>7/8</b> -9	19/16	11/16	21/4	4	5	7/8	174.1	10,000
SS16100	1-8	19/16	11/16	21/4	4	5	7/8	167.2	10,000

316 Stainless Steel

Stock No.	Thread Dia. T	Α	В	С	D	E	F	Approx. Wt. Per 100 Pcs.	Rated Capacity
SS16237	3/8	7/6	5/8	11/4	2	21/2	3/8	22.0	2,700
SS16250	1/2	7/8	5/8	11/4	2	21/2	3/8	19.5	2,700
SS16262	5/8	13/8	3/4	11/2	21/2	3 🔭	1/2	60.0	5,000
SS16275	3/4	13/8	3/4	11/2	21/2	3	1/2	56.0	5,000

## STAINLESS STEEL TURNBUCKLE BODIES

Forged • 304 Stainless Steel

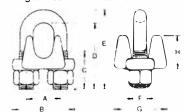


	Size	in Ir	ches				
Stock No.	Thread Dia. T		Take- Up 0	Head H	Body Length L	Approx. Wt. Per 100 Pcs.	Rated Capacity
SS10612	3/8	×	6	9/16	71/8	33	1,200
SS10616	1/2	x	6	3/4	71/2	56	2,200
SS10628	5/8	×	6	7/ <sub>R</sub>	73/4	85	3,500
SS10640	3/4	×	6	11/16	81/8	140	5,200

#### All stainless electropolished.

## STAINLESS STEEL WIRE ROPE CLIPS

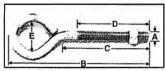
Forged • 304 Stainless Steel



				Dime	nsions				Min. No Clips for	Min. Spacing	Approx.	
Stock Size for No. Rope Dia	A	В	C	0	E	F	G	H	Max. Strength	Between Clips	Wt. Per 100 Pcs.	
SS18510	1/4	11/16	17/16	7/a	17/32	11/2	5/16	11/8	11/16	2	11/2	18.0
SS18520	3/8	1	115/16	7/8	15/8	2	7/16	11/2	7/8	2	21/4	44.5
SS18530	1/2	13/16	21/4	11/16	129/32	25/16	1/2	113/16	13/32	3	3	71.6
SS18540	5/8	11/4	23/8	17/16	23/8	27/a	9/16	21/16	11/4	3	33/4	100.0
SS18545	3/4	11/2	23/4	11/6	213/40	33%	5/6	25/16	115/22	4	414	140 0

# STAINLESS STEEL WROUGHT EYE BOLTS

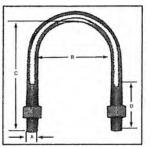
304 Stainless Steel



NOT RECOMMENDED FOR LIFTING

## STAINLESS STEEL U-BOLTS

304 Stainless Steel



All stainless electropolished.

Stock No.	Thread Dia. A	Overail Length B	Shank Length C	Thread Length D	I.D. Eye E	Wt. Per 100 Pcs.
SS21400	1/4-20	2	1	7/a	9/16	3.6
SS21420	1/4-20	25/g	113/16	11/2	3/8	4.0
SS21440	1/4-20	31/2	21/2	11/2	9/16	5.2
SS21450	1/4-20	4	3	11/2	9/16	5.4
SS21500	<b>5/16</b> -18	31/4	23/16	2	1/2	7.8
SS21520	<b>5/16</b> -18	4	25/8	2	3/4	9.9
SS21610	<b>3/8</b> -16	4	21/4	21/8	1	15.7
SS21630	<b>3/8</b> -16	6	41/4	21/2	1	20.6
SS21640	<b>3/8-</b> 16	8	61/4	21/2	1	25.3

<sup>•</sup> Furnished with stainless steel hex nuts (unassembled) • Available bulk only

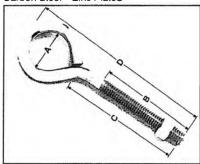
Stock No.	Thread Dia. Inches A	Width Bet. Legs Inches B	Inside Length Inches C	Thread Length Inches D	Pipe Size Inches	Wt. Per 100 Pcs.
SS34010	1/420	3/4	11/4	3/4	3/8	4.8
SS34030	1/4-20	3/4	21/4	11/2	3/8	6.8
SS34070	1/4-20	1	13/4	3/4	1/2	6.0
SS34080	1/4-20	11/8	2	3/4	3/4	6.5
SS34090	1/4-20	13/8	21/4	3/4	1	7.4
SS34100	1/4-20	13/4	23/4	1	11/4	8.5
SS34110	1/4-20	2	31/4	11/4	11/2	9.5
SS34200	<b>5/16</b> -18	13/8	23/16	1	1	11.6
SS34220	<b>5/16</b> -18	13/4	211/16	1	11/4	13.6
SS34240	<b>5/16</b> -18	2	211/16	1	11/2	13.6
SS342 <b>7</b> 0	<b>5/16</b> -18	21/2	33/16	11/2	2	16.0
SS34292	<b>3/8-</b> 16	1	21/4	11/4	1/2	17.7
SS34303	<b>3/8</b> -16	11/2	21/2	11/4	1	19.2
SS34304	<b>3/8</b> -16	2	31/8	11/4	11/2	23.0
SS34310	<b>3/8-</b> 16	21/2	35/8	11/2	2	24.9
SS34320	<b>3/8</b> -16	3	41/8	11/2	21/2	28.0
SS34330	<b>3/8-</b> 16	35/8	45/8	11/2	3	32.3

Furnished with stainless steel hex nuts (unassembled) • All sizes manufactured with rolled threads • Cut thread available upon request • Send drawing for special sizes • Bulk packaging • Special packaging available upon request.

#### WROUGHT NUT EYE BOLTS

#### **BENT EYES**

Carbon Steel . Zinc Plated



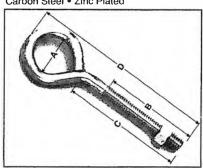
**NOT RECOMMENDED FOR LIFTING** 

- Furnished with hex nuts (unassembled)
- · Available bulk only
- · All sizes manufactured with rolled threads
- · Special packaging available upon request



#### **BENT EYES** WELDED CLOSED

Carbon Steel . Zinc Plated



**NOT RECOMMENDED FOR LIFTING** 

Stock No.	Thread Dia.	I.D. Eye A	Thread Length B	Shank Length C	Overall Length D	Approx. Wt. Per 100 Pcs.
21370	8-32	1/4	1	11/16	15/8	1.2
21371	8-32	3/8	1	11/16	13/4	1.4
21380	10-24	5/16	11/8	11/4	115/16	1.6
21381	<b>10</b> -24	3/6	7/8	1	111/16	1.5
21382	<b>10</b> -24	3/8	1	2	211/16	2.0
21383	<b>10</b> -24	3∕e	11/2	3	311/16	2.5
21390	<b>12</b> -24	3/8	13/8	17/15	23/16	2.5
21400	1/4-20	9/16	7/8	1	2	3.6
21410	<b>1/4</b> -20	9/16	13/8	11/2	21/2	4.0
21420	<b>1/4</b> -20	3∕e	11/2	113/16	25/8	4.0
21430	<b>1/4</b> -20	9/16	11/2	2	3	4.6
21440	<b>1/4</b> -20	9/16	11/2	21/2	31/2	5.2
21450	1/4-20	9/16	11/2	3	4	5.4
21460	<b>1/4</b> -20	9/16	11/2	4	5	6.6
21470	1/4-20	9/16	11/2	5	6	7.0
21500	<b>5/16</b> -18	1/2	2	23/16	31/4	7.8
21510	<b>5/16</b> -18	3/4	11/8	115/16	31/4	8.2
21520	<b>5/16</b> -18	3/4	2	25/8	4	9.9
21530	<b>5/16</b> -18	3/4	21/2	35/8	5	11.6
21540	<b>5/16</b> -18	3/4	21/2	45/8	6	13.4
21600	<b>3/8</b> -16	5/8	23/8	21/2	37/8	13.2
21610	<b>3/8</b> -16	1	21/8	21/4	4	15.7
21620	<b>3/8</b> -16	1	21/2	31/4	5	16.8
21630	<b>3/8</b> -16	1	21/2	41/4	6	20.6
21640	<b>3/8</b> -16	1	21/2	61/4	8	25.3
21650	<b>3/8</b> -16	1	21/2	73/6	91/2	29.2
21660	<b>3/8</b> -16	1	21/2	9%	111/2	37.0
21670	<b>3/8</b> -16	1	21/2	111/18	131/2	41.0
21700 21710	<b>7/16</b> -14 <b>7/16</b> -14	1	21/2	4 6	6	27.2
21710	7/16-14 7/16-14	,	2½ 2½	8	8	35.3
21720	7/16-14 7/16-14	4	2½ 2½	10	10 12	41.8 48.5
21740	1/2-13	1	23/4	3	5	34.0
21750	<b>1/2</b> -13	1	3	4	6	37.3
21760	<b>1/2</b> -13	1	3	5	7	42.3
21770	<b>1/2</b> -13	1	3	6	8	46.2
21780	<b>1/2</b> -13	1	3	8	10	54.3
21790	<b>1/2</b> -13	1	3	10	12	63.5
21800	<b>5/8</b> -11	11/4	3	31/2	6	62.5
21810	<b>5/8</b> 11	11/4	3	51/2	8	74.6
21820	<b>5/8</b> -11	11/4	3	71/2	10	90.5
21830	<b>5/8</b> -11	11/4	3	91/2	12	103.5

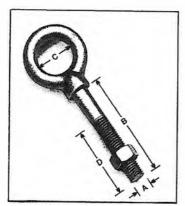
24500	1/4-20	9/16	7/ <sub>8</sub>	1	2	3.6
24510	<b>1/4</b> -20	9/16	13/8	11/2	21/2	4.0
24530	<b>1/4</b> -20	9/16	11/2	2	3	4.6
24540	<b>1/4</b> -20	9/16	11/2	3	4	5.4
24550	<b>1/4</b> -20	9/16	11/2	4	5	6.6
24560	1/4-20	9/16	11/2	5	6	7.0
24630	<b>5/16</b> -18	3/4	17/8	115/16	31/4	8.2
24640	<b>5/16</b> -18	3/4	2	25/8	4	9,9
24650	<b>5/16</b> -18	3/4	21/2	35/8	5	11.6
24660	<b>5/16</b> -18	3/4	21/2	45/8	6	13.4
24740	<b>3/8</b> -16	1	21/8	21/4	4	15.7
24750	<b>3/8</b> -16	1	21/2	31/4	5	16.8
24760	<b>3/8</b> -16	1	21/2	41/4	6	20.6
24780	<b>3/8</b> -16	1	21/2	61/4	8	25.3

## **ALL PARTS AVAILABLE** IN STAINLESS STEEL

### LIFTING EYES & TURNBUCKLE BODIES

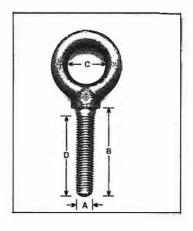
#### **NUT EYE BOLTS**

Forged • Shoulder Pattern Hot Galvanized • 1030 Carbon Steel ★



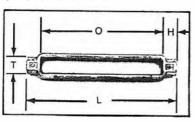
#### **SPECIAL SIZES**

Forged • Shoulder Pattern Self-Colored 1030 Carbon Steel★



#### TURNBUCKLE BODIES

Forged • Carbon Steel ★ Self-Colored/Hot Galvanized



Stock No.	Thread Dia. A	Shank Length B	I.D. Eye C	Min. or Std. Thread Length D	Blanks*	Approx. Wt. Per 100 Pcs.	Rated Capacity
15710	1/4	2	1/2	1	0.77	7.7	400
15714	1/4	6	1/2	1	D	11.3	400
	1/4		1/2	1	R15716_	13.0	400
15719	1/10	21/4	5/6	11/4	_	13.3	800
15724	5/16	41/4	5/8	11/4	-	17.1	800
_	5/16	6	5/8	11/4	R15726	20.0	800
15730	3/8	21/2	3/4	11/2	-	20.5	1,200
15734	3/8	41/2	3/4	11/2	-	25.6	1,200
	3/8	6	3/4	11/2	R15738	30.0	1,200
SPECIAL	3/8	AL	3/4	11/2		_	1,200
15740	1/2	31/4	1	2	-	43.8	2,100
15741	1/2	4	1	2	-	48.6	2,100
15743	1/2	6	1	2	R15743	59.0	2,100
	1/2	12	1	2	R15747	75.0	2,100
COECIAI	1/2	18	1	2 2 2 2 2	R15748	110.0	2,100
SPECIAL	1/2	AL.	1			-	2,100
15750	5/B	4	13/8	21/2	neer-	92.0	3,200
15752	5/6	6	13/6	21/2	R15752	110.0	3,200
	5/8	12	13/9	21/2	R15754	135 0	3,200
SPECIAL	%	AL.	13/9	21/2	and the second	344	3,200
15760	3/4	41/2	11/2	3	320	135.0	4,500
15762	3/4	6	11/2	3	R15762	153.0	4,500
-	3/4 3/4	12	11/2	3	R15766	216.0	4,500
	1/4	18	11/2	3	R15769	304.0	4.500

1/4" size only. Electro-Galvanized after threading. \*\*Any length.

Stock No.	Thread Dia. A	Shank Length B	I.D. Eye C	Min. or Std. Thread Length D	Blanks*	Approx. Wt. Per 100 Pcs.	Rated Capacity
17611	1/4	1	1/2	7/8	775	4.8	400
17621	5/16	11/6	5/8	1		9.6	800
17629	3/ <sub>8</sub>	1/2	. 1	3/8		14.1	1,200
17630	3/8	3/4	1	5/8	-	15.6	1,200
17631	3/8	11/4	3/1	11/8	-	14.2	1,200
17632	3/8	2	3/4	11/8	-	16.3	1,200
17633	3/8	31/2	1	33/8	-	22.7	1,200
17640	1/2	1	9/16	1/8	-	16.9	2,100
17641	1/2	11/2	1	13/8		35.3	2,100
17744	1/2	1	13/16	1	- m	17.5	2,100
17642	5/8	23/14	13/10	21/10	(fine)	41.0	2,100
17662	5/8	25/8	13/8	21/2	-mate	78.0	3,200
17673	3/4	31/2	11/2	33/8	***	124.0	4.500
_	7/8	51/2	111/16		R17682	280.0	7,000
17685	1	31/4	113/16	31/8	_	295.0	8,500
17690	1	6	113/16	53/4	R17690	400.0	8,500
17693	1	12	113/16	111/2	R17693	550.0	8,500
1000	1	18	113/16		R17695	780.0	8,500
17696	11/4	6	23/16	5¾	R17696	580.0	13.500
17699	11/4	12	23/16	111/2	R17699	760.0	13,500

\*Blanks have no rated capacity.

Size	in li	nches	Self-	Hot		Body	Approx.	
Thread Dla T		Take- Up - O	Colored Stock No.	Galvanized Stock No.	Head H	Length L	Wt. Per 100 Pcs.	Rated Capacity
1/4	х	4	10604	10605	7/16	47/ <sub>8</sub>	11	500
5/16	Х	41/2	10608	10609	1/2	51/4	20	800
3/8	Х	6	10612	10613	9/16	71/8	33	1,200
1/2	х	3	10614	10615	3/4	41/2	30	2,200
1/2	х	6	10616	10617	3/4	71/2	56	2,200
1/2	X	9	10620	10621	3/4	101/2	70	2,200
1/2	X	12	10624	10625	3/4	131/2	104	2,200
5/8	х	3	10626	10627	7/8	43/4	50	3,500
5/8	X	6	10628	10629	7/8	73/4	85	3,500
5/8	X	9	10632	10633	7/ <sub>B</sub>	103/4	108	3,500
5/8	X	12	10636	10637	7/8	133/4	145	3,500
3/4	х	6	10640	10641	11/16	81/8	140	5,200
3/4	X	9	10644	10645	11/16	111/8	186	5,200
3/4	X	12	10648	10649	11/16	141/ <sub>B</sub>	210	5,200
3/4	Х	18	10652	10653	11/16	201/ <sub>8</sub>	320	5,200
7/8	х	6	10654	10655	13/16	83/8	160	7,200
7/8	X	12	10656	10657	13/16	143/ <sub>8</sub>	272	7,200
7/8	X	18	10660	10661	13/16	20¾	488	7,200
1	х	6	10664	10665	13/8	83/4	218	10,000
1	X	12	10668	10669	13/8	143/4	358	10,000
1	х	18	10672	10673	13/8	203/4	470	10,000
1-1/8	х	6	10676	10677	19/16	91/8	340	12,400
1-1/4	X	6	10680	10681	13/4	91/2	324	15,200
1-1/2	X	6	10684	10685	21/8	101/4	590	21,400
1-3/4	х	6	10688	10689	23/8	103/4	850	27,600
2	х	6	10692	10693	211/16	113/ <sub>8</sub>	1280	34.500

#### **HARDWARE**

#### FORGED SHACKLES

(C-1035 Steel)

Size, work load, and trademark are permanently marked on all shackles. Loads are based on a safety factor of 5 to 1. When tested all shackles are pulled at a uniform rate of speed in a direct tension. ANY DEVIATIONS AS ANGULAR LIFTS, SHOCK LOADS, MODIFICATION OF THE BASIC FORGING, ETC., WILL RESULT IN DRASTICALLY REDUCED MAXIMUM LOADS.

Shackles meet Federal Specifications RRC-271d Type IV.\*

TYPE IVA

11.1	AN	ICHO	R—R	OUND	PIN - SC	REW F	PIN - SA	FETY	THE T
MAX.				DIMENSION	IS-INCHES				EST.
MAX. LOAD				SIDE			O.D.	PIN OR	WEIGHT PER 100
TONS	SIZE DIA.	WIDTH (i) EYES	TOL.	WIDTH () BOW	LENGTH	TOL.	EYES	BOLT DIA.	in LBS.
1/3	3/16	3/8	1/16	%16	7/8	1/16	5/8	1/4	7
1/2	1/4	15/32	1/16	3/4	11/8	1/16	3/4	5/16	13
3/4	5/16	17/32	1/16	15/16	11/4	1/16	7/8	3/8	21
1	3/8	21/32	1/16	11/8	1 7/16	1/8	1	7/16	34
11/2	7/16	23/32	1/16	1 5/16	1 1 1/16	1/8	11/8	1/2	49
2	1/2	13/16	1/16	11/2	1 15/16	1/8	1 1/4	5/8	<i>7</i> 1
31/4	5/8	11/16	1/16	1 1/8	21/2	1/8	111/16	3/4	143
43/4	3/4	11/4	1/16	2	3	1/4	17/8	7/8	237
61/2	7/8	17/16	1/16	25/8	31/4	1/4	21/8	1	355
81/2	1	111/16	1/16	23/4	33/4	1/4	21/2	11/8	530
91/2	11/8	113/16	1/16	215/16	41/4	1/4	25/8	11/4	700
12	11/4	2	1/16	31/4	41/2	1/4	3	13/8	1000
14	1 3/8	21/4	1/8	31/2	51/4	1/4	3 1/4	1 1/2	1250
17	11/2	23/8	1/8	33/4	53/4	1/4	31/2	1 5/8	1720



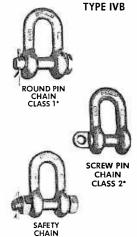


ANCHOR



All types of shackles are available in a self-colored or hot-dipped galvanized finish. When ordering specify the size, finish, and type of shackle. Other rust preventative coatings are available on a special basis.

			DIM	ENSIONS-INCH	IES			EST.
MAX. LOAD			INS	IDE		O.D.	PIN OR	WEIGHT
TONS	SIZE DIA.	WIDTH	TOL.	LENGTH	TOL.	EYES	BOLT DIA.	PER 100 IN LBS.
1/2	1/4	15/32	1/16	7/8	1/16	3/4	5/16	10
3/4	5/16	17/32	1/16	1	1/16	7/8	3/8	18
1	3/8	21/32	1/16	11/4	1/8	1	7/16	28
11/2	7/16	23/32	1/16	1 1/2	1/8	11/8	1/2	44
2	1/2	13/16	1/16	111/16	1/8	11/4	5/8	65
31/4	5/8	11/16	1/16	2	1/8	15/8	3/4	132
43/4	3/4	11/4	1/16	25/16	1/4	11/8	7/8	204
61/2	7/8	17/16	1/16	21/8	1/4	21/8	1	316
81/2	1	111/16	1/16	31/4	1/4	21/2	11/8	465



Safety shackles, indicated by shaded area, are of the same specifications as the regular types except for the bolt, nut and cotter. Additional sizes can be supplied on request.

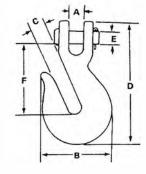


#### **HARDWARE**

#### DROP FORGED HIGH-TEST CHAIN HOOKS

DROP FORGED HIGH-TEST CHAIN HOOKS



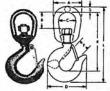


**CLEVIS GRAB HOOK** 

- Made for use on Hi-Test Chain. All hooks are heat treated. Also can be used on BBB & proof coil.
- High Test stamped on every hook.
- Available Self Colored & Zinc Plated.

Chain Size	Work Load Limit In Pounds	A	В	С	D	E	F	Weight Per/100 In Pounds
1/4"	2,600	5/16	1-15/16	3/8	3- 3/8	5/16	2	40
5/16"	4,000	3/8	2- 1/4	7/16	3-15/16	3/8	2- 3/8	65
3/8"	5,400	7/16	2-11/16	1/2	4- 1/2	7/16	2-11/16	100
7/16"	7,200	1/2	3	9/16	5- 1/32	1/2	3	150
1/2"	9,200	19/32	3- 5/16	21/32	5- 5/8	9/16	3-23/64	200
5/8"	11,500	3/4	4- 1/4	25/32	6- 7/8	11/16	4	400
3/4"	16,200	7/8	5- 1/4	15/16	8	3/4	4-19/32	700

### HOT GALVANIZED SAFETY SWIVEL HOOKS



Drop forged from C-1035 steel. Heat treated. Latch, spring, machine screw and nut are stainless steel. Loads are based on a safety factor of 5 to 1.

Max. Load- Tons	A	В	С	D	F	L	R	S	Weight Per/100 In Pounds
3/4	2	15/16	1-1/4	2-7/8	7/8	5-9/16	4-15/32	3/8	84
1	2-1/2	1- 5/16	1-1/2	3-3/16	31/32	6-5/8	5- 9/32	1/2	135

FSI ALSO CARRIES AIRCRAFT CABLE.
ASK YOUR REPRESENTATIVE FOR DETAILS.



# Fastener Systems, Inc.



#### **Fasteners**

ITEM NUMBER

#### **CARRIAGE BOLTS**

ROUND HEAD—SQUARE NECK PLAIN, ZINC & GALVANIZED

	025-0075	1/4 x 3/4
	025-0100	x 1
	025-0125	x 1 1/4
	025-0150	x 1 1/2
	025-0175	x 1 3/4
	025-0200	x 2
	025-0225	x 2 1/4
	025-0250	x 2 1/2
BCAR	025-0275	x 2 3/4
	025-0300	х 3
	025-0350	x 3 1/2
	025-0400	x 4
	025-0450	x 4 1/2
	025-0500	x 5
	025-0550	x 5 1/2
	025-0600	x 6
	031-0075	5/16 x 3/4
	031-0100	x 1
	031-0125	x 1 1/4
	031-0150	x 1 1/2
	031-0175	x 13/4
	031-0200	x 2
	031-0225	x 2 1/4
	031-0250	x 2 1/2
BCAR	031-0275	x 2 3/4
	031-0300	x 3
	031-0350	x 3 1/2
	031-0400	x 4
	031-0450	x 4 1/2
	031-0500	x 5
	031-0550	x 5 1/2
	031-0600	x 6
	031-0800	x 8
	031-0900	x 9
	037-0075	3/8 × 3/4
	037-0100	x 1
	037-0125	x 1 1/4
	037-0150	x 1 1/2
2045	037-0135	x 1 3/4
BCAR	037-0200	x 2
	037-0205	x 2 1/4
	037-0250	x 2 1/2
	037-0255	x 2 3/4
	037-0275	x 3
	037-0300	0.00
	037-0325	HIPP HTT
	037-0350	
	a property of the con-	
	037-0450	x 4 1/3
	037-0500	x 5
BCAR	037-0550 037-0600	× 51/3
JUAII		x 6
	037-0650	× 6 1/3
	037-0700	× 7
	037-0800	* 8
	037-0900	x 9 x 10

		Diameter Length
BCAR	037-1100	3/8 x 11
BUAN	037-1200	x 12
	043-0100	7/16 x 1
	043-0125	× 1 1/4
	043-0150	x 1 1/2
	043-0175	₩ 1 3/4
	043-0200	x 2
	043-0225	× 2 1/4
	043-0250	× 2 1/2
BCAR	043-0275	x 2 3/4
DUAN	043-0300	к 3
	043-0350	* 3 1/2
	043-0400	× 4
	043-0450	× 4 1/2
	043-0500	x 5
	043-0550	x 5 1/2
	043-0600	
	050-0100	1/2 x 1
	050-0100	x 1 1/4
	050-0125	* 11/2
	050-0175	к 13/4
	050-0200	× 2
	050-0200	x 2 1/4
	050-0250	× 2 1/2
	050-0230	× 2 3/4
	050-0300	x 3
	050-0350	x 3 1/2
	050-0400	x 4
BCAR	050-0450	× 4 1/2
207.111	050-0500	x 5
	050-0550	x 5 1/2
	050-0600	× 6
	050-0650	x 6 1/2
	050-0700	x 7
	050-0750	x 7 1/2
	050-0800	x 8
	050-0900	* 9
	050-1000	× 10
	050-1100	x 11
	050-1200	x 12
	050-1300	x 13
	050-1400	x 14
	062-0150	5/8 x 11/2
	062-0175	x 13/4
	062-0200	<b>* 2</b>
	062-0225	x 2 1/4
	062-0250	¥ 2 1/2
	062-0275	× 23/4
	062-0300	a 3
	062-0350	x 3 1/2
	062-0400	* 4
BCAR	062-0450	x 4 1/2
DUAN	062-0500	x 5



	062-0750	5/8	X	. 7	1/2
	062-0800		×	8	i
BCAR	062-0900		×	9	
	062-1000		×	10	
	075-0150	3/4	x	1	1/2
	075-0200	100	x	2	
	075-0250		×	2	1/2
	075-0300		×	3	
	075-0350	=30	8	3	1/2
	075-0400		×	4	
	075-0450		×	4	1/4
BCAR	075-0500		×	5	
	075-0550		×	5	1/2
	075-0600		×	6	
	075-0650		ж	6	1/2
	075-0700		×	7	
	075-0750		×	7	1/2
	075-0800		×	8	
	075-0850		×	8	1/2
	075-0900		×	9	
	075-1000		x	10	_

MOST
DIAMETERS
ARE ALSO
AVAILABLE
FROM STOCK
IN
STAINLESS STEEL.

3/8" DIAMETER
AVAILABLE
UP TO
16" LENGTH
WITH
6" OF THREAD.

5 1/2

x 6 1/2

062-0550

062-0600

062-0650 062-0700

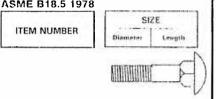




#### **CARRIAGE BOLTS**

**GRADE 5—ROUND HEAD—** SQUARE NECK—MFG HEAD MARK PLAIN—CONFORMS TO ANSI:

**ASME B18.5 1978** 



		411111039313	-	(
	031-0075	5/16	×	3/4
	031-0100		×	1
BCAR5	031-0150		x	1 1/2
	031-0200		×	2
	037-0100	3/8	x	1
	037-0125		×	1 1/4
	037-0150		×	1 1/2
BCAR5	037-0175		x	1 3/4
	037-0200		×	2
	037-0250		x	2 1/2
	037-0300		×	3
	050-0150	1/2	х	1 1/2
	050-0200		x	2
	050-0250		x	2 1/2
BCAR5	050-0300		X	3
	050-0400		x	4
	050-0500	on were	x	5
	050-0600		x	6
	062-0200	5/8	x	2
	062-0250		x	2 1/2
	062-0300		x	3
BCAR5	062-0350		×	3 1/2
DUARS	062-0400		x	4
	062-0450		x	4 1/2
	062-0500		x	5
	062-0550		x	5 1/2
	062-0600		x	6
	075-0200	3/4	x	2
	075-0250		x	2 1/2
	075-0300		x	3
	075-0350		x	3 1/2
BCAR5	075-0400		x	4
	075-0450		×	4 1/2
	075-0500		x	5
	075-0550		x	5 1/2
	075-0500		×	6

Note: Fully threaded up to 6 inches

**MOST PRODUCTS** AVAILABLE IN 18-8 S.S.

**CHECK WITH YOUR FSI REPRESENTATIVE** FOR AVAILABILITY.

#### TAP BOLTS

HEX HEAD—FULLY THREADED **PLAIN & ZINC** 

ITEM NUMBER		SIZE		
		Dismeter Len		
	025-0050	1/4 x 1		
	025-0075	* 3		
	025-0100	x 1		
	025-0100	x 11		
	025-0150			
ВТАР	100 to 10			
DIAP	025-0175 025-0200	x 13		
	025-0200	x 2		
	025-0225	x 21		
	025-0250	x 21		
	025-0275	x 23		
		x 3		
	031-0075	5/16 x 3		
	031-0100	x 1		
	031-0125	x 11.		
	031-0150	x 11		
ВТАР	031-0175	x 13.		
<i>-</i>	031-0200	x 2		
	031-0225	x 2 1/		
	031-0250	x 21		
	031-0275	x 23		
	031-0300	x 3		
	037-0062	3/8 x 5/		
	037-0075	× 3′		
	037-0100	x 1		
	037-0125	x 1 1/		
	037-0150	x 1 1/		
	037-0175	x 13/		
DTAD	037-0200	x 2		
BTAP	037-0225	x 2 1/		
	037-0250	x 2 1		
	037-0275	x 23		
	037-0300	x 3		
	037-0350	x 3 1/		
	037-0400	x 4		
	037-0450	x 41/		
	037-0500	x 5		
	037-0550	x 51		
	037-0600	x 6		
	050-0075			
	050-0075			
		x 1		
	050-0125	x 11/		
	050-0150	x 1 1/		
	050-0175	x 1 3/		
	050-0200	x 2		
	050-0225	x 21/		
ВТАР	050-0250	x 21/		
DIAP	050-0275	x 2 3/		
	050-0300	x 3		
	050-0350	x 3 1/		
	050-0400	x 4		
	050-0400 050-0450	x 4 x 4 1/		
		The second second second		



	050-0600	1/2	x	6
	062-0125	5/8	x	1 1/4
	062-0150		x	1 1/2
	062-0175		x	1 3/4
	062-0200		×	2
	062-0225		x	2 1/4
	062-0250		x	2 1/2
BTAP	062-0275	2-00-09-70-		2 3/4
	062-0300		x	3
	062-0325		×	3 1/4
	062-0350		×	3 1/2
	062-0375	00.00=0.00	×	3 3/4
	062-0400		x	4
	062-0500	0.010.011-00	x	5
	062-0600		x	6
	075-0125	3/4	х	1 1/4
	075-0150		x	1 1/2
	075-0175		x	1 3/4
	075-0200	0.7	x	2
	075-0225		x	2 1/4
	075-0250		x	2 1/2
BTAP	075-0275		х	2 3/4
	075-0300		×	3
	075-0325		×	3 1/4
	075-0350		x	3 1/2
	075-0375		x	3 3/4
	075-0400		×	4

#### **TAP BOLTS**

**GRADE 5-HEX HEAD-FULLY THREADED-**MFG HEAD MARK PLAIN—CONFORMS TO ANSI/ ASME B18.2.1 Thread Length IFI 1965 Edition

		S	IZE	
ITEM N	UMBER	Diameter	I	Longth
	025-0050	1/4	×	1/2
	025-0075		×	3.'4
	025-0100		×	1
	025-0125		×	114
	025-0150		x	1 1/2
D.T.4.D.F	025-0175		x	1 3/4
BTAP5	025-0200		х	2
	025-0225		×	2 1/4
	025-0250		x	2 1/2
	025-0275		x	2 3/4
	025-0300		x	3
	031-0075	5,16	x	3/4
	031-0100		x	1
	031-0125		x	1 1/4
	031-0150		×	1 1/2
BTAP5	031-0175	e zastali e i e e	×	1 3/4
	031-0200		x	2





#### TAP BOLTS (continued)

GRADE 5—HEX HEAD— FULLY THREADED— MFG HEAD MARK PLAIN—CONFORMS TO ANSI/ ASME B18.2.1 Thread Length IFI 1965 Edition

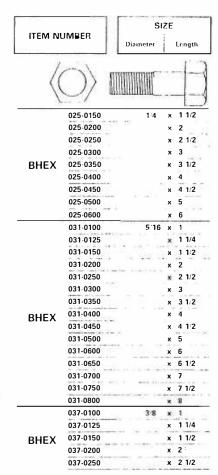
	031-0225	5/16 + 2 1/4
BTAP5	031-0250	x 2 1/2
BIAPS	031-0275	x 2 3/4
	031-0300	x 3
	037-0062	3.8 × 5.8
	037-0075	x 3'4
	037-0100	x 1
	037-0125	x 1 1/4
	037-0150	x 1.1/2
	037-0175	x 13/4
	037-0200	x 13/4
		The second of th
BTAP5	037-0225	x 2 1/4
	037-0250	x 2 1/2
	037-0275	x 2 3/4
	037-0300	x 3
	037-0350	x 3 1/2
	037-0400	x 4
	037-0450	x 4 1/2
	037-0500	x 5
	037-0550	x 5 1/2
	037-0600	x 6
	050-0075	1/2 × 3/4
	050 0100	x 1
	050-0125	λ 1 1/4
	050-0125	F
	Telephone (1997)	x 1 1/2
	050-0175	x 1 3/4
	050-0200	x 2
	050-0225	x 21'4
STAP5	050-0250	x 2 1/2
	050-0275	x 2 3:4
	050-0300	x 3
	050-0350	x 3 1/2
	050-0400	x 4
	050-0450	x 4 1/2
	050-0500	x 5
	050-0550	x 5 1/2
	050-0600	х 6
	062-0125	5/8 x 1 1/4
	062-0150	x 1 1/2
	062-0175	
	062-0200	
	Francisco Contractor	x 2
	062-0225	x 2 1/4
TA	062-0250	x 2 1/2
TAP5	062-0275	x 2 3/4
	062-0300	_ x 3
	062-0325	x 3 1/4
	062-0350	x 3 1/2
	062-0375	x 3 3/4
	062-0400	x 4
	062-0500	x 5
TAP5	062-0600 075-0125	x 6



	7544 511144050		SIZE		
ITEM NUMBER		Diameter		Length	
	075-0175	3/-	* ×	1 3/4	
	075-0200		×	2	
	075-0225		×	2 1/4	
BTAP5	075-0250		×	2 1/2	
•	075-0275	-	×	2 3/4	
	075-0300		×	3	
	075-0325		×	3 1/4	
	075-0350		×	3 1/2	
	075-0375		×	3 3/4	
	075-0400		x	4	

#### MACHINE BOLTS

HEX HEAD
PLAIN, ZINC & GALVANIZED



# MACHINE BOLTS (continued) HEX HEAD PLAIN, ZINC & GALVANIZED

		The second second
	037-0300	3'8 x 3
	037-0350	x 3 1/2
	037-0400	x 4
	037-0450	x 4 1/2
	037-0500	x 5
	037-0550	× 5 1/2
	037-0600	x 6
	037-0650	x 6 1/2
	037-0700	Minimum Transcore
BHEX	037-0750	
	037-0800	× 8
	037-0850	x 8 1/2
	037-0900	<b>x</b> 9
	037-0950	x 9 1/2
	037-1000	x 10
	037-1050	x 10 1/2
	037-1100	x 11
	037-1150	x 11 1/2
	037-1200	x 12
	050-0100	1/2 x 1
	050-0125	* 1 1/4
	050-0150	* 11.2
	050-0175	x 1 3/4
	050-0200	x 2
	050-0225	× 2 1/4
	050-0250	x 2 1/2
	050-0275	
	050-0275	en historian and a historian is
	050-0350	THE RESERVE OF STREET
		x 3 1/2
	050-0400	* 4
	050-0450	× 4 1/2
	050-0500	₩ 5
	050-0550	x 5 1/2
внех	050-0600	× 6
BHEX	050-0650	ж 6 1/2
	050-0700	a 7
	050 0750	x 7 1/2
	050-0800	x 8
	050-0850	× 8 1/2
	050-0900	× 9
	050-0950	x 9 1.'2
	050-1000	x 10
	050-105C	x 10 1/2
	050-1100	x 11
	050-1150	x 11 1/2
	050-1150	
		x 12
	050-1300	x 13
	050-1400	x 14
	050-1500	x 15
	050-1600	x 16
	050-1800	x 18

ALL PARTS AVAILABLE IN STAINLESS STEEL



MACHINE	<b>BOLTS</b>	(continued)
<b>HEX HEAD</b>		
PLAIN, ZINC &	GALVANI	7FD

	062-0125 5/8	×	1 1/4
	062-0150	*	10.40
	062-0175	×	1 3/4
	062-0200	*	2
	062-0225	×	
	062-0250	×	2 1/2
	062-0275	×	2 3/4
	062-0300	×	3
	the state of the s	100	
	062-0325	×	3 1/4
	062-0350	×	3 1/2
	062-0375	x	***
	062-0400	×	4
	062-0450	×	4 1/2
	062-0500	×	5
	062-0550	×	5 1/2
HEX	062-0600	×	. 6
	062-0650	*	6 1/2
	062-0700	A	7
	062-0750	×	7 1/2
	062-0800	×	8
	062-0850	*	
	062-0900	×	9
	062-1000	X	10
	062-1100	X	11
	062-1200	×	12
	062-1300	X	13
	062-1400	×	14
	062-1500	X	15
	062-1600	x	16
	062-1700	x	17
	062-1800	x	18
	062-2000		20
		X	
	075-0125 3/4	×	1 1/4
	The second secon		1 1/4 1 1/2
	075-0125 3/4	×	chart to
	075-0125 3/4 075-0150	×	1 1/2
	075-0125 3/4 075-0150 075-0175	×	1 1/2 1 3/4 2
	075-0125 3/4 075-0150 075-0175 075-0200	×	1 1/2 1 3/4 2
	075-0125 3/4 075-0150 075-0175 075-0200 075-0225	* * *	1 1/2 1 3/4 2 2 1/4 2 1/2
	075-0125 3/4 075-0150 075-0175 075-0200 075-0225 075-0250	* * * *	1 1/2 1 3/4 2 2 1/4 2 1/2 2 3:4
	075-0125 3/4 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275	× × × ×	1 1/2 1 3/4 2 2 1/4 2 1/2 2 3:4 3
	075-0125 3/4 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300	x x x x x x	1 1/2 1 3/4 2 2 1/4 2 1/2 2 3:4 3 3 1/4
	075-0125 3/4 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325	x x x x x x	1 1/2 1 3/4 2 2 1/4 2 1/2 2 3:4 3 3 1/4
	075-0125 3/4 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325 075-0350 075-0375	* * * * * * * * * * * * * * * * * * *	1 1/2 1 3/4 2 2 1/4 2 1/2 2 3:4 3 3 1/4 3 1/2
SHEX	075-0125 3/4 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325 075-0350	* * * * * * * * * * * * * * * * * * *	1 1/2 1 3/4 2 2 1/4 2 1/2 2 3:4 3 3 1/4 3 1/2 3 3/4
внех	075-0125 3/4 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325 075-0350 075-0375 075-0400	* * * * * * * * * * * * * * * * * * *	1 1/2 1 3/4 2 2 1/4 2 1/2 2 3:4 3 3 1/4 3 1/2 3 3/4
внех	075-0125 3/4 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300 076-0325 075-0350 075-0350 075-0400 075-0450 075-0450	× × × × × × × × × × × × × × × × × × ×	1 1/2 1 3/4 2 2 1/4 2 1/2 2 3:4 3 3 1/4 3 1/2 3 3/4 4 1/2 5
BHEX	075-0125 3/4 075-0150 075-0150 075-0200 075-0225 075-0250 075-0275 075-0300 076-0325 075-0350 075-0350 075-0400 075-0450 075-0550	× × × × × × × × × × × × × × × × × × ×	1 1/2 1 3/4 2 2 1/4 2 1/2 2 3:4 3 3 1/4 3 1/2 3 3/4 4 1/2 5 5 1/2
внех	075-0125 3/4 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325 075-0350 075-0350 075-0400 075-0450 075-0550 075-0550 075-0500	* * * * * * * * * * * * * * * * * * *	1 1/2 1 3/4 2 2 1/4 2 1/2 2 3:4 3 1/4 3 1/2 3 3/4 4 1/2 5 5 1/2 6
внех	075-0125 3/4 075-0150 075-0150 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325 075-0350 075-0350 075-0400 075-0450 075-0550 075-0550 075-0550	* * * * * * * * * * * * * * * * * * *	1 1/2 1 3/4 2 1/4 2 1/2 2 3/4 3 1/2 3 3/4 4 1/2 5 1/2 6 6 1/2
внех	075-0125 3/4 075-0150 075-0150 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325 075-0350 075-0350 075-0400 075-0450 075-0550 075-0560 075-0600 075-0650 075-0700	× × × × × × × × × × × × × × × × × × ×	1 1/2 1 3/4 2 2 1/4 2 1/2 2 3:4 3 3 1/4 3 1/2 3 3/4 4 4 1/2 5 5 1/2 6 6 1/2
знех	075-0125 3/4 075-0150 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325 075-0350 075-0375 075-0400 075-0450 075-0500 075-0500 075-0650 075-0650 075-0750	× × × × × × × × × × × × × × × × × × ×	1 1/2 1 3/4 2 1/2 2 1/4 2 1/2 2 3:4 3 3 1/4 3 1/2 3 3/4 4 1/2 5 5 1/2 6 6 1/2 7 7 1/2
внех	075-0125 3/4 075-0150 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325 075-0350 075-0375 075-0400 075-0500 075-0500 075-0500 075-0500 075-0650 075-0750 075-0750 075-0750	× × × × × × × × × × × × × × × × × × ×	1 1/2 1 3/4 2 1/4 2 1/2 2 3:4 3 1/4 3 1/2 3 3/4 4 1/2 5 5 1/2 6 1/2 7 7 1/2 8
внех	075-0125 3/4 075-0150 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325 075-0350 075-0375 075-0400 075-0450 075-0500 075-0650 075-0600 075-0750 075-0750 075-0750 075-0750	× × × × × × × × × × × × × × × × × × ×	1 1/2 1 3/4 2 1/3 2 1/4 2 1/2 2 3:4 3 1/4 3 1/2 3 3/4 4 1/2 5 5 1/2 6 6 1/2 7 7 1/2 8 8 1/2
внех	075-0125 3/4 075-0150 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325 075-0350 075-0450 075-0450 075-0550 075-0600 075-0650 075-0750 075-0750 075-0750 075-0800 075-0850 075-0850	× × × × × × × × × × × × × × × × × × ×	1 1/2 1 3/4 2 1/3 2 1/4 2 1/2 2 3:4 3 1/4 3 1/2 3 3/4 4 1/2 5 5 1/2 6 6 1/2 7 7 1/2 8 8 1/2 9
HEX	075-0125 3/4 075-0150 075-0150 075-0175 075-0200 075-0225 075-0250 075-0275 075-0300 075-0325 075-0350 075-0375 075-0400 075-0450 075-0500 075-0650 075-0600 075-0750 075-0750 075-0750 075-0750	× × × × × × × × × × × × × × × × × × ×	1 1/2 1 3/4 2 1/3 2 1/4 2 1/2 2 3:4 3 1/4 3 1/2 3 3/4 4 1/2 5 5 1/2 6 6 1/2 7 7 1/2 8 8 1/2

	- 50	1	
	075-1300	3/4 x	13
	075-1400	-	14
חוובע	075-1500	×	CONTRACTOR OF STREET
BHEX	075-1600	, , , , , , , , , , , , , , , , , , ,	16
	075-1800		
	075-2000		
	087-0150	7/8 x	
	087-0175		
	087-0200		-
	087-0225		
		<del></del>	-
	087-0250		-
	087-0275		settletin -
	087-0300		
	087-0325		****
BHEX	087-0350		
	087-0375		
	087-0400	×	4
	087-0450		4 1/2
	087-0500	×	5
	087-0550	×	5 1/2
	087-0600	×	6
	087-0650		6 1/2
	087-0700	×	
	087-0750	- ;	7-151
	087-0800		-
	087-0850	numa 🛪 🖟	
	087-0900		9
	087-1000	×	N 155
			1.344
3HEX	087-1100	×	
	087-1200	x	
	087-1300	×	
	087-1400	×	
	087-1500		15
	087-1600	X	16
	087-1800	×	18
	087-2000	<b>,</b>	20
	100-0200	1 ,	. 2
	100-0225		2 1/4
	100-0250		2 1/2
	100-0275		2 3:4
	100-0300		farter -
	100-0325		Charles Charles
	100-0350		3 1/2
	100-0330	· · · · · · · · · · · · · · · · · · ·	14 1 2
	100-0373		4
	110400-0040-004		9.550.52
	100-0450		THE RESERVE
	100-0500	2000 36-	4- 4- 1-
	100-0550		
	100-0600		
BHEX	100-0650		
	100-0700	,	
	100-0750		7 1/2
	100-0800	,	8
	100-0850		8 1/2
	100-0900		
	100-1000		No. of Concession, Name of Street, or other party of the last of t
	man man Marketin		

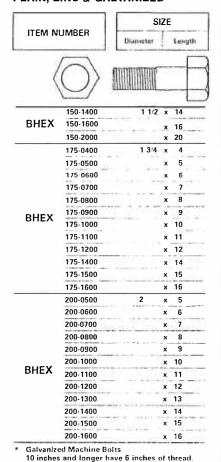
/		[)
(1		
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	100-1200	1 x 12
	100-1300	x 13
	100-1400	x 14
BHEX	100-1500	x 15
	100-1600	x 16
	100-1800	x 18
y <del></del> -	100-2000	1 1/8 x 3
	112-0350	1 1/8 x 3
	112-0400	x 4
	112-0450	x 4 1/2
	112-0500	x 5
	112-0550	x 5 1/2
BHEX	112-0600	x 6
	112-0700	x 7
	112-0800	к 8
	112-0900	ж 9
	112-0950	x 9 1/2
	112-1000	x 10 x 11
	112-1100	x 11
	112-1200	x 15
	112-1600	x 16
===	125-0300	1 1/4 x 3
	125-0350	x 3 1/2
	125-0400	* 4
	125-0450	x 4 1/2
	125-0500	x 5
	125-0550	x 5 1/2
	125-0600	× 6
	125-0650	x 6 1/2
BHEX	125-0700 125-0800	× 7
	125-0800	× · · · · · · · · · · · · · · · ·
	125-0950	× 9 1/2
	125-1000	x 10
	125-1100	x 11
	125-1200	х 12
	125-1400	x 14
	125-1600	x 16
	150-0300	1 1/2 x 3
	150-0350	× 3 1/2
	150-0400	* 4
	150-0450	× 4 1/2 × 5
	150-0500 150-0550	× 5 1/2
	150-0600	× 6
BHEX	150-0650	x 6 1/2
	150-0700	x 7
	150-0750	x 7 1/2
	150-0800	х 8
	150-0850	x 8 1/2
	150-0900	x 9
	150-0950	x 9 1/2
	150-1000	x 10
	150-1100	x 11

100-1100





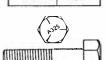
# MACHINE BOLTS (continued) HEX HEAD PLAIN, ZINC & GALVANIZED



#### HIGH STRENGTH STRUCTURAL BOLTS WITH HEAVY HEX NUTS— UNATTACHED

PLAIN & GALVANIZED— CONFORMS TO ASTM A-325 TYPE 1— MFG HEAD MARK

ITEM NUMBER



Length

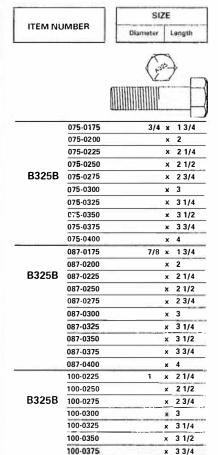
SIZE

Diameter

			_	-
	075-0150	3/4	×	1 1/2
	075-0175		×	1 3/4
	075-0200		x	2
	075-0225		×	2 1/4
B325	075-0250		х	2 1/2
	075-0275		×	2 3/4
	075-0300		×	3
	075-0325		×	3 1/4
	075-0350		X	3 1/2
	087-0200	7/8	х	2
B325	087-0225		×	2 1/4
	087-0250		×	2 1/2
	087-0275	creoussesses.	x	2 3/4
	087-0300		×	3
	087-0325		×	3 1/4
	087-0350		x	3 1/2
	087-0375		×	3 3/4
	087-0400		x	4
	100-0200	1	x	2
	100-0225		×	2 1/4
	100-0250		×	2 1/2
	100-0275		×	2 3/4
B325	100-0300		x	3
	100-0325		×	3 1/4
	100-0350		x	3 1/2
	100-0375		x	3 3/4
	100-0400	nena manyana anak	×	4

#### HIGH STRENGTH DOMESTIC STRUCTURAL BOLTS

PLAIN & MECHANICAL GALVANIZED-CONFORMS TO ASTM A-325 TYPE 1— MFG HEAD MARK



100-0400

#### **NEED STAINLESS?**

WE STOCK A WIDE VARIETY OF HARDWARE IN 18-8 S.S.

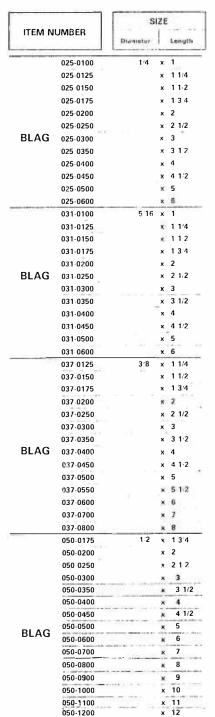
WE EVEN HAVE ITEMS NOT AVAILABLE ANY WHERE ELSE.

ASK YOUR FSI REPRESENTATIVE IF YOU DON'T SEE WHAT YOU NEED



#### LAG BOLTS

HEX HEAD PLAIN, GALVANIZED & ZINC





	062-0200	5.8	×	2
	062-0250		×	2 1/2
	062-0300		×	3
	062-0350		×	3 1 2
	062-0400		×	4
	062-0450		×	4 1.2
	062-0500		×	5
BLAG	062-0550		×	5 1/2
DEAG	062-0600		×	6
	062-0650		*	612
	062-0700		×	7
	062-0750		*	7 1,2
	062-0800		×	8
	062-0850		×	8 1/2
	062-0900		×	9
	062-0950	183	×	9 1 2
	062-1000		x	10
	062-1100		x	11
	062-1200		x	12
	075-0400	3 4	x	4
	075-0450	3.5	×	4 1/2
	075-0500		×	5
	075-0550		R	5 1 2
	075 0600		K	6
	075-0650		X	6 1 2
BLAG	075-0700		×	7
DLAG	0/5 0800		×	В
	075-0900		×	9
	075-1000		x	10
	075-1100		x	11
	075-1200		x	12

# CAP SCREWS GRADE 2—HEX HEAD PLAIN & ZINC PLATED

		SIZE		
ITEM N	JMBER	Diameter		Length
	025-0050	1/4 - 20	×	1/2
	025-0062		×	5/8
	025-0075		*	3/4
	025-0087		×	7/8
CSLC	025-0100		x	1
COLC	025-0125		x	1 1/4
	025-0150		x	1 1/2
	025-0175		x	1 3/4
	025-0200	Day and	x	2
	025-0225		×	2 1/4
	025-0250		×	2 1/2

We put the fast in fasteners

# CAP SCREWS GRADE 2—HEX HEAD PLAIN & ZINC PLATED

	025-0275	1'4 20	) x 2:	3/4
	025-0300	(10)	x 3	
	025-0325		x 3	1/4
	025-0350		x 3	1/2
	025-0375		x 3	-
CSLC	025-0400		x 4	
	025-0450			1/
			-	1/4
	025-0500		x 5	
	025-0550		x 5	1/2
	025-0600		x 6	
	031-0050	5/16 - 18	-	1/2
	031-0062		17	5 8
	031-0075		-	3:
	031-0087	40.00		7/8
	031-0100	17.0	x 1	
	031-0125		x 1	1/-
	031-0150		x 1	1/2
	031-0175		x 13	3.4
	031-0200		x 2	
	031-0225		x 2	1/4
	031-0250		х. 2	1/2
CSLC	031 0275		x 23	3/4
	031-0300		x 3	
	031-0325		x 3	1/
	031-0350		x 31	
	100	581 9		
	031-0375		x 33	9.74
	031-0400			į
	031-0450		x 4 '	17.
	031-0500		x 5	
	031-0550		x 5	L
	031-0600		x 6	
	037-0050	3:8 - 16		17.
	037-0062			54
	037-0075			3.4
	037-0087		180	7
	037-0100		x 1	
	037-0125		x 1	1/
	037-0150		x 1	1
	037-0175		x 13	3/
	037-0200		x 2	
	037-0225		x 2	1/
	037-0250		x 2	1.
CSLC	037-0275		x 2:	3 '
	037-0300		х 3	1
	037-0325		x 3	1 '
	037-0323		x 3	
	037-0350			3
	**************************************			
	037-0400	4.0	1000	
	037-0450	2.6	- 10 14 4	1.7
	037-0500		x 5	
	037-0550		x 5	1/
	037-0600		x 6	
	043-0075	7/16 - 14	-	3,
	043-0087		K	1
CSLC	043-0100		x 1	
COLC				
COLO	043-0125		x 1 x 1	



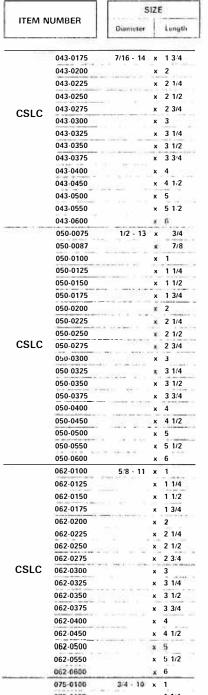
(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

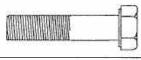


#### **Fasteners**

## CAP SCREWS (continued) GRADE 2—HEX HEAD

GRADE 2—HEX HEAD PLAIN & ZINC PLATED





				4_
	075 0150		x	1 1/2
	075-0175		x	1 3/4
	075-0200		×	2
	075-0225	3 4 - 10	x	2 1'4
	075-0250		×	2 1 2
	075-0275		x	2 3'4
	075-0300		x	3
	075 0325		x	3 1/4
	075-0350		×	3 1/2
	075-0375		×	3 3/4
001.0	075-0400		x	4
CSLC	075-0450		x	4 1/2
	075-0500		×	5
	075-0550		×	5 1/2
	075-0600		×	6
	075-0650		×	6 1 2
	075-0700		×	7
	075-0750		×	7 1'2
	075-0800		×	8
	087-0150	7.8 - 9	×	1 1/2
	087-0175		×	1 3'4
	087-0200		×	2
	087-0225		×	2 1 4
	087-0250	200	×	2 1/2
	087-0275	16.1	×	2 3 4
	087-0300	0 0 EXA	*	3
	087-0305	9 = 1	×	3 1/4
	087-0350	100	×	3 1/2
CSLC	087-0375	5.75	H	3 3 4
	087-0400		×	4
	087-0450		x	4 1/2
	087-0500		×	5
	087-0550	NYWAS JA	x	5 1/2
	087-0600	SHAPP W	×	6
	087-0650	***	×	6 1/2
	087-0700		×	7
	087-0750		×	7 1/2
	087-0800	10.00	×	8
	100-0200	1 - 8	×	2
	100-0225	- 114.75	×	2 1/4
	100-0250		×	2 1/2
	100-0275	11.	*	2 3'4
	100-0300		×	3
	100-0325	101010	×	3 1/4
	100-0350	S. 25.	×	3 1/2
	100-0375		×	3 3/4
CSLC				
CSLC	100-0373		×	4
CSLC	100-0400		×	
CSLC			×	4 1/2
CSLC	100-0400 100-0450		×	
CSLC	100-0400 100-0450 100-0500	- 101 - 112 (- 114) - 115 - 114 (- 114)	×	4 1/2
CSLC	100-0400 100-0450 100-0500 100-0550		*	4 1/2 5 5 1/2
CSLC	100-0400 100-0450 100-0500 100-0550 100-0600		* *	4 1/2 5 5 1/2 6
CSLC	100-0400 100-0450 100-0500 100-0550 100-0600 100-0650		* * * *	4 1/2 5 5 1/2 6 6 1/2

# CAP SCREWS GRADE 5—NC—HEX HEAD— MFG HEAD MARK PLAIN & ZINC PLATED—CONFORMS TO ANSI/ASME B18.2.1 1981 (Foreign & Domestic)

MIN III		Diameter	1	Longth
	ATTITUTE OF			
( 1)	MANAG			
\\ 1 <i>!!</i>	AMMAN	490May		
(4)				4
	025-0050	1/4 - 20	х	1/2
	025-0062	CONTRACTOR OF THE PARTY OF THE	×	5′8
	025-0075	50.00	×	3:4
	025-0087		×	7/8
	025-0100		x	1
	025-0125		x	1 1/4
	025 0150		×	1 1/2
	025-0175		X	1 3/4
	025-0200		X	2
	025-0225		×	2 1/4
	025-0250		х	2 1/2
CSG5	025-0275	52-288112-5	X	2 3.4
	025-0300		×	3
	025-0325		x	3 1/4
	025-0350		X	3 1/2
	025-0375	-	x	3 3/4
	025-0400		x	4
	025-0450		x	4 1/2
	025-0500		x	5
	025-0550		x	5 1/2
	025-0600		x	6
	031-0050	5/16 - 18	×	1/2
	031-0062		×	. 5/8
	031-0075		×	3/4
	031-0087		×	7,8
	031-0100		X	1
	031-0125		X	1 1/4
	031-0150		x	1 1′2
	031-0175		×	134
	031-0200		X	2
	031-0225	- m - m	X	2 1/4
CSG5	031-0250		x	2 1,2
	031-0275	-	X	2 3/4
	031-0300	mark may be trained	X	3
	031-0325		X	3 1/4
	031-0350	Lance Control	X	3 1/2
	031-0375	44	X	3 3.4
	031-0400	1.00	X	4
	031-0450		x	4 1,2
	031-0500		X	5
	031-0550		X	5 1,2
	031-0600	-	x	6
	037-0050	38 - 16	×	1.2
			×	5.8
	037-0062			100
CCCE	037-0062		*	3 4
CSG5	10.000			100



CAP SCREWS (continued)
GRADE 5—NC—HEX HEAD— MFG HEAD MARK
PLAIN & ZINC PLATED—CONFORMS
ANSI/ASME B18.2.1 1981 (Foreign & Don

	037-0150	3/8 - 16	×	1 1/2
	037-0175		x	1 3/4
	037-0200		×	2
	037-0225		x	2 1/4
	037-0250		×	2 1/2
	037-0275		×	2 3/4
	037-0300		×	3
CSG5	037-0325		×	3 1/4
	037-0350		×	3 1/2
	037-0375		x	3 3/4
	037-0400		×	4
	037-0450		x	4 1/2
	037-0500		x	5
	037-0550		x	5 1/2
	037-0600		x	6
	043-0075	7/16 - 14	×	3/4
	043-0087		×	7/8
	043-0100		x	1
	043-0125		×	1 1/4
	043-0150		x	1 1/2
	043-0175	services in the	x	1 3/4
	043-0200		×	2
CSG5	043-0225		x	2 1/4
	043-0250	meno es os	×	2 1/2
	043-0275		x	2 3/4
	043-0300		X	3
	043-0325		×	3 1/4
	043-0350		X	3 1/2
	043-0375		×	3 3/4
	043-0400		X	4
	043-0450		X	4 1/2
	043-0500		×	5
	043-0550		X	5 1/2
	043-0600		х	6
	050-0075	1/2 - 13	X	3/4
	050-0087		×	7/8
	050-0100		X	1
	050-0125		X	1 1/4
	050-0150		×	1 1/2
	050-0175		×	1 3/4
	050-0200		16	2
	050-0225		×	2 1/4
	050-0250 050-0275		×	2 1/2
CCCE			×	2 3/4
CSG5	050-0300 050-0325		×	3 1/4
	*********		×	3 1/4
	050-0350 050-0375		*	
	050-0375		×	3 3/4
	050-0450		×	4 1/2
	050-0450		×	5
	050-0550		×	5 1/2
	050-0600		×	6
	050-0625		×	6 1/4
	050-0625		×	6 1/2

CSG5    050-0750	1 1 1/4 1 1/4 1 1 1/2 2 2 1/4 2 1/2 2 1/4 3 3 3 1/2 4 4 1 1/2 5 5 1/2 5
CSG5    050-0800	8 8 1/2 9 9 1/2 0 0 1 1 1 1 1 1 1/4 1 1 1/2 2 1 1/4 1 1 1/2 1 3/4 1 1 1/2 1 1 3/4 1 1 1/2 1 1 3/4 1 1 1/2 1 1 3/4 1 1/2 1 1 3/4 1 1/2 1 1 3/4 1 1/2 1 1 3/4 1 1/2 1 1 3/4 1 1/2 1 1 3/4 1 1/2 1 1 1 1/4 1 1 1/2 1 1 1 1/4
CSG5    050-0800	8 8 1/2 9 9 1/2 0 0 1 1 1 1 1 1 1/4 1 1 1/2 2 1 1/4 1 1 1/2 1 3/4 1 1 1/2 1 1 3/4 1 1 1/2 1 1 3/4 1 1 1/2 1 1 3/4 1 1/2 1 1 3/4 1 1/2 1 1 3/4 1 1/2 1 1 3/4 1 1/2 1 1 3/4 1 1/2 1 1 3/4 1 1/2 1 1 1 1/4 1 1 1/2 1 1 1 1/4
CSG5    050-0850	8 1/2 9 9 9 1/2 0 1 1 1 1/4 1 1/2 2 1/4 2 2 1/4 2 3/4 3 3 1/2 4 4 1/2 5 1/2
CSG5  050-0900	9
CSG5  050-0950  x  050-1000  x 1  056-0100  056-0125  x  056-0125  x  056-0150  x  056-0175  056-0200  x  056-0250  x  056-0255  x  056-0250  x  056-0300  056-0350  x  056-0450  x  056-0500  x  056-0500  x  056-0500  x  056-0500  x  062-0100  062-0125  062-0150  062-0150  062-0150  062-0255  x  062-0255  x  062-0255  x  062-0255  x  062-0255  x  062-0255  x  062-0300  x  062-0150  06	9 1/2 0 0 1 1 1 1/4 1 1/4 2 2 1/4 2 1/2 2 1/4 3 3 3 1/2 4 1 1/2 5 1/2 5 1/2
050-1000	0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
056-0100 9/16-12 x 056-0125 x 056-0125 x 056-0150 x 056-0175 x 056-0200 x 056-0250 x 056-0250 x 056-0250 x 056-0350 x 056-0450 x 056-0450 x 056-0500 x 056	1 1 1/4 1 1/4 1 1 1/2 2 1/4 1 1 1/2 2 1/4 1 1 1/2 1 1 1/4 1 1/2 1 1/4 1 1/2 1 1/4 1 1/2 1 1 1/4 1 1/2 1 1 1/4
056-0125	1 1/4 1 1/2 2 1/2 2 1/2 2 1/2 2 1/2 2 3/4 3 3 3 1/2 1 1/2
056-0150	1 1/2 2 2 1/4 2 2 1/4 2 2 1/2 2 1/2 2 3/4 3 3 3 3 1/2 4 4 1 1/2 5 1/2
056-0175	1 3/4 2 2 1/4 2 1/2 2 1/2 2 3/4 3 3 1/2 4 1 1/2 5 1/2
056-0200 x 056-0225 x 056-0250 x 056-0250 x 056-0250 x 056-0300 x 056-0350 x 056-0400 x 056-0450 x 056-0500 x 056-0500 x 056-0500 x 056-0500 x 056-0500 x 056-0500 x 062-0100 5/8 - 11 x 062-0125 x 062-0150 x 062-0175 x 062-0200 x 062-0225 x 062-0200 x 062-0225 x 062-0300 x 062-0325 x 062-0350 x	2 1/4 2 1/2 2 1/2 2 3/4 3 3 1/2 1 1 1/2 5 1/2
056-0225 x 056-0250 x 056-0250 x 056-0275 x 056-0300 x 056-0300 x 056-0400 x 056-0450 x 056-0450 x 056-0550 x 062-0100 5/8-11 x 062-0125 x 062-0150 x 062-0175 x 062-0200 x 062-0225 x 062-0205 x 062-0350 x	2 1/4 2 1/2 2 3/4 3 3 1/2 4 1/2 5 1/2
CSG5  056-0250  x  056-0275  x  056-0300  x  056-0350  x  056-0400  x  056-0450  x  056-0500  x  056-0600  x  062-0100  062-0125  062-0150  062-0255  062-0250  x  062-0255  x  062-0255  x  062-0255  x  062-0300  x  062-0325  062-03350  x  062-0400  x	2 1/2 2 3/4 3 3 1/2 4 1 1/2 5 1/2 1 1/4
CSG5 056-0275 x 056-0300 x 056-0350 x 056-0400 x 056-0450 x 056-0500 x 056-0500 x 056-0600 x 062-0100 5/8 - 11 x 062-0125 x 062-0150 x 062-0225 x 062-0250 x 062-0250 x 062-0250 x 062-0350 x	2 3/4 3 3 1/2 4 1 1/2 5 1/2 1 1 1/4
056-0300	3 1/2 1 1/2 1 1/2 5 1/2 1 1/4
056-0350	3 1/2 1 1 1/2 5 1/2 3
056-0400 x 056-0450 x 056-0500 x 056-0500 x 056-0650 x 056-0600 x 062-0100 5/8 - 11 x 062-0125 x 062-0150 x 062-0175 x 062-0200 x 062-0225 x 062-0250 x 062-0250 x 062-0250 x 062-0350 x 062-0350 x 062-0375 x 062-0400 x	1 1 1/2 5 1/2 1 1 1/4
056-0450	1 1/2 5 1/2 1 1/4
056-0500 x  056-0550 x  056-0600 x  062-0100 5/8 - 11 x  062-0125 x  062-0150 x  062-0175 x  062-0200 x  062-0225 x  062-0250 x  062-0275 x  062-0300 x  062-0325 x  062-0315 x	5 1/2
056-0550 -	1 1/4
056-0600	1 1/4
062-0100 5/8 - 11 x 062-0125	1 1/4
062-0125	1/4
062-0150 # 062-0175 # 062-0200 # 062-0225 # 062-0250 # 062-0275 # 062-0300 # 062-0325 # 062-0350 # 062-0375 #	
062-0175	1/2
062-0200	
062-0225	3/4
062-0250	
062-0275 x 062-0300 x 062-0325 x 062-0350 x 062-0375 x 062-0400 x	2 1/4
062-0300 # 062-0325 # 062-0350 # 062-0375 # 062-0400 #	2 1/2
062-0325	2 3/4
062-0350	3 1/4
062-0375 x	3 1/2
062-0400 x	3 3/4
002-0430 x	1/2
CSG5 062-0500 x !	-
LIPTERIES OF THE PROPERTY.	-
	1/2
	5 1/2
	7 1/2
**************************************	
	3 1/2
A	112
	1/2
062-1000 x 10	-
Carlo accusation of the later time.	1/4
	1/2
075-0200 x	1/2
	3/4
075-0250 ×	3/4
	3/4
CSG5 075-0300 v	2 1/4

	CHARLEMAN	Internation		一上
	075-0375	T-19-6-3-5-3-5	×	3 3/4
	075-0400		×	4
	075-0450		×	4 1/2
	075-0500	ALINE SHIP	×	5
	075-0550		×	5 1/2
	075-0600		×	6
	075-0650	3/4 - 10	x	6 1/2
	075-0700		X	7
	075-0750		X	7 1/2
CSG5	075-0800		X	8
	075-0850		x	8 1/2
	075-0900		×	9
	075-0950		X	9 1/2
	075-1000		X	10
	087-0150	7/8 - 9	X	1 1/2
	087-0175		×	1 3/4
	087-0200		X	2
	087-0225		X	2 1/4
	087-0250		×	2 1/2
	087-0275		x	2 3/4
	087-0300		x	3
	087-0325		х	3 1/4
	087-0350		x	3 1/2
	087-0375		x	3 3/4
CSG5	087-0400		X	4
	087-0450		X	4 1/2
	087-0500		х	5
	087-0550		×	5 1/2
	087-0600		х	6
	087-0650		X	6 1/2
	087-0700		×	7
	087-0750	-	X	7 1/2
	087-0800		X	8
	087-0850		X	8 1/2
	087-0900		×	9
	087-0950		X	9 1/2
	087-1000		х	10
	100-0150	1 · 8	х	1 1/2
	100-0175		X	1 3/4
	100-0200		x	2
	100-0225	0.00	x	2 1/4
CSG5	100-0250		X	2 1/2
	100-0275		x	2 3/4
	100-0300		×	3
	100-0325		x	3 1/4
	100-0350		x	3 1/2
	100-0375		x	3 3/4
	100-0400		x	4
	100-0450		x	4 1/2
	100-0500		х	5
	100-0550		×	5 1/2
	100-0600		×	6
	100-0650		×	6 1/2
CSG5	100-0700	DE011 00	x	7
Cada	100-0700			
Cada	100-0750		x	7 1/2

x 8 1/2



CAP SCREWS (continued) GRADE 5-NC-HEX HEAD-MFG HEAD MARK

PLAIN & ZINC PLATED—CONFORMS TO ANSI/ASME B18.2.1 1981 (Foreign & Domestic)

	_	SIZE			
EM NUMBER		Diameter	Len	gti	,
-	100-0900	1 - 8		x	9
CSG5	100-0950			×	9 1/2
5555	100-1000			x	10
	112-0250	1 1/8	3 - 7	x	2 1/2
	112-0275			x	2 3/4
	112-0300			x	3

CSG5	100-0900	1.8 x 9
	100-0950	× 9 1/2
	100-1000	x 10
	112-0250	11/8 - 7 x 21/2
	112-0275	x 23/4
	112-0300	x 3
	112-0350	x 31/2
	112-0400	x 4
	112-0450	x 41/2
	112-0500	x 5
	112-0550	x 5 1/2
CSG5	112-0600	x 6
	112-0650	x 6 1/2
	112-0700	x 7
	112-0750	× 7 1/2
	112-0800	x 8
	112-0850	x 81/2
	112-0900	x 9
	112-1000	x 10
	112-1200	x 12
	125-0300	11/4-7 x 3
	125-0325	x 3 1/4
CSG5	125-0350	x 3 1/2
	125-0400	x 4
	125-0450	x 41/2
	125-0500	x 5
	125-0550	x 51/2
	125-0600	x 6
	125-0650	× 61/2
	125-0700	x 7
CSG5	125-0750	* 7 1/2
0000	125-0800	ж 8
	125-0850	× 8 1/2
	125-0900	x 9
	125-1000	x 10
	150-0300	1 1/2 · 6 x 3
CSG5	150-0350	x 31/2
	150-0400	× 4
	150-0450	× 41/2
	150-0500	x 5
	150-0550	× 51/2
	150-0600	х б
	150-0650	¥ 6 1/2
	150-0700	× 7
	150-0750	× 71/.2
	150-0800	x 8
	150-0850	× 8 1/2
	150-0900	<b>x</b> 9
	450 4000	

150-1000

**CAP SCREWS GRADE 5—NF—HEX HEAD—** MFG HEAD MARK

PLAIN & ZINC PLATED—CONFORMS TO ANSI/ASME B18.2.1 1981 (Foreign & Domestic)

ITEM NUMBER		SIZ	Æ
		Diameter	Length
	025-0050	1/4 - 28	x 1/2
	025-0062		× 5/8
	025-0075		× 3/4
	025-0087		× 7/8
	025-0100		x 1
	025-0125		x 1 1/4
	025-0150		x 1 1/2
	025-0175		x 13/4
	025-0200		x 2
CSG5F	025-0225		x 21/4
00-0.	025-0250		x 2 1/2
	025-0250		x 23/4
	025-0275		
	_		
	025-0350		x 3 1/2
	025-0375		x 33/4
	025-0400		x 4
	025-0450		x 4 1/2
	025-0500		x 5
	025-0550		x 51/2
	025-0600		x 6
	031-0050	5/16 - 24	x 1/2
	031-0062	- 3	× 5/8
	031-0075		x 3/4
	031-0087	3	× 7/8
	031-0100		x 1
	031-0125	500:	x 1 1/4
	031-0150		x 11/2
	031-0175		x 13/4
	031-0200	\$35000000000	x 2
	031-0225		x 21/4
CSG5F	031-0250		x 2 1/2
	031-0275		x 23/4
	031-0300		х 3
	031-0325		x 3 1/4
	031-0350		x 3 1/2
	031-0375		x 33/4
	031-0400		x 4
	031-0450		x 4 1/2
	031-0500		x 5
	031-0550		x 51/2
	031-0600		x 5 1/2 x 6
	037-0050		x 1/2
CSG5F	037-0050		x 5/8
	037-0062		x 3/4
	037-0075		x 3/4 x 7/8
	037-0087		
	037-0125 037-0150		x 1 1/4 x 1 1/2
	221-0120		
	027.0175		v 12/4
	037-0175		x 13/4
	037-0200		x 2





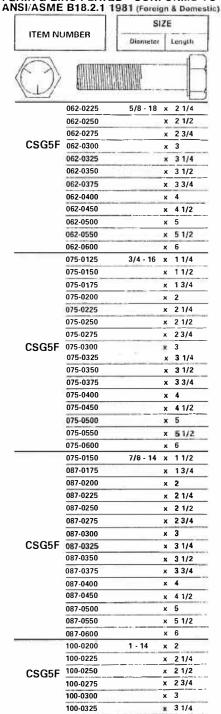
3/8 · 24 x 23/4

	037-0275	3/8 · 24 X Z	3/4
	037-0300	х 3	
CSG5F	037-0325	x 3	1/4
	037-0350	x 3	1/2
	037-0375		3/4
	037-0400	x 4	
	037-0450		1/2
	037-0450		
	037-0550		1/2
-11	037-0600	x 6	
	043-0075	7/16 ×	3/4
	043-0087	×	7/8
	043-0100	x 1	
	043-0125	x 1	1/4
	043-0150	x 1	1/2
	032-0175	x 1	3/4
	043-0200	x 2	
CSG5F	043-0225	x 2	1/4
	043-0250	x 2	1/2
	043-0275	x 2	3/4
	043-0300	х 3	
	043-0325	х 3	1/4
	043-0350	х 3	1/2
	043-0400	x 4	
	050-0075	1/2 - 20 x	3/4
	050-0087	0.40	7/8
	050-0100	x 1	
	050-0125		1/4
	050-0150		1/2
CSG5F	050-0175		3/4
	050-0200	x 2	
	050-0205		1/4
	050-0250		1/2
	050-0275		3/4
	050-0273		3/4
	050-0300		1/4
	050-0325	the second second second	
	050-0350		1/2
			3/4
CSG5F	050-0400	x 4	
Codor	050-0450		1/2
	050-0500	ж 5	
	050-0550		1/2
	050-0600	х 6	
CSG5F	056-0100	9/16 - 18 x 1	
	056-0125		1/4
	056-0150		1/2
	056-0175		3/4
	056-0200	x 2	
	056-0250	x 2	1/2
	056-0300	x 3	
	056-0350	х 3	1/2
	056-0400	x 4	
	062-0100	5/8 - 18 x 1	
	062-0125	x 1	1/4
	062-0150	x 1	1/2
	062-0175	x 1	3/4
	062-0200	x 2	
			70



#### CAP SCREWS (continued) **GRADE 5—NF—HEX HEAD—** MFG HEAD MARK

PLAIN & ZINC PLATED—CONFORMS TO



#### CAP SCREWS

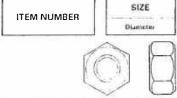
**GRADE 5—NF—HEX HEAD—** MFG HEAD MARK

PLAIN & ZINC PLATED—CONFORMS TO ANSI/ASME B18.2.1 1981 (Foreign & Domestic)

	100-0350	1 - 14	×	3 1/2
	100-0375		x	3 3/4
	100-0400		x	4
CSG5F	100-0450		x	4 1/2
	100-0500		x	5
	100-0550		x	5 1/2
	100-0600		x	6

#### **FINISHED HEX NUTS**





	025	1/4 - 20
	031	5/16 - 18
	037	3′8 - 16
	043	7/16 - 14
	050	1/2 - 13
	056	9/16 - 12
	062	5/8 - 11
	075	3/4 · 10
	087	7/8 - 9
NFHX	100	1 · 8
	112	1 1/8 - 7
	125	1 1:4 - 7
	137	1 3/8 - 6
	150	1 1/2 - 6
	175	1 3/4 - 5
	200	2 - 4 1/2
	225	2 1/4 - 4 1/2
	250	2 1/2 - 4
	275	2 3/4 - 4
	300	3 - 4

## **CALL FOR STAINLESS**

#### FINISHED HEX NUTS

SIZE

NL		
PLAIN	&	ZINC

MBER	Diseister
	$\bigcirc$ $\bigcirc$
025	1/4 - 28
031	5/16 - 24
037	3'8 - 24
043	7/16 - 20
050	1/2 - 20
056	916 - 18
062	5/8 - 18
075	3.4 - 16
●87	7:8 - 14
100	1 - 14
112	1 1/8 - 12
125	1 1/4 - 12
137	1 3:8 - 12
150	1 1/2 - 12
175	1 3'4 - 12
200	2 - 12
225	2 1/4 - 12
250	2 1/2 - 12
275	2 3/4 - 12
300	3 - 12
	025 031 037 043 056 062 075 087 100 112 125 137 150 175 200 225 250

#### **FINISHED HEX NUTS** SLOTTED-NC PLAIN

SIZE ITEM NUMBER



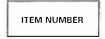
	050	1/2 - 13
	062	5/8 - 18
	075	3/4 - 10
NEOL	087	7/8 - 9
NFSL	100	1 - 8
	112	1 1/8 - 7
	125	1 1/4 - 7
	150	1 1/2 - 6





#### **FINISHED HEX NUTS**

SLOTTED-NF **PLAIN** 







	050	1/2 - 20
	062	5/8 - 18
	075	3/4 - 16
NFSLF	087	7/8 - 14
	100	1 - 14
	112	1 1/8 - 12
	125	1 1/4 - 12
	150	1 1/2 - 12

#### **FINISHED HEX NUTS**

JAM-NC **PLAIN & ZINC** 





	025	1/4 - 20
	031	5/16 - 18
	037	3.8 - 16
	013	7/16 - 14
	050	1/2 - 13
	056	9/16 - 12
	062	5/8 - 11
ALŦИ	075	3/4 - 10
	087	7/8 - 9
	100	1 - 8
	112	11/8 - 7
	125	1 1/4 - 7
	137	1 3/8 - 6
	150	11/2 - 6

#### **FINISHED HEX NUTS**

JAM-NF **PLAIN & ZINC** 

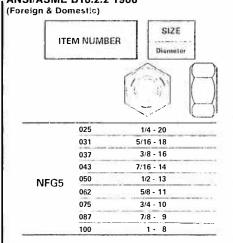




	025	1/4 - 28
	031	5/16 - 24
	037	3/8 - 24
	043	7/16 - 20
	050	1/2 - 20
	056	9/16 - 18
	062	5/8 - 18
NFJAF	075	3/4 - 16
	087	7/8 - 14
	100	1 - 14
	112	1 1/8 - 12
	125	1 1/4 - 12
	137	1 3/8 - 12
	150	1 1/2 - 12

#### **FINISHED HEX NUTS**

**GRADE 5—NC** PLAIN & ZINC—CONFORMS TO SAE J-995 **ANSI/ASME B18.2.2 1986** 

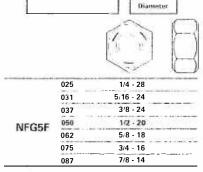


#### **FINISHED HEX NUTS**

ITEM NUMBER

**GRADE 5—NF** 

PLAIN & ZINC—CONFORMS TO SAE J-995 ANSI/ASME B18.2.2 1986 (Foreign & Domestic)



#### **HEX COUPLING NUTS** ZINC

ITEM NUMBER



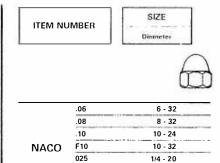
SIZE



#### 3/8 - 16 037 NCOU 050 1/2 - 13 062 5/8 - 11

#### **ACORN CAP NUTS**

TWO PIECE CONSTRUCTION— **CLOSED END NICKEL** 



5/16 - 18

3/8 - 16

1/2 - 13

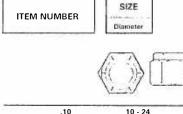
#### **LOCK NUTS NYLON INSERT—NC**

031

037

050

**NE SERIES** ZINC—CONFORMS TO IFI 100



	.10	10 - 24
	025	1/4 - 20
	031	5/16 - 18
	037	3/8 - 16
	043	7/16 - 14
	050	1/2 - 13
	056	9/16 - 12
NLNY	062	5/8 - 11
	075	3/4 - 10
	087	7/8 - 9
	100	1 - 8
	112	1 1/8 - 7
	125	1 1/4 - 7
	150	1 1/2 - 6

**ALL ABOVE IN** STOCK IN STAINLESS STEEL



#### SHEET METAL SCREWS SLOTTED PAN HEAD—TYPE A HARDENED & ZINC PLATED

continued

		S	IZE	
ITEM N	UMBER	Diameter		Lungt
	.08-0125	8	x	1 1/4
	.08-0150		x	1 1/2
SSSP	.08-0175	1000	x	1 3/4
5551	.08-0200		x	2
	.08-0250		x	2 1/2
	.08-0300		×	3
	.10-0037	10	×	3.8
	10-0050		×	1/2
	10-0062		×	5/8
	10-0075		×	3/4
	.10-0100		x	1
SSSP	.10-0125		x	1 1/4
	.10-0150	-015700751 E	x	1 1/2
	.10-0175		x	1 3/4
	.10-0200		x	2
	.10-0250	II commence and the	x	2 1/2
	.10-0300		x	3
	.12-0050	12	×	1/2
	.12-0062		*	5/8
	.12-0075		x	3/4
cccn	.12-0100		x	1
SSSP	.12-0125		x	1 1/4
	.12-0150		x	1 1/2
	.12-0175		x	1 3/4
	.12-0200		x	2
	.12-0250		x	2 1/2
	.12-0300		x	3
	.14-0050	14	×	1/2
	.14-0062		x	5/8
	.14-0075		x	3/4
	.14-0100		×	1
SSSP	.14-0125		x	1 1/4
JJJP	.14-0150		×	1 1/2
	.14-0175		x	1 3/4
	.14-0200		x	2
	.14-0250		×	2 1/2
	.14-0300		x	3

FSI STOCKS
ALL
OF THE ABOVE
IN
STAINLESS
STEEL

# SHEET METAL SCREWS PHILLIPS PAN HEAD—TYPE A HARDENED & ZINC PLATED

ITEM NUMBER		S	IZE
IIEM N	ITEM NOWBER		Lengt
			dit
SSPP	.04-0050	4	x 1/2
	.06-0025	6	x 1/4
	.06-0037		× 3/8
	.06-0050		x 1/2
0000	.06-0062		× 5/8
SSPP	.06-0075		х 3/4
	.06-0100		x 1
	.06-0125		x 1 1/4
	.06-0150	411-2-1-2-17	x 1 1/2
	.08-0037	8	× 3/8
	.08-0050		x 1/2
	.08-0062		× 5/8
	.08-0075		x 3/4
	.08-0100		x 1
SSPP	.08-0125		x 1 1/4
	.08-0150		x 1 1/2
	.08-0175		x 1 3/4
	.08-0200		x 2
	.08-0250		x 2 1/2
-	.10-0037	10	ж 3/8
	.10-0050		x 1/2
	.10-0062		× 5/8
	.10-0075		x 3/4
	.10-0100		x 1
	.10-0125	-	x 1 1/4
SSPP	.10-0150		x 1 1/2
	.10-0175		x 1 3/4
	.10-0200		x 2
	.10-0250		x 2 1/2
	.10-0230	150	x 3
	.12-0050	12	x 1/2
	.12-0030		× 3/4
	.12-0075		x 1
	.12-0100		x 1 1/4
SSPP	.12-0125		
	.12-0150		x 1 1/2 x 1 3/4
	.12-0200		
	.12-0250		
	.12-0300		x 3
	.14-0050	14	× 1/2
	.14-0075		× 3/4
	.14-0100		x 1
0000	.14-0125		x 1 1/4
SSPP	.14-0150		x 1 1/2
	.14-0175		x 1 3/4
	.14-0200		x 2
	,14-0250		x 2 1/2
	.14-0300		x 3

# SHEET METAL SCREWS PHILLIPS FLAT HEAD—TYPE A HARDENED & ZINC PLATED

	Diameter	Leng
		41
.04-0050	4	x 1/2
.04-0062		× 5/8
.04-0075		<b>x</b> 3/4
.06-0037	6	× 3/8
.06-0050		× 1/2
.06-0062		× 5/8
.06-0075	0.800 WHER	× 3/4
.06-0100		x 1
.06-0125		x 1 1/4
.06-0150	-0.0	x 1 1/2
.08-0037	8	× 3/8
.08-0050	V	× 1/2
.08-0062		<b>x</b> 5/8
.08-0075		× 3/4
.08-0100		x 1
.08-0125		x 1 1/4
.08-0150		x 1 1/2
.08-0175		x 1 3/4
.08-0200		x 2
.08-0250	=	x 2 1/2
.10-0037	10	¥ 3/8
.10-0050		x 1/2
.10-0062		x 5/8
.10-0075		× 3/4
.10-0100		x 1
.10-0125		x 1 1/4
.10-0150		x 1 1/2
.10-0175		x 1 3/4
.10-0200		x 2
.10-0225	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	x 2 1/4
.10-0250		x 2 1/2
.10-0300		x 3
.12-0075	12	x 3/4
.12-0100		x 1
.12-0125		x 1 1/4
-		x 1 1/2
12.0175	1 1000	x 1 3/4
.12-0200		x 2
.12-0250	1115	x 2 1/2
.12-0300		x 3
.14-0050	14	x 1/2
.14-0075		× 3/4
		x 1
.14-0150		x 1 1/2
.14-0200		x 2
.14-0250		x 2 1/2 x 3
	.06-0037 .06-0050 .06-0050 .06-0062 .06-0075 .06-0100 .06-0125 .06-0150 .08-0037 .08-0050 .08-0062 .08-0100 .08-0125 .08-0100 .08-0125 .08-0150 .08-0150 .08-0175 .08-0200 .08-0250 .10-0037 .10-0050 .10-0050 .10-0052 .10-0100 .10-0125 .10-0150 .10-0125 .10-0150 .10-0125 .10-0150 .10-0150 .10-0150 .10-0200 .10-0225 .10-0250 .10-0300 .12-0150	.06-0037 6 .06-0050 .06-0050 .06-0062 .06-0075 .06-0100 .06-0125 .06-0150 .08-0037 8 .08-0050 .08-0062 .08-0075 .08-0100 .08-0125 .08-0100 .08-0250 .10-0037 10 .10-0050 .10-0062 .10-0050 .10-0125 .10-0150 .10-0150 .10-0150 .10-0200 .10-0255 .10-0200 .12-0250 .12-0100 .12-0150 .12-0150 .12-0150 .12-0150 .12-0150 .12-0150 .12-0250 .12-0300 .14-0250 .14-0050 .14-0050 .14-0150 .14-0100 .14-0150 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200 .14-0200





# MACHINE SCREWS COMBINATION PHILLIPS/SLOTTED PAN HEAD— TYPE A HARDENED & ZINC PLATED

ITEM NUMBER SIZE

	.06-0075	6 -32	×	3/4
	.06-0100		×	1
SMCR	.06-0125		×	1 1/4
	.06-0150	ell (60.00c)	×	1 1/2
	.06-0200		×	2
	.08-0050	8 - 32	×	1/2
	.08-0075		×	3/4
	.08-0100	MVCmotumise ii	x	1
SMCR	.08-0125		x	1 1/4
	.08-0150		х	1 1/2
	.08-0200		x	2
	.08-0250		X	2 1/2
	.08-0300		x	3
	.10-0075	10 -24	×	3/4
	.10-0100		x	1
SMCR	.10-0125		x	1 1/4
SIVICH	.10-0150		x	1 1/2
	.10-0200		x	2
	.10-0300		х	3
	025-0037	1/4 - 20	х	3/8
	025-0050		×	1/2
	025-0075		×	3/4
	025-0100		х	1
SMCR	025-0125		x	1 1/4
	025-0150		x	1 1/2
	025-0200		x	2
	025-0250		x	2 1/2
	025-0300		X	3
	025-0400		х	4
	037-0075	3/8 - 16	×	3/4
	037-0100		x	1
	037-0125		x	1 1/4
SMCR	037-0150		X	1 1/2
	037-0200		х	2
	037-0300		x	3
	037-0400		×	4
SMCR	F10-0075	10 - 32	×	3/4

ALL ABOVE
AVAILABLE IN
STAINLESS STEEL

#### MACHINE SCREWS SLOTTED ROUND HEAD ZINC PLATED

SIZE ITEM NUMBER F10-0200 10 - 32 x 2 x 2 1/4 F10-0225 x 2 1/2 x 23/4 F10-0275 SMSR x 3 F10-0300 F10-0350 x 3 1/2 F10-0400 F10-0450 x 4 1/2 025-0037 1/4 - 20 × 3/8 025-0050 1/2 025-0062 5/8 025-0075 3/4 025-0087 7/8 025-0100 025-0112 x 1 1/8 025-0125 025-0137 x 1 3/8 025-0150 x 1 1/2 x 15/8 025-0162 x 1 3/4 025-0175 SMSR x 2 025-0200 x 2 1/4 025-0225 025-0250 x 2 1/2 025-0275 x 2 3/4 x 3 025-0300 x 3 1/2 025-0350 025-0400 025-0450 x 4 1/2 x 5 025-0500 025-0550 x 5 1/2 025-0600 x 6 5/16 - 18 x 031-0050 031-0062 5/8 031-0075 3/4 031-0087 7/8 SMSR 031-0100 031-0112 x 1 1/8 031-0125 x 1 1/4 031-0137 x 1 3/8 031-0150 x 1 1/2 031-0175 x 1 3/4 031-0200 x 2 x 2 1/4 031-0225 031-0250 031-0275 x 2 3/4 031-0300 x 3 x 3 1/2 031-0350

# MACHINE SCREWS SLOTTED ROUND HEAD ZINC PLATED

	031-0400	5/16 - 18	х	4
	031-0450		x	4 1/2
SMSR	031-0500		×	5
	031-0550		x	5 1/2
	031-0600		x	6
	037-0050	3/8 - 16	x	1/2
	037-0062		×	5/8
	037-0075		×	3/4
	037-0087		×	7/8
	037-0100		x	1
	037-0125	22311112-22-	x	1 1/4
	037-0150		×	1 1/2
	037-0175		×	1 3/4
	037-0200		x	2
SMSR	037-0225		x	2 1/4
	037-0250		x	2 1/2
	037-0275		×	2 3/4
	037-0300		x	3
	037-0350		x	3 1/2
	037-0400		×	4
	037-0450		×	4 1/2
	037-0500		x	5
	037-0550		×	5 1/2
	037-0600		x	6

#### SHEET METAL SCREWS SLOTTED PAN HEAD—TYPE A HARDENED & ZINC PLATED

ITEM NUMBER		S	IZE
		Diameter	Length
			diiii)
	.04-0037	4	x 3'8
	.04-0050		x 1/2
SSSP	.04-0062		x 58
	.04-0075	186	× 34
	.04-0100	CONTROL S	x 1
	.06-0037	6	x 3/8
SSSP	.06-0050		× 1′2
	.06-0062		× 5′8
ooor	.06-0075		× 3/4
	.06-0100		x 1
	.06-0125		x 1 1/4
	.06-0150		x 1 1/2
	.07-0050	7	× 1/2
SSSP	.07-0062		× 5/8
000.	.07-0100		x 1
	.07-0150		x 1 1/2
	.08-0037	В	× 3/8
	.08-0050		x 1/2
SSSP	08-0062		× 5/8
	.08-0075	(Sill) Colores	× 3/4
	.08-0100		x 1

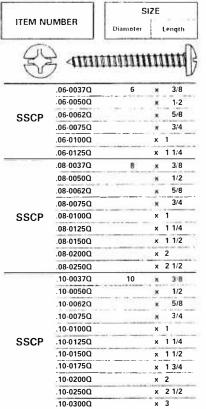


# SHEET METAL SCREWS PHILLIPS TRUSS HEAD—TYPE A HARDENED & ZINC PLATED

ITEM NUMBER		SI	ZE	
		Diameter	L	Length
				att
- CT H20-1	.06-0037	6	x	3/8
	.06-0050		×	1/2
SSPT	.06-0062	-	x	5/8
	.06-0075		x	3/4
	.06-0100		x	1
	.08-0037	8	х	3/8
	.08-0050		х	1/2
SSPT	.08-0062		×	5/8
	.08-0075		x	3/4
	.08-0100		x	1
	.10-0037	10	x	3/8
	.10-0050		*	1/2
	.10-0062		x	5/8
SSPT	.10-0075		х	3/4
	.10-0100		х	1

#### **SHEET METAL SCREWS**

COMBINATION PHILLIPS SLOTTED PAIN HEAD—TYPE A HARDENED & ZINC PLATED



#### **SHEET METAL SCREWS**

COMBINATION PHILLIPS/ SLOTTED PAN HEAD—TYPE A HARDENED & ZINC PLATED

	.12-0050Q	12	ж	1/2
	.12-0075Q		ж	3/4
	.12-0100Q		x	1
SSCP	.12-0125Q		×	1 1/4
3301	.12-0150Q	47.50	×	1 1/2
	.12-0200Q		×	2
	.12-0250Q		×	2 1/2
	.12-0300Q		x	3
	.14-0050Q	14	×	1/2
	.14-0075Q		×	3/4
	.14-0100Q		×	1
SSCP	.14-0125Q		×	1 1/4
5501	.14-0150Ω		х	1 1/2
	14-0200Q		x	2
	.14-0250Q		х	2 1/2
	.14-0300Q		х	3

SIZE

### WOOD SCREWS

PHILLIPS FLAT HEAD ZINC PLATED

<>)	4tenenn	111111111		
OVALDE	.04-0050	4	×	1/2
SWPF	.04-0062		K	5/8
	.04-0075		X	3/4
	.05-0050	5	×	1/3
SWPF	.05-0062		ĸ	5/8
	.05-0075	ce such sees to	x	3/4
	.05-0100		X	1
	.06-0050	6	×	1/2
	.06-0062		X	5/8
	.06-0075		ĸ	3/4
	.06-0100		x	1
SWPF	.06-0125		X	1 1/4
	.06-0150		ĸ	1 1/;
	.06-0175		x	1 3/4
	.06-0200		x	2
	.07-0075	7	×	3/-
SWPF	.07-0100		х	1
••••	.07-0125		x	1 1/-
	.07-0150		х	1 1/2
	.08-0050	8	ĸ	1/3
	.08-0062		ĸ	5/8
	.08-0075		х	3/4
	.08-0100		x	1
	.08-0125		×	1 1/4
	.08-0150		×	1 1/2
SWPF	.08-0175		х	1 3/4
	.08-0200		x	2
	.08-0225		X	2 1/4

# WOOD SCREWS PHILLIPS FLAT HEAD ZINC PLATED

	.08-0300	8	х	3
	.09-0075	9	x	3/4
	.09-0100		x	1
	.09-0125		х	1 1/4
SWPF	.09-0150		x	1 1/2
	.09-0175	HIII—COSCO	x	1 3/4
	.09-0200		x	2
	.09-0250		х	2 1/2
	.10-0075	10	х	3/4
	.10-0100		x	1
	.10-0125		×	1 1/4
SWPF	.10-0150		×	1 1/2
CVVI	.10-0175		х	1 3/4
	.10-0200		х	2
	.10-0225		×	2 1/4
	.10-0250		x	2 1/2
	.10-0275		×	2 3/4
SWPF	.10-0300		×	3
	.10-0350		×	3 1/3
	.10-0400		x	4
	.12-0100	12	×	1
	.12-0125		×	1 1/4
	.12-0150		х	1 1/3
	.12-0175		x	1 3/4
	.12-0200	- 227	x	2
SWPF	.12-0225		×	2 1/4
	.12-0250	11010000	×	2 1/2
	.12-0300		x	3
	.12-0350	- C.	х	3 1/2
	.12-0400		х	4
	.14-0100	14	×	1
	.14-0125		х	1 1/4
	.14-0150		х	1 1/3
	.14-0175		х	1 3/4
	.14-0200		x	2
SWPF	.14-0225		x	2 1/4
	.14-0250		х	2 1/2
	.14-0300		x	3
	.14-0350		x	3 1/2
	.14-0400		×	4

#### WOOD SCREWS SLOTTED FLAT HEAD ZINC PLATED

		8	SIZE	E
ITEM NUMBER		Diameter	I	Length
		aununtitt	m	m
	01.0000			1/2
	.04-0050	4	x	1/2
SIMSE	.04-0050	4	x	1/2 5/8
SWSF		4		
SWSF	.04-0062	4	x	5/8
SWSF	.04-0062 .04-0075	5	×	5/8

# Fastener Systems, Inc.

**SOCKET Security Screws** 

## FLAT HEAD/CAP SCREWS





#### 18-8 STAINLESS STEEL

10-001711	TEECO OI		
DIAMETER	IENCTH	DART NO	MATCHING DRIVER
DIAMETER	3/8	PART NO. 6.63238FS	SIZE
	1/2	6.63212FS	
6-32	3/4	6.63234FS	1/8"
		6.6321FS	
	1	6.6321FS	
	2.0	6.83238FS	
	3/8		
8-32	1/2 3/4	6.83212FS	1/8"
	3/4	6.83234FS	
_	1	6.8321FS	
	1/2	6.10312FS	8115
	3/4	6.10334FS	
10-32	1	6.1031FS	5/32"
	1-1/2	6.103112FS	1/8"
	1 1/2	0.10011210	1/0
	3/8	6.10238FS	
10.26	1/2	6.10212FS	
10-24	3/4	6.10234FS	5/32"
	1	6.1021FS	
	1-1/2	6.102112FS	1/8"
DIAMETER	LENGTII	PART NO.	MATCHIN DRIVER SIZE
12-24	1/2 UC	6.12212UFS	
12-24			5/32"
	1/2	6.14212FS	_
	3/4	6.14234FS	
1/4-20	1	6.1421FS	5/32"
1,1 20	1-1/4	6.142114FS	. 7,52
	1-1/2	6.142112FS	
	2	6.1422FS	
		H1175	
	1/2	6,51612FS	
	3/4	6.51634FS	
5/16-18	1	6.5161FS	3/16"
,, 10 10	1-1/4	6.516114FS	
	1-1/2	6.516112FS	
	2	6,5162FS	
Eval	1.0	0.0004050	
	1/2	6.38612FS	
	3/4	6.38634FS	
	7	6.3861FS	7/32"
3/8-16	<del>1</del>	0.000111=0	1132
3/8-16	1-1/4	6.386114FS	7732
3/8-16	1-1/4 1-1/2 2	6.386114FS 6.386112FS 6.3862FS	1132

#### BUTTON HEAD/ SHEET METAL SCREWS



**TYPE AB, 18-8 STAINLESS STEEL** 

DIAMETER	LENGTH	PART NO.	MATCHING DRIVER SIZE
	1/2	6.8AB12BS	
#8	3/4	6.8AB34BS	1/8"
	1	6.8AB1BS	MATCHING DRIVER
DIAMETER	LENGTH	PART NO.	SIZE
	1/2	6.10AB12BS	3
#10	3/4	6.10AB34BS	5/32"
	1	6.10AB1BS	

# TORX® Security Screws BUTTON HEAD/ MACHINE SCREWS





#### 18-8 STAINLESS STEEL

10-0 STAII	NLESS S1	CCL	
DIAMETER	LENGTH	PART NO.	MATCHING DRIVER SIZE
	1/4	4.44014BS	
4-40	1/2	4.44012BS	T-8
	3/4	4.44034BS	
	1/4	4.63214BS	
	3/8	4.63238BS	
6-32	1/2	4.63212BS	T-10
	3/4	4.63234BS	
	7 -	4.6321BS	
	1/4	4.83214BS	
	3/8	4.83238BS	
8-32	1/2	4.83212BS	T-15
	3/4	4.83234BS	
	1	4.8321BS	
	1/2	4.10312BS	
10-32	3/4	4.10334BS	T-25
10 02	1	4.1031BS	= 1-29
	1-1/4	4.103114BS	3
	1/2	4.10212BS	
10-24	3/4	4.10234BS	T-25
	1	4.1021BS	= 1-27
	1-1/4	4.102114BS	3

# TORX® Security Screws BUTTON HEAD/ MACHINE SCREWS





18-8 STAIN			MATCHING DRIVER
DIAMETER	LENGTH	PART NO.	SIZE
	1/2	4.14212BS	
1/4-20	3/4	4.14234BS	T-27
1/1-20	1	4.1421BS	- 1-2/
	1-1/4	4.142114BS	-
	1-1/2	4.142112BS	_
	3/4	4.51634BS	9
5/16-18	1	4.5161BS	T-40
	1-1/2	4.516112BS	

#### FLAT HEAD/MACHINE SCREWS



18-8 STAII	VLLOO O1		MATCHING DRIVER
DIAMETER	LENGTH	PART NO.	SIZE
	1/4	4.44014FS	
4-40	3/8	4.44038FS	T-8
-	1/2	4.44012FS	
-	3/8	4.63238FS	
_	1/2	4.63212FS	
6-32	3/4	4.63234FS	T-10
	1	4.6321FS	
	3/8	4.83238FS	
8-32	1/2	4.83212FS	T-15
0-32	3/4	4.83234FS	,
	1	4.8321FS	
	1/0	4.4004.050	
	1/2	4.10312FS	
10-32	3/4	4.10334FS	T-20
	1	4.1031FS	
	1-1/4	4.103114FS	-
	1/2	4.10212FS	-
10-24	3/4	4.10234FS	T-20
	1	4.1021FS	
-	1-1/4	4.102114FS	
12-24	1/2 UC	4.12212UFS	T-20
	1/2	4.14212FS	
	3/4	4.14234FS	
1/4-20	1	4.1421FS	T-27
	1-1/4	4.142114FS	
	1-1/2	4.142112FS	

Note: "UC" Denotes Undercut Head

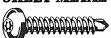
# TORX® Security Screws BUTTON HEAD/ SHEET METAL SCREWS



**TYPE A, 18-8 STAINLESS STEEL** 

DIAMETER	LENGTH	PART NO.	MATCHING DRIVER SIZE
#6	1/2	4.6A12BS	
	3/4	4.6A34BS	T-10
	1	4.6A1BS	
	1/2	4.8A12BS	
#8	3/4	4.8A34BS	T-15
₩ <b>O</b>	1	4.8A1BS	1-17
	1-1/4	4.8A114BS	
	1-1/2	4.8A112BS	
	1/2	4.10A12BS	
	3/4	4.10A34BS	
#10	1	4.10A1BS	T-25
	1-1/4	4.10A114B	3
	1-1/2	4.10A112B	<u> </u>

## PAN HEAD/SELF DRILLING SHEET METAL SCREWS



TYPE AB,	410 STAI	NLESS STEEL	MATCHING DRIVER
DIAMETER	LENGTH	PART NO.	SIZE
	1/2	4.8ABK12PS	2.5
#8	3/4	4.8ABK34PS	Т-20
#0	1	4.8ABK1PS	1-20
	1-1/4	4.8ABK114PS	
	1/2	4.10ABK12PS	
	3/4	4.10ABK34PS	
#10	1	4.10ABK1PS	T-25
	1-1/4	4.10ABK114PS	10
	1-1/2	4.10ABK112PS	F2:

### **TOOLS and KITS**

TORX*	<b>TAMPERPROOF</b>
17	

V-28200-
PART NO.
4B.T7
4B.T8
4B.T9
4B.T10
4B.T15
4B.T20
4B.T25
4B.T27
4B.T30
4B.T40
4B.T45
4B.T50



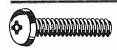
# TORX® Security Screws FLAT HEAD/ SHEET METAL SCREWS



TYPE A, 18-8 STAINLESS STEEL

DIAMETER	LENGTH	PART NO.	MATCHING DRIVER SIZE
	3/4	4.6A34FS	
#6	1	4.6A1FS	T-10
	3/4	4.8A34FS	
	1	4.8A1FS	
#8	1-1/4	4.8A114FS	T-15
	3/4	4.10A34FS	
#10	1	4.10A1FS	- T-20
#10	1-1/4	4.10A114FS	1-20
	1-1/2	4.10A112FS	-

# PHILLIPS® Security Screws PAN HEAD/MACHINE SCREWS





**18-8 STAINLESS STEEL** 

DIAMETER	LENGTH	PART NO.	MATCHING DRIVER SIZE
	1/4	2.63214PS	
	3/8	2.63238PS	
	1/2	2.63212PS	
	5/8	2.63258PS	
6-32	3/4	2.63234PS	P2
	1	2.6321PS	
	1-1/4	2.632114PS	
	1-1/2	2.632112PS	
	2	2.6322PS	
	3/8	2.83238PS	×
	1/2	2.83212PS	
	5/8	2.83258PS	
	3/4	2.83234PS	
8-32	1	2.8321PS	P2
	1-1/4	2.832114PS	• • •
	1-1/2	2.832112PS	-
	2	2.8322PS	
	2-1/2	2.832212PS	
	3	2.8323PS	<del>-</del>

# Security Screws PAN HEAD/MACHINE SCREWS 18-8 STAINLESS STEEL MATCHING

**PHILLIPS®** 

18-8 STAIN	ILESS ST	EEL	
DIAMETER	LENGTH	PART NO.	MATCHING DRIVER SIZE
	1/4	2.10314PS	
	3/8	2.10338PS	
	1/2	2.10312PS	
	5/8	2.10358PS	
10 22	3/4	2.10334PS	P2
10-32	1	2.1031PS	r2
	1-1/4	2.103114PS	
	1-1/2	2.103112PS	
	2	2.1032PS	
	2-1/2	2.103212PS	
	3/8	2.10238PS	
	1/2	2.10212PS	
	3/4	2.10234PS	
	1	2.1021PS	
10-24	1-1/4	2.102114PS	P2
	1-1/2	2.102112PS	
	2	2.1022PS	
	2-1/2	2.102212PS	
	3	2.1023PS	
	1/2	2.12212PS	
10.01	3/4	2.12234PS	
12-24	1	2.1221PS	P3
	1-1/2	2.122112PS	2
	1/2	2.14212PS	
	3/4	2.14234PS	-
	1	2.1421PS	-
	1-1/4	2.142114PS	a' -
1/4-20		2.142112PS	P3
	2	2.1422PS	-
	2-1/2	2.142212PS	

#### **TOOLS and KITS**

3-1/2

2.1423PS

2.142312PS

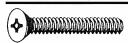
BITS ONLY	
SIZE	PARTNO
#2 Bit Only (1/4" Hex)	28.2
#3 Bit Only (1/4" Hex)	2B.3



We put the fast in fasteners

### PHILLIPS® Security Screws

#### FLAT HEAD/MACHINE SCREWS





#### 18-8 STAINLESS STEEL

				MATCHING DRIVER
I	DIAMETER	LENGTH	PART NO.	SIZE
		1/4	2.63214FS	
		3/8	2.63238FS	i i
		1/2	2.63212FS	
	6-32	3/4	2.63234FS	. P2
	0~52	1	2.6321FS	1.4
		1-1/4	2.632114FS	
		1-1/2	2.632112FS	4:
_		2	2.6322FS	
		3/8	2.83238FS	
		1/2	2.83212FS	
		3/4	2.83234FS	
	8-32	1	2.8321FS	P2
	· 3-	1-1/4	2.832114FS	12
		1-1/2	2.832112FS	
		2	2.8322FS	
		2-1/2	2.832212FS	
Ī				
		3/8	2.10338FS	
		1/2	2.10312FS	-
		3/4	2.10334FS	
	10-32	1	2.1031FS	- - P2
	10-32	1-1/4	2.103114FS	- F2
		1-1/2	2.103112FS	-
		2	2.1032FS	
		2-1/2	2.103212FS	
-		3/8	2.10238FS	
		1/2	2.10212FS	
		3/4	2.10234FS	
		1	2.1021FS	
	10-24	1-1/4	2.102114FS	P2
		1-1/2	2.102112FS	
		2	2.1022FS	
		2-1/2	2.102212FS	
		3	2.1023FS	
-				
,		1/2	2.12212FS	
		3/4	2.12234FS	
	12-24	1.	2.1221FS	P3
		1-1/4	2.122114FS	
		1-1/2	2.122112FS	

### PHILLIPS® Security Screws

#### FLAT HEAD/MACHINE SCREWS

DIAMETER	LENGTII	PART NO.	
	1/2	2.14212FS	
	3/4	2.14234FS	
	1	2.1421FS	
1/4-20	1-1/4	2.142114FS	Р3
1/1-20	1-1/2	2.142112FS	FJ
	2	2.1422FS	
	2-1/2	2.142212FS	
	3	2.1423FS	

# PHILLIPS® Security Screws PAN HEAD/ SHEET METAL SCREWS



TYPE A, 18-8 STAINLESS STEEL

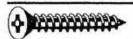
DIAMETER	LENGTH	PART NO.	MATCHING DRIVER SIZE
	1/2	2.6A12PS	
	5/8	2.6A58PS	
	3/4	2.6A34PS	
#6	1	2.6A1PS	P2
	1-1/4	2.6A114PS	
	1-1/2	2.6A112PS	
	2	2.6A2PS	
	3/8	2.8A38PS	
	1/2	2.8A12PS	
	3/4	2.8A34PS	
	1	2.8A1PS	
#8	1-1/4	2.8A114PS	P2
	1-1/2	2.8A112PS	
	2	2.8A2PS	
	2-1/2	2.8A212PS	
	3	2.8A3PS	
	1/2	2.10A12PS	
	3/4	2.10A34PS	
	1	2.10A1PS	
	1-1/4	2.10A114PS	
#10	1-1/2	2.10A112PS	P2
	2	2.10A2PS	
	2-1/2	2.10A212PS	
	3	2.10A3PS	
	3-1/2	2.10A312PS	55

# PHILLIPS® Security Screws PAN HEAD/ SHEET METAL SCREWS

TYPE A, 18-8 STAINLESS STEEL

DIAMETER	LENGTII	PART NO.	MATCHING DRIVER SIZE
	1/2	2.12A12PS	
	3/4	2.12A34PS	
	1	2.12A1PS	
#12	1-1/4	2.12A114PS	. P3
#14	1-1/2	2.12A112PS	ry
	2 2-1/2	2.12A2PS	
	2-1/2	2.12A212PS	
	3	2.12A3PS	
-			
	1/2	2.14A12PS	
	3/4	2.14A34PS	
	1	2.14A1PS	
_	1-1/4	2.14A114PS	
#14	1-1/2	2.14A112PS	Р3
	2-1/2	2.14A2PS	
		2.14A212PS	
	3	2.14A3PS	
		_	

# PHILLIPS® Security Screws FLAT HEAD/ SHEET METAL SCREWS



TYPE A, 18-8 STAINLESS STEEL

DUAMETER	LENGTH	PART NO.	MATCHING DRIVER SIZE	DIAMETER	LENGTH	PART NO.	MATURIN DRIVER SIZE
	1/2	2.6A12FS			1/2	2.12A12FS	
	3/4	2.6A34FS			3/4	2.12A34FS	
#G	1	2.6A1FS	P2		1	2.12A1FS	
	1-1/4	2.6A114FS			1-1/4	2.12A114FS	
	1-1/2	2.6A112FS		#12	1-1/2	2.12A112FS	P3
	2	2.6A2FS		1	2	2.12A2FS	
				1	2-1/2	2.12A212FS	
	1/2	2.8A12FS			3	2.12A3FS	
	3/4	2.8 34FS					
	1	2.8A1FS			1/2	2.14A12FS	
#8	1-1/4	2.BA114FS			3/4	2.14A34FS	
*0	1-1/2	2.8A112FS	. P2		1	2.14A1FS	
	2	2.8A2FS	· F2	#14	1-1/4	2.14A114FS	P3
	2-1/2	2.8A212FS		*14	1-1/2	2.14A112FS	. P5
	3	2.8A3FS			2	2.14A2FS	
		1000		1	2-1/2	2.14A212FS	
	1/2	2.10A12FS			3	2.14A3FS	
	3/4	2.10A34FS					
	1	2.10A1FS					
#10	1-1/4	2.10A114FS	P2				
#10	1-1/2	2.10A112FS	PZ				
	2	2.10A2FS					
	2-1/2	2.10A212FS					
	3	2.10A3FS					

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

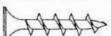
#### **DRYWALL SCREWS**

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#### **PHILLIPS BUGLE HEAD - FINE THREAD**

PART NUMBER	SIZE	CARTON QUANTITY	CARTON WEIGHT	DRIVE SIZE	APPLICATION
DWS-06034 DWS-06100 DWS-06118 DWS-06114 DWS-06158 DWS-06200 DWS-06214	#6 x 3/4" #6 x 1" #6 x 1-1/8" #6 x 1-1/4" #6 x 1-5/8" #6 x 2" #6 x 2-1/4"	10 M 10 M 10 M 8 M 5 M 3.5 M 3 M	29 lbs. 32 lbs. 35 lbs. 31 lbs. 25 lbs. 20 lbs. 22 lbs.	# 2 Phillips	Original and primary application of D/W to 20 - 25 gauge metal studs. Also known as "all-purpose" or "many purpose" screws.
DWS-08212 DWS-08300 DWS-10312 DWS-10334 DWS-10400 DWS-10412 DWS-10500 DWS-10600	#8 x 2-1/2" #8 x 3" #10 x 3-1/2" #10 x 3-3/4" #10 x 4" #10 x 4-1/2" #10 x 5" #10 x 6"	2.5 M 2 M 1 M 1 M 1 M 1 M 1 M 1 M	21 lbs. 24 lbs. 23 lbs. 23 lbs. 24 lbs. 25 lbs. 27 lbs. 31 lbs.	# 2 Phillips	Extra-Length allows user to attach D/W to 20 - 25 gauge metal stud - used in "scab over" applications.





#### PHILLIPS BUGLE HEAD - COARSE THREAD

	CARTON	CARTON WEIGHT	DRIVE SIZE	APPLICATION
" -1/8" -1/4" -1/2" -5/8"	10 M 10 M 8 M 6 M 5 M	32 lbs. 35 lbs. 31 lbs. 24 lbs. 25 lbs.	# 2 Phillips # 2 Phillips # 2 Phillips # 2 Phillips # 2 Phillips	
-3/4" '	4 M 3.5 M	21 lbs. 20 lbs.	# 2 Phillips # 2 Phillips	Original and primary applica
-1/4"	3 M	22 lbs.	# 2 Phillips	Also used in many interio wood and fixture fastening
-1/2" '	2.5 M 2 M	21 lbs. 24 lbs.	# 2 Phillips # 2 Phillips	applications.
3-1/2"	" 1 M	23 lbs.	# 2 Phillips	
3-3/4"		23 lbs.	# 2 Phillips	
4" 4 4 10"	1 M	23 lbs.	# 2 Phillips	
4-1/2" -"		24 lbs.	# 2 Phillips # 2 Phillips	
5" 6"	1 M 1 M	27 lbs. 31 lbs.	# 2 Phillips	

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#### **WOOD FASTENING SCREWS**

	PHILLIPS BUGLE HEAD - LONG LIFE COATING
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PART NUMBER	SIZE	CARTON QUANTITY	CARTON WEIGHT	DRIVE SIZE	APPLICATION
WGD-06100	#6 x 1"	10 M	32 lbs.	# 2 Phillips	
WGD-06118	# 6 x 1-1/8"	10 M	35 lbs.	# 2 Phillips	
WGD-06114	#6 x 1-1/4"	8 M	31 lbs.	# 2 Phillips	
WGD-06158	#6 x 1-5/8"	5 M	25 lbs.	# 2 Phillips	1
WGD-06200	#6 x 2"	3.5 M	23 lbs.	# 2 Phillips	
WGD-06214	#6 x 2-1/4"	3 M	22 lbs.	# 2 Phillips	Any exterior fastening, in-
WGD-08212	#8 x 2-1/2"	2.5 M	24 lbs.	# 2 Phillips	cluding: decks, fences shade structures. Recom-
WGD-08300	#8 x 3"	2 M	25 lbs.	# 2 Phillips	mended for use in treated yellow pine.
WGD-10312	# 10 x 3-1/2"	1 M	23 lbs.	# 2 Phillips	
WGD-10400	# 10 x 4"	1 M	25 lbs.	# 2 Phillips	l
WGD-10412	# 10 x 4-1/2"	1 M	26 lbs.	# 2 Phillips	il i
WGD-10500	# 10 x 5"	1 M	28 lbs.	# 2 Phillips	1
WGD-10600	# 10 x 6"	1 M	21 lbs.	# 2 Phillips	1



#### **HEX WASHER HEAD SLOTTED** - ZINC PLATED

PART NUMBER	SIZE	CARTON QUANTITY	CARTON WEIGHT	DRIVE SIZE	APPLICATION
HHS-07012	# 7 x 1/2"	15 M	38 lbs.	1/4" Hex	
HHS-08012	#8 x 1/2"	10 M	31 lbs.	1/4" Hex	
HHS-08034	#8 x 3/4"	10 M	38 lbs.	1/4" Hex	1
HHS-08100	#8 x 1"	8 M	38 lbs.	1/4" Hex	
HHS-08112	#8 x 1-1/2"	5 M	32 lbs.	1/4" Hex	For H.V.A.C. or other thir gauge metal fastener
HHS-08200	#8 x 2"	3 M	26 lbs.	1/4" Hex	Screws have a needle point for self piercing of sheetmeta
HHS-10012	# 10 x 1/2"	8 M	33 lbs.	5/16" Hex	in a range of .0209 to .0359.
HHS-10034	# 10 x 3/4"	6 M	32 lbs.	5/16" Hex	
HHS-10100	# 10 x 1"	5 M	33 lbs.	5/16" Hex	
HHS-10112	# 10 x 1-1/2"	3 M	27 lbs.	5/16" Hex	
HHS-10200	# 10 x 2"	2 M	23 lbs.	5/16" Hex	

#### SLOTTED HEX HEAD ZIP SCREWS IN STOCK PAINTED

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#### **SELF DRILLING SCREWS**



#### PHILLIPS BUGLE HEAD - BLACK PHOSPHATE

APPLICATION	DRIVE SIZE	CARTON WEIGHT	CARTON QUANTITY	SIZE	PART NUMBER
Recommended for the ap	# 2 Phillips	32 lbs.	10 M	#6 × 1"	BDB-06100
plication of D/W or Gy	# 2 Phillips	35 lbs.	10 M	#6 x 1-1/8"	BDB-06118
board to 12 -20 gauge meta	# 2 Phillips	31 lbs.	8 M	#6 x 1-1/4"	EDB-06114
studs.	# 2 Phillips	25 lbs.	5 M	# 6 x 1-5/8"	BDB-06158
2500 rpm is recommended	# 2 Phillips	22 lbs.	4 M	#6 x 1-7/8"	BDB-06178
maximum drive speed; car	# 2 Phillips		1		1
also be used in wood to meta		24 lbs.	3 M	#8 x 2-3/8"	BDB-08238
fastening where wood is pre drilled.	#2 Phillips	20 lbs.	2 M	#8 x 2-5/8"	BDB-08258
Marineo.	# 2 Phillips	24 lbs.	2 M	#8 x 3"	BDB-08300

	IIIIII PH	IILLIPS MOD	OIFIED TRUS	SS HEAD	BLACK PHOSPHATE or ZINC-PLATED
MTD-08012	# 8 x 1/2"	10 M	37 lbs.	# 2 Phillips	For the application of metal lathe to heavy 12 - 20 gauge metal studs. Recommended drive speed is 2500 rpm.
MTD-08034	# 8 x 3/4"	10 M	48 lbs.	# 2 Phillips	
MTD-08100	# 8 x 1"	8 M	43 lbs.	# 2 Phillips	
MTD-08114	# 8 x 1-1/4"	6 M	39 lbs.	# 2 Phillips	
MTD-08158	# 8 x 1-5/8"	3 M	24 lbs.	# 2 Phillips	

### Managara 3

#### PHILLIPS BUGLE HEAD - ZINC PLATED

PART NUMBER	SIZE	CARTON QUANTITY	CARTON WEIGHT	DRIVE	APPLICATION
BDZ-06100	# 6 x 1"	10 M	32 lbs.	# 2 Phillips	Recommended for application on D/W or Gyp board to 12 - 20 gauge metal studs; To be used when end-user requires additional corrosion resistance of zinc plating. Recommended maximum drive speed is 2500
BDZ-06118	# 6 x 1-1/8"	10 M	35 lbs.	# 2 Phillips	
BDZ-06114	# 6 x 1-1/4"	8 M	31 lbs.	# 2 Phillips	
BDZ-06158	# 6 x 1-5/8"	5 M	25 lbs.	# 2 Phillips	
BDZ-06178	# 6 x 1-7/8"	4 M	22 lbs.	# 2 Phillips	
BDZ-08238	# 8 x 2-3/8"	3 M	24 lbs.	# 2 Phillips	rpm.
BDZ-08258	# 8 x 2-5/8"	2 M	20 lbs.	# 2 Phillips	
BDZ-08300	# 8 x 3"	2 M	24 lbs.	# 2 Phillips	





#### PHILLIPS PAN HEAD FRAMER - BLACK PHOSPHATE

PART NUMBER	SIZE	CARTON QUANTITY	CARTON WEIGHT	DRIVE	APPLICATION	
FDB-07716	#7 x 7/16"	15 M	40 lbs.	# 2 Phillips	For heavy 16 - 20 gauge metal stud. Recommended maximum 2500 rpm drive speed.	





#### PHILLIPS PAN HEAD FRAMER - ZINC PLATED

PART NUMBER	SIZE	CARTON QUANTITY	CARTON WEIGHT	DRIVE SIZE	APPLICATION	
FDZ-07716	#7 x 7/16"	15 M	40 lbs.	# 2 Phillips	For heavy 16 - 20 gauge metal stud. Recommended maximum 2500 rpm drive speed.	



### **Anchor Selection Guide**

ANCHOR TYPE	HAMMER DRIVE	ALUMINUM DRIVE	DRIVE PIN	RIBBED PLASTIC ANCHOR	SUPER PLASTIC ANCHOR	MUNGO NYLON PLUG (MN)		
PRODUCT INFORMATION	A mushroom head anchor that is relatively tamperproof. Available with standard Zinc Plated Steel nail or Stainless Steel nail.	Aluminum body with 5/8" diameter mushroom head. Stainless Steel expander pin is available.	Hardened steel pin with a 3/8" diameter washer. Does not require pre-drilling.	For light duty fastering. Ribs provide extra holding power. Available with or without lip.	One of the finest plastic anchors available. Top and bottom of anchor expand to provide 4 expansion points.	Top quality nylon anchor that saves time in installation. The MN is an ideal alternative to many anchoring systems including lag shields and machine screws anchors.		
FOR USE WITH	Requires no other fastener	Requires no other fastener	Requires no other fastener	Sheet Metal, Wood or Lag Screw	Sheet Metal, Wood or Lag Screw	Machine Screws, Sheet Metal Screws, Lag Screws, Woodscrews, Threaded Rod		
FOR USE IN	Concrete, Brick, Block, Stone	Concrete, Masonry	Concrete, Brick, Block	Concrete, Brick, Masonry, Drywall	Concrete, Brick, Masonry, Drywall	Concrete, Brick, Stone		
MADE OF	High grade Zinc Alloy and Steel	Aluminum and Stainless Steel	Steel	Plastic	Plastic	Virgin Nylon		
SIZE RANGE	3/16" x 7/8" to 1/4" x 2"	1/4" x 1" to 1/4" x 1 1/2"	1/4" x 1/2" to 1/4" x 3"	#6-8 x 7/8" to #14-16 x 1 1/4"	#4-#6-#8 x 1" to #12-#14-#16 x 1 1/2"	5/32" x 3/4" to 3/4" x 3 9/16"		

ANCHOR TYPE	MUNGO HAMMER SCREW (MNA)	TOGGLE BOLT	HOLLOW WALL	KAP TOGGLE	MUNGO JET PLUG (MJP)	MUNGO UNIVERSAL PLUG (MU)
PRODUCT INFORMATION	The MNA is superior to comparable products. It has a reinforced screw head that facilitates high knock-in loads. Screw head is phillips Pozi-Drive.	Fully threaded machine screws with Zinc plated wings. For medium duty fastening in hollow walls.	For light duty fastening in hollow wall. Can be expanded with screw- driver or setting tool.	For light to medium duty applications. Fast positive action.	Fast no drilling for light duty fastening. Sets with screwdriver. Conveniently packaged for all job sizes. Heatproof.	Top quality universal nylon plug for use with various building materials. Screw must exceed fitting and plug by 1/4".
FOR USE WITH	Requires no other fastener	Requires no other fastener	Requires no other fastener	Machine screws	Sheet metal screws	Coarse thread screws
FOR USE IN	Concrete, Solid Brick, Block	Wallboard, Hollow- block, Plaster	Wallboard, Plaster, Paneling	Hollow wall, Floor Panels	Sheetrock, Gypsum, Chipboard, Aerated Concrete, Plaster	Aerated Concrete, Hollow Brick, Drywall, Plaster
MADE OF	Virgin Nylon & Steel (Available in Stainless Steel)	Steel	Steel	Nylon, Steel	Zinc	Virgin Nylon
SIZE RANGE	3/16" x 1 3/16" to 5/16" x 5 1/2"	1/8" x 2" to 1/2" x 6"	1/8" x short to 1/4" x Long	1/8", 3/16",1/4"	#8	1/4" x 1 3/4" to 3/8" x 2 3/8"





# **Anchor Selection Guide**

				* /	2//	
ANCHOR TYPE	WEDGE	DROP-IN	LAG SHIELD	SLEEVE	CONCRETE SCREW	LEAD WOODSCREW
PRODUCT INFORMATION	One piece expansion both with universal style collar for heavy duty fastening applications.	Female style anchor with an internal plug for beavy duty applications.	A high quality zinc alloy anchor for light to medium fastening applications. Expands by sightening screw or bolt.	Heavy duty anchor available in many head styles. Does not require a solid base material for installation.	For medium to light duty applications. Available in hex or flat head. Corrosive resistant coating.	For light duty fastening applications, Can be used in irregular shaped holes due to the soft nature of the lead alloy.
FOR USE WITH	Requires no other fastener	Machine screw or bolt	Lag bolt	Requires no other fastener	Requires no other fastener	Wood, sheet metal or lag screw
FOR USE IN	Concrete, Stone	Concrete, Stone	Concrete, Brick, Mortar joint	Concrete, Brick, Block, Stone	Concrete, Brick, Block	Concrete, Brick, Block, Stone
MADE OF	Steel, 303 & 316 S.S., Galvanized	Steel, 303 S.S.	Rustproof Zinc Alloy	Steel, 304 S.S.	Steel	Lead alloy
SIZE RANGE	1/4" x 1 3/4" to 1 1/4" x 12"	1/4" to 3/4"	1/4" to 3/4"	1/4" x 7/8" to 3/4" x 6 1/4"	3/16" x 1 1/4" to 1/4" x 5"	#6-8 x 3/4" to #16-18 x 1 1/2"

	13				1	
ANCHOR TYPE	PLASTIC TOGGLE	SPLIT FAST ANCHOR	SELF - DRILLING	SINGLE / DOUBLE EXPANSION	NYLON NAIL	MACHINE SCREW
PRODUCT INFORMATION	Toggle type anchor for light duty fastening in hollow walls.	Easily hammered into a predrilled hole. Available in flat or round head.	Snap off style self- drilling anchor, No need for a previously drilled hole.	A high quality zinc alloy anchor that is easy to install. Sets by tightening screw or bolt.	A light dury fastener for use in most mediums, Available in mushroom, flat and round head.	A caulking type unchor with a Zinc alloy cone and a Lead ring.
FOR USE WITH	Sheet Metal screw	Requires no other fastener	Machine screw or bolt	Machine screw or bolt	Requires no other fastener	Machine screw or bolt
FOR USE IN	Waliboard, Plaster	Concrete, Stone	Concrete	Concrete, Block, Stone, Brick	Concrete, Brick, Block, Wallboard, Plaster	Concrete, Block, Stone, Brick
MADE OF	Polypropylene	Steel	Steel	Rustproof Zinc Alloy	Nylon and Steel	Zinc Alloy and Lead
SIZE RANGE	1/8" to 5/8"	3/16" x 1" to 1/4" x 4"	1/4" to 3/4"	1/4" to 3/4"	3/16" x 1" to 1/4" x 4"	6-32 to 3/4" - 10



## **Anchors**

# **WEDGE ANCHORS**



WEDGE
ANCHORS
ARE
STOCKED
IN BOTH
CARBON STEEL
AND
STAINLESS
STEEL

CARBON STEEL ITEM CODE	303 STAINLESS STEEL ITEM CODE	316 STAINLESS STEEL ITEM CODE	HOT DIPPED GALVANIZED ITEM CODE	DIAMETER & LENGTH	MINIMUM EMBEDMENT	THREAD LENGTH
W1416 W1422 W1432	W1416S W1422S W1432S	W1416S3 W1422S3		1/4" x 1 3/4" 1/4" x 2 1/4" 1/4" x 3 1/4"	1 1/8" 1 1/8" 1 1/8"	3/4" 3/4" 3/4"
W3822 W3826 W3830 W3836 W3850 W3864	W3822S W3826S W3830S W3836S W3850S W3864S	W3826S3 W3830S3 W3836S3 W3850S3		3/8" x 2 1/4" 3/8" x 2 3/4" 3/8" x 3 3/4" 3/8" x 3 3/4" 3/8" x 5" 3/8" x 6 1/2"	1 1/2" 1 1/2" 1 1/2" 1 1/2" 1 1/2" 1 1/2"	7/8" 1 1/8" 1 1/8" 1 1/8" 1 1/8" 1 1/8"
W1226 W1236 W1242 W1254 W1270 W1284 W12100 W12 120	W1226S W1236S W1242S W1254S W1270S W1284S W12100S W12120S	W1226S3 W1236S3 W1242S3 W1254S3 W1270S3	W1226G W1242G W1254G W1270G	1/2" x 2 3/4" 1/2" x 3 3/4" 1/2" x 4 1/4" 1/2" x 5 1/2" 1/2" x 7" 1/2" x 8 1/2" 1/2" x 10" 1/2" x 12"	2 1/4" 2 1/4" 2 1/4" 2 1/4" 2 1/4" 2 1/4" 2 1/4" 2 1/4"	1 1/4" 1 1/4" 1 1/4" 1 1/4" 1 1/4" 1 1/4" 1 1/4"
W5834 W5844 W5850 W5860 W5870 W5884 W58100 W58120	W5834S W5844S W5850S W5860S W5870S W5884S W58100S W58120S	W5834S3 W5844S3 W5850S3 W5860S3 W5870S3 W5884S3	W5834G W5850G W5860G	5/8" x 3 1/2" 5/8" x 4 1/2" 5/8" x 5" 5/8" x 6" 5/8" x 7" 5/8" x 8 1/2" 5/8" x 10" 5/8" x 12"	2 3/4" 2 3/4" 2 3/4" 2 3/4" 2 3/4" 2 3/4" 2 3/4" 2 3/4"	2" 2" 2" 2" 2" 2" 2"
W3442 W3446 W3454 W3462 W3470 W3484 W34100 W34120	W3442S W3446S W3454S W3462S W3470S W3484S W34100S	W3442S3 W3446S3 W3454S3 W3470S3 W3484S3	W3446G W3454G W3484G	3/4" x 4 1/4" 3/4" x 4 3/4" 3/4" x 5 1/2" 3/4" x 6 1/4" 3/4" x 7" 3/4" x 8 1/2" 3/4" x 10" 3/4" x 12"	3 1/4" 3 1/4" 3 1/4" 3 1/4" 3 1/4" 3 1/4" 3 1/4" 3 1/4"	2" 2" 2" 2" 2" 2" 2"
W7860 W7880 W78100	W7860S W7880S W78100S		W7860G W7880G	7/8" x 6" 7/8" x 8" 7/8" x 10"	3 7/8" 3 7/8" 3 7/8"	2 1/4" 2 1/4" 2 1/4"
W10060 W10090 W100120 W100150	W10060S W10090S W100120S		W10090G	1" x 6" 1" x 9" 1" x 12' 1" x 15"	4 1/2" 4 1/2" 4 1/2" 4 1/2"	2 1/4" 2 1/4" 2 1/4" 2 1/4"
W11490 W114120				1 1/4" x 9" 1 1/4" x 12"	5 1/2" 5 1/2"	3 1/4" 3 1/4"

### TECHNICAL DATA

	ULTIMATE LOAD VALUES								
ANCHOD	CHREDHENT	MBEDMENT TORQUE		PSI	4000 PSI		6000 PSI		
ANCHOR DIAMETER (IN)	DEPTH (IN)	FT/LB	TENSION (LBS.)	SHEAR (LBS.)	TENSION (LBS.)	SHEAR (LBS.)	TENSION (LBS.)	SHEAR (LBS.)	
	1-1/8		1170	1443	1771	1813	2773	2635	
1/4	1-3/4	5-10	1841	1443	2408	1813	2773	2635	
	2-3/4		1975	1443	2748	1813	2830	2635	
	1-1/2		1631	4318	3636	5121	4448	6232	
3/8	3	25-30	3229	4318	5653	5121	5975	6232	
	5		4074	4318	6328	5121	6360	6232	
1/2	2-1/4		3999	7419	6714	9377	9616	9888	
	4	50-60	6336	7419	8942	9377	10192	9888	
=	6		6902	7419	10175	9377	12064	9888	
	2-3/4	<b>7</b> 5-90	4999	8264	8747	12928	9760	16373	
5/8	5		8854	8264	15590	12928	16802	16373	
	7		9381	8264	16710	12928	17732	16373	
	3-1/4		6638	12504	11314	17050	16230	22965	
3/4	6	150-175	10084	12504	18408	17050	21092	22965	
	8		11170	12504	19805	17050	22522	22965	
	3-7/8		8392	18250	16354	20234	16801	23980	
7/8	5-3/4	200-250	12064	18250	18250	20234	23404	23980	
	8-3/4		12784	18250	16850	20234	25575	23980	
	5-1/2		9773	23617	18250	27605	27460	28909	
1	7-1/2	250-300	11890	23617	26726	27505	34960	28909	
	10		15590	23617	30491	27605	37840	28909	
	5-1/2		17550	32275	22971	42690	32368	55566	
1-1/4	7	400-450	21050	32275	27845	42690	48366	55566	
	10		27893	32275	34788	42690	61272	55566	

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## KINGPIN U.S. ANCHOR CORP.

# **Anchors**

# HAMMER DRIVE ANCHORS



HAMMER DRIVES WITH ZINC PLATED NAILS							
ITEM CODE	ANCHOR DIAMETER & LENGTH	HOLE SIZE	GRIP RANGE				
H3107	3/16" x 7/8"	3/16"	0-1/8"				
H1406	1/4" x 3/4"	1/4"	0-1/8"				
H1410	1/4" x 1"	1/4"	1/8" - 1/4"				
H1412	1/4" x 1 1/4"	1/4"	1/4" - 1/2"				
H1414	1/4" x 1 1/2"	1/4°	1/2" - 3/4"				
H1420	1/4" x 2"	1/4"	3/4" - 1 1/4				

ITEM CODE	ANCHOR DIAMETER & LENGTH	HOLE SIZE	GRIP RANGE
H1406S	1/4" x 3/4"	1/4"	0 - 1/8"
H1410S	1/4" x 1"	1/4"	1/8" - 1/4"
H1412S	1/4" x 1 1/4"	1/4"	1/4" - 1/2"
H1414S	1/4" x 1 1/2"	1/4"	1/2" - 3/4"
H1420S	1/4" x 2"	1/4"	3/4" - 1 1/4"

GSA Spec. FF-S-325, Group V, Type 2, Class 3

ULTIMATE LOAD VALUES 4000 PSI CONCRETE							
ANCHOR	EMBEDMENT	TENSION	SHEAR				
	3/4"	1104	1289				
1/4"	1" 1 1/4"	1373 1375	1394 1399				

# **SLEEVE ANCHORS**







SLEEVE
ANCHORS
ARE
STOCKED
IN BOTH
CARBON STEEL
AND
STAINLESS
STEEL

	CARBO	N STEEL		3045	S	ULTIMATE	LOAD			
ACORN HEAD ITEM CODE	HEX HEAD ITEM CODE	FLAT HEAD ITEM CODE	ROUND HEAD ITEM CODE	HEX HEAD ITEM CODE	FLAT HEAD ITEM CODE	TENSION 3500 PSI (LBS.) CONCRETE	SHEAR 3500 PSI (LBS.) CONCRETE	DIAMETER & LENGTH	MINIMUM Embedment	BOLT DIA.
SA1407					10	800	1500	1/4" X 7/8"	3/4"	3/16*
			SR1412			1300	1500	1/4" X 1 1/4"	1"	3/16"
SA1413		SF1413		SH1413S		1300	1500	1/4" X 1 3/8"	1*	3/16*
		SF1420	SR1420	1	SF1420S	1300	1500	1/4" X 2"	1"	3/16"
		SF1420T				1300	1500	1/4" X 2" thishld	1"	3/16"
SA1422						1300	1500	1/4" x 2 1/4"	1"	3/16"
			SR1426			1300	1500	1/4" x 2 3/4"	1"	3/16"
		SF1430			SF1430S	1300	1500	1/4" x 3"	1"	3/16"
		SF1440				1300	1500	1/4" x 4"	. 1'	3/16*
	SH5614		100			1700	2000	5/16" x 1 1/2"	1"	1/4"
	SH5624					1700	2000	5/16" x 2 1/2"	1'	1/4"
	SH3817			SH3817S		2400	3000	3/8" x 1 7/8"	1 1/4"	5/16"
			SR3824		1	2400	3000	3/8" x 2 1/2"	1 1/4"	5/16"
	Ť.	SF3826			SF3826S		0 0	3/8" x 2 3/4"	1 1/4"	5/16"
	SH3830	SF3830		SH3830S		2400	3000	3/8" x 3"	1 1/4"	5/16*
			SR3836	1			et s	3/8" x 3 3/4"	1 1/4"	5/16"
	SH3840	SF3840			SF3840S	2400	3000	3/8" x 4"	1 1/4"	5/16"
			SR3846		1	2400	3000	3/8" x 4 3/4"	1 1/4"	5/16"
		SF3850				2400	3000	3/8" x 5"	2"	5/16*
		SF3860	ł	1		2400	3000	3/8" x 6"	2"	5/16"
	SH1222			SH1222S		4700	5200	1/2" x 2 1/4"	1 1/2"	3/8"
	SH1230					4700	5200	1/2" x 3"	1 1/2"	3/8*
	SH1240	1		SH1240S		4700	5200	1/2" x 4"	1 1/2"	3/8"
	SH1260					4700	5200	1/2" x 6"	3"	3/8"
	SH5822					5900	10,100	5/8" x 2 1/4"	2"	1/2"
	SH5830			-		5900	10,100	5/8" x 3"	2"	1/2"
	SH5842			SH5842S		5900	10,100	5/8" x 4 1/4"	3 1/2"	1/2*
	SH5860					5900	10,100	5/8" x 6"	3 1/2"	1/2*
	SH3424			1	1	9200	15,000	3/4" x 2 1/2"	2 <sup>*</sup>	5/8"
	SH3442					9200	15,000	3/4" x 4 1/4"	3 1/2"	5/8"
	SH3462					9200	15,000	3/4" x 6 1/4"	3 1/2"	5/8"

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# KINGPIN U.S. ANCHOR CORP.

## **Anchors**

# LEAD WOOD SCREW ANCHORS



ITEM CODE	SCREW SIZES	HOLE SIZE	ANCHOR LENGTH
WS6806	#6-#8	1/4"	3/4"
WS6810	#6-#8	1/4"	1"
WS6814	#6-#8	1/4"	1 1/2"
WS1006	#10-#12-#14	5/16"	3/4"
WS1010	#10-#12-#14	5/16"	1"
WS1014	#10-#12-#14	5/16"	1 1/2"
WS1610	#16-#18	3/8"	1"
WS1614	#16-#18	3/8"	1 1/2"

# **ALUMINUM DRIVE ANCHORS**



ANCHOR DIAMETER & LENGTH	HOLE SIZE	NOMINAL GRIP
1/4" x 1"	1/4"	7/8*
1/4" x 1 1/4"	1/4*	1 1/8"
1/4" x 1 1/2"	1/4*	1 3/8"
	& LENGTH 1/4" x 1" 1/4" x 1 1/4"	& LENGTH HOLE SIZE  1/4" x 1" 1/4"  1/4" x 1 1/4" 1/4"

# SINGLE EXPANSION ANCHORS



ITEM CODE	INTERNAL DIAMETER	HOLE SIZE	ANCHOR LENGTH
SE14	1/4"	1/2"	1 5/16"
SE56	5/16"	5/8"	1 1/2"
SE38	3/8"	5/8"	1 1/2"
SE12	1/2"	7/8"	2"
SE58	5/8"	1"	2 5/8"
SE34	3/4"	1 1/4"	2 3/4"

ULTIMATE LOAD VALUES									
			ULTIMA	TE LOAD					
ANCHOR	ANCHOR/	Concrete	3700 PSI	Hollow	Block				
	DRILL DIA.	Tension (Lbs.)	Shear (Lbs.)	Tension (Lbs.)	Shear (Lbs.)				
SE14	1/2"	1760	2120	833	1215				
SE56	5/8"	2080	3200	4					
SE38	3/4"	2310	3800		-				
SE12	7/8"	3600	8100						
SE58	1"	5980	12,000	6 4					
SE34	1 1/4"	8910	15,200	8 5	-				

# **DOUBLE EXPANSION ANCHORS**



ITEM CODE	INTERNAL DIAMETER	HOLE SIZE	ANCHOR LENGTH
DE14	1/4"	1/2"	1"
DE56	5/16"	5/8"	1 1/4"
DE38	3/8"	3/4*	2"
DE12	1/2"	7/8*	2"
DE58	5/8"	1"	2 1/4"
DE34	3/4"	1 1/4"	2 7/8"

# NYLON NAIL ANCHORS



ITEM CODE	DIAMETER & LENGTH	HEAD DIAMETER	HOLE SIZE
	MUSHROOM	HEAD SIZES	
N3110M	3/16" X 1"	9/16"	3/16⁵
N3114M	3/16" X 1/2"	9/16"	3/16*
N1406M	1/4" X 3/4"	9/16"	1/4"
N1410M	1/4" X 1"	9/16"	1/4"
N1414M	1/4" X 1 1/2"	9/16"	1/4"
N1420M	1/4" X 2"	9/16"	1/4"
N1430M	1/4" X 3"	9/16"	1/4"
T I MILES	ROUND HE	EAD SIZES	
N3110R	3/16" x 1"	3/8"	3/16"
N3114R	3/16" x 1 1/2*	3/8"	3/16"
N1410R	1/4" x 1"	7/16"	1/4"
N1414R	1/4" x 1 1/2"	7/16"	1/4"
N1420R	1/4" x 2"	7/16"	1/4°
	FLAT HE	AD SIZES	
N3110F	3/16" x 1"	3/8°	3/16"
N3114F	3/16" x 1 1/2"	3/8"	3/16"
N1410F	1/4" x 1"	7/16*	1/4*
N1414F	1/4" x 1 1/2"	7/16"	1/4"
N1420F	1/4" x 2"	7/16°	1/4"

# RIBBED PLASTIC ANCHORS



ITEM CODE	DIAMETER & LENGTH	HOLE SIZE	TO USE WITH SCREW SIZES	COLOR
	RIBBED PLAST	TC ANCHORS	WITH LIP	
RPA68BX	3/16" x 7/8"	3/16"	#6 - #8	GRAY
RPA68BXR	3/16" x 7/8"	3/16"	#6 - #8	RED
RPA68BG	3/16" x 7/8"	3/16"	#6 - #8	GRAY
RPA68BGR	3/16" x 7/8"	3/16"	#6 - #8	RED
RPA68BL	3/16" x 7/8"	3/16"	#6 - #8	GRAY
RPA68BLR	3/16" x 7/8"	3/16"	#6 - #8	RED
RPA1012BX	1/4" x 1"	1/4"	#10 - #12	GRAY
RPA1012BXR	1/4" x 1"	1/4"	#10 - #12	RED
RPA1012BG	1/4" x 1"	1/4"	#10 - #12	GRAY
RPA1012BGR	1/4" x 1"	1/4"	#10 - #12	RED
RPA1012BL	1/4" x 1"	1/4"	#10 - #12	GRAY
RPA1012BLR	1/4" x 1"	1/4"	#10 - #12	RED
RPA1416BX	5/16" x 1 1/4"	5/16"	#14 - #16	GRAY
RPA1416BXR	5/16" x 1 1/4"	5/16"	#14 - #16	RED
RPA1416BG	5/16" x 1 1/4"	5/16°	#14 - #16	GRAY
RPA1416BGR	5/16" x 1 1/4"	5/16"	#14 - #16	RED
RPA1416BL	5/16" x 1 1/4"	5/16"	#14 - #16	GRAY
RPA1416BLR	5/16" x 1 1/4"	5/16"	#14 - #16	RED
	RIBBED PLASTIC	ANCHORS W	VITHOUT LIP	
RPANL68BX	3/16" x 7/8"	3/16"	#6 - #8	GRAY
RPANL68BG	3/16" x 7/8"	3/16"	#6 - #8	GRAY
RPANL68BL	3/16" x 7/8"	3/16"	#6 - #8	GRAY
RPANL1012BX	1/4" x 1"	1/4*	#10 - #12	GRAY
RPANL1012BG	1/4" x 1"	1/4*	#10 - #12	GRAY
RPANL1012BL	1/4" x 1"	1/4"	#10 - #12	GRAY
RPANL1416BX	5/16" x 1 1/4"	5/16"	#14 - #16	GRAY
RPANL1416BG	5/16" x 1 1/4"	5/16"	#14 - #16	GRAY
RPANL1416BL	5/16" x 1 1/4"	5/16"	#14 - #16	GRAY

# Fastener Systems, Inc.

640 Snyder Avenue Bolmar Industrial Center West Chester, PA 19382

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



### **Anchors**

# **ACOUSTICAL WEDGE ANCHORS**

ITEM CODE

W1422A

DIAMETER & LENGTH

1/4" X 2 1/4"



1 1/8"

DIA.	MINIMUM EMBEDMENT	EYE DIAMETER

1/4"

<b>SLEEVE TYPE</b>
<b>ROD HANGERS</b>

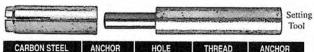


ITEM CODE	DIAMETER & LENGTH	DRILL DIAMETER	OPEN END DIAMETER OR ROD	MINIMUM EMBEDMENT
RH5614	5/16" x 1 1/2"	5/16"	1/4"	1"
RH3838	3/8" x 1 7/8"	3/8"	3/8"	1 1/4"
RH1212	1/2" x 2 1/4"	1/2"	1/2"	1 1/2"
RH5858	5/8" x 2 1/4"	5/8"	5/8"	2"

# DROP-IN ANCHORS - CARBON STEEL

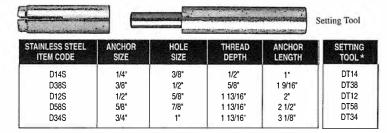
DRILL DIA.

1/4"



CARBON STEEL ITEM CODE	ANCHOR SIZE	HOLE SIZE	THREAD DEPTH	ANCHOR LENGTH
D14	1/4"	3/8"	1/2"	1*
D38	3/8"	1/2"	5/8"	1 9/16"
D12	1/2"	5/8 <sup>s</sup>	1 3/16"	2"
D58	5/8"	7/8"	1 3/16"	2 1/2"
D34	3/4"	1"	1 3/16"	3 1/8"

# DROP-IN ANCHORS - 303 STAINLESS STEEL



ULTIMATE LOADS TABLE					
ANCHOR	ANCHOR	EMBEDMENT	4500	) PSI	
TYPE	DIAMETER	DEPTH	TENSION	SHEAR	
18814200	1/4"	1"	2551	2422	
	3/8"	1-9/16"	4698	5117	
DROP-IN	1/2"	2"	9472	7812	
	5/8"	2-1/2"	9936	15229	
	3/4"	3-1/8"	12798	16087	

# **SELF-DRILLING ANCHORS**



ITEM CODE	ANCHOR SIZE	OUTSIDE DIAMETER	OVERALL LENGTH	THREAD DEPTH
S14	1/4"	7/16"	1 7/32"	1/2"
S56	5/16"	1/2"	1 7/16"	9/16"
S38	3/8"	9/16"	1 1/2"	5/8"
\$12	1/2"	11/16"	2"	7/8"
S58	5/8"	7/8"	2 7/16"	1"
S34	3/4"	1"	3 3/16"	1"

# **MACHINE SCREW ANCHORS**



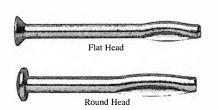
STREET, ST	ITEM CODE	INTERNAL DIAMETER	HOLE SIZE	MINIMUM HOLE	SETTIN TOOL
Γ	M6	6-32	5/16"	1/2"	MT6
	M8	8-32	5/16"	1/2"	MT8
	M10	10-24	3/8"	5/8"	MT10
	M14	14-20	1/2"	7/8"	MT14
	M56	5/16-18	5/8"	1"	MT56
ı	M38	3/8 -16	3/4"	1 1/4"	MT38
١	M12	1/2-13	7/8"	1 1/2"	MT12
ł	M58	5/8-11	1 1/8"	2"	MT58
1	M34	3/4-10	1 1/4"	2 1/4"	MT34

ULTIMATE LOAD VALUES						
	ANCHOR /	ULTIMATE LOAD (LBS ) 3500				
ANCHOR	DRILL DIA.	TENSION	SHEAR			
M6	5/16"	406	590			
MB	5/16"	790	700			
M10	3/8"	970	1190			
M14	1/2"	2200	2100			
M56	5/8"	3100	2400			
M38	3/4"	5500	4300			
M12	7/8"	6310	5000			
M58	1 1/8"	7440	12,900			



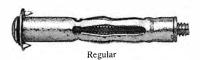
## **Anchors**

# **SPLIT FAST ANCHORS**



ITEM CODE	DIAMETER & LENGTH	HOLE SIZE	MINIMUM EMBEDMENT
	FLAT HEAD	SIZES	
SD3110F	3/16" x 1"	3/16"	7/8"
SD3114F	3/16" x 1 1/2"	3/16"	7/8"
SD3120F	3/16" x 2"	3/16"	7/8*
SD3124F	3/16" x 2 1/2"	3/16"	7/8"
SD3130F	3/16" x 3"	3/16"	7/8"
SD141 4F	1/4" x 1 1/2"	1/4"	1 1/8"
SD1420F	1/4" x 2"	1/4"	1 1/8"
SD1424F	1/4" x 2 1/2"	1/4"	1 1/8"
SD1430F	1/4" x 3"	1/4"	1 1/8"
SD143 4F	1/4" x 3 1/2°	1/4"	1 1/8"
SD1440F	1/4" x 4"	1/4"	1 1/8"
	ROUND HEAD	SIZES	
SD1412R	1/4" x 1 1/4"	1/4"	1 1/8"
SD141 4R	1/4" x 1 1/2"	1/4"	1 1/8"
SD1420R	1/4" x 2"	1/4"	1 1/8"
SD1424R	1/4" x 2 1/2"	1/4"	1 1/8"

# HOLLOW WALL ANCHORS







ITEM CODE	ANCHOR SIZE	SCREW SIZE & LENGTH	HOLE SIZE	ANCHOR BODY LENGTH	GRIP RANGE	HEAD STYLE
		HOLL	OW WALL AND	CHORS		
HW18XS	1/8 XShort	6-32 x 1"	5/16"	3/4"	1/16" - 1/4"	Pan/Combo
HW18S	1/8 Short	6-32 x 1 1/2"	5/16"	1 1/4"	1/8" - 1/2"	Pan/Combo
HW18SH	1/8 Short	6-32 x 1 1/2"	5/16"	1 1/4"	1/8" - 1/2"	Hex
HW18L	1/8Long	6-32 x 2"	5/16"	1 5/8"	5/8" - 7/8"	Pan/Comb
HW18LH	1/8 Long	6-32 x 2"	5/16"	1 5/8"	5/8" - 7/8"	Hex
HW1 8SL	1/8 SLong	6-32 x 2"	5/16"	1 3/4"	1/8" - 13/16"	Pan/Comb
HW18XL	1/8 XLong	6-32 x 2 1/2"	5/16"	2 1/4"	1 1/4" - 1 1/2"	Pan/Comb
HW31S	3/16 Short	10-24 x 2 1/4"	3/8"	2 1/16"	1/8" - 5/8"	Pan/Comb
HW31L	3/16 Long	10-24 x 2 3/4"	3/8"	2 1/2"	5/8" - 1 3/16"	Pan/Comb
HW31 XL	3/16 XLong	10-24 x 3 1/2"	3/8"	3 1/8"	1 1/4" - 1 3/4"	Pan/Comb
HW14S	1/4 Short	1/4-20 x 2 1/4"	1/2"	2 1/16"	1/8" - 5/8"	Pan Comb
HW14L	1/4 Long	1/4-20 x 2 3/4"	1/2"	2 1/2"	5/8" - 1 3/16"	Pan/Comb
HW14XL	1/4 XLong	1/4-20 x 3 1/2"	1/2"	3 1/8"	1 1/4" - 1 3/4"	Pan/Comb
		HOLLOW	WALL DRIVE	ANCHORS		
HWD18XS	1/8 XShort	6-32 x 1 3/8"	5/16"	3/4"	1/16" x 1/4"	Pan/Comb
HWD1 8S	1/8 Short	6-32 x 1 3/4"	5/16"	1 1/4"	1/8" x 1/2"	Pan/Comb
HWD18SH	1/8 Short	6-32 x 1 3/4"	5/16"	1 1/4"	1/8" - 1/2"	HEX
HWD18L	1/8 Long	6-32 x 2 11/32"	5/16"	1 3/4"	5/8" - 7/8"	Pan/Comb
HWD18SL	1/8 SLong	6-32 x 2 11/32"	5/16"	1 3/4"	1/8" - 13/16"	Pan/Comb
HWD18SLH	1/8 SLong	6-32 x 2 11/32*	5/16"	1 3/4°	1/8" - 13/16"	Hex
		HOLL	OW DOOR AN	CHORS		
HD18XS	1/8 XShort	6-32 x 1"	11/32"	11/32"	0 - 3/16"	Pan/Comb
HD18MS	1/8 MShort	6-32 x 1"	11/32"	13/16	3/16" - 3/8"	Pan/Comb
		HOLLOW	DOOR DRIVE	ANCHORS		
HDD18MS	1/8 MShort	6-32 x 1 11/32"	11/32"	13/16"	3/16" - 3/8"	Pan/Comb
		HOLLOW	WALL SETTI	NG TOOLS		
ITEM COL	DE		DESCRIPTION	N		
						3112-100yan-Sin

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Loading Time . . . . . 4 Hours



## Ultrabond 1

TECHNICAL DATA ltrabond 1 is a "fast cure" formula specifically developed for projects requiring "fast bolt-up" and extended CURE TIME\*\* Gel Time ..... 8-10 Minutes

- · Anchoring and doweling in concrete
- · Anchoring in hollow block, brick and stone

working time in a variety of applications.

· Bonding concrete to concrete



	Full-Cure Time 48 Hours
** Gel, loading and cure times are based on a temperature of 78°F (25°C). Gel	times are calculated on a mass of 20 grams.

ULTIMATE LOADS TABLE									
			f'c=30	f'c=3000PSI		f'c=5000PSI		f'c=7000PSI	
ANCHOR DIAMETER (IN)	HOLE DIAMETER (IN)	EMBEDMENT (IN)	ULTIMATE TENSION LOAD (LBS.)	ULTIMATE SHEAR LOAD (LBS.)	ULTIMATE TENSION LOAD (LBS.)	ULTIMATE SHEAR LOAD (LBS.)	ULTIMATE TENSION LOAD (LBS.)	ULTIMATE SHEAR LOAD (LBS.)	
3/8	7/16	3-1/2	9334	6941	10122	7034	10937	7143	
1/2	9/16	4-1/2	14146	8316	14513	10379	18400	13097	
5/8	3/4	5-5/8	19600	15326	20688	18056	29286	19052	
3/4	7/8	6-3/4	25053	22336	26864	25733	34762	26073	
7/8	1	7-7/8	33374	29365	34328	31409	39524	33093	
-1	1-1/8	9	41696	36395	41792	37085	52143	40950	

Values shown are average ultimate values and are offered only as a guide and are not guaranteed in any way. A safety factor of 4:1 or 25% is generally accepted as a safe working load. Reference should be made to applicable codes for the specific working ratio.

## Ultrabond 2

#### TECHNICAL DATA

ltrabond 2 is a "slow cure" formula designed specifically for job conditions requiring maximum working times up

**CURE TIME\*\*** Gel Time ...... 25 Minutes Loading Time ..... 10 Hours Full-Cure Time . . . . . 48 Hours

- · Anchoring and doweling in concrete
- · Anchoring in hollow block, brick and stone
- · Bonding concrete to concrete



			f'c=3	000PSI	f'c=5000PSI	
ANCHOR DIAMETER (IN)	HOLE DIAMETER (IN)	EMBEDMENT (IN)	ULTIMATE TENSION LOAD (LBS.)	ULTIMATE SHEAR LOAD (LBS.)	ULTIMATE TENSION LOAD (LBS.)	ULTIMATE SHEAR Load (LBS.
3/8	7/16	3-1/2	9334	7217	9726	6850
1/2	9/16	4-1/2	14500	9691	14713	10840
5/8	3/4	5-5/8	21804	15025	22460	15220
3/4	7/8	6-3/4	29109	20360	30208	19600
7/8	1	7-7/8	37769	30914	40229	26982
1	1-1/8	9	46430	41468	50250	34365

Values shown are average ultimate values and are offered only as a guide and are not guaranteed in any way. A safety factor of 4:1 or 25% is generally accepted as a safe working load. Reference should be made to applicable codes for the specific working ratio.

# Ultrabond 3

ltrabond 3 is an "ultra-fast cure" formula engineered specifically for cold-weather applications. Ultrabond 3 is also perfect for projects requiring "bolt-up" times as quick as 90 minutes.

CURE TIME**
Gel Time 5 Minutes
Loading Time 90 Minutes
Full-Cure Time 24 Hours

· Anchoring and doweling in concrete



98

\*\* Gel, loading and cure times are based on a temperature of 78°F (25°C). Gel times are calculated on a mass of 20 grams.

\*\* Gel, loading and cure times are based on a temperature of 78°F (25°C). Gel times are calculated on a mass of 20 grams.

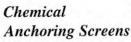
	ULTIMATE LOADS TABLE								
				f'c=3000PSI		f'c=5000PSI		f'c=7000PSI	
ANCHOR DIAMETER (IN)	HOLE DIAMETER (IN)	EMBEDMENT (IN)	ULTIMATE TENSION LOAD (LBS.)	ULTIMATE SHEAR LOAD (LBS.)	ULTIMATE TENSION LOAD (LBS.)	ULTIMATE SHEAR LOAD (LBS.)	ULTIMATE TENSION LOAD (LBS.)	ULTIMATE SHEAR LOAD (LBS.)	
3/8	7/16	3-1/2	10898	7311	10900	7034	10738	7143	
1/2	9/16	4.1/2	13384	8316	14333	10379	18681	13453	
58	3/4	5-5/8	21692	16345	23365	16923	31190	19762	
3/4	7/8	6 3/4	30000	24375	32397	23467	40357	28096	
7/8	1 1	7-7/8	39941	32343	42970	31819	46190	36429	
1	1-1/8	9	49881	40312	53544	40315	58096	45237	

Values shown are average ultimate values and are offered only as a guide and are not guaranteed in any way. A safety factor of 4:1 or 25% is generally accepted as a safe working load. Reference should be made to applicable codes for the specific working ratio.

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# ULTRABOND

# **Ultrabond System Accessories**



GALVANIZED				
ITEM CODE	DIAMETER & LENGTH	HOLE DIAMETER	BAG QUANTITY	WEIGHT (LBS.) PER 100
S38-4	3/8" X 4"	1/2*	10	1.3
S38-6	3/8" x 6"	1/2"	10	1.5
S38-10	3/8" X 10"	1/2"	10	1.7
S12-4	1/2" X 4"	5/8*	10	1.5
S12-6	1/2" x 6"	5/8"	10	1.7
S12-10	1/2" X 10"	5/8"	10	2.3
S58-4	5/8° X 4°	3/4"	10	1.7
S58-6	5/8" x 6"	3/4"	10	1.9
S58-10	5/8" X 10"	3/4"	10	2.3
S34-4	3/4" X 4"	7/8"	10	1.7
S34-6	3/4" x 6"	7/8*	10	1.9
S34-10	3/4" X 10"	7/8*	10	2.7

ITEM CODE	DIAMETER & LENGTH	HOLE DIAMETER	BAG QUANTITY
PS38-4	3/8° X 4°	1/2*	10
S38-6	3/8" X 6"	1/2*	10
S38-10	3/8" X 10"	1/2*	10
S12-4	1/2" X 4"	5/8*	10
S12-6	1/2" X 6"	5/8"	10
S12-10	1/2" X 10"	5/8*	10
PS58-4	5/8" X 4"	3/4*	10
S58-6	5/8" X 6"	3/4"	10
PS58-10	5/8" X 10"	3/4*	10
S34-4	3/4" X 4"	7/8*	10
PS34-6	3/4" X 6"	7/8"	10
PS34-10	3/4" X 10"	7/8*	10

# **Epoxy Retaining Plugs**



ITEM CODE	DIAMETER & LENGTH
RP916	3/8" TO 1/2" ROD 9/16" HOLE
RP58	1/2" ROD 5/8" HOLE
RP34	5/8" ROD 3/4" HOLE
RP78	3/4" ROD 7/8" HOLE
RP100	7/8" ROD 1" HOLE
RP118	1" ROD 1 1/8" HOLE
1	

Note: Air drills create larger holes

#### Threaded Rod

ITEM CODE	ITEM DESCRIPTION
TR38STR	3/8" X 5"
TR12STR	1/2" X 6 1/2"
TR58STR	5/8" X 7 5/8"
TR34STR	3/4" X 9 3/4"
TR78STR	7/8" X 10 1/2"
TR100STR	1" X 11 3/4"

#### "HP" Nozzles - Bulk (Packages of 100)

ITEM CODE	DESCRIPTION
T3812X6	(Exclusively for 6 oz. systems) • Dual 1/2" to 3/8" nozzle
T5838	• Dual 5/8" and 3/8" nozzle • 3/8" can break off to 5/8"
T5812	<ul> <li>Dual 5/8" and 1/2" nozzle</li> <li>1/2" can break off to 5/8"</li> </ul>

#### "HP" Nozzles - Kits (3 nozzles & 1 nut per kit)

ITEM CODE	DESCRIPTION
T3812 X6K <sup>+</sup>	(Exclusively for 6 oz. systems) • Dual 1/2" to 3/8" nozzle • 3/8" can break off to 1/2"
T5838 K	<ul> <li>Dual 5/8" and 3/8" nozzle</li> <li>3/8" can break off to 5/8"</li> </ul>
T5812 K	<ul> <li>Dual 5/8" and 1/2" nozzle</li> <li>1/2" can break off to 5/8"</li> </ul>
T78S*	<ul><li>7/8" outside diameter</li><li>high flow nozzle</li></ul>

\* NOT AVAILABLE IN KITS / SOLD INDIVIDUALLY + NUT NOT INCLUDED

Nylon Brushes



ITEM CODE	DIAMETER & LENGTH
BR3812	3/8" - 1/2" HOLE
BR58100	1/2" - 1" HOLE



00177450501	
ITEM CODE	ITEM DESCRIPTION
EZ-D	EZ 10 Drill Attachment

#### UTI - Ultrabond Threaded Insert

ITEM CODE	HOLE DIAMETER	HOLE DEPTH	BOLT SIZE & THREADS PER INCH
UTI 38	3/4"	2 1/2"	3/8 - 16 unc.
UTI 12	7/8"	3 3/8"	1/2 - 13 unc.
UTI 58	1"	4 1/2	5/8 - 11 unc.
UTI 34	1 1/8"	5 1/2"	3/4 - 10 unc.
UTI 78	1 1/4"	6 1/2"	7/8 - 9 unc.
UTI 100	1 1/2"	8"	1" - 8 unc.

### Cartridge Heater

ITEM CODE	ITEM DESCRIPTION	WEIGHT PER EACH
UCH	Cartridge Heater	9 lbs.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# **Ultrabond** "EZ Set" Capsules

CAPSULE ITEM CODE	CAPSULE DIAMETER	BOX/CTN QUANTITY
EZ38	3/8"	10
EZ12	1/2"	10
EZ58	5/8"	10
EZ34	3/4"	10

Larger size capsules available.

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# **Ultrabond Glass Capsules Vinyl Ester & Polyester Products**



	POLY	ESTER
CAPSULE ITEM CODE	CAPSULE DESCRIPTION	BOX/CTN QUANTITY
P38	3/8"	10
P12	1/2"	10
P58	5/8"	10
P34	3/4"	10
P78	7/8"	10
P100	1"	10
P114	1 1/4"	5

	VINYL	ESTER
CAPSULE ITEM CODE	CAPSULE DESCRIPTION	BOX/CTN QUANTITY
E38	3/8"	10
E12	1/2"	10
E58	5/8"	10
E34	3/4"	10
E78	7/8"	10
E100	1"	10
E114	1 1/4"	5

CURE	TIME
+68°F	
50-68°F	
14-32°F	1 Hour
5-14°F	5 Hours

Values shown are average ultimate values and are offered only as a guide and are not guaranteed in any way. A safety factor of 4:1 or 25% is generally accepted as a safe working load. Reference should be made to applicable codes for the specific

	ULTIMAT	E LOADS TABL	E - VINYL ES	TER CAPŞUL	ES	
		THE WAS	f'c = 3	000PSI	f'c = 5	000PSI
ANCHOR DIAMETER (IN)	HOLE DIAMETER (IN)	EMBEDMENT (IN)	ULTIMATE TENSION LOAD (LBS)	ULTIMATE SHEAR LOAD (LBS)	ULTIMATE TENSION LOAD (LBS)	ULTIMATE SHEAR LOAD (LBS)
3/8	7/16	3-1/2	10070	6113	10562	7402
1/2	9/16	4-1/2	15844	6904	16977	10152
5/8	3/4	5-5/8	23702	11857	27839	18388
3/4	7/8	6-3/4	31520	16810	38700	26624
7/8	1	7-7/8	45977	26949	44523	32086
1	1-1/8	9	50434	37088	50345	37547

# "SPEED SET" System





PEED SET" cartridges are simple and quick. Simply attach the mixing nozzle to the cartridges and insert the cartridge into the dispensing tool. "SPEED SET" cartidges can be dispensed with either the VM11 (Manual Dispensing Tool) or the VA11 (Air Dispensing Tool).

#### ORDERING INFORMATION

Cartridges

	,
ITEM CODE	DIAMETER
VSS7	7.2 FL. OZ.
VSS11	11.7 FL. OZ.

Mixing Nozzles



Dispensing Tools (for both 7.2 and 11.7 fl. oz. systems)

ITEM CODE	ITEM DESCRIPTION
VM11	Manual Tool
VA11	Air Tool



# VINYL ESTER & POLYESTER ACCESSORIES

Chamfered Threaded Studs and Rod Drivers for Glass Capsules

CARBON STEEL ITEM CODE	304 STAINLESS ITEM CODE	DIAMETER & LENGTH	MINIMUM Embedment	ROD DRIVER
TR38	TR38S	3/8" X 5"	3 1/2"	TRD38
TR12	TR12S	1/2" X 6 1/2"	4 1/4"	TRD12
TR58	TR58S	5/8" X 7 5/8"	5"	TRD58
TR34	TR34S	3/4" X 9 3/4"	6 5/8"	TRD34
TR78	TR78S	7/8" X 10 1/2"	7"	TRD78
TR100	TR100S	1" X 11 3/4"	8 1/4"	TRD100
TR114	TR114S	1 1/4" X 14 1/8"	10 1/4'	TRD114

Threaded Rod for "EZ Set" Capsules and "Speed Set" Systems

ITEM CODE	ITEM DESCRIPTION
TR38STR	3/8" X 5"
TR12STR	1/2" X 6 1/2"
TR58STR	5/8" X 7 5/8"
TR34STR	3/4" X 9 3/4"
TR78STR	7/8" X 10 1/2"
TR100STR	1" X 11 3/4"

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



### **Anchors**

# LAG SHIELDS DOUGLE



SHORT STYLE							
ITEM CODE	ANCHOR SIZE	HOLE SIZE	ANCHOR LENGTH				
LSS14	1/4"	1/2"	1"				
LSS56	5/16"	1/2"	1 1/4"				
LSS38	3/8"	5/8"	1 3/4"				
LSS12	1/2"	3/4"	2"				
LSS58	5/8"	7/8"	2"				
LSS34	3/4"	1"	2"				

LONG STYLE							
ITEM CODE	ANCHOR SIZE	HOLE SIZE	ANCHOR LENGTH				
LSL14	1/4"	1/2"	1 1/2"				
LSL56	5/16"	1/2"	1 3/4"				
LSL38	3/8"	5/8"	2 1/2"				
LSL12	1/2"	3/4"	3"				
LSL58	5/8"	7/8"	3 1/2"				
LSL34	3/4"	1"	3 1/2"				

GSA Spec. FF - S - 325, Group II, Type 1 Classes 1 & 2

# CALL FSI FOR ALL TECHNICAL DATA

# VINYL PLASTIC PLUGS



# DRIVE PINS AND SETTING TOOLS



ITEM CODE	HEAD DIAMETER & OVERALL LENGTH	PIN DIAMETER	MINIMUM EMBEDMENT
DP4	1/4" x 1/2"	1/7"	3/8"
DP6	1/4" x 3/4"	1/7"	5/8"
DP8	1/4" x 1"	1/7"	5/8*
DP10	1/4" x 1 1/4"	1/7"	5/8"
DP12	1/4" x 1 1/2"	1/7"	5/8*
DP16	1/4" x 2"	1/7"	5/8"
DP20	1/4" x 2 1/2"	1/7"	5/8"
DP24	1/4" x 3"	1/7"	5/8"
DPT	Drive Pin Setting Tool		

ITEM CODE	DIAMETER & LENGTH	SCREW SIZES	HOLE SIZE	COLOR
VP1810	1/8" x 1"	#1 - #3	1/8"	YELLOW
VP3110	3/16" x 1"	#4 - #6	3/16"	WHITE
VP3114	3/16" x 1 1/2"	#4 - #6	3/16"	WHITE
VP1510	15/64" x 1"	#7 - #9	15/64"	RED
VP1514	15/64" x 1 1/2"	#7 - #9	15/64"	RED
VP1410	1A" x 1"	#10 - #12	1/4"	GREEN
VP1412	1/4" x 1 1/4"	#10 - #12	1/4"	GREEN
VP1414	1/4" x 1 1/2"	#10 - #12	1/4"	GREEN
VP1420	1/4" x 2"	#10 - #12	1/4"	GREEN
VP5610	5/16" x 1"	#14 or 1/4" Lag	5/ 16"	BLUE
VP5614	5/16" x 1 1/2"	#14 or 1/4" Lag	5/16"	BLUE
VP5620	5/16" x 2"	#14 pr 1/4" Lag	5/16*	BLUE
VP3814	3/8" X 1 1/2"	#16 or 5/16" Lag	3/8"	ORANGE
VP3820	3.8" x 2"	#16 or 5/16" Lag	3.8"	ORANGE
VP3824	3/8" x 2 1/2"	#16 or 5/15" Lag	3/8"	ORANGE
VP7 120	7/16" x 2"	#20 or 3/8" Lag	7/16"	GREY
VP7 124	7/16" x 2 1/2"	#20 or 3/8" Lag	7/16"	GREY
VP5824	5/8" x 2 1/2"	1/2" Lag	5 <i>l</i> 8°	BLACK
VP5830	5/8" x 3"	1/2" Lag	5 <i>l</i> 8°	BLACK

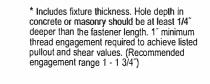
# COUPLING NUTS - THROUGH AND REDUCER



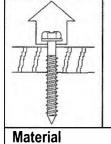
ITEM CODE	INTERNAL THREAD SIZE	THICKNESS ACROSS THE FLAT	LENGTH	BOX / CTN QUANTITY
	(	THE	OUGH COUP	LINGS
CN 14 CN56 CN38 CN12 CN58 CN34	1/4"-20 5/16"-18 3/8"-16 1/2"-13 5/8"-11 3/4"-10	3/8" 3/8" 1/2" 5/8" 3/4" 1"	7/8" 7/8" 1" 1 1/4" 1 1/2" 2 1/4"	100/1000 100/1000 100/1000 50/500 25/250 20/100
		REC	UCER COUP	LINGS
CN1438 CN5638 CN3812 CN1258	1/4"-20 to 3/8"-16 5/16"-18 to 3/8"-16 3/8"-16 to 1/2"-13 1/2"-13 to 5/8"-11	1/2" 1/2" 5/8" 3/4"	1" 1" 1 1/4" 1 1/2"	100/1000 100/1000 50/500 25/250



# **Tapcon® Type Masonry System**



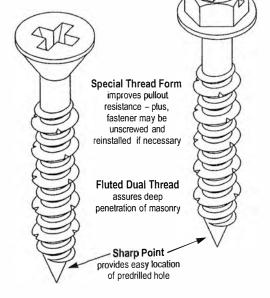
\*\* Drill Bit Selection 5/32" bit for 3/16" fasteners, 3/16" bit for 1/4" fasteners.

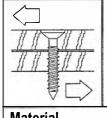


#### Pull-Out Values (Lbs.)

for Con-Mate Fasteners

7		Fastener Diameter		
Material	Embedment	3/16"	1/4″	
3000 PSI Concrete	1″	610	2030	
6380 PSI Concrete	1"	608	1150	
Hollow Block	1″	1408	1806	





#### Shear Values (Lbs.)

for Con-Mate Fasteners

	Con-mate / asteriors	Fastener [	Diameter
Material	Embedment	3/16"	1/4″
3000 PSI Concrete	1″	796	1261
6380 PSI Concrete	1″	1038	1572
Hollow Block	1″	712	1591

\*3/16" Dia. Available From 1-1/4" to 4" \* 1/4" Dia. Available From 1-1/4" to 6"

SDS AND ROUND SHANK CARBIDE DRILL
BITS ARE AVAILABLE FOR
TAPCON® FASTENING SYSTEM



# Fastener Systems, Inc.

640 Snyder Avenue Bolmar Industrial Center West Chester, PA 19382

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



0-2500 rpm; 3.5 amp motor

#### 0141-1

- 0-4000 rpm; 3.5 amp motor
- 1/4" Capacity
- Trigger Speed Control, reversing
- All ball and roller bearings
- Heavy-Duty Industrial Chuck
- Lightweight, Compact



0-1000 rpm; 3.5 amp motor

#### 0230-1

- 0-1700 rpm; 3.5 amp motor
- 3/8" capacity
- Trigger Speed Control, reversing
- All ball and roller bearings
- Heavy-Duty Industrial Chuck
- Lightweight, Compact



- 1/4" capacity
- 0-2000 rpm; 5.4 amp motor

#### 0224-1

- 3/8" Capacity
- 0-1200 rpm; 5.4 amp motor
- Trigger Speed Control, reversing
- Quik-Lok cord-easy detachment
- Exclusive Quick change brush cartridge system
- All ball and roller bearings
- Heavy-Duty industrial chuck





• 0-850 rpm; 5.4 amp motor

#### 0244-1

- 0-600 rpm; 5.4 amp motor
- 1/2" Capacity
- Trigger Speed Control, reversing
- Quik-Lok cord-easy detachment
- Exclusive Quick change brush cartridge system
- All ball and roller bearings
- Heavy-Duty industrial chuck

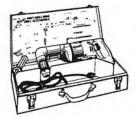


# **HEAVY-DUTY CLOSE QUARTER DRILL** 0375-1

- 3/8" Capacity
- Variable speed 0-1300 rpm

#### 0379-1

- 1/2" Capacity
- Variable speed 0-750 rpm
- 3.5 amp motor
- 55° angled chuck for easy access to tight places
- Double Insulated
- Ideal for general maintenance
- Lightweight, compact-only 3.5 lbs.



# **HEAVY-DUTY** RIGHT ANGLE **DRILL KIT**

3102

**PLUMBER'S KIT** 

Low 335 rpm; High 750 rpm

#### 3202

PLUMBER'S KIT

Low 230 rpm; High 525 rpm

#### 3002-1

**ELECTRICIAN'S KIT** 

Low 400 rpm; High 900 rpm

#### 3107-1

#### **VARIABLE SPEED KIT**

- Low 0-335 rpm; High 0-750 rpm
- 8' Quik-Lok cord standard. 25' length available.
- 1/2" capacity in steel, handles up to a 2-9/16" selfeed bit.
- Reversing
- Powerful 4.5 amp motor
- Head and handle swivel 360° Tight locking in any position
- Includes steel carrying case and accessories for installing/ removing right angle head
- Ideal for drilling between joists and other hard to reach areas.

**HEAVY-DUTY** COMPACT **HOLE-SHOOTER** 

1610-1

1630-1

900 rpm

1660-1

450 rpm

650 rpm

- 1/2" capacity in steel
- Reversing, 7 amp
- Powerful, yet compact
- Pipe handle is removable for close quarter drilling

# Fastener Systems, Inc.

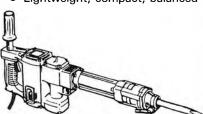
640 Snyder Avenue Bolmar Industrial Center West Chester, PA 19382 (800) 232-5060 (610) 692-6658 FAX (610) 692-8151



- For driving self-drilling, selftapping fasteners.
- Trigger speed control, reversing.
- 0-2500 rpm. 5.0 amp.
- Non-marring locators.
- Positive drive clutch engages when pressure is applied.



- 5.0 amp
- Grounded
- Trigger speed control, reversing
- 0-2500 rpm
- Minimum offset for close quarter work
- Simple positive depth adjustment
- Lightweight, compact, balanced



# HEAVY-DUTY DEMOLITION HAMMER 5332

- For fast breakup of concrete, asphalt, clay, compacted dirt.
- 2000 blows per minute. 13 amp
- Smooth operating to reduce fatigue.
- Handles a wide range of hammer accessories.
- Includes steel carrying case, side handle and grease.



# HEAVY-DUTY THAMMER-DRILLS 5397-1

 Includes hammer-drill, steel carrying case and four percussion carbide tip bits.

#### 5392-1

- 3/8" capacity
- Trigger speed control—reversing
- 0-2500 rpm. 0-50,000 bpm, 5.0 amps
- Compact, lightweight, ideal for overhead drilling.
- Impact resistant, non-conductive motor housing and handle.
- For drilling, in concrete/masonry and drilling without hammering in wood/metal.



# MAGNUM® HAMMER-DRILL 5370-1 5371-1

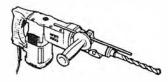
- 1/2" capacity
- Trigger speed control—reversing
- Two speed ranges: low (0-1000 rpm, 0-20,000 bpm), and high (0-3600 rpm, 0-72,000 bpm)
- 5371-1 KIT also includes steel carrying case and four percussion carbide tip bits.
- Quik-Lok detachable cord
- Removable brush cartridge change brushes in less than one minute.



- 3/8" capacity
- Variable speed control—reversing 0-3500 rpm and 0-70,000 bpm
- 5373-1 KIT also includes steel carrying case and four percussion carbide tip bits.

### **5374-1 5375-1**

- 1/2" capacity
- Variable speed control 0-2500 rpm and 0-50,000 bpm
- 5375-1 KIT also includes steel carrying case and four percussion carbide tipped bits.
- Quik-Lok detachable cord
- Removable brush cartridge change brushes in less than one minute



# HEAVY-DUTY 1-1/2" ROTARY HAMMER 5347 5348

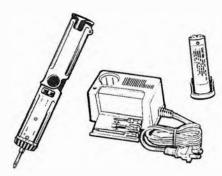
- Includes steel carrying case, side handle and depth gauge.
- 5348 KIT also includes an assortment of bits and hammer tools.
- 1-1/2" spline drive carbide tipped bit capacity.
- 6" diameter capacity in concrete/ masonry with percussion core hits
- 4100 bpm, 500 rpm, 8.5 amps
- Fast, lightweight, powerful— 13-1/2 lbs.
- Stop rotation control allows hammer action only...set self drilling tooth anchors up to 7/8".

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



# HEAVY-DUTY STEEL HAWG 4240

- Super strong drill press cuts 1/2" to 2" diameter holes in any ferrous material up to 1" thick
- Permanent magnet holds securely on as thin as 1/8" steel
- No electricity needed to maintain holding power
- Self-contained, automatic pumping system provides proper cooling and lubrication with proper flow of Hawg Wash.
- Portable—only 35 lbs. and 16" long
- Hi/Lo Speed Selector—500 rpm or 1000 rpm
- Quick Release Spindle for fast cutter change, no keys or wrench required
- Quick Change Steel Hawg cutters, available in 26 sizes from 1/2" to 2" diameters, require no prepunching or pilot holes.



# HEAVY-DUTY CORDLESS SCREWDRIVER 6539-1

- Includes screwdriver, battery pack and charger
- 190 rpm, 2.4 volts
- Reversing, 6 position adjustable clutch
- Adjustable swivel handle for tight applications.
- 1 hour 120 volt Fast Charge
- 12 volt (automotive) charger optional

# Militalikee Power Tools



# HEAVY-DUTY CORDLESS SCREWDRIVER KIT

# 6540-1

- Includes screwdriver, battery pack, charger, chuck attachment, driver/drill bit set No. 48-30-0101 and high-impact, rust-proof polyethylene carrying case
- 190 rpm, 2.4 volts
- Reversing, 6 position adjustable
- Adjustable swivel handle for tight applications.
- 1 hour 120 volt Fast Charge
- 12 volt (automotive) charger optional



# HEAVY-DUTY MAGNUM® DRYWALL SCREW-SHOOTER 6749-1

- 0-2500, 5.4 amps
- Trigger speed control, reversing

## 6754-1

- 0-4000 rpm, 5.4 amps.
- Trigger speed control, reversing.
- Exclusive snap action clutch.
- Quik-lok detachable cord.
- 8' cord standard length, 25' lengths available.
- Removable brush cartridge-change brushes in less than one minute.

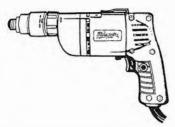


# ₩ HEAVY-DUTY SCREW-SHOOTER 6543-1

- 0-1000 rpm, 5.0 amps
- Trigger speed control, reversing
- For driving wood screws.
- Positive drive clutch.



- 0-1000 rpm, 5.0 amp
- Trigger speed control, reversing.
- For machine and sheet metal screws and nuts.
- Adjustable torque release clutch.
- Quick release bit holding mechanism— no bit guide needed



# HEAVY-DUTY SCREW-SHOOTER 6783-1

- 0-2500 rpm; 5.0 amp
- Trigger speed control, reversing.
- For driving self-drilling, selftapping fasteners.
- Adjustable torque release clutch.
- Quick release bit holding mechanism— no bit guide needed

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



# HEAVY-DUTY HAWK 1" SDS ROTARY HAMMER

#### 5362-1 5365-1

- Includes steel carrying case, side handle and depth gauge.
- 5365-1 KIT also includes 7 SDS bits from 3/16" — 5/8" diameter.
- Universal Drive System accepts up to 1" diameter SDS bits.
- 1" solid bit capacity in concrete;
   3-1/2" thin wall core bit capacity
- 0-900 rpm Reversing, 0-4500 bpm
- Powerful 6 amp motor
- Lightweight 7-1/2" lbs. and compact-14 in. long
- Two modes of operation hammer-drilling or rotation only



HEAVY-DUTY
EAGLE
1-1/2" ROTARY
HAMMER

#### 5341

5342

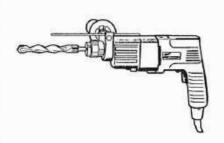
- 4" diameter capacity in concrete/ masonry with percussion core bits
- Fast 4100 bpm, 600 rpm

#### 5352

5353

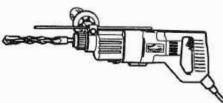
- 6" diameter capacity in concrete/ masonry with percussion core bits
- Variable Speed: 0-4100 bpm, 0-500 rpm
- Includes steel carrying case, side handle and depth gauge.
- 5342 KIT and 5353 KIT also include an assortment of bits and hammer tools.
- 1-1/2" spline drive carbide tipped bit capacity
- Powerful 8.5 amp Lightweight 13 lbs.
- Can be used for light demolition work with Bull Points and Chisels
   106





# HEAVY-DUTY FALCON 3/4" SDS ROTARY HAMMER 5366-1 5367-1

- 3/4" Solid, 1-3/4" Core Bit Capacity
- Two modes of operation: Hammer with Rotation or Rotation only.
- Includes steel carrying case, side handle and depth gauge. 5367-1 includes the above plus 5 carbidetipped SDS bits.
- Fast, lightweight, powerful.
- Variable Speed 0-1100 rpm,
   0-5000 bpm, reversing, 6 amps.
- Uses SDS bits.



# HEAVY-DUTY FALCON 3/4" SDS ROTARY HAMMER 5368-1

- Includes steel carrying case, side handle and depth gauge.
- 3/4" Solid; 1-3/4" Core Bit Capacity
  Two modes of operation: Hammer
- with Rotation or Rotation only.
   Fast, lightweight, powerful.
- Variable Speed 0-1100 rpm, 0-5000 bpm, reversing, 6 amps.
- Uses SDS bits

# We put the fast in fasteners



# HEAVY-DUTY CIRCULAR SAW 6367

- 7-1/4" capacity
- 13 amp, 5800 rpm
- Heavy-Duty steel shoe
- Double-Insulated
- Spindle lock for fast, easy blade changes
- One knob adjustment for depth of cut; one lever adjustment angle of cut
- Strong, non-conductive glass reinforced nylon housing and handle.
- Quick return, heavy-duty, safety telescoping guard.
- Clear line sighting.
- Includes combination/rip saw blade and 9/16" wrench.



# HEAVY-DUTY CIRCULAR SAW

6365

Includes Combination/Rip saw blade and 9/16" wrench

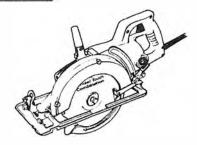
#### 6366

 Includes carbide tipped framing/ rip saw blade, 9/16" wrench and rip fence

#### 6368

- Includes carbide tipped framing/ rip saw blade, 9/16" wrench, rip fence and steel carrying case
- 7-1/4" capacity
- 13 amp 5800 rpm
- Rigid, lightweight aluminum shoe
- Spindle lock for fast, easy blade changes
- Lever adjustment for setting angle of cut
- Strong, non-conductive glass reinforced nylon housing and handle
- Quick return, heavy-duty, safety telescoping guard.
- Clear line sighting.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



# HEAVY-DUTY WORM DRIVE CIRCULAR SAW 6377

• 7-1/4" capacity

#### 6378

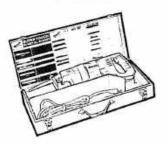
- 8-1/4" capacity
- 15 amp, 4400 rpm
- One knob adjustment for depth of cut; one lever adjustment for angle of cut.
- Strong, non-conductive glass reinforced nylon housing and handle.
- Quick return, heavy-duty, safety telescoping guard.
- Clear line sighting.
- Includes combination/rip saw blade and 9/16" wrench.
- Spindle lock for fast, easy blade changes.



# HEAVY-DUTY 7-1/4" CIRCULAR SAW WITH ELECTRONIC BRAKE 6369

- Electronic Brake stops blade in LESS THAN 2 SECONDS!
- 13 amps. 5800 rpm.
- Rigid, lightweight aluminum shoe.
- Strong, non-conductive glass reinforced nylon housing and handle.
- Quick return, heavy-duty, safety telescoping guard.
- Clear line sighting.
- Includes carbide tipped framing/ rip saw blade, 9/16" wrench.

# Milwaukee Power Tools



# HEAVY-DUTY SAWZALL® 6507

- 8' Quik-Lok cord for easy field replacement
- Includes 7 piece Bi-Metal blade assortment, socket wrench and holder, extra blade clamp/screw, and steel carrying case
- Variable speed in two speed ranges 0-2400 and 0-1700 spm.
- Handle designed for greater operator comfort and control.
- Rear positioned cord for easier plunge cutting.



# HEAVY-DUTY SAWZALL® 6508

- Includes 7 piece Bi-Metal blade assortment, socket wrench and holder, extra blade clamp/screw, and steel carrying case.
- Variable speed in two speed ranges 0-2400 and 0-1700 spm.
- Handle designed for greater operator comfort and control.
- Rear positioned cord for easier plunge cutting.

Can't Find It? Call us

— We'll Find It For You!



# HEAVY-DUTY SAWZALL® 6531

- Includes 7 piece Bi-Metal blade assortment, socket wrench and holder and extra blade clamp screw.
- Two speeds 2400 or 1700 spm.
- High speed for roughing in wood and low speed for metal cutting.
- Handle designed for greater operator comfort and control.
- Rear positioned cord for easier plunge cutting.



# HEAVY-DUTY SUPER SAWZALL® 6527

- Fast, Smooth, High Performance
- Patented counter-balance mechanism reduces vibration for extra smooth operation.
- Long 1-1/4" Blade Stroke
- Patented shoe release lever easily adjusts shoe without tools.
- Dual range variable speed 0-2000 spm and 0-2800 spm
- 8' Quik-Lok cord for easy field replacement
- Includes 7 High Performance Super Sawzall blades, hex key, extra blade clamp/screw and steel carrying case
- Patented Rubber Boot is designed for operator comfort.
- Reversible blade for cutting upside down.

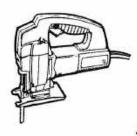


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# HEAVY-DUTY SUPER SAWZALL® 6528

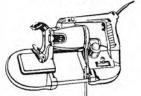
- Fast, Smooth, High Performance
- Patented counter-balance mechanism reduces vibration for extra smooth operation.
- Long 1-1/4" Blade Stroke
- Patented shoe release lever easily adjusts shoe without tools.
- Dual range variable speed 0-2000 spm and 0-2800 spm
- Includes 7 High Performance Super Sawzall Blades, hex key, extra blade clamp/screw and steel carrying case
- Patented Rubber Boot is designed for operator comfort
- Reversible blade for cutting upside down



# HEAVY-DUTY JIG SAW 6256

- Full 1" blade stroke for fast, efficient cutting
- Variable speed trigger speed control 0-3100 spm.
- Double Insulated. 3.8 amp
- Top handle contoured for comfort and accurate control.
- Shoe-tilt adjusts up to 45° for angle cutting.
- Blade clamp designed for simple, fast blade changes.





# HEAVY-DUTY DEEP CUT BAND SAW

6230

6232

- Trigger speed control—0-350 s.f.p.m.
- 6232 includes steel carrying case

6236

6238

- Two Speed: 250 and 350 s.f.p.m.
- 6238 includes steel carrying case
- 6 amp
- Designed for use with standard 44-7/8" × 1/2" × .020 Bi-Metal Blades
- Large 4-3/4" capacity
- Excellent balance—straighter, more accurate cuts
- Gear drive mechanism is lubricated with grease—no oiling!



# HEAVY-DUTY CHOP SAW

### 6165

- 12" abrasive wheel
- 4200 rpm
- 15 amps. Cuts pipe to 4", bar stock to 2-3/8", square stock to 4".

#### 6170

- 14" abrasive wheel
- 3350 rpm
- 15 amps. Cuts pipe to 5", bar stock to 2-9/16", square stock to 4-3/8".
- Efficiently cuts bundles of drywall studs.
- Fast cutting action in angle iron, pipe tubing, conduit, pvc and channels.



- 8000 rpm
- Powerful 3.5 H.P. 15 amp motor
- Controlled start—drastically reduces torque reaction when starting tool...extends gear, brush and motor life.
- Line lock-out feature...prevents tool from operating should current be restored to an interrupted line when switch is locked in the "on" position.
- Replaceable armature pinion gears for less costly repairs.
- Recessed spindle lock for quick accessory changes.
- Supplied with guard; order grinding wheel separately
- Not recommended for sanding



## HEAVY-DUTY SANDER/GRINDER 6145

- 4-1/2" capacity
- 1/2" − 13 Spindle Size
- Powerful 10,000 rpm
- Double insulated 5.5 amps
- Paddle switch allows for one hand operation
- Side handle mounts right or left
- One screw to adjust guard



# HEAVY-DUTY SANDER/GRINDER 6141

- 5" capacity
- 5/8" 11 Spindle Size
- Powerful—10,000 rpm
- Double Insulated 5.5 amps
- Paddle switch allows for one hand operation.
- Side handle mounts right or left.
- One screw to adjust guard.

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# HEAVY-DUTY ROUTER 5620

- 23,000 rpm
- 1.00 H.P. 8 amp
- 1/4"−3/8" collet capacity
- Powerful, lightweight-for extra heavy-duty jobs.
- Functional trigger-handle grouping.
- Accurate, simple depth adjustment
- Out-of-way electric cord.



# HEAVY-DUTY ROUTER 5660

- 24,500 rpm
- 1.5 H.P. 10 amp

#### 5680

- 26,000 rpm
- 2.0 H.P. 12 amp
- 1/4"-3/8"-1/2" collet capacity.
- Powerful, lightweight, for extra heavy-duty jobs.
- Functional trigger-handle grouping.
- Accurate simple depth adjustment.
- Out-of-way electric cord.

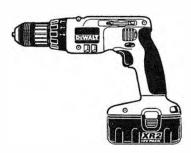


# HEAVY-DUTY SWIVEL HEAD SHEARS 6850

- Powerful 18 gauge capacity.
- 3.5 amp
- Cuts 15 feet per minute
- Cuts round holes...square holes...irregular holes.
- 360° swivel head.
- Head assembly designed for easy servicing.
- Spindle speed 0-2500 rpm



# The DeWalt Tool Store Cordless Tools



# 18.0V 1/2"(13mm) Heavy Duty Cordless Drill/Driver/ Hammerdrill Kit

#### **DW998K**

- Dual Range VSR 0-650/0-1850
- 0-7,150/0-20,350 BPM Hammer Action for Masonry Drilling
- Fan Cooled Motor with Electric Brake and Replaceable Brushes
- Anti-slip Soft Comfort Grip and Keyless Chuck
- Adjustable Clutch Torque Control
- Includes 1 Hour Charger, XR2 PACK® Battery and Heavy Duty Carrying Case



# 18.0V 1/2"(13mm) Heavy Duty Cordless Drill/Driver/ Hammerdrill Kit

#### **DW997K**

- Dual Range VSR 0-650/0-1850
- 0-7,150/0-20,350 BPM Hammer Action for Masonry Drilling
- Fan Cooled Motor with Electric Brake and Replaceable Brushes
- Anti-slip Soft Comfort Grip and Keyless Chuck
- Adjustable Clutch Torque Control
- Includes 1 Hour Charger, XR2 PACK<sup>2</sup> Battery and Heavy Duty Carrying Case



# 18.0V 1/2"(13mm) Heavy Duty Cordless Drill/ Driver Kit

#### **DW995K**

- Dual Range VSR 0-450/0-1400
- Fan Cooled Motor with Electric Brake and Replaceable Brushes
- Anti-slip Comfort Grip
- Adjustable Clutch Torque Control
- Includes 1 Hour Charger, XR2 PACK® Battery and Heavy

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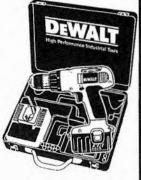
# **CORDLESS TOOLS**



POWER LONGER

## 14.4 Volt 3/8" Heavy Duty **Adjustable Clutch Cordless Driver/Drill Kit**

- Dual Range VSR 0-450/0-1400 RPM
- High Performance Fan Cooled Motor with Replaceable Brushes
- XR PACK™ Extended Run-Time Battery
- Anti-Slip Comfort Grip
- # Heavy Duty Keyless Chuck with Electric Brake
- Includes 1 Hour Charger, XR PACK™ Battery, and Steel Case



# 14.4V 5-3/8" (136mm) Blade **Heavy Duty Cordless Saw Kit**

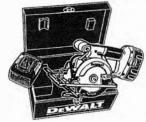
- 3000 rpm for Fast Cutting
- Cuts 2X Materials in a Single Pass
- Blade Located on Left Side for Better Visibility
- Fan Cooled Motor with Replaceable Brushes
- 50' Bevel
- Includes Carbide Blade, Steel Carrying Case, Charger, XR PACK™ Extended Run-Time Battery Pack



## 18.0V 5-3/8" (136 mm) Blade **Heavy-Duty Cordless** Saw Kit

#### DW936K

- 3200 RPM lor Fast Cutting
- Rip Fence Included for Increased Ripping Accuracy
   Blade Located on Left Side for Better Visibility
- Fan Cooled Motor with Replaceable Brushes
- Includes 1 Hour Charger, Carbide Blade, XR PACK\* Battery and Heavy Duty Carrying Case



## **Heavy Duty Steel Kit Box Cordless Saw**

#### DW9359

- Rugged, Heavy Duty Steel Construction
   Self Contained Storage Compartments for Accessories
- Oven Baked Black Paint with Durable Textured Finish
- Full Length Piano Higged Ton
- Fits DW930, DW930K, DW935, DW935K



### 18.0V 1 Hour Heavy Duty Battery Charger

#### DW9108

- 120 Volts, AC only, 2.5 Amps
- Accepts the following DEWALT Battery Packs: DW9095, DW9091, DW9072, DW9071, DW9070, DW9062, DW9061, and DW9060
- Thermal protection for hot packs with automatic reset
- Maintenance Charge keeps Battery Pack 100% ready for work
- Charges Battery Pack in 1 hour or less
- Diagnostic System detects defective packs



# **15 Minute Heavy Duty Quick Charger**

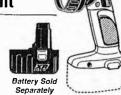
#### DW9115

- 120 Volts, AC Only, 2.0 Amps
- For all DeWalt Battery Packs 7.2 14.4 Volts ■ Charges Battery Packs in 15 Minutes or Less
- # Diagnostic System Detects Defective Packs



# 14.4 Volt **Cordless Flashlight**

- 90° Swiveling Head
- Spare Bulb Inside Lens Cover Compact Ergonomic Design
- Un To 3 Hours Continuous Run-Time
- Battery and Charger Sold Separately



# 12.0 Volt Heavy Duty **Battery Pack**

#### DW9071

- High Capacity Battery-25% More Run-Time than Standard 12.0V Batteries
- Long Life-1,200 cycles
- # No Memory Effect ■ 2 Year Warranty



#### **Battery Pack** DW9091

- High Capacity Battery-25% More Run-Time than Standard 14.4V Batteries
- Long Lile-1,200 cycles
- No Memory Elfect 2 Year Warranty



## 18.0V Heavy Duty XR2 PACK® **Extended Run-Time Battery Pack**

#### DW9095

- High Capacity Battery 25% More Run-Time than
- Standard Batteries (1.7) Amp Hours Long Life - 1,200 Recharging Cycles
- Designed for Repetitive Charging No Memory Effect Full 2 Year Warranty

# 1 Hour Heavy Duty **Fast Charger**

#### DW9106

- 120 Volts, AC Only, 2.0 Amps
- For all DeWalt Battery Packs 7.2 14.4 Volts
- Automatic Start, No Resetting for Hot Packs ■ Maintenance Charge keeps Battery Pack 100%
- Charges Battery Packs in 1 hour or Less ■ Diagnostic System Detects Defective Packs





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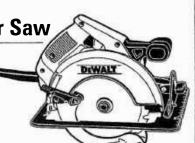
### POWER TOOLS





#### **DW359**

- Powerful 13.0 Amp AC/DC Motor
- Lightweight at 10.9 lbs.
- Newly Designed High Strength, Low Friction, Ribbed Aluminum Shoe
- 50° Bevel Canacity
- Carbide Saw Blade Included



7 1/4" Heavy Duty **Lightweight Circular Saw** with Electric Brake

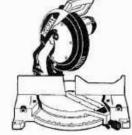
#### **DW362**

- Powerful 15.0 Amp AC/DC Motor
- Lightweight at 10.9 lbs.
- Newly Designed High Strength, Low Friction, Ribbed Aluminum Shoe
- 100% Ball and Roller Bearing Construction
- Electric Brake



#### **DW704**

- High fence allows 5 1/4" trim materials to be mitered standing vertically.
- Cuts 2x8 at 90°, 2x6 at 45°, 4x4 at 45°. Powerful 2000-watt, 13-amp motor. Weighs only 36 lbs., carries easily. Precision stainless steel miter scale.



# 12" Compound Mitersaw with Electric Brake

#### DW705

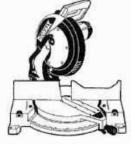
- High fence allows large trim materials to be mitered standing vertically.
- Fence slides to permit compound cuts.
   Cuts 2x8 at 90° and 45° bevel; 2x6 at 45° miter and 45°x45° compound; 4x4 at 45°.

  Powerful 2000-watt, 13-amp motor.
- Weighs only 38 lbs., carries easily.
- Precision stainless steel miter scale.

# **Heavy Duty Reciprocating Saw Kit**

#### DW305K

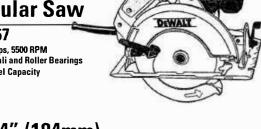
- 6.5 Amps
- 0-1800/2400 SPM Dial Control
- 1-1/8" Stroke Length
- Ball and Roller Bearing Construction
- Low Vibration Counterweighted Gear
- Includes Steel Carrying Case





# 7-1/4" (184mm) **Heavy Duty** Circular Saw

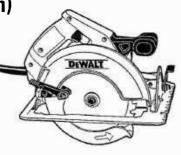
- 13.0 Amps, 5500 RPM
- 100% Bali and Roller Bearings
- 50° Bevel Capacity



# 7-1/4" (184mm) **Heavy Duty** Circular Saw

#### **DW361**

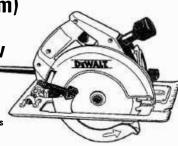
- **■** Electric Brake
- **14.0 Amps, 5800 RPM**
- 100% Ball and Roller Bearings
- 50° Bevel Capacity



# 7-1/4" (184mm) **Heavy Duty** Circular Saw

#### **DW364**

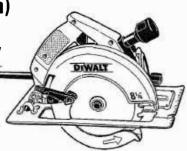
- Electric Brake, 13.0 Amps
- 50° Bevel Capacity 5800 RPM ■ Rear Pivot Adjustment
- 100% Ball and Roller Bearings



# 8 1/4" (210mm) **Heavy Duty Circular Saw**

#### **DW384**

- Electric Brake, 13.0 Amps
- 50° Bevel Capacity, 5800 RPM
- Rear Pivot Adjustment
- 100% Ball and Roller Bearings



# **Heavy Duty** Reciprocating Saw Kit

#### DW306K

- 1-1/8" Stroke Length
- 8.0 Amps, 0-1800/2400 SPM Dial Control
- Ball and Roller Bearing Construction ■ Low Vibration Counterweighted Gear
- Includes Steel Carrying Case

One stop shopping for all your construction needs



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## **POWER TOOLS**



# **Heavy Duty** Jig Saw Kit

#### **DW321K**

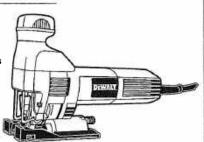
- Variable Speed
- 5.8 Amps, 500-3100 SPM
- **■** Keyless Blade Change and Shoe Bevel
- Ball and Roller Bearing Construction
- 1" Stroke
- Includes Assorted Blades and Heavy Duty Carrying Case



# **Heavy Duty Jig Saw Kit**

#### **DW323K**

- 5.8 Amps, 500-3100 SPM
- Accepts T-shank and Universal Blades
- Tool Free Blade Change
- Tool Free Shoe Bevels To 45° On Both Sides & Retracts Flush To Housing
- Adjustable Dust Blower
- Variable Speed
- Orbital Action
- Includes 3 Assorted Cobalt Steel Blades and Heavy Duty Carrying Case



# **VS** Portable **Band Saw Kit**

#### **DW328K**

- Variable Speed 100-265 SFPM for Cutting a Variety of Materials
- 4-3/4" x 4-1/2" Rectangular, 4-3/4" Round Cutting Capacity
- 6 Amp, 120V AC Motor
- Tracking Control to Adjust to Various Blade Conditions
- Light-weight for Ease of Operation

# 1 1/4 HP Heavy Duty **Electronic Plunge Router**

#### **DW615**

- 8.0 Amps
- Variable Speed, 8.000-24.000 RPM
- Electronic Feedback Speed Control
- 1/4" Collet Capacity, Spindle Lock Button
- P₁unge Action
- 100% Ball Bearings



# **3 HP Heavy Duty Electronic Plunge Router**

#### **DW625**

- 15.0 Amps. Plunge Action
- Variable Speed Electronic Feedback, 8,000-22,000 RPM
- Includes 1/4" and 1/2" Collets

- Micro-fine Depth Adjuster ■ 100% Ball Bearings ■ Spindle Lock Button 112



- 15.0 Amps, 22,000 RPM
- Includes 1/4" and 1/2" Collets
- Micro-fine Depth Adjustor
- Plunge Action
- 100% Ball Bearing Construction
- Spindle Lock Button



# **Heavy Duty Plate Joiner Kit**

- **■** 6.5 Amps, 10,000 RPM
- Rack and Pinion Fence Height Adjustment
- Integral Fence Tilts 0-90°
- Preset Depth Stops for #0, #10, and #20 Biscuits
- Retractable Steel Anti-Slip Pins
- Includes 6T Carbide Blade, Dustbag, and Steel Carrying Case

# 1/2" (13mm) **Heavy Duty** Impact Wrench

#### **DW290**

- 7.5 Amps, 2100 RPM
- Reversing, 2700 Impacts/Min.
- Detent Pin Anvil
- Ball Bearing Construction



FOR COMPLETE **DEWALT TOOL LISTING CONTACT YOUR FSI** REPRESENTATIVE



(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# POWER TOOLS



- Variable Speed Reversing
- 4.0 Amps, 0-2500 RPM
- 100% Ball Bearings
- Built in 2-Way Level



- Heavy Duty Keyless Chuck
- Variable Speed Reversing
- 5.4 Amps, 0-1200 RPM
- 100% Ball and Roller Bearings



- Variable Speed Reversing
- 5.4 Amps, 0-600 RPM
- 100% Ball and Roller Bearings
- Triple Gear Reduction



#### **DW111**

- **Variable Speed Reversing**
- **■** 5.4 Amps, 0-900 RPM
- 100% Ball and Roller Bearings
- Triple Gear Reduction





#### **DW116**

- Heavy Duty Keyless Chuck
- Variable Speed Reversing
- ■5.4 Amps, 0-600 RPM
- 100% Ball and Roller Bearings
- Triple Gear Reduction
- 360° Side Handle



#### DW117

- Heavy Duty Keyless Chuck
- Variable Speed Reversing
- 5.4 Amps, 0-900 RPM
- 100% Ball and Roller Bearings
- **■** Triple Gear Reduction
- 360° Side Handle



1/2" (13mm) **Heavy Duty** Spade-Handle Drill

#### **DW130**

- Reversing
- 7.0 Amps, 450 RPM
- 100% Ball and Roller Bearings



#### **DW103**

- Variable Speed Reversing
- 5.4 Amps, 0-1200 RPM

1/4" (6mm)

■ 5.4 Amps, 0-4000 RPM

■ Variable Speed, Reversing

■ 100% Ball & Roller Bearings

■ Die Cast Metal Gear Housing ■ Dust Sealed Trigger Switch

■ Includes Chuck Key & Holder

3/8" (10 mm)

■ Variable Speed Reversing ■ 4.5 Amps, 0-2500 RPM ■ Ball Bearing Construction

3/8" (10mm)

**■ Variable Speed Reversing** ■ 4.5 Amps, 0-1200 RPM **■** Ball Bearing Construction ■ Double Gear Reduction

DW102

**Heavy Duty Drill** 

Built In 2-Way Level

**DW101** 

**Heavy Duty Drill** 

**DW166** 

**Heavy Duty Drill** 

- 100% Ball and Roller Bearings
- Heavy Duty Chuck

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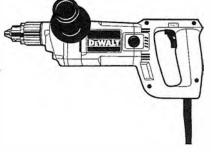
## POWER TOOLS



# 1/2" (13mm) **Heavy Duty End-Handle Drill**

### **DW140**

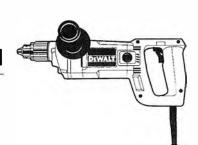
- 7.0 Amps, 600 RPM
- Reversing
- 100% Ball and Roller Bearings
- Triple Gear Reduction



# 1/2" (13 mm) **Heavy Duty End-Handle Drill**

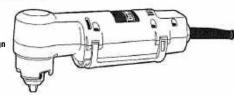
#### **DW142**

- 7.0 Amps, 900 RPM
- Reversing
- 100% Ball and Roller Bearings
- Triple Gear Reduction



# 3/8" (10mm) **Heavy Duty Right Angle Drill**

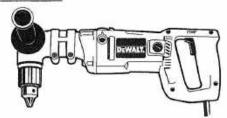
- 3.2 Amps, 1200 RPM
- Ball Bearing Construction
- **■** Compact, Lightweight Design
- Paddle Switch
- **■** Double Gear Reduction



# **1/2"** (13mm) **Right Angle Drill Kit**

#### **DW120K**

- 7.0 Amps. Reversing
- 3 Speed 400/600/900 RPM
- 100% Ball and Roller Bearings
- Includes Steel Carrying Case



# 1/2" (13mm) Heavy Duty **Joist & Stud Drill Kit**

#### **DW124K**

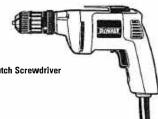
- 8.0 Amps
- 2 Speed 300/1200 RPM
- Mechanical Clutch In Low Speed
- 100% Ball and Roller Bearings
- Includes Steel Carrying Case



# 3/8" (10mm) Heavy Duty Screwdriver/Drill with Keyless Chuck

#### **DW170**

- 5.4 Amps, 0-1200 RPM
- Variable Speed Reversing
- 100% Ball & Roller Bearings
- Die Cast Metal Gear Housing
- Heavy Duty Keyless Chuck
- Converts from Drill to Positive Clutch Screwdriver



# **Heavy Duty Depth** Sensitive Screwdriver

#### DW259

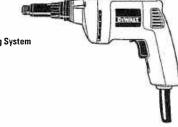
- Variable Speed Reversing
- 5.4 Amps, 0-2500 RPM
- 100% Ball and Roller Bearings
- Set and Forget Depth Sensitive Nosepiece
- 1/4" Hex Shank Drive



# **Heavy Duty Torque Adjustable Screwdriver**

#### DW264

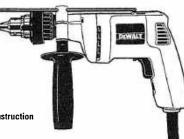
- Variable Speed Reversing
- 5.4 Amps, 0-2500 RPM
- 100% Ball and Roller Bearings
- Versa-Clutch® Torque Adjusting System
- 1/4" Hex Shank Drive



# 3/8" (10mm) **Heavy Duty** Hammerdrill

#### **DW500K**

- Variable Speed Reversing
- 5.0 Amps, 0-2500 RPM
- **■** 0-50,000 BPM
- 100% Ball and RollerBearing Construction
- Includes Steel Carrying Case



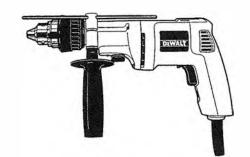
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# POWER TOOLS

# 1/2" (13mm) **Heavy Duty** Hammerdrill

#### **DW510K**

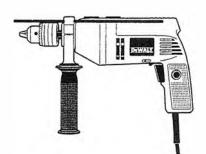
- w Variable Speed Reversing
- 5.0 Amps, 0-1400/0-3100 RPM
- 0-22,000/0-49,600 BPM
- 100% Ball and RollerBearing Construction.
- **Includes Steel Carrying Case**



# 1/2" (13mm) **Heavy Duty Hammerdrill**

#### DW512

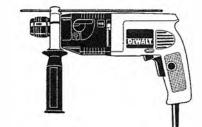
- Variable Speed Reversing
- 5.0 Amps, 0-1050/0-2700 RPM
- 0-12,750/0-32,300 BPM
- Ball and Roller Bearing Construction
- Includes Side Handle and Depth Rod



# 5/8" (16mm) Heavy Duty **SDS Rotary Hammer Kit**

#### **DW523K**

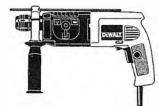
- 5.5 Amps, Variable Speed Reversing
- 0-1350 RPM/0-5000 Load BPM
- ■Ball and Roller Bearing Construction
- 5/8" Masonry Capacity
- Includes Side Handle, Depth Rod, and Steel Carrying Case



# 3/4" (19mm) Heavy Duty **SDS Rotary Hammer Kit**

#### **DW514K**

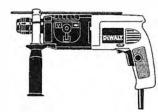
- 5.5 Amps, Variable Speed Reversing
- 0-1100 RPM/0-4100 Load BPM
- Ball and Roller Bearing Construction
- 3/4" Masonry Capacity
- Light Chiseling/Chipping Capacity
- Includes Side Handle, Depth Rod, and Steel Carrying Case

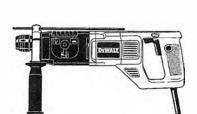


# 1" (25mm) Heavy Duty **SDS Rotary Hammer Kit**

#### **DW557K**

- 6.9 Amps, Variable Speed Reversing
- 0-980 RPM/0-3700 Load BPM
- Ball and Roller Bearing Construction
- 1" Masonry Capacity
- Chiseling/Chipping Feature
- Includes Side Handle, Depth Rod, and Steel Carrying Case





# 4-1/2" (115mm) **Heavy Duty** Mini Grinder

#### **DW402**

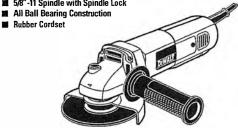
- 6.0 Amns, 10.000 RPM
- 5/8-11 Spindle with Spindle Lock
- Paddle Switch and 3 Position Handle
- Ball Bearing Construction



# 4-1/2" Heavy Duty **Angle Grinder**

#### **DW406**

- 900 Watts Out, AC Motor
- 4-1/2" Wheel Capacity
- 3 5/8"-11 Spindle with Spindle Lock
- Rubber Cordset



# 7" (180mm) **Heavy Duty** Angle Grinder

#### **DW474**

- # 15.0 Amps, 6000 RPM
- 5/8-11 Spindle with Spindle Lock
- Ball Bearing Construction
- Heat Treated Steel Spiral Bevel Gears



(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# **Blue 101 Poly Tarp**

# LONGER LASTING REINFORCED POLY TARP

#### FEATURES -

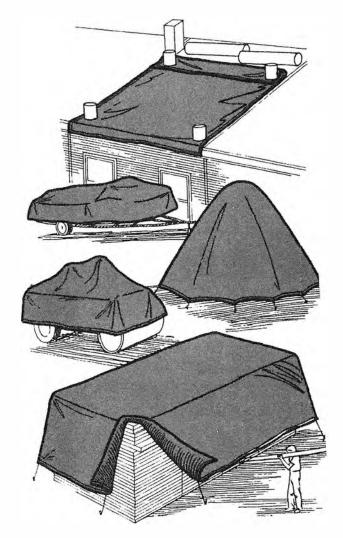
- Waterproof, Mildew-Resistant.
- Lightweight, Yet Strong & Flexible.
- Rip-Resistant Woven Polyethylene Fabric Coated on Both Sides.
- Heat-Sealed or Sewn Hems Reinforced with Rope to Minimize Grommet Pull-Out.
- Rust-Resistant Grommets Spaced 3-4 Feet Apart on All Sides.

#### SIZES

6 x 8	12 x 18	16 x 20	20 x 40	30 x 50
8 x 10	12 x 25	20 x 20	25 x 45	40 x 60
10 x 12	15 x 30	20 x 30	30 x 40	50 x 100

ALL TARPS ARE CUT FULL SIZE AND FINISH SLIGHTLY SMALLER DUE TO HEMS AND SEAMS

EACH TARP PACKED IN A POLY BAG WITH FABRIC SAMPLE ATTACHED TO OUTSIDE.



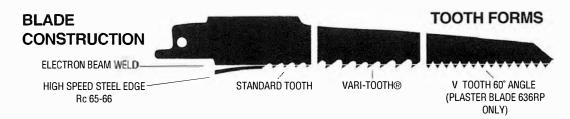
WE SELL POLYETHYLENE, NYLON AND MANILA ROPE



(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



## RECIPROCATING BLADES



#### **FEATURES**

- · Bi-metal construction
- · Matrix II type alloy high speed steel cutting edge (8% cobalt edge)
- Tooth hardness Rc 65-66
- Precision milled teeth
- 17° tooth back clearance angle 656R, 956R, 156R, 676RC
- Angled tang

#### ADVANTAGES

- · Shatter resistant
- · Shock resistant teeth
- · High wear resistance
- · High heat resistance
- · More aggressive cut

#### BENEFITS

- · Cuts through tough materials including nail-embedded wood
- Longer life
- · Retains tooth sharpness longer
- · Increases productivity
- Faster cutting



# **HEAVY-DUTY** GRIT RECIPROCATING RECIPROCATING BLADES BLADES

#### **FEATURES**

- Designed specifically for "rehabing" and demolition work
- 44% thicker than standard blades
- · Wider than standard blades
- · Unique tooth cutting angle

#### **ADVANTAGES**

- · Stays rigid
- . No vibrating from side to side
- · Durable in wood or metal demolition work

#### BENEFITS

- · Easy cutting
- Fast cutting
- · More cuts from each blade
- Lower sawing costs

#### BLADE CONSTRUCTION

6150 ALLOY STEEL SPRING TEMPERED BACKING



**GRIT HARDNESS** R<sub>A</sub> 90-93

TUNGSTEN CARBIDE CONTINUOUS FDGF GRIT PARTICIES

#### **FEATURES ADVANTAGES**

- 6150 alloy steel spring tempered backing
- Tungsten carbide continuous edge grit particles
- · Grit hardness Ra 90-93
- Fits most popular reciprocating machines
- Higher abrasion resistance than bi-metal blades
- Cuts certain materials more
   Increases productivity effectively than bi-metal blades, such as: soil pipe, cast iron, plywood, ceramic wall tile, brick, carbon, fiberglass, epoxies, plaster, melamines, cement, laminates, marble, and hardwood flooring

#### BENEFITS

- Reduces cost per cut
- Reduces downtime

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

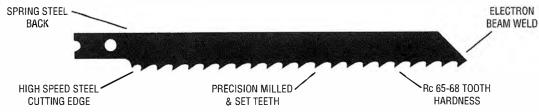


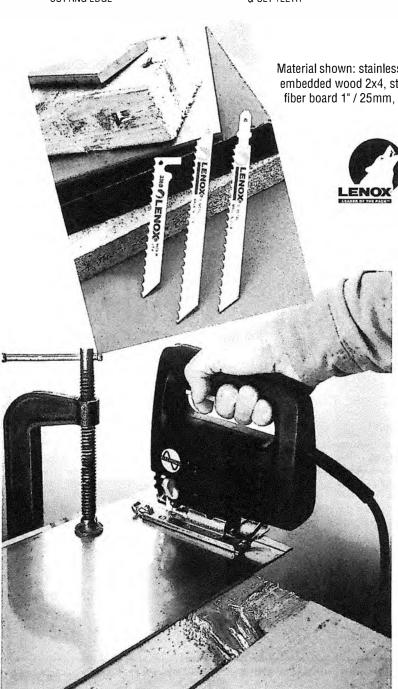
# RECIPROCATING BLADE SPECIFICATIONS

Sin Helema con el la	PRODUCT NUMBER LENGTH x WIDTH x THIC		TH * THICKNESS	TEETH			
5 PER VINYL	2 PER VINYL	BLISTER PACKED 1 PER CARD/5	BULK PACKED 50 PER BOX	INCHES	MILLIMETERS	PER INCH/ 25mm	SHAPE
<b>POUCH</b> 20572-656R	POUCH	20573-S656R	20543-B656R	6 x <sup>3</sup> / <sub>4</sub> x .050	150 x 20 x 1.3	6	<b></b>
20585-156R		20586-S156R	20546-B156R	12 x <sup>3</sup> / <sub>4</sub> x .050	300 x 20 x 1.3	6	
20582-956R		20587-S956R	20545-B956R	9 x <sup>3</sup> / <sub>4</sub> x .050	225 x 20 x 1.3	6	
20556-676RC		20557-S676RC		6 x <sup>7</sup> /16 x .050	150 x 11 x 1.3	6	.04
20560-606R		20559-S606R	20536-B606R	6 x <sup>3</sup> / <sub>4</sub> x .035	150 x 20 x .9	6	
20575-634R		20574-S634R		6 x <sup>3</sup> / <sub>4</sub> x .035	150 x 20 x .9	4	
20562-610R		20561-S610R	20539-B610R	6 x <sup>3</sup> / <sub>4</sub> x .035	150 x 20 x .9	10	2
20580-810R		20581-S810R	20544-B810R	8 x <sup>3</sup> / <sub>4</sub> x .050	200 x 20 x 1.3	10	
20520-314RC		20519-S314RC		3 x <sup>1</sup> / <sub>4</sub> x .032	75 x 6 x .8	14	
20583-110R		20584-S110R	20547-B110R	12 x <sup>3</sup> / <sub>4</sub> x .050	300 x 20 x 1.3	10/14	
20550-414R		20551-S414R	20526-B414R	4 x <sup>3</sup> / <sub>4</sub> x .035	100 x 20 x .9	14	
20564-614R		20565-S614R	20540-B614R	6 x <sup>3</sup> / <sub>4</sub> x .035	150 x 20 x .9	14	
20552-418R		20553-S418R	20527-B418R	4 x <sup>3</sup> / <sub>4</sub> x .035	100 x 20 x .9	18	<i>\$</i>
20566-618R		20567-S618R	20541-B618R	6 x <sup>3</sup> / <sub>4</sub> x .035	150 x 20 x .9	18	<b></b>
20578-818R		20563-S818R		8 x <sup>3</sup> / <sub>4</sub> x .035	200 x 20 x .9	18	
20521-318RC		20522-S318RC		3 x <sup>1</sup> / <sub>4</sub> x .032	75 x 6 x .8	18	
20554-424R		20555-S424R	20528-B424R	4 x <sup>3</sup> / <sub>4</sub> x .035	100 x 20 x .9	24	-
20568-624R		20569-S624R	20542-B624R	6 x <sup>3</sup> / <sub>4</sub> x .035	150 x 20 x .9	24	<i></i>
20570-636RP		20571-S636RP	20538-B636RP	6 x <sup>3</sup> / <sub>4</sub> x .050	150 x 20 x 1.3	6	
	20576-800RG			8 x <sup>3</sup> / <sub>4</sub> x .042	200 x 20 x 1.1	Medium Carbide Grit	ATTENDED
	20598-966R			9 x <sup>7</sup> / <sub>8</sub> x .062	225 x 22 x 1.6	6	_4 <u>11111111111111111111111111111111</u>
	20597-960R		-	9 x <sup>7</sup> / <sub>8</sub> x .062	225 x 22 x 1.6	10	
	20592-650R			6 x <sup>3</sup> / <sub>4</sub> x .050	150 x 20 x 1.3	10/14	A CONTRACTOR OF THE PARTY OF TH
	20591-6510R			6 x <sup>3</sup> / <sub>4</sub> x .050	150 x 20 x 1.3	10	47777
	20593-6514R		-	6 x <sup>3</sup> / <sub>4</sub> x .050	150 x 20 x 1.3	14	ARTHUR MARKET
	20594-6518R			6 x <sup>3</sup> / <sub>4</sub> x .050	150 x 20 x 1.3	18	



## MILLED JIG SAW BLADES





Material shown: stainless steel 2"  $\times$   $^{1}/_{4}$ " / 51  $\times$  6mm, nailembedded wood 2x4, stainless steel 6"  $\times$   $^{1}/_{8}$ " / 152  $\times$  4mm, fiber board 1" / 25mm, particle board  $^{3}/_{4}$ " / 19mm.

#### **FEATURES**

- Bi-metal construction
- Precision milled teeth
- 8% cobalt high speed steel cutting edge
- Tooth hardness Rc 65-68
- 0° tang angle
- Tangs to fit all major manufacturers of jig saw machines

#### ADVANTAGES

- Shatter resistant
- · Shock resistant teeth
- High wear resistance
- · High heat resistance

#### BENEFITS

- Cuts through most materials including stainless steel and nail-embedded wood
- Longer life
- Retains tooth sharpness longer
- · Increases productivity
- · Faster cutting

Fast overnight service

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



#### HACKSAW BLADES & FRAMES

SPRING STEEL BACK

HIGH SPEED STEEL EDGE STANDARD TOOTH

SPECIFICATIONS							
PRODUCT NUMBER LENGTH x WIDTH							
BULK PACKED 100 PER BOX	10 PER Vinyl Pouch	BLISTER PACKED 1 PER CARD/ 10 CARDS PER PACK	INCHES	MILLIMETERS	TEETH PER INCH/25mm		
20110-018HE	20140-V018HE	20150-S018HE	10 x <sup>1</sup> / <sub>2</sub>	250 x 13	18		
20111-024HE	20141-V024HE	20151-S024HE	10 x <sup>1</sup> / <sub>2</sub>	250 x 13	24		
20112-032HE	20142-V032HE	20152-S032HE	10 x <sup>1</sup> / <sub>2</sub>	250 x 13	32		
	20143 -V214HE		12 x <sup>1</sup> / <sub>2</sub>	300 x 13	14		
20116-218HE	20144-V218HE	20154-S218HE	12 x <sup>1</sup> / <sub>2</sub>	300 x 13	18		
20117-224HE	20145-V224HE	20155-S224HE	12 x <sup>1</sup> / <sub>2</sub>	300 x 13	24		
20118-232HE	20146-V232HE	20156-S232HE	12 x ½	300 x 13	32		

#### **FEATURES**

ELECTRON BEAM WELD

- · Bi-metal construction
- · Spring steel back
- M-2 high speed steel cutting edge
- Tooth hardness Rc 64-66

#### **ADVANTAGES**

- · Virtually unbreakable
- Shatter resistant
- Shock resistant
- · High heat resistance

#### BENEFITS

- Lasts longer
- · Safer than solid high speed steel blades
- Outperforms carbon steel up to 10 to 1
- · Increases blade life
- · Easier to push through the cut
- · Smoother cut
- Freer cutting action
- · Faster cutting

# **4012 HACKSAW** FRAME

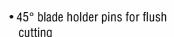
- 1. Lever tensions the 12"/ 300mm hacksaw blade to 30,000 psi / 21 kg. mm<sup>2</sup> (about twice that of ordinary frames).
- 2. Mount blade at 45° for flush cutting jobs.
- 3. Use frame as jab saw (set screw holds blade in position).
- 4. Use as a compass saw with No. 20585-156R reciprocating blade.
- 5. Store spare blades inside tubular back.

1 PER SLEEVE/5 PER BOX

SPECIFICATIONS					
PRODUCT NUMBER	DESCRIPTION				
20918-4012	High tension hand hacksaw frame				

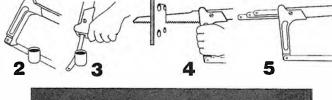
#### **FEATURES**

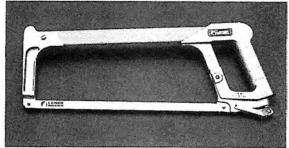
- · Heavy-duty aluminum handle
- · Rectangular steel crossbar
- Blade storage
- · Converts to jab or compass saw
- · Permanent hardened/serrated blade holding pins
- Blade tensions to 30,000 psi / 21 kg. mm<sup>2</sup>
- Steel tensioning nut
- · Fold away tension lever



#### **ADVANTAGES**

- · Resists breakage
- · Easy to use
- · No need to replace blade holder pins
- · No blade twisting



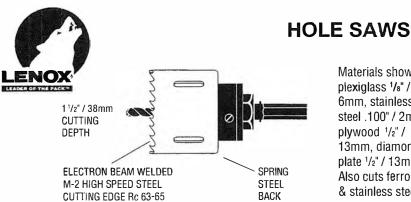


#### BENEFITS

- Strong
- · Saves time/improves productivity
- Safe to use
- Straighter cuts
- Convenient
- · Longer blade life
- Versatile
- · Fast cutting
- · Easier to push through the cut

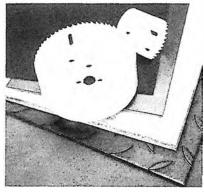


# Fastener Systems, Inc.



01111	va LD	GE Rc 6	0 00	BACK				
HOLE SAW RPM CHAP								
SIZ INCH	E MM	MILD STEEL	TOOL & STAINLESS	CAST IRON	BRASS	ALUMINUM		
9/16	14	580	300	400	790	900		
5/8	16	550	275	365	730	825		
11/16	17	500	250	330	665	750		
3/4	19	460	230	300	600	690		
-	20	425	210	280	560	630		
13/16	21	425	210	280	560	630		
7/8	22	390	195	260	520	585		
15/16	24	370	185	245	495	555		
1	25	350	175	235	470	525		
11/16	27	325	160	215	435	480		
11/8	29	300	150	200	400	450		
13/16	30	285	145	190	380	425		
11/4	32	275	140	180	360	410		
15/16	33	260	135	175	345	390		
13/8	35	285	145	190	380	425		
17/16	37	240	120	160	315	360		
11/2	38	230	115	150	300	345		
19/16	40	220	110	145	290	330		
15/8	41	210	105	140	280	315		
111/16	43	205	100	135	270	305		
13/4	44	195	95	130	250	295		
113/16	46	190	95	125	250	285		
17/6	48	180	90	120	240	270		
2	51	170	85	115	230	255		
21/16	52	165	80	110	220	245		
21/8	54	160	80	105	210	240		
21/4	57	150	75	100	200	225		
23/8			70	95	190			
	60	140		_		220		
21/2	64	135	65	90	180	205		
29/16	65	130	65	85	175	200		
25/8	67	130	65	85	170	195		
	68	130	65	85	170	195		
23/4	70	125	60	80	160	185		
27/8	73	120	60	80	160	180		
3	76	115	55	75	150	170		
31/8	79	110	55	70	140	165		
31/4	83	105	50	70	140	155		
33/8	86	100	50	65	130	150		
31/2	89	95	45	65	130	145		
35/8	92	95	45	60	120	140		
33/4	94	90	45	60	120	135		
4	102	85	40	55	110	130		
41/8	105	80	40	55	110	120		
41/4	108	80	40	55	110	120		
41/2	114	75	35	50	100	105		
43/4	121	70	35	45	90	95		
5	127	65	30	40	85	90		
51/2	140	60	30	35	80	85		

Materials shown: plexiglass 1/8" / 6mm, stainless steel .100" / 2mm, plywood 1/2"/ 13mm, diamond plate 1/2" / 13mm. Also cuts ferrous & stainless steels.

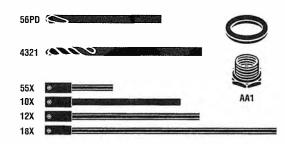


1 PER CLAM

ACCESSORIES						
PRODUCT Number	DESCRIPTION	CHUCK SIZE Inches MM		FITS ARBOR Number		
30850-4321	Pilot Drill*	1/4	6	1L, 2L, 4L		
30851-56PD	Pilot Drill*	1/4	6	5L, 6L		
30857-AA1	Arbor Adaptor**			1L, 4L, 5L		
30848-18X	18" / 450mm Extension	1/2 & larger	13	1L, 2L		
30847-12X	12" / 300mm Extension	1/2 & larger	13	1L, 2L		
30843-10X	10" / 250mm Extension	3/8 & larger	10	5L, 6L		
30846-55X	51/2" / 140mm Extension	1/2 & larger	13	1L, 2L		

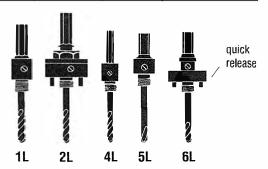
\* Order Pilot Drills in multiples of ten.

<sup>\*\*</sup> Arbor Adaptors 1 per card. Order in multiples of five.



1 PER BOX

	ARBORS							
PRODUCT Number	FITS HOLE Saws	SHANK Type	CHUCK SIZE INCHES MM					
30001-1L	9L-19L	Hex	1/2 & larger 13					
30002-2L	20L-96L	Hex	1/2 & larger 13					
30004-4L	9L-19L	Round	1/4 & larger 6					
30005-5L	9L-19L	Hex	3/8 & larger 10					
30006-6L	20L-96L	Hex	3/8 & larger 10					



6 152 Suggested RPM's only.

55

35

75

85





### **HOLE SAWS**

	SAW	SF	E	CII	FI	CA'	LI	ONS
PRODUCT Number 1 per box	PROOUCT NUMBER 1 PER SLAM	DIAM		PIPE INCHES		PIPE E	NTR.	USE ARBOR NUMBER
30009-9L	-	9/16	14					1L, 4L, 5L
30010-10L	30110-K10L	5/8	16	_				1L, 4L, 5L
30011-11L	-	11/16	17					1L, 4L, 5L
30012-12L	30112-K12L	3/4	19	1/2	13	3/8	10	1L, 4L, 5L
30098-20MMHS	30198-K20MMHS	-	20	-			1	1L, 4L, 5L
30013-13L	_	13/16	21			-		1L, 4L, 5L
30014-14L	30114-K14L	7/8	22	3/4	19	1/2	13	1L, 4L, 5L
30015-15L	-	15/16	24		13	1"	10	1L, 4L, 5L
30016-16L	30116-K16L	1	25					1L, 4L, 5L
30017-17L	30117-K17L	11/16	27		-			1L, 4L, 5L
30018-18L	30118-K18L	11/8	29	1	25	3/4	19	1L, 4L, 5L
30019-19L	-	13/16	30	<u> </u>	20	/4	10	1L, 4L, 5L
30020-20L	30120-K20L	11/4	32		-			2L or 6L
30021-21L	-	15/16	33					2L or 6L
30021-21L	30122-K22L	13/8	35	-		1	25	2L or 6L
30023-22L	- 00122 R22L	17/16	37	-		<u> </u>	20	2L or 6L
30023-23L	30124-K24L	11/2	38	11/4	32			2L or 6L
30024-24L 30025-25L	00124 K24L	19/16	40	1 /4	02			2L or 6L
30025-25L	30126-K26L	15/8	41	-				2L or 6L
30020-20L 30027-27L		111/16	43	-	_	-	-	2L or 6L
30027-27L	30128-K28L	13/4	44	11/2	38	11/4	32	2L or 6L
30029-29L	30120-N20L	113/16	46	1 12	30	1 /4	02	2L or 6L
30030-30L	30130-K30L	17/8	48			700.5		2L or 6L
30030-30L	30132-K32L	2	51		-	11/2	38	2L or 6L
30032-32L 30033-33L		21/16	52			1 12	00	2L or 6L
30033-33L 30034-34L	30134-K34L	21/8	54	-			-	2L or 6L
	30134-K34L	21/4	57	2	51		_	2L or 6L
30036-36L 30038-38L	30130-K30L	23/8	60	-	31		_	2L or 6L
30040-40L	30140-K40L	21/2	64	_		2	51	2L or 6L
30040-40L 30041-41L	30140-K40L	2 <sup>9</sup> / <sub>16</sub>	65				01	2L or 6L
30047-41L	30142-K42L	2 <sup>5</sup> /8	67	21/2	64			2L or 6L
30042-42L 30043-43L	30142-K42L	_	68	2 12	04		_	2L or 6L
	30143-K43L	23/4	70		-		-	2L or 6L
30044-44L 30046-46L	30144-K44L	27/8	73				-	2L or 6L
	20140 1/401	3	76		-	21/2	64	2L or 6L
30048-48L	30148-K48L	31/8	79	-	-	2.12	04	2L or 6L
30050-50L	30150-K50L 30152-K52L	31/4	83	2	70			2L or 6L
30052-52L	30132-K32L	33/8	86	3	76		-	2L or 6L
30054-54L	201EC VECI	31/2	89					2L or 6L
30056-56L	30156-K56L	-		-	1	2	76	
30058-58L	3015 <u>8-K58L</u>	35/8	92	21/-	90	3	76	2L or 6L
30060-60L	20164 1/641	33/4	94	31/2	89		-	2L or 6L
30064-64L	30164-K64L	41/2	102		-	31/2	90	2L or 6L
30066-66L	30166-K66L	41/8	105	A	100	3.12	89	2L or 6L 2L or 6L
30068-68L	U. — —	41/4	108	4	102			2L or 6L
30072-72L	20176 1761	41/2	114	41/-	114	1	100	2L or 6L
30076-76L	30176-K76L	43/4	121	41/2	114	4	102	
30080-80L	<del>-</del>	5	127	-				2L or 6L
30088-88L		51/2	140	_	-			2L or 6L

All Boxed Hole Saws  $^9$ /16" / 14mm to  $1^9$ /4" / 44mm available in master pack of 10. All Boxed Hole Saws  $1^{13}$ /16" / 46mm to  $3^1$ /2" / 89mm available in master pack of 5.

6 152

#### SHARPER TOOTH TIPS





A new manufacturing process creates sharper tooth tips for faster, freer cutting.

The difference can be seen in these microscopic photographs.

#### **FEATURES**

- Bi-metal construction
- M-2 high speed steel cutting edge
- Tooth hardness Rc 63-65
- Vari-Tooth® design
- · Positive rake tooth
- 3/16" / 5mm thick heavyduty backing plate
- 1<sup>1</sup>/<sub>2</sub>" / 38mm cutting depth

#### **ADVANTAGES**

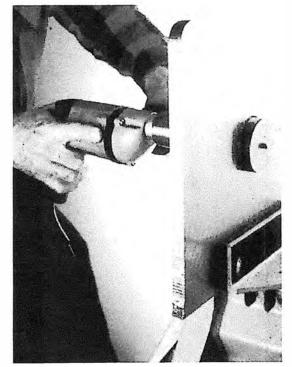
- Shock resistant teeth
- Resists tooth strippage
- Greatly reduces vibration
- Aggressive cutting action
- More durable than stamped backing cups
- · Deep cutting

#### **BENEFITS**

- Teeth stay sharper longer
- Faster cutting
- Smoother cuts
- Quieter cutting
- Better chip clearance
- Eliminates need for torque driving plate
- Cuts through 2x4\*

\*Some arbors limit cutting depth to 13/8" / 35mm.





30096-96L

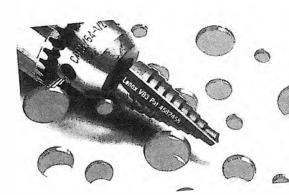
(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

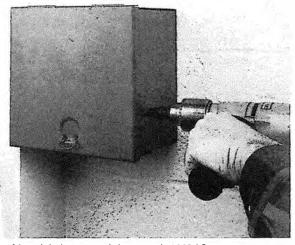


## **VARI-BIT STEP DRILLS**



STEP DRILL BITS





Material shown: stainless steel .100" / 2mm.

1 PER CLAM

U.S. PATENT NO. 4582458

	SPECIFICATIONS							
LENOX Vari-bit	NUMBER OF HOLE SIZES	HOLE SIZES Inches / MM	ELECTRIC Drill Size Inches / Mm	UNIBIT®	KLEIN UNIBIT®			
30881-VB1	13	$^{1/8,\ 5/32,\ 3/16,\ 7/32,\ 1/4,\ 9/32,\ 5/16,\ 11/32,\ 3/8,\ 13/32,\ 7/16,\ 15/32,\ 1/2}_{3,\ 4,\ 4.5,\ 5.5,\ 6,\ 7,\ 8,\ 8.5,\ 9.5,\ 10,\ 11,\ 12,\ 12.5}$	¹/₄/ 6 & larger	1	1-59001			
30882-VB2	9	<sup>1</sup> / <sub>2</sub> , <sup>9</sup> / <sub>16</sub> , <sup>5</sup> / <sub>8</sub> , <sup>11</sup> / <sub>16</sub> , <sup>3</sup> / <sub>4</sub> , <sup>13</sup> / <sub>16</sub> , <sup>7</sup> / <sub>8</sub> , <sup>15</sup> / <sub>16</sub> , 1 12.5, 14, 16, 17.5, 19, 20.5, 22, 23.5, 25	³/ <sub>8</sub> / 9.5 & larger	20	2-59002			
30883-VB3	9	<sup>1</sup> / <sub>4</sub> , <sup>5</sup> / <sub>16</sub> , <sup>3</sup> / <sub>8</sub> , <sup>7</sup> / <sub>16</sub> , <sup>1</sup> / <sub>2</sub> , <sup>9</sup> / <sub>16</sub> , <sup>5</sup> / <sub>8</sub> , <sup>11</sup> / <sub>16</sub> , <sup>3</sup> / <sub>4</sub> 6, 8, 9.5, 11, 12.5, 14, 16, 17.5, 19	³/ <sub>8</sub> / 9.5 & larger	3	3-59003			
30884-VB4	6	<sup>3</sup> / <sub>16</sub> , <sup>1</sup> / <sub>4</sub> , <sup>5</sup> / <sub>16</sub> , <sup>3</sup> / <sub>8</sub> , <sup>7</sup> / <sub>16</sub> , <sup>1</sup> / <sub>2</sub> 4.5, 6, 8, 9.5, 11, 12.5	1/4 / 6 & larger	2	5-59005			
30886-VB6	2	<sup>3</sup> / <sub>8</sub> , <sup>1</sup> / <sub>2</sub> 9.5, 12.5	1/4/6 & larger	10, 12*	7-59007			
30887-VB7	1	<sup>7</sup> /8/ 22 (for ¹/2" / 12.5 conduit)	³/ <sub>8</sub> / 9.5 & larger	11	8-59008			
30908-VB8	12	<sup>3</sup> / <sub>16</sub> , <sup>1</sup> / <sub>4</sub> , <sup>5</sup> / <sub>16</sub> , <sup>3</sup> / <sub>8</sub> , <sup>7</sup> / <sub>16</sub> , <sup>1</sup> / <sub>2</sub> , <sup>9</sup> / <sub>16</sub> , <sup>5</sup> / <sub>8</sub> , <sup>11</sup> / <sub>16</sub> , <sup>3</sup> / <sub>4</sub> , <sup>13</sup> / <sub>16</sub> , <sup>7</sup> / <sub>8</sub> 4.5, 6, 8, 9.5, 11, 12.5, 14, 16, 17.5, 19, 20.5, 22	<sup>3</sup> / <sub>8</sub> / 9.5 & larger	4	14-59014			
30888-VB11	2	<sup>7</sup> / <sub>8</sub> , 1 <sup>1</sup> / <sub>8</sub> / 22, 28.5 (for <sup>1</sup> / <sub>2</sub> " / 12.5 and <sup>3</sup> / <sub>4</sub> " / 19 conduit)	³/ <sub>8</sub> / 9.5 & larger	13**	11-590011			
30912-VB12	5	<sup>7</sup> / <sub>8</sub> , 1 <sup>1</sup> / <sub>8</sub> , 1 <sup>7</sup> / <sub>32</sub> , 1 <sup>1</sup> / <sub>4</sub> , 1 <sup>3</sup> / <sub>8</sub> 22, 285, 31, 32, 35	3/8 / 9.5 & larger	None	None			
30925-VBX8	EXTENSION 8"	/ 204mm. 1 per clam. Fits 3/8" / 9.5mm drill chuck & I						

<sup>\*</sup> Lenox Vari-Bit #6 combines Unibit #10 & #12.

<sup>\*\*</sup> Unibit® #13 has 11/8" / 28.5mm step only. Vari-Bit has both 7/8" / 22mm & 11/8" / 28.5mm.

METRIC VARI-BIT® SPECIFICATIONS						
LENOX Vari-bit	NUMBER OF Hole Sizes	HOLE SIZES MM	ELECTRIC Drill Size MM	UNIBIT®		
30960-MVB412	9	4, 5, 6, 7, 8, 9, 10, 11, 12	6mm & larger	1M		
30961-MVB1424	7	14, 16, 18, 20, 22, 24, 25	10mm & larger	20M		
30962-MVB618	7	6, 8, 10, 12, 14, 16, 18	10mm & larger	3M		
30963-MVB2034	8	20, 22, 24, 26, 28, 30, 32, 34	10mm & larger	21 <b>M</b>		
30964-MVB528PG	10	5, 7.5, 10, 12.5, 15.2, 18.6, 20.4, 22.5, 25.5, 28.3	10mm & larger	PG29		



## **PORTABLE BAND SAW BLADES**

#### MASTER-BAND®

3 PER BOX

SF	SPECIFICATIONS						
LENGTH x WIDTH	X THICKNESS MILLIMETERS	PRODUCT Number	TEETH PER INCH/25mm				
3' 8 <sup>7</sup> / <sub>6</sub> "(44 <sup>7</sup> / <sub>6</sub> ") x <sup>1</sup> / <sub>2</sub> " x .020	1140 x 13 x .50	80114-38-EW-10/14 80115-38-EW-14 80112-38-EW-14/18 80116-38-EW-18 80117-38-EW-24	10/14 14 14/18 18 24				
3' 8 <sup>7</sup> /s"(44 <sup>7</sup> /s") x ¹/₂" x .025	1140 x 13 x .64	80143-385-EW-8/12 80144-385-EW-10/14 80145-385-EW-14 80142-385-EW-14/18	8/12 10/14 14 14/18				
4' 5 <sup>3</sup> / <sub>4</sub> "(53 <sup>3</sup> / <sub>4</sub> ") x <sup>1</sup> / <sub>2</sub> " x .020	1365 x 13 x .50	80119-45-EW-10/14 80120-45-EW-14 80123-45-EW-14/18 80121-45-EW-18 80122-45-EW-24	10/14 14 14/18 18 24				
4' 5 <sup>3</sup> / <sub>4</sub> "(53 <sup>3</sup> / <sub>4</sub> ") x <sup>1</sup> / <sub>2</sub> " x .025	1365 x 13 x .64	80146-455-EW-10/14 80147-455-EW-14/18	10/14 14/18				
4' 6"(54") x ½" x .025	1370 x 13 x .64	80148-54-EW-6/10 80723-54-EW-8/12 80724-54-EW-10/14 80141-54-EW-14/18 80150-54-EW-18	6/10 8/12 10/14 14/18 18				

#### **FEATURES**

- Bi-metal construction
- Matrix II type alloy high speed steel cutting edge (8% cobalt edge)
- Tooth hardness Rc 66-68
- Vari-Tooth® or standard tooth forms available

#### **ADVANTAGES**

- Tough shock resistant alloy with less tooth chippage
- Withstands higher cutting temperatures than M-2 or carbon steel blades

#### BENEFITS

- Lasts longer on interrupted cuts and mild to difficult to machine materials
- Attains higher productivity than M-2 or carbon steel blades





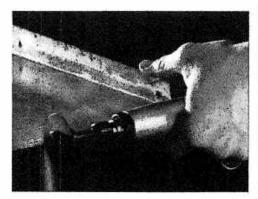
# "Hummer" Abrasive Wheels

#### "Hummer" Type 1 Resin Bond Wheels - Boxed



#### **Applications**

- For cut-off or grinding in high speed air or electric die grinders.
- Automotive, aircraft or ship building.
- Pipe welding and fabrication.
- Power plant construction and maintenance.
- General purpose metal removal.
- Available in two grades: Standard -BBR fast cutting (not available in ¼6" and ½2"). Hard - BRR long life.

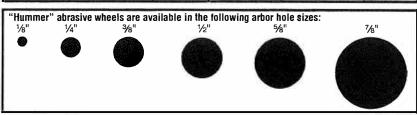




HCKIT01 Kit 5 Popular "Hummer" Cut-off Wheels, 3" x 1/32" x 3/6", and 1 – 3/8" Mandrel.

FEATURES	ADVANTAGES	BENEFITS
Resin Bond     Aluminum Oxide Grain	Fast Metal Removal	Fast Cutting and Grinding     Increased Production Rates
Double Fiberglass     Reinforcement	Resists Breakage	Safe Operation
Special Formulation	Holds Grains Longer     More Fractures per Grain     Helps Clean Kerf	Longer Life     Cleaner Cuts

Specificatio Description Inches	Standard Pack	RPM	Description Inches	Standard Pack	RPM
1 x 1/32	25	61,115	21/2 x 1/4	10	24,446
1 x 1/16	25	61,115	21/2 x 3/8	10	21,696
1 x 1/8	25	61,115	21/2 x 1/2	10	21,696
1 x 1/4	10	61,115	3 x .035	25	20,372
1 x 3/8	10	54,240	3 x 1/32	25	20,372
1 x ½	10	54,240	3 x 1/16	25	20,372
11/4 x 1/32	25	48,892	3 x 1/8	25	20,372
11/4 X 1/16	25	48,892	3 x 1/4	10	20,372
11/4 x 1/8	25	48,892	3 x 3/8	10	18,080
11/4 x 1/4	10	48,892	3 x ½	10	18,080
11/4 x 3/8	10	43,392	31/2 x 1/32	25	17,462
11/4 x 1/2	10	43,392	31/2 x 1/16	25	17,462
1½ x 1/32	25	40,744	31/2 x 1/8	25	17,462
11/2 X 1/16	25	40,744	31/2 x 1/4	10	17,462
1½ x 1/8	25	40,744	3½ x 3/8	10	15,497
1½ x ¼	10	40,744	3½ x ½	10	15,497
1½ x 3/8	10	36,160	4 x .035	25	15,279
1½ x ½	10	36,160	4 x 1/32	25	15,279
2 x .035	25	30,558	4 x 1/16	25	15,279
2 x 1/32	25	30,558	4 x 1/8	25	15,279
2 x 1/16	25	30,558	4 x 1/4	10	15,279
2 x 1/8	25	30,558	4 x 3/8	10	13,560
2 x 1/4	10	30,558	4 x ½	10	13,560
2 x 3/8	10	27,120	41/2 X 1/16	25	13,581
2 x ½	10	27,120	41/2 x 1/8	25	13,581
21/2 X 1/32	25	24,446	41/2 X 1/4	10	13,581
2½ x 1/16	25	24,446	41/2 X 3/8	10	12,053
2½ x 1/8	25	24,446	4½ x ½	10	12,053



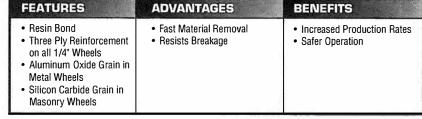
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# **Depressed Center Wheels**

# Type 27 Depressed Center Resin Bond Wheels FEATURES







#### Applications - Metal Wheel

- For grinding or cut-off in electric or air powered right angle grinders.
- General purpose applications in mild steels or for multi-application users grinding stainless steels, and alloy steels.
- For pipe welding and general metal fabrication.

#### Specifications - Metal Cutting

Type 27 Metal Wheels							
Description	ription Product Number Standard F		rd Pk.	Maximum			
Inches	Boxed	Carded	Boxed	Carded	RPM		
3 x 1/8 x 3/8	D3000MET		25		18,000		
3 x 1/4 x 3/8	D3020MET		25		18,000		
4 x 1/8 x 3/8	D4000MET		25		13,500		
4 x 1/8 x 5/8	D4001MET		25	**	13,500		
4 x 1/4 x 3/8	D4020MET		25		13,500		
4 x 1/4 x 5/8	D4021MET		25		13,500		
4½ x 1/8 x 7/8	D4502MET	DC4502MET	25	5	13,300		
4½ x ¼ x ¾	D4522MET	DC4522MET	25		13,300		
5 x 1/8 x 7/8	D5002MET		25		12,200		
5 x 1/4 x 7/8	D5022MET		25		12,200		
7 x 1/8 x 7/8	D7002MET	DC7002MET	25	5	8,500		
7 x 1/8 x 5/8 - 11	D7003MET		10		8,500		
7 x 1/4 x 7/8	D7022MET	DC7022MET	25	5	8,500		
7 x 1/4 x 5/8 - 11	D7023MET	DC7023MET	10	5	8,500		
9 x 1/8 x 7/8	D9002MET		25		6,600		
9 x 1/8 x 5/8 - 11	D9003MET		10		6,600		
9 x 1/4 x 7/8	D9022MET		25		6,600		
9 x 1/4 x 5/8 - 11	D9023MET		10		6,600		

#### Applications - Masonry Wheel

- For grinding in electric or air powered right angle grinders.
- General purpose applications in concrete, masonry or stone.
- For high load metal applications including ductile iron, cast iron, aluminum, etc.

#### Specifications - Masonry Cutting

Description	Product	Product Number		Standard Pk.		
Inches	Boxed	Carded	Boxed	Carded	RPM	
4½ x ¼ x ¾	D4522MAS	DC4522MAS	25	5	13,300	
7 x 1/4 x 7/8	D7022MAS	DC7022MAS	25	5	8,500	
7 x 1/4 x 5/8 - 11	D7023MAS	DC7023MAS	10	5	8,500	
9 x ½ x %	D9022MAS		25		6,600	
9 x 1/4 x 5/8 - 11	D9023MAS		10		6,600	

## Type 28 Depressed Center Wheels



FEATURES	ADVANTAGES	BENEFITS	
Resin Bond     Three Ply Reinforcement on all 1/4" Wheels     Aluminum Oxide Grain in Metal Wheels     Silicon Carbide Grain in Masonry Wheels	Fast Material Removal     Resists Breakage	Increased Production Rates     Safer Operation	



#### **Applications**

 For flat or corner grinding saucer-shape allows increased visibility.

#### - Specifications - Metal Cutting

Type 28 Metal Wheels Maximum Standard Pk. Description **Product Number** Inches Boxed Carded Boxed Carded **RPM** 8,500 7 x 1/4 x 1/8 D7022MET28 25 8,500 7 x ¼ x % - 11 D7023MET28 10 9 x 1/4 x 1/8 D9022MET28 25 6,600 9 x 1/4 x 5/8 - 11 D9023MET28 10 6,600

# We put the fast in fasteners

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



# Flap Discs & Wheels

# Zirconium Flap Discs

#### **Applications**

- For combined grinding and finishing in electric or air powered right angle grinders.
- For general purpose grinding and smoothing of ferrous or non-ferrous

  motals
- · Long life in stainless steel.
- · For weld seam grinding and blending.
- · Rust removal.
- Metal fabrication.
- · Automotive, aircraft or ship building.
- · Automotive aftermarket.

FEATURES	ADVANTAGES	BENEFITS
Combined Rough Metal Removal and Finishing     Norzon Zirconia Grain     Type 27 or Type 29	Eliminates Secondary     Operations     Long Life and Fast Cutting     Standard or Built-In Grinding Action	<ul> <li>Increased Production Rates</li> <li>Won't Clog or Load</li> <li>For use on Stainless Steel</li> <li>Multiple Applications</li> </ul>

Specificatio		0.4	Product Number	Standard	Maximum
Description	Туре	Grit	Boxed	Pack	RPM
4 x % AH	27	36z	FDZ4036F	10	13,500
4 x % AH	29	36z	FDZ4036C	10	13,500
4 x % AH	27	60z	FDZ4060F	10	13,500
4 x % AH	29	60z	FDZ4060C	10	13,500
4 x % AH	27	80z	FDZ4080F	10	13,500
4 x % AH	29	80z	FDZ4080C	10	13,500
41/2 x 7/8 AH	27	36z	FDZ4536F	10	13,300
41/2 x 7/8 AH	29	36z	FDZ4536C	10	13,300
4½ x % AH	27	60z	FDZ4560F	10	13,300
41/2 x 7/8 AH	29	60z	FDZ4560C	10	13,300
4½ x % AH	27	80z	FDZ4580F	10	13,300
41/2 x 7/8 AH	29	80z	FDZ4580C	10	13,300
7 x 1/8 AH	27	36z	FDZ7036F	10	8,500
7 x 1/8 AH	29	36z	FDZ7036C	10	8,500
7 x 1/8 AH	27	60z	FDZ7060F	10	8,500
7 x % AH	29	60z	FDZ7060C	10	8,500
7 x 1/8 AH	27	80z	FDZ7080F	10	8,500
7 x 1/8 AH	29	80z	FDZ7080C	10	8,500

# Flap Wheels

#### **Applications**

- · For finishing and light stock removal.
- For ferrous and non-ferrous metals, woods, and plastics.
- · Deburring and blending.
- · Cleaning and polishing.
- · Pre-paint preparation.

FEATURES	ADVANTAGES	BENEFITS
Aluminum Oxide Grain on Resin Bond Cloth	Easy Stock Removal	Increased Production Rates
Spin Balanced	Concentric Operation	<ul><li>Enhanced Safety</li><li>Longer Life</li></ul>

Description	Grit	Product Number Boxed	Standard Pack	Maximum RPM
1 x 1 x 1/4 shank	60	FW1160	20	25,000
1 x 1 x 1/4 shank	80	FW1180	20	25,000
1 x 1 x 1/4 shank	120	FW11120	20	25,000
2 x 1 x 1/4 shank	60	FW2160	20	22,000
2 x 1 x 1/4 shank	80	FW2180	20	22,000
2 x 1 x 1/4 shank	120	FW21120	20	22,000
3 x 1 x 1/4 shank	60	FW3160	20	18,000
3 x 1 x 1/4 shank	80	FW3180	20	18.000
3 x 1 x 1/4 shank	120	FW31120	20	18,000
4 x 1 x 5/8 AH	60	FW4160A	10	15,000
4 x 1 x 5/8 AH	80	FW4180A	10	15,000
4 x 1 x 5/8 AH	120	FW41120A	10	15,000
6 x 1 x 1 AH	60	FW6160A	5	6,000
6 x 1 x 1 AH	80	FW6180A	5	6,000
6 x 1 x 1 AH	120	FW61120A	5	6,000
6 x 2 x 1 AH	60	FW6260A	5	3,500
6 x 2 x 1 AH	80	FW6280A	5	3,500
6 x 2 x 1 AH	120	FW62120A	5	3,500
8 x 1 x 1 AH	60	FW8160A	5	5,000
8 x 1 x 1 AH	80	F <b>W</b> 8180A	5	5.000
8 x 1 x 1 AH	120	FW81120A	5	5,000
8 x 2 x 1 AH	60	FW8260A	5	3,500
8 x 2 x 1 AH	80	FW8280A	5	3,500
8 x 2 x 1 AH	120	FW82120A	5	3,500

### Fastener Systems, Inc.

640 Snyder Avenue Bolmar Industrial Center West Chester, PA 19382

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#### **Premium Segment Dry/Wet Cut Blades**





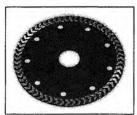
#### DIAMOND BLADES

#### Premium Dry/Wet Cut "DWS" Type Turbo Blades



KHK Turbo Blades can be used with a standard circular saw or gasoline powered hand held saw to cut reinforced concrete. The turbo blades are ideal for cutting marble, granite, brick, tile, refractory and ceramic products. Continuous rim construction provide smoother cutting and eliminates segment breakage.

#### Premium Dry/Wet Cut "RS" Type Turbo Blades



KHK "RS" type Turbo Blades, because of their special design, make cutting more profitable by more efficient heat exchange and quick chip removal.

#### **Premium Segmented Cured Concrete Blades**

KHK Segmented Cure Concrete Blades are specially designed for cutting cured concrete and block. These blades can be used for walk behind saws.

#### Premium Segmented Green Concrete/Asphalt Blades

#### **Premium Wet Cut Tile Blades**



KHK Wet Cutting Tile Blades are designed with continuous rim that provides faster, more efficient, chip-free cutting of hard ceramic materials including ceramic tile, quarry tile, marble, granite, slate, etc.

**Premium Cup Grinders** 

KHK Premium Cup Grinders are designed and manufactured for heavy material removal suitable applications include concrete, masonry and stone.

#### Premium Tuck Point Blades/Crack Chaser

KHK Premium Tuck Point blades are designed for high speed clearing of mortar joints on brick structures.

**Premium Low Noise Diamond Blades**  "LN" type blades, our newly patented products, will reduce the noise level about 10DB when sawing. And this noise reduction is achieved by special designed cores. This special design will reduce the cutting noise, increase blades rigidity as well as cutting speed and blade life.

Nominal Size	Part Number
411 070 5/01/00	HKD40T
4"x.070x5/8"-20mm	
4.5"x.070x7/8"-5/8"	HKD45T
5"x.070x7/8"-5/8"	HKD50T
6"x.080x7/8"-5/8"	HKD60T
7"x.090x5/8"-Dia	HKD70T
8"x.095x7/8"-5/8"	HKD80T
9"x.095x7/8"-5/8"	HKD90T
10"x.095x7/8"-5/8"	HKD100T
12"x.110x1"or 20mm	HKD120T
12"x.125x1" or 20mm	HKD120T-L
14"x.125x1" or 20mm	HKD140T
4"x.080x5/8"-20mm	HKDWS40T
4.5"x.080x7/8"-5/8"	HKDWS45T
5"x.080x7/8"-5/8"	HKDWS50T
6"x.080x7/8"-5/8"	HKDWS60T
7"x.090x5/8"-Dia	HKDWS70T
8"x.095x7/8"-5/8"	HKDWS80T
9"x.095x7/8"-5/8"	HKDWS90T
9 x.095x7/8 -5/8" 10"x.095x7/8"-5/8"	
	HKDWS100T
12"x.125x1" or 20mm	HKDWS120T
14"x.125x1" or 20mm	HKDWS140T
4" x .080x5/8"-20mm	HKRS40T
4.5"x.080x7/8"-5/8"	HKRS45T
5"x.080x7/8"-5/8"	HKRS50T
6"x.080x7/8"-5/8"	HKRS60T
7"x.090x5/8"-Dia	HKRS70T
8"x.095x7/8"-5/8"	HKRS80T
9"x.095x7/8"-5/8"	HKRS90T
10"x.095x7/8"-5/8"	HKRS100T
12"x.125x1" or 20mm	HKRS120T
14"x.125x1" or 20mm	HKRS140T
10"x.095x7/8"-5/8"	HKD100T-C
12"x.110x1" or 20mm	HKD120T-C
12"x.125x1" or 20mm	HKD120T-CL
14"x.125x1" or 20mm	HKD140T-C
14"x.145x1" or 20mm	HKD140T-CL
16"x.142x1"	HKD160T-C
18"x.142x1"	HKD180T-C
20"x.151x1"	HKD200T-C
10"v 125v1" or 20	LIVD 120T A
12"x.125x1" or 20mm	HKD120T-A
14"x.145x1" or 20mm	HKD140T-A
4"x.060x5/8"-20mm	HKW40T
4.5"x.060x7/8"-5/8"	HKW45T
5"x.060x7/8"-5/8"	HKW50T
6"x.070x7/8"-5/8"	HKW60T
7"x.080x5/8"-Dia	HKW70T
8"x.080x7/8"-5/8"	HKW80T
10"x.088x5/8"	HKW100T
4"x.250x7/8" (Single Row)	HKM40T-S
4"x.250x7/8" (Double Row)	HKM40T-D
7"x.250x7/8"-5/8"	HKM70T
4"x.250x7/8"-5/8"	LIVTANT
7"x.250x7/8"-5/8"	HKT40T
, A.200AIIU -3IU	HKT70T

All KHK Premium Diamond Blades are available with our Low Noise Steel Cores.

### **Longboy HSS General Purpose Drills**

- LONGBOY • Straight Shank
- M2 High Speed
- Size Above ½ Reduced Shank To 1/2"
- 118° Point
- Sharp Cutting Edge To Drill In Many Different Types Of Material
- Mild Steel
- Cast Iron
- Aluminum — Wood

#### **TRITON 135**

#### **AIRCRAFT DRILL BITS**

- Straight Shank
- Split Point
- 135° Point
- Sharp Cutting Edge To Drill In Many Materials
- Extra Flexibility For Drilling In Inaccessible Areas

#### SERIES 216HS/12"LONG

#### 216HS1264 1875 2188 216HS1464 2500 216HS1664 2812 216HS1864 3125 216HS2064 216HS2264 3438 3750 216HS2464 216HS2664 4062 4375 216HS2864 216HS3C64 4688 216HS3264 5000 9 216HS3664 5625

#### SERIES 217HS/18" LONG

Part Number	Drill Size	Dec. Equiv.	Flute Length
217HS1264	3,16"	.1875	14"
217HS1464	7 32	.2188	14
217HS1664	14	.2500	14
217HS1864	9.32	.2812	14
217HS2064	5 16	.3125	14
217HS2264	1' 32	.3438	11
217HS2464	3 6	.3750	14
217HS2664	13 32	4062	14
217HS2864	16	4375	14
217HS3064	15 32	4688	14
217HS3264	12	5000	14
217HS3664	9 16 ·	5625	14
217HS4064	58.	6250	14
217HS4864	3. •	.7500	14

#### AIRCRAFT DRILL BIT 135° SPLIT POINT

#### SERIES 212SP/6" LONG

6250

216HS4064

216HS4864

212SP2964

212SP3264

SER	IES 2	214SP/	12"	LONG

158"

251€

23,

215 16

358

31,

41 16

45,

8" LONG

25 16

33 16

358

3125

SENIES	2123	DF/0 L	LONG	SERIES	2143	5P/12"
Part Number	Drill Size	Dec. Equiv.	Flute Length	Part Number	Drill Size	Dec. Equiv.
212SP0464 212SP0864 212SP0964 212SP1064 212SP1164	16" 6 964 5 22 11 64	0625 1250 1406 1562 1719	15 ± 13 ± 2 2 ± 5	214SP0864 214SP1064 214SP1264 214SP1464 214SP1664	5 32 3 16 3 2	1250 1562 1875 2188 2500
212SP1264 212SP1364 212SP1464 212SP1564 212SP1664	13 H 13 H 18 G 18 G	1875 2031 2188 2344 2500	2°	214SP1864 214SP2064 214SP2264 214SP2464 214SP2664	9 32 5 16 11 32 3 6 13 32	2812 .3125 .3438 3750 4062
212SP1764 212SP1864 212SP1964 212SP2064 212SP2164	17 64 9 32 19 64 21 64	2656 2812 2969 3125 3281	2 <sup>7</sup> 8 2 <sup>15</sup> 16 3 <sup>3</sup> 16 3 <sup>3</sup> 14 3 <sup>4</sup> 16	214SP2864 214SP3064 214SP3264	7 16 15 32 1 2	4375 4688 5000
212SP2264 212SP2364	11 23 6:	3438 3594	3. · · · · · · · · · · · · · · · · · · ·	SERIES	S 215	SP/18"
212SP2464 212SP2564 212SP2664	3 8 25 64 13 32	3750 3906 4062	3 <sup>3</sup> ε 3 <sup>3</sup> : 3 ε	Part Number	Drill Size	Dec. Equiv.
212SP2764 212SP2864	?t64	4912 4375	3'5 ·6 4' 16	215SP1264 215SP1664	3 16"	.1875

### Aircraft Extension Drills 6" & 12" Long

- · Split point
- 135° Point
- M2 High Speed

#### **SERIES 213SP/6" LONG WIRE SIZES**

maining oras	Equiv.	Length
213SP0001 1	2280	2*/-
213SP0007 7	2010	2/4
213SP0010 10	1935	2%
213SP0011 11	1910	37
213SP0013 13	1850	37
213SP0020 20	161	3'
213SP0021 21	159	3
213SP0029 29	1360	1/1
213SP0030 30	1285	11/2
213SP0036 36	1065	1:/-
213SP0040 40	0980	1:/-
12" LONG	WIRI	E SIZES

213SP1201 1 2280 37/-

#### 43 32 215SP2464 3750 45 16 212SP3064 4688 215SP2864 4375 212SP3164 43, 4844

4531

### Long Boy Drill Bits For Construction



215SP2064

215SP3264

#### SUPER HIGH SPEED STEEL 1/2" SHANK

Precision point angle for effective penetration through steel and wood.

Extra length flute with continuous cutting

edges for drilling deep holes and fast chip

Reduced shank fits all drill motors with 1/2"

Non-slip grips prevent the bit from spinning in the chuck.

THESE DRILL BITS ARE ENGINEERED To — Work for Roof Structure Assembly. When there is a problem lining up opposite hole connector and a standard wood drill break striking steel, we recommend to use the contractor's Long Boy.

#### **SERIES 218HS** CONTRACTORS LONG BOY

Part Number	Drill Size	Dec. Equiv.	O/A Length	Flute Length	
218HS3664	9,15"	5625	12"	9"	
218HS4064	58	6250	12	9	
218HS4464	11/16	6875	12	9	
218HS4864	3.	7500	12	9	
218HS5664	78	8750	10	6	_
218HS6064	15/16	9375	10	6	
218HS6464	1	1.000	11	6	
218HS7264	11/8	1 125	12	7	

# Fastener Systems, Inc.

### **Stub Heavy Duty HSS Drills**

#### **TRITON 135**

- M2 HSS
- 135° Point
- Split Point
- Black Oxide Finish
- Short Flute For Exceptional Strength

**WIRE GAUGE** 

6 7

8

10

12 13 14

15

16

17

18

19

20

22

23 24 25

34

35

39

210SM0001

210SM0002

210SM0003

210SM0004

210SM0005

210SM0006

210SM0007

210SM0008

210SM0009 210SM0010

210SM/0011

210SM0012

210SM0013

210SM0014

210SM0015 210SM0016

210SM0017

210SM0018

210SM0019

210SM0020

210SM0021

210SM0022

210SM0023

210SM0024

210SM0025

210SM0026

210SM0027

210SM0028

210SM0029 210SM0030

210SM0031 210SM0032

210SM0033

210SM0034

210SM0035

210SM0036

210SM0037

210SM0038 210SM0039

210SM0040

SERIES 210SM STUB LENGTH

Equiv.

2280 2210

.2130

2055

2040

2010

1990

1935

1910

1890

1850

1820

1770

1730

1695

1660

1610

1590

1570

1540

1520

1495

1470

1440

1405

1285

1160

1110

1100

1065

1040

2316

- Suitable for
- Stainless Steel
- Medium Alloy Steel
- Medium Alloyèd Materials
- All Types of
- Sheet Metal Working — All Types of Automotive

Working



### SERIES 209SM STUB LENGTH FRACTIONAL SIZES

Part	Drill	Dec.	O/A	Flute
Number	Size	Equiv.	Length	Length
209SM0464 209SM0564 209SM0664 209SM0764 209SM0864	*564 3.32 764 18	0625 0781 0938 1094 1250	1°6" 1 <sup>11</sup> 16 1 <sup>3</sup> : 1 <sup>13</sup> 16 1 <sup>7</sup> 8	36" 13. <sub>e</sub> 7.ē
209SM0964 209SM1064 209SM1164 209SM1264 209SM1364	* 62 * 52 * 54 * 55 * 54	1406 1562 1719 1875 2031	1 <sup>15</sup> <sub>16</sub> 2 <sup>1</sup> <sub>16</sub> 2 <sup>1</sup> <sub>8</sub> 2 <sup>3</sup> <sub>16</sub> 2 <sup>1</sup> <sub>4</sub>	10 1 11 16 11 8 12 16
209SM1464	9 32	2188	2 <sup>3</sup> 6	1' ±
209SM1564		2344	2 <sup>7</sup> 16	1° 5
209SM1664		2500	2 <sup>1</sup> 2	1 <sup>3</sup> 8
209SM1764		2656	2 <sup>5</sup> 6	1 <sup>7</sup> 5
209SM1864		2812	2 <sup>1</sup> 16	11 <sub>2</sub>
209SM1964 209SM2064 209SM2164 209SM2264 209SM2364	5 % 21 % 11 32 23 %	2969 3125 328: 3438 3594	2 <sup>3</sup> ± 2 <sup>13</sup> 1£ 2 <sup>15</sup> 1£ 3	19 <sub>th</sub> 15 <sub>6</sub> 1'' 16 1'' 16 1 <sup>8</sup> 1
209SM2464	3 ± 25 64 13 ± 27 64 1	3750	3' h	113 to
209SM2564		3906	3' ±	17 s
209SM2664		4062	3 <sup>5</sup> 16	115 to
209SM2764		4219	3 <sup>3</sup> h	2
209SM2864		4375	3 <sup>7</sup> 16	21 to
209SM2964	15 12	4531	3 <sup>9</sup> 16	2 <sup>1</sup> 5
209SM3064	15 12	4688	3 <sup>5</sup> 6	2 <sup>1</sup> 6
209SM3164	16 14	4844	3 <sup>11</sup> 16	2 <sup>3</sup> 6
209SM3264	1 13	5000	3 <sup>3</sup> 4	2 <sup>1</sup> :

### Silver & Deming Drill Bits 1/2" Shank

SERIES 201SD ½"
SHANK 6"
LONG SILVER
and DEMING

ALSO AVAILABLE IN JOBBER LENGTHS



Part Number	Drill Size	Dec. Equiv.	O/A Length	Flute Length
201SD3364 201SD3464 201SD3564 201SD3664 201SD3764	33, <sub>64</sub> " 17, <sub>32</sub> 35, <sub>64</sub> 9,16	5156 5312 5469 5625 5781	6" 6 6 6	2 <sup>3</sup> ,4" 2 <sup>3</sup> ,2 2 <sup>3</sup> ,2 2 <sup>3</sup> ,2
201SD3864 201SD3964 201SD4064 201SD4164 201SD4264	19/32 39/64 5/8 41/61 21/32	.5938 6094 6250 6406 6562	6 6 6 6	2 <sup>3</sup> 4 2 <sup>3</sup> 4 2 <sup>3</sup> 4 2 <sup>3</sup> 4
201SD4364 201SD4464 201SD4564 201SD4664 201SD4764	43,64 11,16 45,64 23,32 47,64	6719 6875 7031 7188 7344	66666	2 <sup>3</sup> / <sub>4</sub> 2 <sup>3</sup> / <sub>4</sub> 2 <sup>3</sup> / <sub>4</sub> 2 <sup>3</sup> / <sub>4</sub>
201SD4864 201SD4964 201SD5064	49/6± 25/32	7500 7656 7812	6 6 6	2 <sup>3</sup> .4 2 <sup>3</sup> .2 2 <sup>3</sup> .4
201SD5164 201SD5264 201SD5364 201SD5464 201SD5564	51,64" 13,16 53,64 27,32 55,64	7969 8125 8281 8438 8594	6" 6 6 6	2 <sup>3</sup> 4" 2 <sup>3</sup> 4 2 <sup>3</sup> 4 2 <sup>3</sup> 4
201SD5664 201SD5764 201SD5864 201SD5964 201SD6064	57 64 29 32 59 64 15 16	8750 8906 9062 9219 9375	6 6 6 6	23.4 23.4 23.4 23.4 23.4
201SD6164 201SD6264 201SD6364 201SD6464 201SD6864	61/64 31/32 63/64 1 11/16	9531 .9688 9844 1 0000 1 0625		2 <sup>3</sup> 4 2 <sup>3</sup> 4 2 <sup>3</sup> 4 2 <sup>3</sup> 4 2 <sup>3</sup> 4
201SD7264 201SD7664 201SD8064 201SD8404 201SD8864	13/16 13/16 13/4 15/16	1 1250 1.1875 1.2500 1 3125 1 3750	5 6 6	23.2 23.4 23.4 23.4 23.4
201SD9664	11/2	1 5000	6	23/4

### **Double End Heavy Duty HSS Drills**

SERIES 211DE DOUBLE END - STUB FLUTED FRACTIONAL & WIRE GAUGE SIZES

FRACII	CINA	AL Q V	VIDE	GAU	اد عد
Part Number	Drill Size	Dec. Equiv.	O/A Length	Flute Length	
211DE0764	7.64"	1094	1 <sup>7</sup> s"	12"	
211DE0864	1 8	1250	2	1 2	
211DE0964	9 👊	1406	2	1 2	
211DE1064	5.32	1562	21 16	1 2	
211DE1264	3 16	1875	23 16	1.2	
211DE1464	7 32	2188	23 <sub>8</sub>	1.2	
211DE1664	14	2500	212	2	
211DE0030	#30	1285	2	1 2	



- High Speed Steel
- Short Flute Length
- 135°
- Split Point
- Bright Finish
- Automotive Use
- Sheet Metal Use Packaging 12 Per Pack

FSI specializes in solving problems

### **Heavy Duty Cobalt Steel Drills**

**SERIES 219CO FRACTIONAL SIZES** 

Part Number	Drill Size	Dec. Equiv.	D/A Length	Flute Length	
219C0 0464 219C0 0564 219C00664 219C00764 219C00864	1/16" 564 332 764	.0625 .0781 .0938 .1094 .1250	11/8" 2 21/4 25/8 23/4	1/8" 1 11/4 11/2 15/8	
219C00964 219C01064 219C01164 219C01264 219C01364	9.64 5.32 11.62 3,16 13.64	1406 1562 1719 1875 2031	21/6 31/8 31/4 31/2 35/8	13/2 2 2½ 2½ 25/16 2½/16	
219C01464 219C01564 219C01664 219C01764 219C01864	732 1564 14 1764 932	2188 2344 2500 2656 2812	33/4 31/8 4 41/8 41/4	2½ 2½ 2¾ 2¾ 2½ 2¹5⁄16	

Part	Drill	Dec.	D/A	Flute	
Number	Size	Equiv.	Length	Length	
219C01964 219C02064 219C02164 219C02264 219C02364	19/64 5/16 21/64 11/32 23/64	.2969 3125 .3281 .3438 .3594	43/8 41/2 45/8 43/4 41/8	3½6 3½6 3½6 3½	
219C02464	3/8	.3750	5	35/8	
219C02564	25/64	.3906	5½	33/4	
219C02664	13/32	4062	5¼	31/8	
219C02764	21/64	.4219	5¾	315/16	
219C02864	1/16	4375	5½	41/16	
219CO2964	29/64	.4531	5½	43/16	
219CO3064	15/32	.4688	5¾	45/16	
219CO3164	31/64	.4844	5½	43/8	
219CO3264	1/2	5000	6	41/2	



- Heavy Duty
- Cobalt HSS
- Jobber Length
- 135° Point
- Split Point
- Gold Finish
- Suitable For
- Stainless Steel
- Hardening Grade Of Stainless Steel
- High Temperature Alloys
- Heat Treated Materials
- Abrasive Plastics
- Difficult
   Materials

SERIES 220C0 COBALT WIRE SIZES JOBBER LENGTH.

### Cobalt Silver & Deming 1/2" Shank Drills

SERIES 201CO 1/2" SHANK 6" LONG SILVER AND DEMING.

Part Number	Drill Size	Dec. Equiv.	O/A Length	Flute Length	
201CO3464	17/32	.5312	6	23/4	
201CO3664	9/16	.5625	6	23/4	
201CO3864	19/32	.5938	6	23/4	
201CO4064	5/a	.6250	6	23/4	
201C04264	21/32	.6562	6	23/4	
201CO4464	11/16	.6875	6	23/4	
201CO4664	23/32	.7188	6	23/4	
201 CO4864	3/4	.7500	6	23/4	
201CO5064	25/32	.7812	6	23/4	

Part Number	Drill Size	Dec. Equiv.	O/A Length	Flute Length	
201CO5264	13/16	.8125	6	23/4	
201CO5464	27/32	.8438	6	23/4	
201CO5664	<sup>7</sup> /8	.8750	6	23/4	
201CO5864	29/32	.9062	6	23/4	
201CO6064	15/16	.9375	6	23/4	
201CO6264	31/32	.9688	6	23/4	
201CO6464	1	1.0000	6	23/4	
201CO6864	11/16	1.0625	6	23/4	
201CO7264	11/8	1.1250	6	23/4	
201C07664	13/16	1.1875	6	23/4	
201C08064	11/4	1.2500	6	23/4	
201CO8404	15/16	1.3125	6	23/4	
201CO8864	$1^{3}/8$	1.3750	6	23/4	
201CO9664	11/2	1.5000	6	23/4	





- · 6" Long 1/2" Shank
- Gold Finish
- Individually Packed
- · Suitable For:
  - Stainless Steel
  - High Temperature Alloys
  - Heat Treated Materials
  - Difficult Materials

#### **Titanium Nitride Coated Drills**

Titanium Nitride coating is a new process giving a very hard surface to the drill bit. The surface is harder than Tungsten Carbide. Improves surface finish. Performance is incredible. Very long drill bit life, up to 8 times. With 135° split point suitable for stainless steel.

#### **SERIES 255SP FRACTIONAL SIZES**

Part	Drill	Dec.	O/A	Flute	
Number	Size	Equiv.	Length	Length	
255SP0364	364"	.0469	13/2"	34"	
255SP0464	1/16	.0625	11/8	1/8	
255SP0564	5/64	.0781	2	1	
255SP0664	3/32	.0938	21/4	11/4	
255SP0764	1/64	.1094	25/8	11/2	
255SP0864	1/8	1250	23/4	15/8	
255SP0964	9/64	1406	21/8	13/4	
255SP1064	5/32	1562	31/6	2	
255SP1164	11/64	1719	31/4	21/6	
255SP1264	3/16	1875	31/4	25/16	
255SP1364 255SP1464 255SP1564 255SP1664 255SP1764	13/64 1/32 15/64 1/4	2031 2188 2344 2500 2656	35/8 33/4 31/8 4 41/8	2½ 2½ 2½ 2¾ 2¾	

Part	Drill	Dec.	O/A	Flute	
Number	Size	Equiv.	Length	Length	
255SP1864	9/32"	.2812	414"	2 <sup>15</sup> / <sub>16</sub> "	
255SP1964	19/64	2969	438	3 <sup>1</sup> / <sub>16</sub>	
255SP2064	5/16	3125	412	3 <sup>3</sup> / <sub>16</sub>	
255SP2164	21/64	3281	458	3 <sup>5</sup> / <sub>16</sub>	
255SP2264	11/32	3438	434	3 <sup>7</sup> / <sub>16</sub>	
255SP2364	23/64	.3594	47,8	3½	
255SP2464	3/6	3750	5	356	
255SP2564	25/64	3906	51,8	334	
255SP2664	13/32	4062	51,4	378	
255SP2764	21/64	4219	53,8	315 <sub>16</sub>	
255SP2864 255SP2964 255SP3064 255SP3164 255SP3264	1/16 29/64 15/32 31/64	4375 4531 4688 4844 5000	5½ 55% 534 576 6	41/16 43/16 45/16 43/8 41/2	



- Straight Shank
- 135° Split Point
- Bright Gold Finish
- Suitable For:
  - Tool Steel
- Alloys
- Stainless Steel
- Cast Iron
- Hard ToMachineMaterials

MADE IN USA

### **HSS Ground Thread Hand Taps**

SERIES 262NF-263NF-264NF MACHINE SCREW HIGH SPEED STEEL TAPS

Taper	Stock Number Plug	Bottoming	Machine Screw Threads	No. of Flute	Ground Thread Limit	Overall Length	Thread Length	Use Drill Size
262NF0000 262NC0001 262NF0001 262NC0002 262NF0002	263NF0000 263NC0001 263NF0001 263NC0002 263NF0002	264NF0000 264NC0001 264NF0001 264NC0002 264NF0002	0-80 NF 1 64 NC 1 72 NF 2-56 NC 2-64 NF	2 2 2 3 3	H1 H1 H2 H2 H2	198" 1116 1116 134 134	5/16" 3/8 3/8 1/16 1/16	53 53 53 50 50
262NC0003 262NF0003 262NC0004 262NF0004 262NC0005	263NC0003 263NF0003 263NC0004 263NF0004 263NC0005	264NC0003 264NF0003 264NC0004 264NF0004 264NC0005	3-48 NC 3-56 NF 4-40 NC 4-48 NF 5-40 NC	3 3 3 3	H2 H2 H2 H2 H2	1 <sup>11</sup> / <sub>8</sub> 1 <sup>17</sup> / <sub>8</sub> 1 <sup>7</sup> / <sub>8</sub> 1 <sup>15</sup> / <sub>16</sub>	1/2 9/16 9/16 1/8	47 45 43 42 38
262NF0005 262NC0006 262NF0006 262NC0008 262NF0008	263NF0005 263NC0006 263NF0006 263NC0008 263NF0008	264NF0005 264NC0006 264NF0006 264NC0008 264NF0008	5-44 NF 6-32 NC 6-40 NF 8-32 NC 8-36 NF	3 3 4 4	H2 H2 H2 H3 H3	1 <sup>15</sup> /16 2 2 2 <sup>1</sup> / <sub>8</sub> 2 <sup>1</sup> / <sub>8</sub>	11/ <sub>16</sub> 11/ <sub>16</sub> 3/ <sub>4</sub> 3/ <sub>4</sub>	37 35 33 29 29
262NC0010 262NF0010 262NC0012 262NF0012	263NC0010 263NF0010 263NC0012 263NF0012	264NC0010 264NF0010 264NC0012 264NF0012	10-24 NC 10-32 NF 12-24 NC 12-28 NF	4 4 4	H3 H3 H3 H3	2 <sup>3</sup> / <sub>8</sub> 2 <sup>3</sup> / <sub>6</sub> 2 <sup>3</sup> / <sub>8</sub> 2 <sup>3</sup> / <sub>8</sub>	7.8 15/16 15/16	25 21 16 14

#### SERIES 265 NC - 266 NC - 267 NC FRACTIONAL HIGH SPEED STEEL TAPS

Taper	Stock Number Plug	Bottoming	Machine Screw Threads	No. of Flute	Ground Thread Limit	Overall Length	Thread Length	Use Drill Size
265NC0310 265NF0312 265NC0315 265NF0316 265NC0318	266NC0310 266NF0312 266NC0315 266NF0316 266NC0318	267NC0310 267NF0312 267NC0315 267NF0316 267NC0318	½-20 NC ½-28 NF ⅓6-18 NC ⅓16-24 NF ⅔-16 NC	4 4 4 4	H3 H3 H3 H3	2½" 2½ 2 <sup>23</sup> 32 2 <sup>23</sup> 32 2 <sup>15</sup> 16	1" 1 1½ 1½ 1½	7 3 F I 5 <sub>16</sub>
265NF0319 265NC0320 265NF0321 265NC0322 265NF0323	266NF0319 266NC0320 266NF0321 266NC0322 266NF0323	267NF0319 267NC0320 267NF0321 267NC0322 267NF0323	3⁄6-24 NF 1⁄46-14 NC 1⁄46-20 NF 1∕2-13 NC 1∕2-20 NF	4 4 4 4	H3 H3 H3 H3 H3	2 <sup>15</sup> / <sub>16</sub> 3 <sup>5</sup> / <sub>32</sub> 3 <sup>5</sup> / <sub>32</sub> 3 <sup>3</sup> / <sub>8</sub> 3 <sup>3</sup> / <sub>8</sub>	1½ 1½6 1½6 1½32 12½32	0 U <sup>25</sup> 64 27 64
265NC0325 265NF0326 265NC0327 265NF0328 265NS0329	266NC0325 266NF0326 266NC0327 266NF0328 266NS0329	267NC0325 267NF0326 267NC0327 267NF0328 267NS0329	9/16-12 NC 9/16-18 NF 5/8-11 NC 5/8-18 NF 1/16-11 NS	4 4 4 4	H3 H3 H3 H3	319/32 319/32 313/16 313/16 41/32	1 <sup>2</sup> / <sub>32</sub> 1 <sup>2</sup> / <sub>32</sub> 1 <sup>13</sup> / <sub>16</sub> 1 <sup>13</sup> / <sub>16</sub>	31.64 33.64 17.32 37.64 19.32
265NS0330 265NC0331 265NF0332 265NC0333 265NF0334 265NC0335	266NS0330 266NC0331 266NF0332 266NC0333 266NF0334 266NC0335	267NS0330 267NC0331 267NF0332 267NC0333 267NF0334 267NC0335	1/16-16 NS 34-10 NC 34-16 NF 76-9 NC 78-14 NF 1-8 NC	4 4 4 4 4	H3 H3 H3 H4 H4	4½32 4¼4 4¼4 4½6 4½6 5½8	1 <sup>13</sup> / <sub>16</sub> 2 2 2 <sup>1</sup> / <sub>32</sub> 2 <sup>1</sup> / <sub>32</sub> 2 <sup>1</sup> / <sub>2</sub>	21/32 11/16 49/64 13/16

# THURINGHAMA

#### **TAPER**

8-10 Chanfered Threads For Tough Threading Works

#### **PLUG**

3-5 Chanfered Threads For General Purpose Work

#### **BOTTOMING**

1-1½ Chanfered Threads For Threading The Bottom Of The Hole.

#### Tap & Drill Set

Part Description
TD-SP-019 19 Pcs HS Taps And Drill Set
Heavy Duty HS Drills

### **Tap Wrenches & Die Stocks**

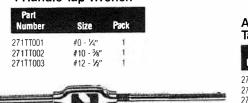


 Industrial Grade Steel



Sold individually

#### T-Handle Tap Wrench



#### Round die Stocks 3 Screws

Part Number	O.D. Size	Pack
2690D0001 2690D0002	13 16"	1
2690D0003 2690D0004	112	1

#### Adjustable Tap/Reamer Wrench

Part Number	Capacity	Size	Pack
270TW0000	#0-1."	TWO	1
70TW0004	#G-3s	TW4	10
70TW0005	#7 *-	TW5	1
70TW0006	#7-2	TW6	10
2701W0007	1	TW7	1

### Ship Head Auger Bits 17" Long

### SHIP AUGER SERIES 303BU BULK PACK

Part Number	Bore Dia.	Size in 16ths	O.A. Length	
303BU2464	3/8"	6	17"	
303BU2864	1/16	7	17	
303BU3264	1, 2	8	17	
303BU3664	916	9	17	
303BU4064	5-8	10	17	
303BU4464	11/16	11	17	
303BU4864	34	12	17	
303BU5264	13/16	13	17	
303BU5664	0	14	17	
303BU6064	15/16	15	17	
303BU6464	1	16	17	
303BU7264	11/8	18	17	
303BU8064	1/4	20	17	
303BU8864	134	22	17	
303BU9664	11/2	24	17	

Series 303BU are sold with **Rust Protection Sleeve** 

#### SHIP AUGER **SERIES 303SL HANGABLE POUCH**

Part	Bore	Size in	O.A.	
Number	Oia.	16ths	Length	
303SL1464 303SL2864 303SL3264 303SL3664 303SL4064	3.8" 7.16 1.2 9.16 5.8	6 7 8 9 10	17" 17 17 17 17	
303SL4464	11. <sub>16</sub>	11	17	
303SL4864	3. <sub>2</sub>	12	17	
303SL5264	13. <sub>16</sub>	13	17	
303SL5664	2. <sub>8</sub>	14	17	
303SL6064	15. <sub>16</sub>	15	17	
303SL6464 303SL7264 303SL8064 303SL8864 303SL9664	1 1½ 1½ 1¾ 1¾ 1½	16 18 20 22 24	17 17 17 17 17	

Series 303SL are sold with Hangable Pouch.



- 12" Twist Length
- 1/16 Hex Shank Above 1/6"
- ¾ Hex Shank From 3/8 To 1/2"
- Heat Treated
- Machine Ground Hollows
- Deep Throat
- Single Twist
- Single Cutter
- Side Lip
- Med Screw Point
- Sold Individually

#### **Electricians Power Wood Bits**

These power bits are specifically designed to fit in between building studs for the installation of conduits and wires. Ideal use with angle power drills.

Series 304BU are packaged with Rust Protection Sleeve.

· Sold Individually

#### **ELECTRICIANS' SERIES 304BU POWER BITS**

Part Number	Bore Diameter	Shank	
304BU4064 304BU4464 304BU4864 304BU5264 304BU5664	34 13/16 13/16	5.16" 5.16 5.16 5.16 5.16	
304BU6464 304BU7264 304BU8064	1 1½ 1¼	516 716 716	



- 8½ Overall Length
- 5½ Twist Length
- Heat Treated
- Machine Ground Hollows
- Double Twist
- Single Spur
- Medium Screw Point
- Shank With 2 Set Screw Recesses For Use With Power Bit Extensions.

### **Pipe Size Power Wood Bits**

#### **SERIES 305BU PLUMBER POWER BITS**

These Power Bits are specifically designed for boring holes where a smooth finish is required. Ideal for Plumbing, Heating, Air Conditioning.

Series 305BU are packaged with Rust Protection Sleeve.

Part Number	Bore Diameter	Shank
305BU4864	3/4"	1/16"
305BU5664	<i>1</i> ∕8	1/16
305BU6464	1	1/16
305BU7264	11/8	1/16
305BU8064	11/4	1/16
305BU8864	13/8	1/15
305BU9664	11/2	1/15

· Sold Individually



- 6½" Overall Length4" Twist Length
- Heat Treated
- Machine Ground Hollows
- Double Twist
- Double Spur
- Medium Screw
- Shank With 2 Set Screw Recesses For Use With Power Bit Extensions.

SHANK

SIZE

#### **Wood Drills - Forstner Bits**



#### **SERIES 310FB FORSTNER**

		· · · · - · ·	
Part Number	SIZE	SHANK	Part Number
310FB1664 310FB2464 310FB3264 310FB4064 310FB4864 310FB5664 310FB5664 310FB7264 310FB8064 310FB8664 310FB9664 310FB9664	1/4 3/8 1/2 5/8 3/4 7/8 1 1/8 1 1/4 1 3/8 1 1/2	3/8 3/8 3/8 3/8 3/8 3/8 3/8 3/8 3/8 3/8	310F11264 310F12064 310F12864 310F13664 310F14464 310F16264 310F16864 310F16864 310F17664 310F19264 310F19264

<sup>\*</sup> Sizes 21/4" and Over Have Multi Spur Cutting Edge - Sold Individually

### Single Flute Countersinks

**HIGH SPEED STEEL** 

60° Code No.	82° Code No.	90° Code No.	100° Code No.	Size	Shank Diameter	Shank Length	Overall Length	
C1-60-1264	C1-82-1264	C1-90-1264	C1-100-1264	³/ <sub>16</sub> ′′	<sup>3</sup> / <sub>16</sub> ′′	3/4''	1½"	
C1-60-1664	C1-82-1664	C1-90-1664	C1-100-1664	3/4,,	1/4''	3/4''	2''	
C1-60-2064	C1-82-2064	C1-90-2064	C1-100-2064	5/16''	Y4''	1"	2''	
C1-60-2464	C1-82-2464	C1-90-2464	C1-100-2464	3/8′′	1/4"	1"	2''	
C1-60-3264	C1-82-3264	C1-90-3264	C1-100-3264	1/2"	1/4"	1"	2''	
C1-60-4064	C1-82-4064	C1-90-4064	C1-100-4064	5/8''	3/8′′	1⅓"	2¾′′	
C1-60-4864	C1-82-4864	C1-90-4864	C1-100-4864	3/4''	3/₀′′	15/16′′	2¾′′	
C1-60-5064	C1-82-5064	C1-90-5064	C1-100-5064	<b>7∕8</b> ′′	1/2"	15/16"	2¾′′	
C1-60-6464	C1-82-6464	C1-90-6464	C1-100-6464	1"	Y2''	15/16′′	2¾′′	



### **3-Flute Center Reamers**

**HIGH SPEED STEEL** 

NEW

60° Code No.	82° Code No.	90° Code No.	100° Code No.	Size	Shank Diameter	Shank Length	Overall Length	
R3-60-1664	R3-82-1664	R3-90-1664	R3-100-1664	У4''	3/16′′	3/4''	11/2"	
R3-60-2464	R3-82-2464	R3-90-2464	R3-100-2464	3∕8′′	1/4"	%′′	2¾"	
R3-60-3264	R3-82-3264	R3-90-3264	R3-100-3264	1/2''	%′′	1"	2''	
R3-60-4064	R3-82-4064	R3-90-4064	R3-100-4064	%''	3/8''	1"	21/4"	
R3-60-4864	R3-82-4864	R3-90-4864	R3-100-4864	3/4′′	<b>½</b> ′′	1¼"	25%''	
R3-60-6464	R3-82-6464	R3-90-6464	R3-100-6464	1''	1/2''	1¼′′	2¾′′	



### **Spade Point Power Wood Bits**

- Cold Forged
- Full Length Treated
- Machine Finish Cutting Groove
- Rust Protection
- Precision Ground Hex Shank
- Individually Pouched

PACKAGING INFORMATION SERIES 300SB 6 Per Pack Series 301SB 1 Per Pack.



### SERIES 300SB SPADE BITS 6" LONG

Part Number	Drill Size	Overall Length	
300SB1664 300SB2064 300SB2464 300SB2864 300SB3264	1/2" 5/16 3/8 1/16 1/2	6" 6 6 6	
300SB3664 300SB4064 300SB4464 300SB4864 300SB5264	% 5/8 11/16 3/4 13/16	6 6 6 6	
300SB5664 300SB6064 300SB6464 300SB7264 300SB8064	1/8 11/4	6 6 6 6	
300SB8864 300SB9664	1 <sup>3</sup> / <sub>8</sub> 1 <sup>1</sup> / <sub>2</sub>	6	

### SERIES 301SB SPADE BITS 16" LONG

Part	Drill	Overall	
Number	Size	Length	
301SB1664 301SB2464 301SB3264 301SB4064 301SB4464	1/4" 3/8 1/2 5/8 11/16	16" 16 16 16 16	
301SB4864	<sup>3</sup> / <sub>4</sub>	16	_
301SB5664	<sup>7</sup> / <sub>8</sub>	16	
301SB6464	1	16	
301SB <b>7</b> 264	1 <sup>1</sup> / <sub>8</sub>	16	
301SB8864	1 <sup>3</sup> / <sub>8</sub>	16	

Extension For Spade Bit 12" Extension

6 Pc. Set 6" Long 300-ST-06 Including  ${}^{3}/_{6}$  -  ${}^{1}/_{5}$  -  ${}^{5}/_{6}$  -  ${}^{3}/_{4}$  -  ${}^{7}/_{6}$  - 1

### **Ship Auger Wood Bits**

- 4" Twist Length
- 1/16 Hex Shank
- Heat Treated
- Machine Ground Hollows
- Deep Throat
- Single Twist
- Single Cutter
- Side Lip
- Med. Screw Point

PACKAGED INDIVIDUALLY



#### SERIES 302BU 6" SHIP AUGER BULK PACK

Part Number	Bore Dia.	Size in 16ths	O.A. Length	
302BU3264	1/2"	8	6"	
302BU3664	9/16	9	6	
302BU4064	5/8	10	6	
302BU4464	11/16	11	6	
302BU4864	3/4	12	6	
302BU5264	13/16	13	6	
302BU5664	1∕8	14	6	
302BU6064	15/16	15	6	
302BU6464	1	16	6	
302BU7264	11/8	18	6	
302BU8064	11/4	20	6	
302BU8864	13/8	20	6	
302BU9664	11/2	24	6	

### SERIES 302SL 6" SHIP AUGER POUCHED

Part Number	Bore Dia.	Size in 16ths	O.A. Length
302SL3264	15"	8	6"
302SL3664	916	9	6
302SL4064	5á	10	6
302SL4464	11/15	11	6
302SL4864	1/4	12	6
302SL5264	12/16	13	6
302SL5664	3/4	14	6
302SL6064	13/15	15	6
302SL6464	1	16	6
302SL7264	11/8	18	- 5
302SL8064	11/4	20	6
302SL8864	13/8	20	6
3025! 9664	11/6	24	6

### Power Bit Extensions For Auger & Multispur Bits

- Hex Wrench included
- Two Set Screws
- For Use With ¾
   Electric Drills

#### **SERIES 307BT EXTENSIONS**

Part Number	Description	For Shank	
307BT1418	¼ x 18 Extension	%"	
307BT5618	⅓ <sub>6</sub> x 18 Extension	%6	
307BT51624	⅓ <sub>6</sub> x 24 Extension	%6	

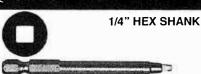
#### **SERIES 307BT EXTENSIONS**

Part Number	Description	For Shank
307BT7609	1/16 x 91/2 Extensions	7/16"
307BT7612	1/16 x 12 Extensions	1/16
307BT7618	$\frac{1}{16}$ x 18 Extensions	7/16
307BT7624	1/26 x 24 Extensions	1/16



### INDUSTRIAL SCREWDRIVER BITS

#### **SQUARE RECESS INSERT BITS**



POINT SIZE	×	LENGTH	DESCRIPTION
#1	x	2"	SQUARE RECESS POWER
#1	x	2-3/4"	SQUARE RECESS POWER
#1	x	3*	SQUARE RECESS POWER
#1	x	3-1/2"	SOUARE RECESS POWER
#1	×	4"	SQUARE RECESS POWER
#1	x	5"	SQUARE RECESS POWER
#1	x	6"	SQUARE RECESS POWER
#2	×	2*	SQUARE RECESS POWER
#2	×	2-1/2"	SQUARE RECESS POWER
#2	x	2-3/4"	SQUARE RECESS POWER
#2	x	3"	SQUARE RECESS POWER
#2	x	3-1/2*	SQUARE RECESS POWER
#2	x	4"	SQUARE RECESS POWER
#2	x	5*	SQUARE RECESS POWER
#2	x	6*	SQUARE RECESS POWER
#3	×	2*	SQUARE RECESS POWER
#3	x	2-3/4"	SQUARE RECESS POWER
#3	x	3-1/2"	SOUARE RECESS POWER
#3	x	4"	SQUARE RECESS POWER
#3	x	5"	SQUARE RECESS POWER
#3	x	6"	SQUARE RECESS POWER

FITS CARLISLE NEW GENERATION FASTENERS

POINT	×	LENGTH	DESCRIPTION
T10	x	2"	STAR POWER
T15	x	2"	STAR POWER
T20	×	2"	STAR POWER
T25	x	2"	STAR POWER
T27	x	2"	STAR POWER
T30	x	2"	STAR POWER
T40	x	2"	STAR POWER

#### PHILLIPS® POWER BITS



POINT SIZE	x	LENGTH	DESCRIPTION
#1	x	2"	PHILLIPS POWER
#1	x	2-3/4"	PHILLIPS POWER
#1	x	3"	PHILLIPS POWER
#1	x	3-1/2"	PHILLIPS POWER
#1	x	4"	PHILLIPS POWER
#1	x	5"	PHILLIPS POWER
#1	x	6"	PHILLIPS POWER
#2	x	2"	PHILLIPS POWER
#2	x	2-3/4"	PHILLIPS POWER
#2	x	3"	PHILLIPS POWER
#2	x	3-1/2*	PHILLIPS POWER
#2	x	4"	PHILLIPS POWER
#2	x	5"	PHILLIPS POWER
#2	×	6"	PHILLIPS POWER
#3	x	2"	PHILLIPS POWER
#3	x	2-3/4"	PHILLIPS POWER
#3	x	3"	PHILLIPS POWER
#3	x	3-1/2*	PHILLIPS POWER
#3	x	4"	PHILLIPS POWER
#3	x	5"	PHILLIPS POWER
#3	x	6"	PHILLIPS POWER

### STAR POWER BITS FOR TORX® SCREWS

1/4" HEX SHANK



#### PHILLIPS® INSERT BITS

1/4" HEX SHANK



3
а

POINT SIZE	×	LENGTH	DESCRIPTION
#0	x	1"	PHILLIPS INSERT
#1	x	1"	PHILLIPS INSERT
#2	×	1"	PHILLIPS INSERT
#3	x	1"	PHILLIPS INSERT

### **SOCKET EXTENSION**

### 1/4" SHANK TO FIT 1/4" SQUARE DRIVE



SHANK HEX SIZE	×	TOTAL LENGTH	N	MALE SQUARE
1/4"	×	1*	x	1/4"
1/4"	×	1-1/4*	x	1/4"
1/4"	x	2"	×	1/4"
1/4"	x	3"	x	1/4"
1/4"	x	4"	x	1/4"
1/4"	x	6"	×	1/4"
1/4"	x	8"	×	1/4"

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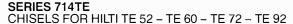
POSIDRIV® IS A REGISTERED TRADEMARK OF PHILLIPS INTERNATIONAL Co.

TORX® IS A REGISTERED TRADEMARK OF CAMCAR, DIV. OF TEXTRON.

### **Chisels For Rotary & Demolition Hammers**

SERIES 714 BP - 714 FC - 714 SC CHISELS FOR ALL SPLINE ROTO HAMMERS AND BOSCH DEMO HAMMER 11306.

Part Number	Size	Description	Quantity Per Pack	
714BP0012	12"	Bullpoint 12" Long	5	
714BP0018	18"	Bullpoint 18" Long	1	
714FC0012	1"x12"	Flal Chisel 1"x12"	5	
714FC0018	1"x18"	Flal Chisel 1"x18"	1	
714SC0012	2"x12"	Scaling Chisel 2"x12"	5	
714SC0018	2"x18"	Scaling Chisel 2"x18"	1	



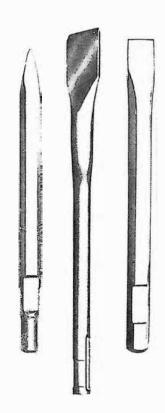
Part Number	Size	Description	Quantity Per Pack
714TEBP12	12"	Bullpoint 12" Long	5
714TEBP18	18"	Bullpoint 18" Long	1
714TEFC12	1"x12"	Flat Chisel 1"x12"	5
714TEFC18	1"x18"	Flat Chisel 1"x18"	1
714TESC12	2"x12"	Scaling Chisel 2" x12"	5
714TESC18	2"×18"	Scaling Chisel 2"x18"	1

### SERIES 714DH DEMOLITION CHISELS FOR BOSCH MODELS 11302 – BOSCH 11305

Part Number	Size	Description	Quantity Per Pack	
714DHBP12	12"	Bullpoint Chisel 12"	5	
714DHBP18	18"	Bullpoint Chisel 18"	1	
714DHFC12	1"x12"	Flat Chisel 1"x12"	5	
714DHFC18	1"x18"	Flat Chisel 1"x18"	1	

#### BUSHING HEAD AND DRIVERS.

Part Number	Description	
714BH1212	1'-'/2' x 1'/2' Bushing Head Taper Type	
714BDSP12	Bushing Driver For Spline	
714BDTE12	Bushing Driver For HILTI-TE-60-72-92	



- Precision Ground
- Cutting Edge Individually Sharpened
- Heat Treated Point And Surface.



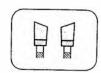


### Hard Body Carbide Tipped Circular Saw Blades

ITM Industrial grade, hard body carbide tipped circular saw blade, stay sharp 40 times longer than the best steel blades.

#### 3 BASIC BLADE TYPES Framing – Rip

Designed for fast and accurate ripping along the grain in hard or soft woods where a smooth cross cut is not necessary.



- · Hard Body 38-42 Rc
- K20 Carbide Grade
- · Packed 25 pc. in Self Display Boxes
- 5/8" Arbor Hole With Knockout For Diamond Arbor
- · Alternate Top Bevelled Tooth
- · Resharpened By Professionals Only
- Made in Europe



#### Rip & Crosscut

A multi-purpose blade for ripping, crosscutting and mitering in hard and soft woods, plywood and composition materials.

#### Finish & Trim

Especially designed for crosscutting and mitering in materials where a very smooth cut is necessary, also cuts aluminum and other non-ferrous metals.

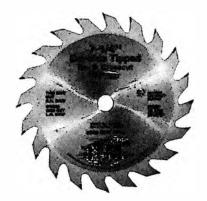
CATALOG NUMBER	BLADE DIA. INCHES	DESCRIPTION	NUMBER OF TEETH	ARBOR HOLE INCHES
CS-58-612	6-1/2"	Rip & Crosscut	12	5/a"
CS-58-640	6-1/2	Finish & Trim	40	5/8
CS-58-712	7-1/4	Framing-Rip	12	<sup>5</sup> /8
CS-58-720	7-1/4	Rip & Crosscut	20	5/8
CS-58-740	7-1/4	Finish & Trim	40	5/8
CS-58-824	8-1/4	Rip & Crosscut	20	5/8
CS-58-840	8-1/4	Finish & Trim	40	5/8
CS-58-940	9	Finish & Trim	40	5/8
CS-34-140	10	Finish & Trim	40	5/8
CS-34-160	10	Finish & Trim	60	5/8

#### STANDARD, CARBIDE TIPPED CIRCULAR SAW BLADES

CATALOG NUMBER			ARBOR HOLE INCHES	
DS-58-724	24	7-1/,"	5/."	

Recommended for sawing, wood, transite, masonite, formica, siding and roofing.

- · Packed 25 Blades in Self Display Boxes
- Made in Europe
- 5/8" Arbor Hole With Knockout For Diamond Arbor
- Not Recommended For Use on Masonry & Metals



### **Best Rotary Percussion Masonry Bits**

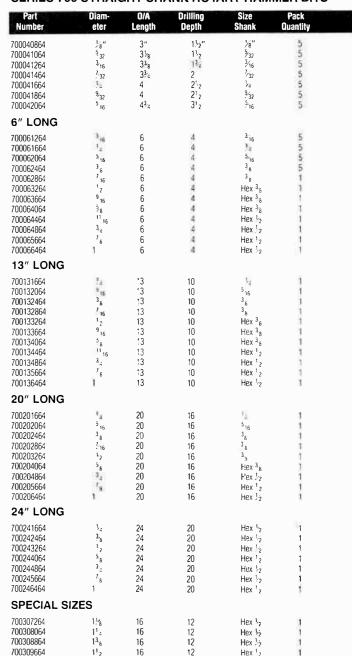
#### SERIES 700 STRAIGHT SHANK ROTARY HAMMER BITS

- Heavy Duty
- ANSI Standard
- Unique Percussion Grade of Carbide of Tungsten Specially Designed for Rotary Hammer Drill Bits.
- Unique Spiral Flute for Fast Removal of Dust. No Blow Back or Compacting.
- Unique Ground Flute
- Unique Process of Heat Treatment for Best Resistance to the Impact.
- Unique Shank Design to Prevent Slip in the Chuck.
- Polished Flute.
- Unique Grinding of Carbide Tip for Fast Penetration.
- Suitable for
  - Concrete
  - Stones
  - Marble
  - Granite

Packaged in Individual Pouches.

These Drill Bits are made for machines with percussion. They will not perform with rotation only.





#### CARBIDE HAMMER DRILL BITS

### SDS - PLUS

#### **SERIES 715S**

PART   DRILL   O/A   DRILLING   NUMBER   SIZE   LENGTH   DEPTH     715S41064   5/32"   4-1/2"   2"     715S61064   5/32"   6-1/2"   4"     715S61064   3/16"   4-1/2"   2"     715S61264   3/16"   6-1/2"   4"     715S10316   3/16"   10"   7-1/2"     715S12316   3/16"   12"   9"     715S12316   3/16"   14"   12"     715S12316   3/16"   14"   12"     715S14316   3/16"   16-1/2"   14"     715S14316   3/16"   16-1/2"   14"     715S61464   7/32"   4-1/2"   2"     715S81464   7/32"   6-1/2"   4"     715S14064   7/32"   10"   7-1/2"     715S14064   7/32"   10"   7-1/2"     715S14064   7/32"   16"   14"     715S16464   7/32"   16"   14"     715S16464   7/32"   16"   14"     715S16464   1/4"   4-1/2"   2"     715S16464   1/4"   4-1/2"   2"     715S16664   1/4"   4-1/2"   2"     715S14014   1/4"   10"   7-1/2"     715S14014   1/4"   10"   7-1/2"     715S20014   1/4"   20"   17"     715S20014   1/4"   20"   17"     715S2064   5/16"   4-1/2"   2"     715S92064   5/16"   6-1/2"   4"     715S14038   3/8"   6-1/2"   4"     715S14018   3/8"   6-1/2"   4"     715S14012   1/2"   6-1/2"   4"     715S13264   1/2"   9"   6"     715S14012   1/2"   18"   14"     715S18012   1/2"   18"   14"     715S18058   5/8"   14"   10"     715S14034   3/4"   14"   10"     715S18034   3/4"   14"   10"	JENIES	, 133		
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715S13264 1/2" 10" 7-1/2" 715S14012 1/2" 14" 10" 7-1/2" 715S18012 1/2" 18" 14" 10" 715S18012 1/2" 22" 18" 715S22012 1/2" 22" 18" 715S43664 9/16" 9" 6" 6" 715S64064 5/8" 6-1/2" 4" 715S94064 5/8" 9" 6" 715S14058 5/8" 14" 10" 715S18058 5/8" 18" 14" 10" 715S18058 5/8" 22" 18" 715S2058 5/8" 22" 18" 715S94464 11/16" 9" 5-1/2" 715S94864 3/4" 9" 5-1/2" 715S18034 3/4" 14" 10" 715S18034	715S63264		6-1/2"	4"
715S14012         1/2"         14"         10"           715S18012         1/2"         18"         14"           715S22012         1/2"         22"         18"           715S43664         9/16"         9"         6"           715S64064         5/8"         6-1/2"         4"           715S94064         5/8"         9"         6"           715S14058         5/8"         14"         10"           715S18058         5/8"         18"         14"           715S94664         11/16"         9"         5-1/2"           715S94864         3/4"         9"         5-1/2"           715S18034         3/4"         14"         10"           715S18034         3/4"         18"         14"	715S93264	1/2"	9"	6"
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715S43664 9/16" 9" 6" 715S64064 5/8" 6-1/2" 4" 715S94064 5/8" 9" 6" 715S14058 5/8" 14" 10" 715S18058 5/8" 18" 14" 715S22058 5/8" 22" 18" 715S94464 11/16" 9" 5-1/2" 715S94864 3/4" 9" 5-1/2" 715S14034 3/4" 14" 10" 715S18034 3/4" 18" 14"	715S18012	1/2"	18"	14"
715S64064 5/8" 6-1/2" 4" 715S94064 5/8" 9" 6" 715S14058 5/8" 14" 10" 715S18058 5/8" 18" 14" 715S22058 5/8" 22" 18" 715S94464 11/16" 9" 5-1/2" 715S94864 3/4" 9" 5-1/2" 715S18034 3/4" 14" 10" 715S18034 3/4" 18" 14"	715S22012	1/2"	22"	18"
715S94064         5/8"         9"         6"           715S14058         5/8"         14"         10"           715S18058         5/8"         18"         14"           715S22058         5/8"         22"         18"           715S94464         11/16"         9"         5-1/2"           715S94864         3/4"         9"         5-1/2"           715S14034         3/4"         14"         10"           715S18034         3/4"         18"         14"	715S43664	9/16"	9"	6"
715S14058 5/8" 14" 10" 715S18058 5/8" 18" 14" 715S22058 5/8" 22" 18" 715S94464 11/16" 9" 5-1/2" 715S94864 3/4" 9" 5-1/2" 715S14034 3/4" 14" 10" 715S18034 3/4" 18" 14"	715S64064	5/8"	6-1/2"	4"
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715S22058 5/8" 22" 18" 715S94464 11/16" 9" 5-1/2" 715S94864 3/4" 9" 5-1/2" 715S14034 3/4" 14" 10" 715S18034 3/4" 18" 14"	715S14058		14"	10"
715S22058 5/8" 22" 18" 715S94464 11/16" 9" 5-1/2" 715S94864 3/4" 9" 5-1/2" 715S14034 3/4" 14" 10" 715S18034 3/4" 18" 14"	715S18058	5/8"	18"	14"
715S94464 11/16" 9" 5-1/2" 715S94864 3/4" 9" 5-1/2" 715S14034 3/4" 14" 10" 715S18034 3/4" 18" 14"	715S22058	5/8"		
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715S14034 3/4" 14" 10" 715S18034 3/4" 18" 14"			-	
715S18034 3/4" 18" 14"				
	715S22034	3/4"	22"	18"

#### **ROTARY HAMMER DRILL BITS**

PART NUMBER	DRILL SIZE	O/A LENGTH	DRILLING DEPTH
715S95464	27/32"	9"	5-1/2"
715S95664	7/8"	9"	5-1/2"
715S14078	7/8"	14"	10"
715S18078	7/8"	18"	14"
715S96464	1"	9"	5-1/2"
715S14001	1"	14"	10"
715S18001	1"	18"	14"
715S60012	15/32" (12mm)	6-1/2"	4"
715S90012	15/32" (12mm)	9"	5-1/2"



- Special Tungsten Carbide Tip.
- Copper Silver Brazing of Carbide Head.
- Special Flute Design Improves Penetration without Blow Back or Compacting.
- · ANSI Specification.
- · Made in Europe.
- · Suitable for:
  - Masonry
  - Stone
- Brick
- Aggregates

# SDS BITS CAN BE USED IN ALL OF THE FOLLOWING HAMMER TOOLS:

IMMINIENTO	OLO.
<b>AEG</b> ®	METABO®
BOSCH®	MILWAUKEE®
B&D®	MAKITA®
HILTI®	RYOBI®
HITACHI®	RAMSET®
<b>WACKER®</b>	RED HEAD®
	KANGO®

ALSO AVAILABLE IN SPLINE SHANK

### **NUT SETTERS**

#### MAGNETIC NUT SETTER 2-9/16" LONG



- · 1PC. CONSTRUCTION.
- · 1/4" HEX SHANK.

HEX HEAD SIZE	x	LENGTH	DESCRIPTION
1/4"	x	2-9/16"	MAGNETIC NUT SETTER
5/16"	x	2-9/16"	MAGNETIC NUT SETTER
3/8"	x	2-9/16"	MAGNETIC NUT SETTER
7/16"	x	2-9/16"	MAGNETIC NUT SETTER

#### MAGNETIC NUT SETTER 4" - 6" LONG



- · 1PC. CONSTRUCTION.
- · 1/4" HEX SHANK.

HEX HEAD SIZE	x	LENGTH	DESCRIPTION
1/4*	×	4"	MAGNETIC NUT SETTER
1/4"	x	6"	MAGNETIC NUT SETTER
5/16"	x	4"	MAGNETIC NUT SETTER
5/16"	x	6"	MAGNETIC NUT SETTER
3/8"	x	4"	MAGNETIC NUT SETTER
3/8"	x	6"	MAGNETIC NUT SETTER

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### mid-state

### triple-connector indoor-outdoor

,	3-wire gi	round	aea exter	nsion	coras	
	Cat. No.	Length	Amps	Watts		
	12/3 SJT W-A	.475 O.D.	ORANGE VINYL	CORD		neun
	TC 22	2'	15	1875		UUILIN
ſ	TC 152	15'	15	1875		1
	TC 252	25′	15	1875	Contract of the second	///
	TC 502	50′	15	1875		
-	TC 1002	100'	15	1875	-	
	14/3 SJT W-A	.390 O.D.	ORANGE VINYL	CORD	TC/TCR TCB SERIES	
-	TC 154	15'	15	1875	TOD SERIES	,
(UL	√TC 254	25'	15	1875		
٣	/TC 504	50'	15	1875		
	TC 1004	100'	13	1625	named and the second	
	14/3 SJOW-A	UL .390 C	D.D. BLACK RUB	BER COR	D	
	TCR 154	15'	15	1875		
- 1	TCR 254	25'	15	1875		
- 1	TCR 504	50'	15	1875		
L	TCR 1004	100'	13	1625		
			). BLUE UL LISTE	ED		
	3-WIRE CORE	) FLEXIBI	LE TO -58°F			
	TCB 22	2'	15	1875		
۲	TCB 152	15'	15	1875		
	TCB 252	25'	15	1875		
	TCB 502	50′	15	1875		
	TCB 1002	100′	15	1875		_
	14/3 SJEOW-A	.390 O.D	. BLUE UL LISTE	ΞD		
ળ	3-WIRE CORE	FLEXIBL	_E TO -58°F			

blue SUN & SNO				
L	TCB 1004	100′	13	1625
1	TCB 504	50'	15	1875
ı	TCB 254	25'	15	1875
1	TCB 154	15'	15	1875

#### all weather indoor-outdoor 3-wire grounded extension cords

remains flexible to -58° F

0/3 SJEOW-A ISTED 3-WIRI		LUE UL		
Cat. No.	Length	Amps	Watts	
SS3 110	10'	15	1875	CHILL O CHOR
SS3 1510	15′	15	1875	DUN & SNO
SS3 2510	25 <sup>*</sup>	15	1875	Extension
SS3 5010	50'	15	1875	CODD
SS3 1010	100'	15	1875	COKD
12/3 SJEOW-		BLOE UL LI	STED	finid-state
3-WIRE COR				-1111 17111
SS3 102	10'	15	1875	
SS3 152	15'	15	1875	
SS3 252	25'	15	1875	
SS3 502	50'	15	1875	
SS3 1002	100'	15	1875	

553 1002	100	. 15	18/5	
) 14/3 SJEOW-	A .390 O.D. B	LUE UL LI	STED 3-WIR	E CORD
SS3 104	10'	15	1875	
SS3 154	15'	15	1875	
SS3 254	25'	15	1875	
SS3 504	50'	15	1875	
SS3 1004	100'	13	1625	
16/3 SJEOW	A .365 O.D. E	BLUE UL LI	STED 3-WIR	E CORD
SS3 106	10′	13	1625	
SS3 156	15′	13	1625	
SS3 256	25'	13	1625	
SS3 506	50'	13	1625	
SS3 1006	100'	10	1250	

#### male caps



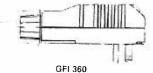
Cat. No.	Description
P 300	Rubber handle grip cap, 2 wire
(h) P 311 P 333	Heavy duty rubber cap w/cord clamp, 2 wire
P 333	3-wire cap, dead front, armored, yellow
P 340	Vinyl 3-wire cap yellow

#### female connectors



C 405	Jumbo rubber connector, 2 wire
C 411	Heavy duty rubber connector, 2 wire
$(U_L)$	w/cord clamp
C 420	3-wire cord connector, armored, yellow
_ C 440	Vinyl 3-wire connector, yellow

#### Ground Fault Interrupter male cord cap

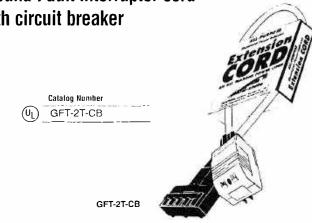




"The GFI male cap can be assembled to any cord. please contact the office if you have a specific cord you need

Ground Fault Interrupter with duplex receptacle





Unit features a male ground fault interrupter and a triple outlet female with a built in circuit breaker for double protection



### PREMIUM MADE IN THE USA CABLE HOIST/PULLERS

#### QUALITY BUILT IN THE USA





# 2 TON HEAVY-DUTY, DOUBLE DRIVE

Revolutionary design and engineering make this the most rugged, reliable and safe puller for today's industrial requirements. Ratchet wheels on both sides for a balanced drive. Double locking and driving pawls independently sprung to insure alignment with ratchet wheel teeth. Tubular steel cable guide guards against excessive wear or fraying. Two legs transfer load to cable drum, minimize distortion and binding locking and lifting pressure applied uniformly to both sides of cable drum.

MODEL	CAPACITY	PULL	
MM 16DD	1 TON	6 FT.	
MM 19DD	1 TON	9 FT.	
MM 112DD	1 TON	12 FT.	
MM 212DD	2 TON	6 FT.	
MM 1212CDD	1-2 TON	6-12 FT.	

### **HOIST/PULLERS TOOLS AND ACCESSORIES**



Now, an industrial grade tool designed and priced for personal use. Simplified release control of drive pawls for raising or lowering. Unique design allows Clevis a full 360 degree rotation. Brake cable spring fabricated for easy in-field maintenance.

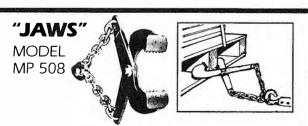
MODEL **PULL** 

MM 5014 14 FT. MM 5028 28 FT.

#### **BAND BREAKER**

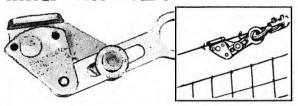
MODEL MP 503

The simplest, most versatile and dependable method. Just slip band into slot and rotate handle parallel to band. Will break banding up to 2" wide and .040 thick.



The harder you pull, the tighter JAWS grip. Can be used as a pallet and skid puller or sheet metal gripper. Weighing 5 lbs., it will pull 2000 lbs., fits 2" spaced pallets. Opens to 4".

#### FENCING ACCESSORIES MINI WIRE CLAMP MODEL MP 189



Designed for use with a Mini-Mule puller, it is an essential accessory for barbed, smooth or insulated wire from 1/16" to 1/4" diameter. The Mini Wire Clamp weighs only 15 oz., yet has a capacity of 1 300 lbs. Provides a sure, positive grip.

#### POST SLING

MODEL MP 502

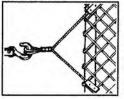




An anchor for fence stretcher. Eliminates frayed and kinked cable when permanently fastened to the cable hook. Hangs out of the way when not in use and never gets lost or mislaid.

#### **PULL CABLE**

MODEL MP 501



Required for the proper erection of chain link or other fencing with tension bars. A balanced tension may be applied throughout the installation, making the job smoother, neater and easier.

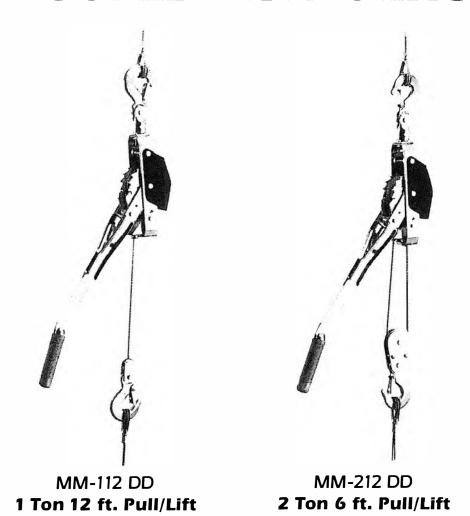
#### ADJUSTABLE CHAIN SLING



For lifting motors from cars, trucks, tractors and boats. Can be locked with long and short legs to hold a motor at proper angle for installation or removal. Capacity 2350 lbs. A bolt through the anchor lugs converts it to an excellent anchor loop for vertical lifting, horizontal pulling, stretching or positioning.



### **DOUBLE DRIVE UNITS**



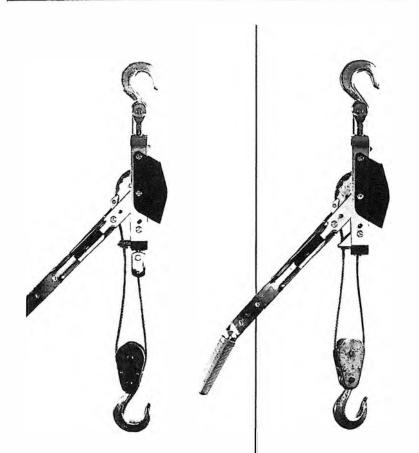
Our most popular Double Drive Mini-Mules. For all your extra-tough jobs!

Note: Units shown with optional safety hooks.

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### PREMIUM MADE IN THE USA CABLE HOIST/PULLERS



### 1-2 TON CONVERTIBLE

The two-in-one model. Easily converts to 1 or 2 ton capacity. Weighs only 7 oz. more than standard 2 ton model. All other specifications are the same as standard 2 ton unit. Change over is easily accomplished. Single Drive and Double Drive.

APACITY	PULL	
1-2 TON 1-2 TON	6-12 FT. 6-12 FT.	

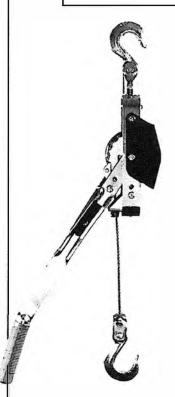
### 2 TON SINGLE DRIVE

This heavy-duty two ton model weighs only 8 1/2 lbs. complete with cable and hooks. Compact, ruggedly constructed frame is 8 1/4" long x 2 1/4" wide. Minimum distance between hooks is 20". Has 36:1 power ratio. Will easily handle 4000 lbs.

MODEL	CAPACITY	PULL
MM 212R	2 TON	6 FT.



#### OPTIONAL STEEL COVERS AVAILABLE



#### 3/4 TON / 1 TON

The popular, wide-utility models - 6 Ft. pull weighs only 7 1/2 lbs. - 12 Ft. pull weighs 8 lbs. Standard compact, rugged frame is 8 1/4" long x 2 1/4" wide. Minimum distance between hooks is 18". Has 18:1 power ratio; will handle 2000 lbs. easily.

MODEL	CAPACITY	PULL	
MM 16R	1 TON	6 FT.	
MM 19R	1 TON	9 FT.	
MM 112R*	1 TON	12 FT.	
MM 7518	3/4 TON	18 FT.	



<sup>\*</sup> Deuer's most popular unit.

SHEAVE

DIA.

11/2

2

3

21/2

31/2

11/2

21/2

31/2

11/2

21/2

31/2

2

3

2

MODEL

DB15H

DB20H

DB25H

DB30H

DB35H

D815HS

DB20HS

DB25HS

DB30HS

DR35HS

DB15E

DB20E

DB25E

DB30E

DB35E

MAX.

CABLE

SIZE

3/16

3∕16

1/4

1/4

5/16

3∕16

3/16

1/4

1/4

5/16

3/16

3/16

1/4

1/4

5/16

CAPACITY

420#

480#

550#

650#

1250#

420#

480#

550#

650#

1250#

460#

480#

550#

650#

1250#

420#

480#

550#

WEIGHT

**EACH** 

(ounces)

12

14

18

251/2

9

12

14

18

251/2

8

11

11

16

23

7

10

10

### **DEUER BLOCKS**

### 5 Styles-5 sizes- all with removable sheave

All Deuer Blocks have a "hairpin" type removable cotter pin holding the clevis pin. This allows the sheave to be removed for rigging into cable at any point, in the same manner as a snatch block.

Deuer Blocks are all steel and entirely bright zinc plated for maximum corrosion resistance.

All Deuer Blocks have the Standard Working Load (capacity) stamped on each block.















EYE (Swivel)

HOOK



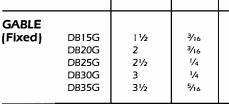














	DB30G DB35G	3 3½	1/4 5/16	650# 1250#	14½ 21½
FLANGE (Fixed)	DB15F DB20F DB25F DB30F	1½ 2 2½ 3	<sup>3</sup> /16 <sup>3</sup> /16 <sup>1</sup> /4	420# 480# 550# 650#	5 8 7½ 12
	DB35F	31/2	5/16	1250#	181/2

Caution: do not mount DB-F "flange" units with wood screws. Use #10 machine screws and nuts.



SHEAVES		I.			
	MODEL	DIA. & BORE	MAX. CABLE SIZE	CAPACITY	WEIGHT EACH (ounces)
	DB15S DB20S DB25S DB30S DB35S	1 ½ x 5/16 2 x 5/16 2½ x 5/16 3 x 5/16 3½ x 5/16	3/16 3/16 1/4 1/4 5/16	420# 480# 550# 650# 1250#	3 5½ 3½ 5 6½

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# MULTI-PURPOSE PORTABLE HOIST/PULLER PACKAGED IN A CONVENIENT CASE!





#### ROPE HOIST MODEL RH 600

Full swiveling safety hooks. 3" diameter sheave pulleys with steel roller bearings. Will operate with any type rope from 3/8" to 1/2" Dia. 600 lbs. safe working load with 4:1 safety factor. 4:1 ratio with positive locking brake to hold load in position. Zinc plated for corrosion resistance.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



#### Harnesses

#### VERSALITE 650 SERIES HARNESSES

- · Lightweight nylon webbing
- Chest strap with adjustment pads
- Pull-up shoulder adjustment
- Forged-steel sliding back D-ring
- Replaceable chest-mounted lanyard clip on adjustment pad

#### Model #650

• Standard VersaLite harness

#### Model #650-4

• Includes forged-steel side D-rings; tongue buckle leg straps

#### Model #650-7

Constructed of heavy-duty nylon webbing; forged steel side D-rings

#### Model #650-58

 Constructed of heavy-duty nylon webbing, tongue buckle leg straps and forged-steel side D-rings

#### · Back strap to keep shoulder straps in position and prevent the back D-ring from sliding down too far • Four (4) loops to accommodate body belt • One "universal" size fits most Options: Coolmax<sup>™</sup> back and shoulder pads • Polyester webbing available for chemical and acidic environments

# Model #650

#### MILLER® 750/751 HARNESSES

- Very economical harness
- Conventional nylon webbing
- Lightweight
- Easier to put on ... greater comfort
- Forged-steel sliding back D-ring
- Chest and back straps keep the shoulder straps in position, preventing the D-ring from sliding down too far
- Available in two (2) sizes S/M and L/XL
- Polyester webbing available for chemical and acidic environments

#### Model #750

• Step-in harness with looped leg straps, friction buckle shoulder straps and pass-through chest buckle

#### Model #751

• Quick-connect harness features mating buckles in the leg straps and a pass-through chest buckle

#### **DURALITE LIGHTWEIGHT HARNESSES**

- · Lightweight nylon webbing
- Lightweight and durable
- Forged-steel sliding back D-ring
- Mating buckles on legs and shoulder straps
- One "universal" size fits most; also available in M, L and XL
- Polyester webbing available for chemical and acidic environments

#### Model #552

• Includes patent pending front D-ring and side D-rings for positioning, more comfortable and easier to adjust than conventional front D-ring harnesses

#### Model #850

• Standard DuraLite harness

#### Model #851

• Includes side D-rings for positioning

#### **SUB-PELVIC HARNESSES**

- Conventional nylon webbing
- Superior support in the buttocks while reducing pressure from the shoulders and legs
- Provides maximum force distribution and comfort
- Tongue buckle waist belt, friction buckles in chest, shoulder and leg straps
- Ideal for being suspended, raised or lowered, such as in tanks, manholes and pipe
- Available in sizes S, M, L, XL
- Polyester webbing available for chemical and acidic environments

#### Model #8095

• Standard Sub-Pelvic harness

#### Model #8095-48

• Includes SofStop™ shock absorber/D-ring combination in the middle of the back for attachment to lanyards or retractable lifelines

#### Model #8095-3

Includes shoulder D-rings

#### Model #8095-4

Includes tongue buckle leg straps

#### Model #8095-7

• Includes side D-rings for positioning

#### ADIUSTABLE FIT HARNESSES

- · Conventional nylon webbing
- · Adjustable fit for extended wear
- Friction buckles on leg, chest, shoulder and waist straps allow full adjustment possibilities
- Available in sizes S, M, L, XL
- Polyester webbing available for chemical and acidic environments

#### Model #8428

Standard Adjustable-Fit harness

#### Model #8428-4

• Includes tongue buckle leg straps

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



#### **Duraflex Harnesses**

#### Model #E552

- New stretchable elastic webbing
- New patent pending front D-ring
- More comfortable than conventional front D-ring harnesses
- Easier to adjust than conventional front D-ring harnesses
- Mating buckles throughout
- Side D-rings
- Sub-pelvic strap
- One "universal" size fits most

#### Model #E650

- New stretchable elastic webbing
- Friction buckle shoulder straps
- Mating buckle leg and chest straps
- Pull-up design shoulder straps
- Belt loops to accommodate tool belts, back pads and accessories
- Lanyard clip
- Sub-pelvic strap
- One "universal" size fits most
- For front D-ring option, order E650FD

#### Model #E650-4

- New stretchable elastic webbing in shoulder and body straps
- Friction buckle shoulder straps
- Conventional nylon webbing in leg straps with tongue buckles
- Pull-up design shoulder adjustment
- Sub-pelvic strap
- Belt loops to accommodate tool belts, back pads and accessories
- Lanyard clip
- One "universal" size fits most
- For front D-ring option, order E650FD4

#### Model #E650-7

- Same design as Model #E650, except with side D-rings
- One "universal" size fits most
- For front D-ring option, order E650FD7

#### Model #E650-58

- Same design as Model #E650-4, except with side D-rings
- One "universal" size fits most
- For front D-ring option, order E650FD58





#### Model #E850

- New stretchable elastic webbing in leg, shoulder and body straps
- Friction buckle shoulder straps
- Mating buckle leg straps
- Sub-pelvic strap
- One "universal" size fits most

#### Model #E851

- Same design as Model #E850, except with side D-rings
- One "universal" size fits most

#### Model #E8095

- New stretchable elastic webbing in leg and shoulder straps
- Friction buckle leg and shoulder straps
- Conventional nylon webbing in waist belt with tongue buckles
- Built-in waist belt
- Sub-pelvic strap
- Available in S, M, L, XL

#### Model #E8759

- New stretchable elastic webbing in shoulder and body straps
- Friction buckle shoulder straps
- Conventional nylon webbing in leg straps with tongue buckles
- Sub-pelvic strap
- One "universal" size fits most

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### **MILLER®**

#### **Harnesses & Body Belts**

#### **CONSTRUCTION HARNESSES**

- Conventional nylon webbing
- Adjustable fit with friction buckles on legs, shoulders and chest straps
- Removable tongue buckle waist belt provides additional stability for carrying tools, etc.
- Available in sizes S, M, L, XL
- Ideal for pipefitters, steel erectors and iron workers
- Polyester webbing available for chemical and acidic environments

#### Model #8428-11

• Standard Construction harness with a 4-inch back pad

#### Model #8428-14

• Includes tongue buckles throughout, side D-rings for positioning and a 4-inch back pad

#### Model #8428-15

• Includes tongue buckle leg straps and a 4-inch back pad

#### **HEAVY-DUTY HARNESSES**

- Heavy-duty nylon webbing
- Includes shoulder D-rings and tongue buckle waist belt
- Includes friction buckles on chest, leg and shoulder straps
- Available in sizes S, M, L, XL
- For use in rugged environments including pipeline construction, oil derrick or confined space activities
- Polyester webbing available for chemical and acidic environments

#### Model #8714

• Standard Heavy-duty harness

#### Model #8714-8

• Includes tongue buckles throughout

#### Model #8714-9

• Includes tongue buckles throughout, no shoulder D-rings



Model #8428-16

Model #8428-11

 Includes a 6-inch back pad and is designed for use with an approved industrial body belt, such as 6414N (belt not included)

#### **UNIVERSAL FIT HARNESSES**

- Conventional nylon webbing
- Permits unresricted movement
- One "universal" size fits most
- Friction buckles on chest and shoulder straps
- Tongue buckle leg straps
- Excellent for workers performing installations, renovations and maintenance activities
- Polyester webbing available for chemical and acidic environments

#### Model #8759

**BELT SIZES:** 

Medium (waist 36-44)

X-Large (waist 44-52)

(waist 32-40)

(waist 40-48)

Small

Large

Standard Universal Fit harness

#### **INDUSTRIAL BODY BELTS**

All body belts should be utilized for positioning work only, not for fall protection. Miller® body belts are designed with heavy-duty nylon webbing and tongue buckle attachments. Polyester webbing is available for chemical and acidic environments.

### Beginning January 1, 1998, OSHA will require full-body harnesses for fall protection in the construction industry.

Miller® brand body belts meet or exceed all applicable OSHA, ANSI and CSA requirements.

#### Model #2NA

 General purpose nylon belt with tongue buckle includes side D-rings and 3-inch back pad

#### Model #3NA

 Nylon belt with tongue buckle includes single D-ring and 3-inch back pad

#### Model #124N

Nylon belt with tongue buckle includes side D-rings

#### Model #9140

 Nylon belt with one (1) D-ring and an integral SofStop™ shock absorber

#### Model #9141

 Nylon belt with two (2) D-rings and an integral SofStop™ shock absorber





Model #3NA



Model #124N



Model #9140

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### **MILLER®**

### Lanyards

#### STRETCHSTOP™ LANYARD WITH SOFSTOP™ SHOCK ABSORBER

• Stretches from 4 to 6 feet, offering greater worker maneuverability – when contracted to 4 feet, it greatly reduces the chances of tripping, snagging or dragging

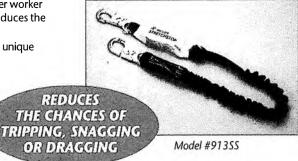
• Includes the field-proven SofStop shock absorber with its unique back-up safety strap.

#### **Model #913SS**

 Stretchable StretchStop lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings and an integral SofStop shock absorber

#### Model #8798SS

 Two-legged, stretchable StretchStop lanyard with three (3) plated locking snap hooks with 3/4 inch throat openings and an integral SofStop shock absorber



#### MANYARD™ SHOCK-ABSORBING LANYARDS

The Manyard lanyard is a true shock absorber/lanyard combination with a special shock-absorbing inner core material surrounded by a super-strong, heavy-duty outer jacket that doubles as a back-up web lanyard. Manyard lanyards contain a unique warning flag to indicate the unit has been involved in a fall and should be removed from service. Manyard lanyards are available in lengths from 4 to 10 feet.

- Standard lanyards are six (6) feet in length.
- Maximum working load of 310 lbs.

#### Model #215WLS

 Six-foot Manyard shock-absorbing lanyard with one (1)
 1-3/4 inch looped end and one (1) plated locking snap hook with 3/4 inch throat opening

#### Model #216WLS

 Six-foot Manyard shock-absorbing lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings

#### Model #219WRS

 Six-foot lanyard with one (1) plated locking snap hook with 3/4 inch throat opening and one (1) plated locking snap hook with 2-1/2 inch throat opening

#### Model #231WRS

 Two-legged, six-foot Manyard shock-absorbing lanyard with one (1) plated locking snap hook with a 3/4 inch throat opening and two (2) plated locking snap hooks with 2-1/2 inch throat openings

#### Model #232WLS

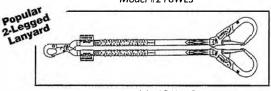
 Two-legged, six-foot Manyard shock-absorbing lanyard with three (3) plated locking snap hooks with 3/4 inch throat openings

Manyard shock-absorbing lanyards are also available as part of Man-Pac belt units which include the following

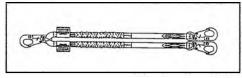
- components: Tongue buckle body belt
  - Six-foot Manyard lanyard
  - Storage pouch



Model #216WLS



Model #231WRS



Model #232WLS

#### Model #7000LS

 Manyard shock-absorbing lanyard loops around a 1-3/4 inch body belt and includes one (1) plated locking snap hook with 3/4 inch throat opening. Includes storage bag

#### Model #7001LS

 Manyard shock-absorbing lanyard permanently attached to the back D-ring of a 1-3/4 inch body belt. Includes storage bag

#### **Model #7002LS**

 Manyard shock-absorbing lanyard permanently sewn to body belt containing a 3 inch comfort pad. Includes storage bag

### **MILLER®**

#### Lanyards

#### MANYARD II SHOCK-ABSORBING LANYARDS

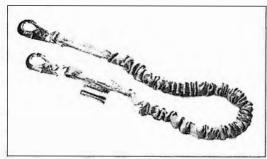
- Stretches from 4 to 6 feet, offering greater worker maneuverability when contracted to 4 feet, it greatly reduces the chances of tripping, snagging or dragging
- Special shock-absorbing inner core material surrounded by a super-strong, heavy-duty outer jacket that doubles as a back-up web lanyard
- A unique warning flag indicates the unit has been involved in a fall and should be removed from service.

#### Model #216M

 Stretchable Manyard II shock-absorbing lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings

#### Model #219M

 Stretchable Manyard II shock-absorbing lanyard with one (1) plated locking snap hook with a 3/4 inch throat opening and one (1) plated locking snap hook with a 2-1/2 inch throat opening



Model #216M

Red Core Indicator shows unit unfit for service



#### **ROPE GRABS/VERTICAL LIFELINES**

Rope grabs are to be used with independent lifelines. A 3/4 inch or 5/8 inch synthetic lifeline with a minimum tensile strength of 5,000 pounds must be secured to an anchorage point independent of the worker's platform. A rope grab will move up or down the vertical lifeline easily, yet it will lock instantly when activated by a fall.

Miller® vertical lifeline's standard rope length is 100 feet. Other lengths available upon request. Nylon or polyester rope is recommended for fall protection.

#### **ROPE GRABS**

Miller®brand 8714 rope grabs meet OSHA and ANSI requirements.

#### Model #98174LS with SofStop™

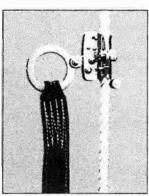
 Constructed of plated steel, the rope grab is designed with an attached SofStop shock absorber and plated D-ring. Accommodates 3/4 inch or 5/8 inch rope tunnel.

#### Model #8174WLS with Web Lanyard

 Constructed of plated steel, the rope grab is designed with an attached 2 foot nylon webbing lanyard and a plated locking snap hook with a 3/4 inch throat opening. Accommodates 3/4 inch or 5/8 inch rope tunnel.

#### Model #8174RLS with Web Lanyard

 Constructed of plated steel, the rope grab is designed with an attached 2 foot rope lanyard and a plated locking snap hook with a 3/4 inch throat opening. Accommodates 3/4 inch or 5/8 inch rope tunnel.





Model #8174MLS



Model #8174X

#### Model #8174MLS with Manyard

 Constructed of plated steel, the rope grab features an attached 4-foot Manyard shock-absorbing lanyard and a plated locking snap hook with a 3/4 inch throat opening. Accommodates 3/4 inch or 5/8 inch rope tunnel.

#### Model #8174X

 Constructed of plated steel, the rope grab is designed with a built-in D-ring. Accommodates 3/4 inch or 5/8 inch rope tunnel.

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### MILLER®

### Rope Grabs & Lanyards

Model #8175WLS

#### **ROPE GRABS/VERTICAL LIFELINES**

#### TRAILING ROPE GRABS

Miller\* brand trailing rope grabs meet or exceed applicable OSHA, ANSI and CSA requirements.

#### Model #8175

 Standard trailing rope grab constructed of stainless steel with a 5/8 inch rope tunnel

#### Model #8175RLS

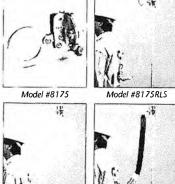
 Trailing rope grab constructed of stainless steel (5/8 inch rope tunnel) with an attached 3 foot rope lanyard and one (1) plated locking snap hook with a 3/4 inch throat opening

#### Model #8175WLS

• Trailing rope grab constructed of stainless steel (5/8 inch rope tunnel) with an attached 3 foot nylon webbing lanyard and one (1) plated locking snap hook with a 3/4 inch throat opening

#### Model #8175SLS

• Trailing rope grab constructed of stainless steel (5/8 inch rope tunnel) with an attached 3 foot nylon webbing lanyard with an integral SofStop shock absorber and one (1) plated locking snap hook with a 3/4 inch throat opening





#### SELF-RETRACTING LIFELINES/LANYARDS

#### **MIGHTYLITE LIFELINES**

Most Popular Retractable in the Industry

#### VERTICAL LIFELINES Specify length when ordering.

#### Model #198RLS-3

• Filament nylon 3/4 inch diameter

#### Model #198RLS-9

• Filament nylon 5/8 inch diameter

#### Model #198RLS-5

Polyester 5/8 inch diameter

#### **SERIES 55 RETRACTABLE LANYARD**

Heavy-duty retractable with galvanized steel cable that is used widely in construction and general industry for maximum fall protection. Designed with a centrifugal braking mechanism that limits free-fall to less than 24 inches. Maximum work load is 310 pounds. Complete with tagline. Stainless steel cable and polyester-aramid blend rope are available upon request.

#### Model #M55-25G

#### Model #M55-50G

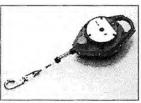
• 50-foot cable length. Weight: 33 lbs.

#### Model #55-75G

• 25-foot cable length. Weight: 31 lbs. • 75-foot cable length. Weight: 51 lbs.

#### Model #55-100G

• 100-foot cable length. Weight: 53 lbs.



Model #M55

# MightyLite 20-foot Galvanized Cable Unit Model #RL20G

#### Model #RI 20P

• 1 inch polyester webbing - 20 foot lenath. Weiaht: 8 lbs.

#### Model #RL20G

 3/16 inch galvanized cable - 20 foot length. Weight: 9 lbs.

#### Model #RL20SS

• 3/16 inch stainless steel cable - 20 foot length. Weight: 9 lbs.

#### **RETRACTABLE WEBBING LANYARD**

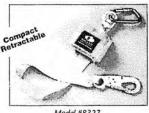
The Miller® Retractable Webbing Lanyard is designed with 10 feet of polyester webbing and is the perfect unit for warehouse activities, cherry picker or aerial basket applications. Designed with an inertia-braking mechanism that locks instantly. Complete with a top swivel ring and a plated locking snap hook with a 3/4 inch throat opening.

#### Model #8327

· Lightweight retractable webbing lanyard with 10 foot payout, complete with carabiner.

#### Model #8327A

• Lightweight retractable webbing lanyard with 10 foot payout, without carabiner.



Model #8327



#### Lanyards

#### **ROPE LANYARDS**

Rope lanyards are available in spun nylon, filament nylon or polyester to fit end-user needs.

- Standard lanyards are six (6) feet in length.
- Available in any length, please specify.

#### Model #198RLS - (indicate length)

 Rope lanyard with one (1) plated locking snap hook with 3/4 inch throat opening, loop on opposite end

#### **Model #201RLS** - (indicate length)

 Rope lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings

#### Model #202RRS - (indicate length)

 Rope lanyard with one (1) plated locking snap hook with 3/4 inch throat opening, one (1) plated locking snap hook with 2-1/2 inch throat opening



1/2" polyester
5/8" polyester
1/2" filament nylon
5/8" filament nylon
3/4" filament nylon

ROPE OPTIONS: 9/16" spun nylon

5/8" spun nylon

Model #201RLS

#### Model #203RLS - (indicate length)

 Adjustable rope lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings

#### Model #204RLS - (indicate length)

 Rope lanyard with one (1) plated locking snap hook with 3/4 inch throat opening, thimble on opposite end. Easily used with a carabiner for attachment to an anchor point.

#### **WEBBING LANYARDS**

Nylon or polyester webbing lanyards are economical, abrasion resistant, and easy to clean and store.

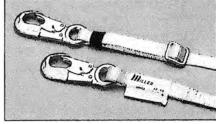
- Standard lanyards are six (6) feet in length.
- Available in any length, please specify.

#### Model #210WLS

 Adjustable nylon or polyester webbing lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings

#### Model #212WLS - (indicate length)

 Nylon or polyester webbing lanyard with one (1) plated locking snap hook with 3/4 inch throat opening, loop on opposite end



Model #210WLS

#### Model #213WLS - (indicate length)

 Nylon or polyester webbing lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings



#### STEEL LANYARDS

Used for positioning **only**, never for fall protection unless incorporated with shock absorber. Steel cable lanyards are super-strong, heat resistant and highly abrasion resistant. A vinyl covering available.

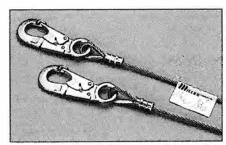
- Standard lanyards are six (6) feet in length.
- Available in any length, please specify.

#### Model #207LS

 Steel cable lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings

#### Model #207NLS

 Steel cable lanyard with vinyl covering and two (2) plated locking snap hooks with 3/4 inch throat openings



Model #207LS

Miller® brand lanyards meet or exceed all applicable OSHA, ANSI and CSA requirements, including ANSI Z359.1.



#### Lanyards

### LANYARDS WITH SOFSTOP™ SHOCK ABSORBER

Miller® SofStop™ Shock Absorbers are versatile shock-absorbing packs available as integral components of various Miller® lanyards. All standard lanyards are six (6) feet in length, unless specified by buyer.

#### **Model #928LS SofStop Shock Absorber**

 A SofStop shock absorber with one (1) D-ring and one (1) plated locking snap hook with a 3/4 inch throat opening provides easy attachment to a harness and can be used with rope, webbing or steel cable lanyards

#### Model #907LS Steel Cable Lanyard

 Steel cable, six-foot lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings and an integral SofStop shock absorber. Steel cable diameter - 1/4 inch

#### Model #901RLS Rope Lanyard

 Six-foot nylon rope lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings and an integral SofStop shock absorber. Rope diameter - refer to Rope Options on page 11

#### Model #903RLS Adjustable Rope Lanyard

 Adjustable nylon rope lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings and an integral SofStop shock absorber. Rope diameter - refer to Rope Options on page 11

#### Model #910WLS Adjustable Web Lanyard

 Adjustable nylon webbing lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings and an integral SofStop shock absorber

#### Model #913WLS Web Lanyard



 Six-foot nylon webbing lanyard with two (2) plated locking snap hooks with 3/4 inch throat openings and an integral SofStop shock absorber

#### Model #8798-6 Two-Legged Web Lanyard

 Two-legged, six-foot nylon webbing lanyard with three (3) plated locking snap hooks with 3/4 inch throat openings and an integral SofStop shock absorber

#### Model #8798-6R Two-Legged Web Lanyard

• Two-legged, six-foot nylon webbing lanyard with one (1) plated locking snap hook with 3/4 inch throat opening and two (2) plated locking snap hooks with 2-1/2 inch throat openings

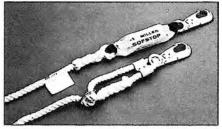
SEE OUR SECTION ON PROTECTIVE EYE, HEAD AND FIRST AID EQUIPMENT



Model #928LS



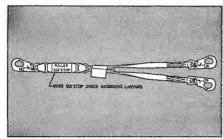
Model #907LS



Model #903RLS



Model #910WLS



Model #8798-6

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### **MILLER®**

### **Anchorage Connectors**

Miller® brand anchorage connectors meet or exceed all applicable OSHA, ANSI or CSA requirements.

Miller® Anchorage Connectors are used for securing a connecting device to an anchorage point. It is important to select a proper anchorage point for ultimate safety:

The anchorage point should

- be directly above the worker
- be easily accessible
- support 5,000 pounds per worker
- be located a safe distance above any lower obstacles

#### 410 Mounted D-Ring

The bolt-on D-ring is designed as a fall protection anchorage point that can be mounted in any position. The steel D-ring and plate are attached to an approved structure with 3/8 inch diameter bolts, lock washers, nuts and a drilling template. Requires four (4) drilled holes.



#### 415 D-Bolt Anchor

Designed specifically to prevent rollout, this new, easy-to-install anchorage connector can be mounted in a variety of positions and is ideal for use with the Manyard shock-absorbing lanyard or the Miller retractable lifelines. 1/2 inch diameter bolt.



#### 420 Push-Thru Eye Bolt

This anchorage connector offers inherently simple one-hand installation with no tools and the flexibility to be used in a wide range of applications. A Miller SofStop™ shock absorber is included and completes the anchorage system.

Fits 3/4 inch diameter hole.



#### 440 Cross-Arm Chain

The 6 foot cross-arm chain readily wraps around I-beams and other structures to form a temporary anchorage connector. It is ideal for use in environments where welding splatter may occur, or where corners, sharp edges or heat are encountered.



#### 450/455 Beam Clamp

The beam clamp is a steel anchorage connector designed for use with horizontal I-beams, S-beams and W-beams. This easy-to-install unit features a swivel attachment ring to prevent twisting of the worker's lanyard or connecting device. The 450 model can be used on beams up to 9 inches wide. The 455 model can be used on beams up to 12-1/2 inches wide.



#### **460 Anchorage Bracket**

The Miller anchorage bracket serves as a permanent tie-off point for an array of construction, industrial and maintenance applications. Constructed of heavy-duty steel, it comes complete with hex bolts, washer, lock nuts, a 3/4 inch diameter eye bolt and drilling template.



#### **470 Wire Hook**

The Miller stainless steel wire hook provides a safe anchorage point for an array of applications including railings, small I-beams, angle iron and scaffolding. Installation is fast and easy: simply squeeze the spring-loaded hook and slip the large opening over the approved structure.



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### <u>VAILLER</u>"

### **Anchorage Connectors**

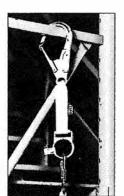
#### 475 Extension Pole/Hook

The 20 foot pole and hook is designed for climbing ladders, towers or any application where quick, temporary overhead anchorage is needed. The pole, extends up to 20 feet, and the spring-loaded hook securely attaches lifelines to beams, angle iron, piping and related structures. The 475 is an ideal complement to the Miller trailing rope grab. No tools required.



#### 480 Webbing/Hook Anchor

Designed to facilitate anchoring to scaffolding, pipe or angle iron, the 480 features a large snap hook with a 2-1/2 inch throat opening for easy, one-hand installation and a D-ring to accommodate the connecting device. No tools required.



#### 485 Hook Anchor w/Shock Absorber

This Miller anchorage connector offers the same benefits as the 480 model, but also includes a SofStop shock absorber to reduce the forces of falling.



#### 8183 Cross-Arm Strap

The Miller cross-arm strap is designed to wrap around I-beams and other structures forming a secure attachment point for lanyards and other connecting devices. Manufactured from 2 inch nylon webbing for maximum strength, the strap features a 2 inch forged D-ring which slips through a 3 inch D-ring. Standard length is 6 feet; other lengths available upon request.



#### 8183

#### 8804 Beam Trolley

For I-beam anchorage applications requiring maximum mobility, Miller offers the beam trolley connector. The steel trolley accommodates I-beams from 3 inches to 8 inches wide, and is ideally suited for the attachment of lanyards, carabiners and retractable lifelines.



#### 8185 Looped Cross-Arm Strap (Not shown)

This 2 inch nylon webbing crossarm strap features a 2 inch forged D-ring which slips through looped webbing. Standard length is 6 feet. Other lengths available upon request.



9186

#### 9183 Cross-Arm Strap w/Shock Absorber

Designed to form a secure, low cost anchorage point for various connecting devices, the 9183 features 2 inch nylon webbing, forged D-rings and an integral SofStop shock absorber which greatly reduces the force of falling. Installation on beams, pipes and railings is easily accomplished. No tools required.



w/Shock Absorber This Miller anchorage connector is an economical version of the 9183 in which the large D-ring has been replaced by a nylon loop. Like the 9183, the integral SofStop

shock absorber provides added safety. No tools required.

9186 Looped Cross-Arm Strap

### **MILLER®**

### **Fall Protection Equipment**

#### **TEMPORARY HORIZONTAL LIFELINE**

Suspended between two approved anchor points, the Miller® Temporary Horizontal Lifeline System permits a worker to freely traverse horizontal distances up to 60 feet to perform an array of construction, maintenance or inspection activities. The lifeline system is designed for use by one person. Components of the system include a 5/8 inch polyester lifeline, an anchorage lanyard and a lifeline tensioner complete in a handy carrying bad.

#### Model #RHL30

• Temporary Horizontal Lifeline System – span 30 feet

#### Model #RHL60

• Temporary Horizontal Lifeline System - span 60 feet

#### **Replacement Parts:**

9031 Rope tensioner 9032 Anchorage lanyard 199RLS-5-35 30-foot lifeline 199RLS-6-65 60-foot lifeline

#### **Accessories:**

201RLS-8

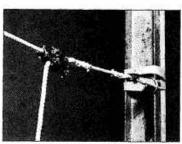
3650

216L

8183 6-foot, polyester webbing cross arm strap
650 VersaLite harness (U.S. only)
216WIS 6-foot Manyard® shock-absorbing lanyard

6-foot Manyard\* shock-absorbing lanyard (U.S. only) Rope lanyard (U.S. only) Full-body harness (Canada only)

6-foot shock-absorbing lanyard (Canada only) Rope lanyard (Canada only)



Temporary Horizontal Lifeline

### ACCESSORIES REBAR CHAIN ASSEMBLIES



Model #6756RS



Model #6756RS4

#### Model #6756RS

 13-link rebar chain assembly with two (2) plated locking snap hooks with 3/4 inch throat openings and one (1) plated locking snap hook with a 2 inch throat opening.
 Swivel attachment.

#### Model #6756RS4

 4-link rebar chain assembly with two (2) plated locking snap hooks with 3/4 inch throat openings and one (1) plated locking snap hook with a 2 inch throat opening.
 Swivel attachment.

#### **GENERAL FALL PROTECTION RECOMMENDATIONS**

The following items are highly recommended to provide maximum protection of workers and ensure compliance with regulations and standards. All work environments are different, so the following are guidelines only. When establishing your own fall protection program, choose the correct Miller\* system to meet your needs.

- A. Warnings: Always read all instructions and warnings contained on and in the product packaging before using any fall protection equipment.
- B. Inspection: All fall protection equipment should be inspected prior to use by following procedures outlined in the MillerGuide brochure.
- C. Training: All workers should be trained by a competent person in the proper use of fall protection products
- D. Regulations: Understand all Federal, State, Local and Provincial regulations pertaining to fall protection before using the equipment.
- E. Rescue Pre-Planning: Minimizing the time between a fall occurrence and medical attention of the workers is vitally important. A thorough rescue program should be established prior to using fall protection equipment. Employers should provide for a prompt rescue should a fall occur. Rescue procedures should be reviewed on a regular basis as part of the company's overall safety training program.

- F. Equipment Preferences: If there are any doubts about which fall protection product to use, choose the following basic system:
  - 1. Full-Body Harness with Sliding Back D-Ring Should a fall occur, the body harnesses will distribute the load throughout the body instead of concentrating the forces on the abdomen, as is the case with traditional body belts. The sliding back D-Ring will keep the worker in an upright position in the event of a fall, which allows the worker to remain as comfortable as possible while awaiting a rescue.

#### 2. Shock-Absorbing Lanyards with Locking Snap Hooks

Lanyards with built-in shock absorbers reduce fall arresting forces by 65-80% compared to forces generated by traditional lanyards. \*
Locking snaps feature self-closing, self-locking keepers which remain closed until unlocked and pressed open for connection or disconnection. This feature of locking snaps significantly reduces the possibility of accidental disengagement or "rollout."

3. Reliable Anchorage Points

Anchor points or attachments must be capable of supporting 5000 lbs. per worker. If there is any doubt about the strength of the attachment point – DO NOT ATTACH. Search for an alternative anchor point.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

### AMERICAN ALLSAFE COMPANY®

#### FACE PROTECTION ANSIZ87.1



#### A-F4000T #27912

- H-10001 #2/
- Faceshield not included
- Adjustable ratchet headband
- Crown assembly pivots up
- Low-riding nape strap for firm fit
- Also available: headgear packed with faceshield #27971



#### A-5500X #22640

- Lightweight nylon bracket
- Pivots up and secures in 3 different positions
- Fits Sentry III™, Poly-Guard™,
   Ram Cap™ and other safety caps
   with universal slots



#### Visor with Chin Cup

#22690

- 8" x 151/2" x 0.40" visor
- Optical grade polycarbonate
- Headgear sold separately



#### 6513 Screen #22692

 6513 wire screen is available for jobs requiring non-plastic window such as forestry applications



#### A-F3000L #27910

- Economical
- Adjustable ratchet headband
- Durable nape strap for secure fit
- Crown and faceshield pivot up



#### A-5500SN

#22639

- Designed for caps without universal slots
- Fits virtually any safety cap
- Heavy-duty rubber cord holds bracket securely in place
- Dielectric



Complete
"Above-theShoulder"(ATS)
Protection System

- Complete packaged system includes:
- Sentry Cap HS100 Bracket
- Visor Hearing muff (HS-20)

White Cap #14623 Orange Cap #14764 Yellow Cap #14624



#### A-F2000L

• Economical

- G Pin-lock headband
- Durable nape strap for secure fit
- Crown and faceshield pivot up



#### A-8100G

#27908

#27911

- Swivel posts lock faceshield in place
- B Heavy-duty, durable n model fits variety of

aluminum model fits variety of safety caps

#### A-8100H

#27906

For full brim hats



#### MonoShield™ w/Goggle #10179

- Distortion-free vision
- Provides splash and impact protection

NOTE: Can only be worn with G211 MonoGoggle®



#### 8154 #22643

- \* 8" x 15-1/2" x .040"
- Aluminum bound reinforced edge
- Headgear sold separately

All visors made from polycarbonate (A) material provide 99.9% UV protection

	ALLSAFE FACESHIELDS FE Faceshield	ATURE A UNIVERSAL H Polycarbonate (A)	OLE PATTERN DESI PETG (B)	IGN
DESCRIPTION	DIMENSIONS	ITEM NO.	ITEM NO.	10
4128LB	8" x 12" x .040"	22641	22614	
4128B	8" x 12" x .040"	N/A	N/A	1
4189LB	9" x 18" x .040"	22654	22617	1
4200LB	10" x 20" x .040"	22655	22657	Caution:
4208LB	8" x 20" x .040"	22656	22658	All faceshield
8140LB	8" x 1512" x .040"	22663	22669	must be
8154B	8" x 15 <sup>1</sup> 5" x .040"	22643	N/Λ	worn with
8154LB	8" x 15 <sup>1</sup> ;" x .040"	22644	22648	1
8156LB	8" x 15 <sup>1</sup> 5" x .060"	22647	N/A	protective
8156B	$8'' \times 15^{1} \times 1000''$	22646	N/A	spectacles
8156MOLD	8" x 1512" x .070"	22677	N/A	or goggles in
8154LBDG	8" x 1515" x .040"	22667	N/Λ	accordance to
8154LBMG	8" x 15";" x .040"	22645	22681	ANSI Z87.1
9194LB	9" x 19 <sup>1</sup> / <sub>4</sub> " x .040"	22702	N/A	ANSI 207.1
9196LB	9" x 19 <sup>1</sup> 4" x .060"	<b>227</b> 01	N/A	
6513 - Screen	615" x 13 (15/.009" opening)	22692	N/A	

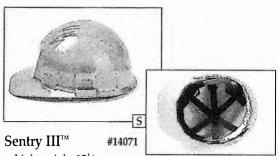
LB = Without Binding B = Bound MG = Medium Green DG = Dark Green Mold = Molded

NOTE: Special designs available; call factory for information.

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### AMERICAN ALLSAFE COMPANY®

HEAD PROTECTION ANSIZ89.1

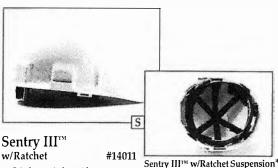


Sentry III™ Suspension\*

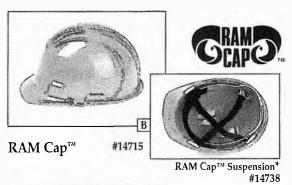
Bump Cap Suspension\*

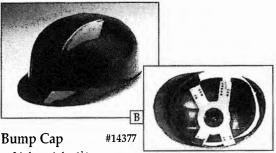
#14429

- Lightweight 12½ oz.
- Adjusts to fit sizes 6½ to 8
- Wide nape strap for secure fit
- Universal slots accommodate hearing, welding and faceshield accessories
- Comfortable six-point nylon suspension with Coolmax<sup>™</sup> terrycloth sweatband



- Lightweight 13½ oz.
- Adjusts to fit sizes 6½ to 8
- Ratchet holds cap in place for secure fit
- · Universal slots accommodate hearing, welding and faceshield accessories
- Comfortable six-point nylon suspension





- Lightweight 6½ oz.
- Adjusts to fit sizes 6½ to 8
- Four-point adjustable plastic suspension system
- Ventilation holes in cap sides plus clearance between shell and suspension for maximum air circulation over wearer's head

CAUTION: Bump Caps do not meet ANSI Z89.1 and are not to be worn for protection from impact of falling or glancing objects.

#### RAM Cap™

- Lightweight 12 oz.
- Adjusts to fit sizes 6½ to 8
- Four-point nylon suspension system with low nape strap
- Universal slots accommodate hearing, welding, and faceshield accessories
- Rain trough
- Short-peak design doesn't interfere with field of vision



Elastic Chin Strap #14998

- Simple
- Fits majority of safety caps
- Non-binding
- Economical

Poly-Guard™ Suspension\*



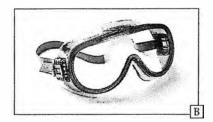
- · Lightweight 13 oz.
- Adjusts to fit sizes 6½ to 8
- · Four-point molded plastic suspension system
- Wide nape strap for secure fit
- Rain trough
- Universal accessory slots allow quick attachment of hearing, welding and faceshield accessories

<sup>\*</sup>All caps supplied with Coolmax $^{cM}$  terrycloth sweatbands to wick away user's perspiration for comfort. Coolmax<sup>CM</sup> is a certification mark of DuPont

### AMERICAN ALLSAFE COMPANY®

PROTECTIVE GOGGLES ANSIZ87.1

#### Chemical Splash Goggles



#### MRXVIII

#10276

- Indirect ventilation
- Spherical lens provides range of vision of more than 160° while protecting against chemical splash
- .090" polycarbonate lens

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THE REAL PROPERTY.	1	1	40
-	Alexander		

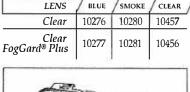
#### MonoGoggle® 211

#10115

#10257

- Indirect ventilation
- Separate nosepiece soft, pliable plastic for snug, comfortable seal
- .060" polycarbonate lens
- Frame designed with pantascopic angle to improve work area visibility
- Indirect ventilation increases airflow, while protecting against chemical splash

	COLOR
LENS	CREEN /
Clear	10032
Clear FogGard® Plus	10115



FRAME COLOR



#### MonoGoggle® VPC

#10195

- · Indirect ventilation
- 35% larger lens than most competitive goggles permits wear over today's larger prescription eyewear
- .060" polycarbonate lens
- Increased indirect ventilation and separate, soft, pliable nosepiece for comfort
- · Pantascopic design increases field of vision

2	FRAME
LENS	BRONZE /
Clear	10191
Clear FogGard® Plus	10195

#### **SG34**

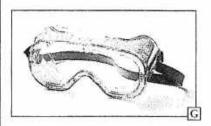
· Indirect ventilation

- .060" polycarbonate lens
- Economical chemical splash
- Bulk pack/200 pair

protection

	FRAMECOLOR
LENS	GREEN /
Clear	10258
Clear Anti-Fog	10257
Clear 48 pr./shipper	10467
Clear Anti-Fog 48 pr./shipper	10466

#### Dust Goggles

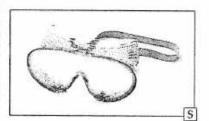


#### **SG30**

#10260

- · Direct ventilation
- .060" polycarbonate lens
- Economical protection
- Bulk pack/200 pair

	COLOR
LENS	GREEN /
Clear	10260
48 pr./shipper	10468



#### MonoGoggle® 201

#10014

- Direct ventilation
- Separate nosepiece soft, pliable plastic for snug, comfortable seal
- · Perforated frame, direct ventilation, impact protection for environments where chemical splashes and fumes are not primary hazards
- .060" polycarbonate lens
- Frame: green
- Lens: clear

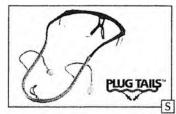
	FRAME COLOR		
LENS	GREEN	CLEAR /	
Econopack - clear 12 pr./bag, 36 pr./shipper	10014	10458	

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### AMERICAN ALLSAFE COMPANY®

#### SPECTACLE ACCESSORIES

#### PLUG TAILS™



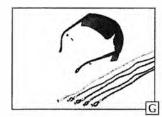
Plug Tails™

#23263

- NRR: 25
- Unique patented reusable silicone plugs and spectacle lanyard all-in-one
- Neon raspberry lanyard with green silicone plugs (small #23262)
- Neon green lanyard with orange silicone plugs (medium #23263)
- Neon yellow lanyard with blue silicone plugs (large #23264)
- See page 12 for additional information

Note: Spectacles not included.

#### CORDS



#### **Spectacle Cords**

Black	#18594
Electric Blue	#18595
Glacier Green	#18596
Neon Orange	#18597
Neon Yellow	#18598
Red	#18599
Violet	#18600

 Conveniently fit any spectacle, to have them readily accessible

#### ANTI-FOG LENS CLEANER



#### Deluxe Lens Cleaning Station

#27635

- For glass, plastic and polycarbonate lenses, goggles and faceshields
- · Anti-fog, anti-static formula
- Contains one 16 oz. spray bottle and 1200 low lint tissues
- Sturdy corrugated construction with easy wall mount design.



 Also available: lens cleaning towelettes (100 individually packaged)

#### BARRICADE TAPE



- For restricting traffic around temporary hazards
- Strong polyethylene tape
- Economical 3" x 1000' rolls

"Caution, Caution"	#26420
Red with white stripe	#26439
"Danger"	#26436
"Caution Do Not Enter"	#26421
"Danger Asbestos Dust Hazard"	#26436
"Caution – Cuidado"	#26668
"Danger – Peligro"	#26669

WE STOCK SAFETY FLAGS

FSI YOUR ONE STOP SOURCE FOR ALL YOUR SAFETY NEEDS

### Fastener Systems, Inc.

640 Snyder Avenue Bolmar Industrial Center West Chester, PA 19382 (800) 232-5060 (610) 692-6658 FAX (610) 692-8151

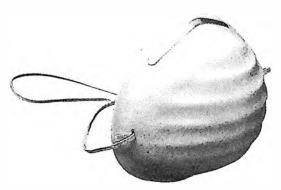






### Dust • Mist Mask

- NIOSH approved Dust/Mist mask
- Features stapled heavy-duty head straps
- Flexible metal nose-piece adjusts to fit every individual user
- Foam inner-piece provides user comfort
- Lightweight and disposable
- 95% effective against particulate aerosols free of oil (N95)



#### Nuisance Mask™

- Ideal for sanding, grinding, cleaning and farm work
- Lightweight, comfortable and disposable
- Flexible metal nosepiece adjusts to fit every individual user

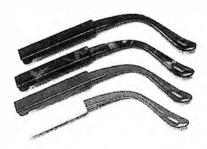


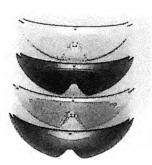
#### Goggles

- Constructed of soft, comfortable vinyl
- Polycarbonate lens meets ANSI Z87.1 impact standards
- Wide, adjustable headband
- Chemical splash goggles feature vent caps to restrict the influx of liquids
- Perforated goggles provide excellent ventilation
- Both available with fog free coating

#### Solo™

- Available in four colors-clear, gray, amber and anti-glare green
- Lightweight and economical, makes a great visitor spectacle
- Vented temples for additional comfort
- Meets all ANSI Z87.1 specifications
- Available with an additional coating to protect from scratching
- Now available in jumbo size to fit over prescription lenses





#### Blazer™

- Contemporary styling for increased user acceptance
- Curved lens provides greater peripheral vision
- Lightweight nylon frame features adjustable temples for a custom fit
- Integrated browguard provides overhead protection
- Available in a variety of fashionable frame colors
- Replaceable polycarbonate lenses available in clear, grey, amber and mirrored
- All Pyramex® lenses are ANSI Z87.1 approved and 99% UV rated



### Integra™

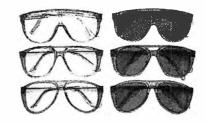
- The Integra® is available in a variety of frame colors and lens tint
- The lightweight, contemporary styling ensures wearer acceptance
- The Integra has adjustable temples for a custom fit
- Replacement lenses are available
- All Pyramex safety glasses meet or exceed ANSI Z87.1 specifications
- All Pyramex<sup>™</sup> lenses are 99% UV rated
- Available in 3.0 and 5.0 filter lenses
- Metal frames available in black or gold

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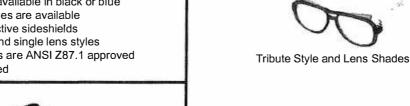
# **Safety Products**



Monitor Styles and Colors

# Prelude™

- High impact and scratch resistant polycarbonate lenses available in clear, grey, amber, 3.0 filter and blue mirror
- Frames constructed of durable, lightweight nylon
- Nylon frames are available in black or blue
- Replacement lenses are available
- High impact protective sideshields
- Available in dual and single lens styles
- All Pyramex lenses are ANSI Z87.1 approved and 99.9% UV rated



# Pathfinder™

- High impact and scratch resistant polycarbonate lenses available in clear, grey, and amber
- Flexible metal temples for easy adjustment and
- Padded nose bridge in soft PVC material for greater comfort
- Replacement lenses are available
- Metal frames available in gold or black
- All Pyramex lenses are ANSI Z87.1 approved and 99.9% UV rated

# **Monitor & Tribute™**

- Monitor<sup>™</sup> meets/exceeds ANSI Z87.1 specifications
- Lenses provide 99.9% UV protection
- High impact, scratch resistant polycarbonate lenses
- Available in conventional, aviator or single lens
- Lens available in clear, grey, 3.0 and 5.0 IR filters
- Reinforced with wire driven temples
- Replacement lenses available
- Tribute<sup>™</sup> meets/exceeds ANSI Z87.1 specifications
- Lenses provide 99.9% UV protection
- Brow guard front provides protection from airborne
- High impact, scratch resistant polycarbonate lenses
- Available in clear and grey lenses

# Rainwear

- Constructed of .35mm PVC on Polyester
- Welded seams prevent leakage
- Available in sizes Small through 5XL
- Nonconductive nylon fasteners
- Jackets and coats feature nylon snap closures, patch pockets and raglan sleeves
- Bib overalls feature adjustable suspenders and take-up snaps at waist
- Generously sized for a comfortable fit
- Styles available:
  - •Two and three piece suits
  - ·Jackets with permanent or detachable hood
  - ·Bib overalls
  - ·Elastic waist rainpants
  - •49" Raincoats



Elastic waist rainpants



49" Raincoat with hood

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# AMERICAN ALLSAFE COMPANY® FIRST AID KITS

OSHA requires manufacturers of first aid kits to conform to its regulations regarding contents and containers. OSHA requires workplaces to consult with the company physician as to whether the first aid kit is adequate for the company's needs. A physician authorization card is included with our kits for complete compliance. See OSHA excerpts.



# 8 - 10 Person Kit

- Great when safety and space are a concern
- Contents have been selected to treat most minor emergencies

В	#28582
	#28536
	#28533
В	#28539
	B S B



- treat most minor emergencies
- Most popular selling kit
- Latex gloves included (6 pair) Plastic w/Gasket #28537

Plastic w/out Gasket

#28534



# 30 - 35 Person Kit

- · Also contains CPR rescue breather
- #28543 is housed in a heavy-duty baked enamel case with rounded corners for long lasting use

	0	
Plastic w/Gasket	S	#28538
Plastic w/out Gasket	В	#28535
Metal w/Gasket	S	#28543
Metal w/out Gasket	B	#28541



# 40 - 50 Person Kit

- Designed to support the larger job site or workplace
- Also contains CPR rescue breather

Plastic w/Gasket S #28590 Metal w/out Gasket #28542

(a) The employer shall ensure the ready

availability of medical personnel for

advice and consultation on matters of



# 100 Person Metal Kit

- Ideal for industry, large offices, schools and warehouses
- CPR rescue breather, eye wash, and latex disposable gloves 9 pr.

Metal w/out Gasket S #28586



### OSHA 1926.50 Medical services and first aid.

Medical services and first aid.

(d) (1) First aid supplies approved by the consulting physician shall be easily accessible when required.

(2) The first aid kit shall consist of materials approved by the consulting physician in a weatherproof container with individual sealed packages for each type of item. The contents of the first aid kit shall be checked by the employer before being sent out on each job and at least weekly on each job to ensure that the expended items are replaced.



# Vehicular Kit

#28546

- · Ideal for glove compartment, trunk, under seat storage. Unitized
- · Rescue foil blanket

# Mobile Kit

#28547

- Durable black nylon pack with belt loop to keep hands free
- Rescue foil blanket. Unitized

# Personal Kit

#28545

- Ideal for employee award and/or recognition programs
- Packed with essential first aid supplies
- Dimensions: 5" x 51/2" x 2"

### Sport Pouch

- For those who want to travel with a first rate kit with out the weight
- Latex gloves included (4 pair)



Unitized

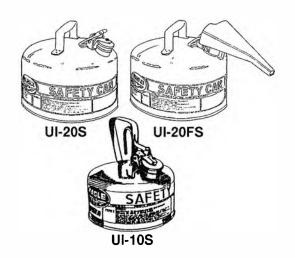
# plant health. (b) In the absence of an infirmary, clinic, or hospital in near proximity to the work-

OSHA 1910.151

place which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid. First aid supplies approved by the consulting physician shall be readily available.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151





Safety cans made from heavy 24 gauge steel. Equipped with brass flame arrestor. Funnel is available for 1, 2, and 5 gal. models.

Metal Type I Safety Cans								
Model		l	Bottom			Packed		
No.	Capacity	Approval	Diameter	Height	Weight	per Carton		
UI-2S	1 qt.	UL,ULC,FM	5¼-	8"	1.96 lbs.	1_		
UI-4S	2 qt.	UL,ULC,FM	6¾"	8¾"	2.59 lbs.	1		
UI-10S	1 gal.	UL,ULC,FM	9"	10"	3.31 lbs.	1		
UI-10FS	1 gal.	UL,ULC,FM	9"	10"	3.52 lbs.	1		
UI-20S	2 gal.	UL,ULC,FM	11¼"	9½"	5.00 lbs.	1 57311-		
UI-20FS	2 gal.	UL,ULC,FM	11¼"	9½"	5.25 lbs.	1		
UI-50S	5 gal.	UL,ULC,FM	12½"	13½"	6.75 lbs.	1		
UI-50FS	5 gal.	UL,ULC,FM	12½"	13½"	7.00 lbs.	1		

F in Model No. Indicates with F-15 Funnel

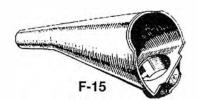
# Type Two SAFETY CANS Approved - Listed - Labeled

Underwriters' Laboratories, Inc. Factory Mutual Underwriters' Laboratories of Canada



Eagle Type II Safety Cans are equipped with an air vent to eliminate back pressure, flexible metal pour spout, 1-inch O.D. to permit convenient pouring, easy working valve for positive control while pouring, and flame arrestor screens in both filler opening and pouring spout. Made from 24-gauge steel.

Model No.	Capacity	Approval	Flexible Spout Length	Packed per Carton	Weight Each
U2-26-S	2 Gal.	UL, ULC, FM	12 in.	One	61/2 lbs.
U2-51-S	5 Gal.	UL, ULC, FM	12 in.	One	8 lbs.



This funnel is designed for use with Eagle's Type I Safety Cans. It is constructed from High Density Polyethylene and has good impact strength. The funnel is 9" long with the smaller end having a %" I.D. and 1%" O.D.

			Packed
Model No.	Length	Weight	per Carton
F-15	9"	.25 lbs. ea.	Six



# DRY CHEMICAL

# DRY CHEMICAL Tri-Class & Regular

- Nylon valve (Du Pont ZYTEL® ST) body provides superior strength and toughness for hostile environments.
- Non-corrosive valve and cylinder is ideal for coastal applications and other extreme conditions.
- Aluminum cylinder models are virtually non-magnetic for hospitals and military applications.
- Seamless aluminum and steel cylinders have chip-resistant epoxy finish.
- Reliable gauge for fast and easy pressure checks.
- Rechargeable unit is easy to service.
- Improved dry chemical agents provide higher UL ratings than other agents in comparable sizes.
- Fits all standard cabinets.
- Mar-resistant pictogram mylar label.

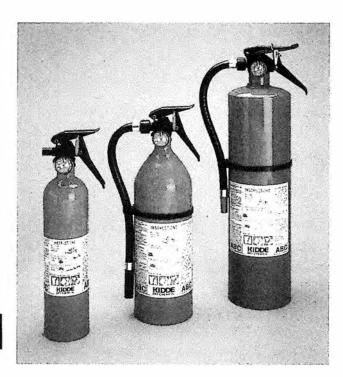
# DRY CHEMICAL TRI CLASS, REGULAR & PURPLE K

Tri-class dry chemical, primarily non ammonium phosphate, is a non-toxic agent which extinguishes flames in seconds and inhibits reflush. It is effective against Class A, B and C fires.

Regular dry chemical, primarily sodium bicarbonate, is a non-toxic agent which quenches fire fast. It is effective against Class B and C fires.

Purple K dry chemical, potassium bicarbonate, is a highly effective, dry chemical, superior to other dry chemicals, effective on Class B and C fires.

# **Trusted Fire Protection From The Industry Leader**



# 6 YEAR WARRANTY BEST INDUSTRY HAS TO OFFER

Effective suppression of Class A, B and C or Class B and C fires.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# SPECIFICATIONS AND ORDER INFORMATION EXCEL LINE DRY CHEMICAL™



UL RATING	1-A:10-B:C	3-A:40-B:C	4-A:60-B:C	10-B:C	40-B:C	60-B:C	10-B:C
AGENT - DRY CHEMICAL	ABC	ABC	ABC	BC	BC	ВС	BC
MODEL	XL 2 1/2 TCZ	XL 5 TCZ	XL 10 TCZ	XL 2 3/4 RZ	XL 6 RZ	XL 10 RZ	XL 5 PKZ
PART NUMBER	466225	466164	899921	466226	466057	899920	466332-01
CONTENTS (LB/KG)	2.6/1.2	5/2.3	10/4.5	2.8/1.3	6/2.7	10/4.5	5/2.3
FILLED	3.9/1.8	7.9/3.6	17/7.7	4.0/1.8	9.6/4.3	17/7.7	7.9/3.6
SHIPPING (LB/KG)	4.2/1.9	8.5/13.9	19.25/8.7	4.3/2.0	9.4/4.3	19.25/8.7	9.4/4.3
DIAMETER (IN./CM)	3.3/8.3	4.5/11.5	5.12/13	3.3/8.3	4.5/11.4	5.12/13	4.5/11.4
HEIGHT (IN./CM)	15/38.1	19.8/50.7	21.18/53.8	15/38.1	19.8/50.2	21.18/53.8	19.8/50.2
WIDTH (IN./CM)	4.7/11.9	7.8/19.7	8.22/20.9	4.7/11.9	8/20.3	8.22/20.9	7.8/19.7
DISCHARGE TIME (SEC.)	8-10	13-15	17-21	8-10	13-15	17-21	13-15
DISCHARGE RANGE (FT.)	10-15	12-18	16-20	10-15	12-18	16-20	12-18
OPTIONAL METAL STRAP BRACKET P/N	466401	466400	366242	466401	466400	366242	466400
OPERATING PRESSURE	100PSI	195PSI	195PSI	100PSI	195PSI*	195PSI	100PSI
CYLINDER (MATERIAL) PACKAGING	ALUMINUM	ALUMINUM	STEEL	ALUMINUM	ALUMINUM	STEEL	ALUMINUM
(UNITS / OVER PACK)	6	4	1	6	4	1	4
TYPE BRACKET PROVIDED	NYLON STRAP	WALL HANGER	WALL HOOK	NYLON STRAP BRACKET	WALL HANGER	WALL HOOK	METAL STRAP BKT.

# **Applications**

Compact extinguishers are designed for:
• Apartments • Homes • Vehicles • Trailers

Large extinguishers designed for industrial business applications which include:

- Laboratories Plants Commercial kitchens
- Schools Garages Trucks Hospitals Hotels

# **Operable Temperature Range All Models:**

(-40°F + 120°F) (-40°C to +48°C)

Authorized Distributor

# **Approvals and Listings:**

ANSI/UL Underwriters Laboratories, Inc.
DOT Department of Transportation
OSHA USCG United States Coast Guard
BMC Bureau of Motor Carrier Safety Regs.

Par. 393.95

# **Brackets:**

Units are equipped with a metal wall hanger for mounting. Heavy-duty metal strap brackets may be purchased for U.S. Coast Guard and Bureau of Motor Carrier Approvals.

FOR ADDITIONAL TYPES AND SIZES OF EXTINGUISHERS CONTACT YOUR FSI REPRESENTATIVE

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

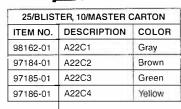
# **REMINGTON®**

# **POWER LOADS**

# **Low Velocity Power Loads**

# .22 CALIBER NECK DOWN, CRIMPED

100/BOX, 20/MASTER CARTON							
ITEM NO.	DESCRIPTION	COLOR					
29278	A22C1	Gray					
29280	A22C2	Brown					
29282	A22C3	Green					
29284	A22C4	Yellow					





# .25 CALIBER STRIP LOADS

For use in Hilti® tools.

100/BOX, 100/MASTER CARTON							
ITEM NO.	DESCRIPTION	COLOR					
78754	S25C3	Green					
78755	S25C4	Yellow					
78756	S25C5	Red					

# .27 CALIBER STRIP LOADS

100/BOX, 20/MASTER CARTON							
ITEM NO.	DESCRIPTION	COLOR					
78757	S27C3	Green					
78758	S27C4	Yellow					
78759	S27C5	Red					

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# **Remington Power Fastener Technical Information**

Material

Modified, cold heading quality, AISI 1062-1065 steel wire austempered

to a Rockwell C hardness of 53-56.

- ASTM

Specifications (cont'd.)

**ICBO** 

Plating ASTM A164 Type RS Material ASTM A227 Class 1

**Plating** 

Specifications

Zinc to a minimum of 0.0002"

Approvals

Report No. 5067

 Federal Plating

QQ-Z-325C

City of L.A.

Research Report RR25214

Material FF-P-395B

Dade County Acceptance No. 931027.08

# TABLE 1 – ALLOWABLE WORKING VALUES FOR REMINGTON LOW-VELOCITY FASTENERS INSTALLED IN STONE-AGGREGATE CONCRETE (pounds)<sup>1,2</sup>

			MINIMUM			CONCRETE COMPRESSIVE STRENGTH							
CATALOG	SHANK	PENETRATION	DISTANCE	2,00	0 psi	2,50	0 psi	3,00	0 psi	3,50	) psi	4,000	0 psi
NUMBER	(inches)	(inches)	(inches)	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear
SP 125 through SP 300	.144 .144	1 1 1/4	3 3	90 165	150 180	100 170	155 195	110 180	160 210	120 185	170 225	130 195	180 240

The fasteners must not be driven until the concrete has reached the designated ultimate compressive strength

# TABLE 2 - ALLOWABLE WORKING VALUES FOR REMINGTON LOW-VELOCITY FASTENERS INSTALLED IN STEEL (pounds)1-2

CATALOG NUMBER	SHANK DIAMETER (inches)	MINIMUM EDGE DISTANCE	MINIMUM SPACING	STEEL THICKNESS	TENSION (pounds)	SHEAR (pounds)
SP 50 through	.144	1/2	1-1/2	3/16	160	680
SP 300	.144	1/2	1-1/2	1/4	200	680

The entire pointed portion of the fastener must penetrate the steel to obtain the tabulated values

### TABLE 3 - ALLOWABLE FASTENER SPACING FOR ATTACHMENT OF WOOD PLATE TO CONCRETE FOOTING OR SLAB12

	OVERALL		SHANK		MAXIMUM SPACING IN FEET	11 72 4 0
CATALOG NUMBER	LENGTH (inches)	HEAD DIAMETER (inches)	DIAMETER (inches)	Interior Bearing Walls <sup>3</sup>	Interior Nonbearing Partitions <sup>2</sup>	Exterior Walls <sup>3</sup>
SP 300 or SPW 300	3	.300	.144	1.5	3.0	1.5

<sup>&#</sup>x27;Spacings are based upon the attachment of 2-inch nominal thickness wood sill plates with specific gravity of 0.48 or greater to concrete floor slabs or footings in accordance with Section 2326.6 of the code for maximum two-story buildings.

The allowable shear and tension values are for the fastener only. Wood or steel members connected must be investigated separately in accordance with accepted design criteria

The allowable shear and tension values are for the fastener only. Wood or steel members connected must be investigated separately in accordance with accepted design criteria.

All walls shall have fasteners placed at 6 inches from the ends of sill plates with maximum spacing between as shown above.

Fasteners indicated shall have two pins placed at 6 inches and 10 inches respectively from each end of sill plates with maximum spacing as shown above.

<sup>&#</sup>x27;All fasteners must be installed with a minimum 1-inch diameter washer.

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# **REMINGTON®**

# **POWDER ACTUATED FASTENERS**

# **Low Velocity Power Fasteners A Wide Selection of the Most Popular Items**

# .300 HEADED/.144 SHANK DIAMETER SP SERIES POWER FASTENER

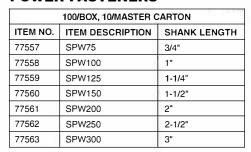
100/BOX, 10/MASTER CARTON			
ITEM NO.	ITEM DESCRIPTION	SHANK LENGTH	
58046	SP50	1/2"	
58047	SP75	3/4"	
58048	SP100	1"	
58049	SP125	1-1/4"	
58050	SP150	1-1/2"	
58051	SP200	2"	
58052	SP250	2-1/2"	
58053	SP300	3"	
78689	KP50	1/2" (Knurled)	

2000/PAIL, 2/MASTER CARTON		
ITEM NO.	ITEM DESCRIPTION	SHANK LENGTH
95947	PSP75	3/4"

25/BLISTER, 10/MASTER CARTON		
ITEM NO.	ITEM DESCRIPTION	SHANK LENGTH
97179-01	SP100	1-1/2"
97180-01	SP150	2-1/2"
97181-01	SP250	2-1/2"

1000/BOX, 1/MASTER CARTON		
ITEM NO. ITEM DESCRIPTION		SHANK LENGTH
77490	BSP50	1/2"
78683	BKP50	1/2" (Knurled)
59897	BSP75	3/4"
99375	BSP150	1-1/2"
99376	BSP250	2-1/2"

# .300 HEADED/.144 SHANK DIAMETER W/1" WASHER SPW WASHERED POWER FASTENERS



12-20/BLISTER, 10/MASTER CARTON			
ITEM NO.	QTY.	DESCRIPTION	SHANK LENGTH
103071	20	SPW150	1-1/2"
103072	15	SPW250	2-1/2"
103073	12	SPW300	3"

# .8MM HEADED/.144 SHANK DIAMETER RDN SERIES POWER FASTENERS

100/BOX, 10/MASTER CARTON		
ITEM NO.	ITEM DESCRIPTION	SHANK LENGTH
79952-1	RDN19	3/4"
79952-3	RDN27	1"
79952-4	RDN32	1-1/4"
79952-5	RDN37	1-1/2"
79952-6	RDN52	2"
79952-8	RDN62	2-1/2"
79952-9	RDN72	2-7/8"



# **REMINGTON®**

# **POWDER ACTUATED FASTENERS**

# .300 HEADED/.144 SHANK DIA. THREADED STUD 1/4"- 20 THREADED

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	·
100/BOX, 10/MASTER CARTON	
ITEM NO. DESCRIPTION	
100766	3/4" Thread on 1" Shank
100765	3/4" Thread on 1/2" Knurled Shank

25/BLISTER, 10/MASTER CARTON	
ITEM NO.	DESCRIPTION
100760	3/4" Thread on 1" Shank
100761	3/4" Thread on 1/2" Knurled Shank

# .300 HEADED/.144 SHANK DIA. 1" PIN ASSEMBLY CONDUIT CLIP



25-100/BOX, 1/MASTER CARTON		
ITEM NO.	QTY.	DESCRIPTION
100762	100	1/2" Conduit Clip
100763	50	3/4" Conduit Clip
100764	25	1" Conduit Clip

# 10-15/BLISTER, 10/MASTER CARTON ITEM NO. QTY. DESCRIPTION 100758 15 1/2" Conduit Clip 100759 10 3/4" Conduit Clip

# 1" CONTROL DISCS

# .300 HEADED/.144 SHANK DIA. TOP HAT PINS



100/BO	X, 10/MASTER CARTON
ITEM NO.	DESCRIPTION
15549	1" Diameter

25/BLISTER, 10/MASTER CARTON		
ITEM NO. DESCRIPTION		
99015-01	1* Diameter	

100/BOX, 10/MASTER CARTON						
ITEM NO.	DESCRIPTION	SHANK LENGTH				
103093	HT75	3/4"				
103094	HT100	1"				

# CEILING CLIPS W/.300 HEADED/ .144 SHANK DIA. 1-1/4" POWER FASTENER

100/BO	X, 10/MASTER CARTON
ITEM NO.	DESCRIPTION
103095	ACC125





# **ASSORTMENT PACK**

ITEM NO. 097971						
40 FASTENERS AND 40 LOADS/BOX, 12/MASTER CARTON						
QUANTITY	DESCRIPTION	SHANK LENGTH				
10	SP100	1"				
10	SP150	1-1/2"				
20	SP250	2-1/2"				

40 FASTENERS AND 40 LOADS/BOX, (CONT'D)					
QUANTITY	DESCRIPTION	COLOR			
10	A22C1	Gray Loads			
10	A22C2	Brown Loads			
10	A22C3	Green Loads			
10	A22C4	Yellow Loads			

# **Hammer Drive Fasteners**

# 1/4" HEADED W/3/8" WASHER RH SERIES FASTENER 📙



100/BOX, 10/MASTER CARTON						
ITEM NO. DESCRIPTION SHANK LENGTH						
103084	RH50	1/2"				
103086	RH75	3/4"				
103087	RH100	1"				
103088	RH125	1-1/4"				
103089	RH150	1-1/2"				

		~ U					
25/BLISTER, 10/MASTER CARTON							
ITEM NO.	DESCRIPTION	SHANK LENGTH					
103075	RH100	1"					
103076	RH150	1-1/2"					
103077	RH250	2-1/2"					
103078	RH300	3"					

# **REMINGTON®**

# **POWDER ACTUATED TOOLS**

# **High Quality, Durable Tools For Small And Large Contractors**



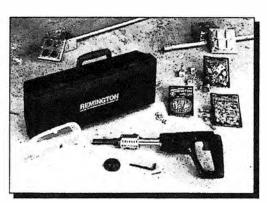
# **REMINGTON 489** TRIGGER ACTUATED Low Velocity Fastening Tool

contractor or less intensive use. the low velocity 489 tool packs a powerful punch at a very competitive price -- one of the lowest among all comparable tools.

- Rugged enough to drive 21/2" power fasteners into concrete or steel. Also shoots 3" washered power fasteners.
- Super lightweight -- only 3½ pounds.
- Short 15" length also contributes to ease of handling.
- Developed especially for the small Uses .22 caliber, neck down, crimped low velocity power loads.
  - "On the job" replacement barrel and piston design to eliminate tool downtime -- tool completely repairable.

### Item No. 98696

Comes with lockable carrying case, 1 hex wrench, spall shield, instructions and goggles.





# **REMINGTON 494 POWER PRO™**

# Low Velocity Fastening Tool

This tool has good power and weight for its price category. Designed for the medium volume user. Ideal for all types of fastening into concrete, masonry or steel.

- Fastens up to 3" power fasteners.
- Large breech opening for fast left or right handed loading.
- Superior balance for easy handling. rings, 2 buffers and instructions.
- · Uses .22 caliber neck down, crimped low velocity power loads.
- · Metal construction with high impact molded handle.
- Weighs slightly more than 41/2 lbs.

# Item No. 101222

Comes with lockable carrying case, goggles, spall shield, 2 piston

# **REMINGTON 496 SEMI-AUTOMATIC POWER PRO** Low Velocity Fastening Tool

A modern tool having state-ofthe-art features for economical, repetitive fastening. Quick fastening • Lightweight, superior balance due to 10 strip cartridges. Ideal for drywall track, window channels, door bucks, 2 x 4's and more. Lightest .27 caliber tool on the market for reduced operator fatigue.

- Uses .27 caliber 10-shot strip loads.
- Fastens up to 3" power fasteners. instructions.
- Fast, semi-automatic operation.
- Up to 8 fastenings per minute.
- · Metal construction with high

impact molded housing and a cushion grip handle.

- for easy handling.
- Weighs just under 41/4 lbs. Item No. 102502

Comes with lockable carrying case, goggles, spall shield, hex wrench, 2 buffers, cleaning brush and

# Item No. 101431

Same as above but tool only fastens up to 21/2" power fasteners.



# **REMINGTON**°

# **POWDER ACTUATED TOOLS**

# **Designed For The High Volume Industrial User**



# **REMINGTON 481 FASTRAK™**

# **Low Velocity Fastening Tool**

ideal for mounting electrical boxes, conduit, dry wall track, window channels, door bucks, duct work and other short pin applications. The advanced handle design and ease of chambering lets you set up to seven Remington pins a minute. Sets 1/2" through 11/2" length power fasteners. Perfect for dry wall track application.

- Lightweight, easy handling.
- Easy pull trigger combined with easy cocking and loading adds to operator comfort.



- Fastrak's small diameter muzzle is Superior balance with rubber handle
  - · Fast cycling, up to seven fastenings a minute.
  - · Driving piston that is larger than most competitive units gives long life and low maintenance.
  - · Uses .22 caliber, neck down, crimped low velocity power loads.
  - Weighs 41/4 lbs.

### Item No. 78478

Comes with lockable carrying case, 2 hex wrenches, 2 cleaning brushes, spall shield, instructions and goggles.

# **REMINGTON 482** MULTI-DRIVER™

# Low Velocity Fastening Tool

The most powerful and durable Remington tool. Up to 7 fastenings per minute into wood, concrete, steel or masonry. Ideal for fastening 2 x 4's and furring strips, quickly mounting electrical fixtures, door bucks, window frames or fastening in any other "hard to get at" areas.

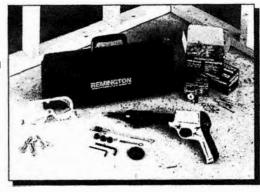
- Small muzzle cap allows operation in confined and narrow areas.
- Handles power fasteners from 1/2" to 21/2" long.\*
- · Large breech opening allows easy loading which increases productivity.

- Rubber contour handle.
- · Superior overall balance; less total weight per unit of length; less wrist fatigue.
- Uses .22 caliber, neck down.
- crimped low velocity power loads.
- · Weighs 5 lbs.

# item No. 78480 Comes with lockable carrying case, 2 hex wrenches, 2 cleaning

brushes, 3 spare buffers, spall shield, instructions and goggles.

\*For 3" fasteners, use accessory muzzle #75961





# **REMINGTON 491 SEMI-AUTOMATIC Low Velocity Fastening Tool**

This semi-automatic tool is fast cycling, allowing up to 8 fastenings per minute. Ideal for mounting electrical junction boxes, conduit, drywall track, window channels, door bucks and duct work.

- Rugged, all-metal construction.
- · Uses .27 caliber strip loads.
- Handles fasteners from 1/2" to 21/2".\* brush, instructions and goggles.
- Quick disassembly for cleaning.
- · Well balanced, with rubber handle for maximum operator comfort.
- · Designed for low maintenance, maximum operator productivity, minimum downtime.
- · Weighs slightly more than 5 lbs. Item No. 99502

Comes with lockable carrying case, 1 hex wrench, spall shield, cleaning

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# INSTA-STIK PROFESSIONAL ROOFING ADHESIVE

### 1. PRODUCT NAME

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INSTA-STIK® Professional Roofing Adhesive

### 2. MANUFACTURER

Insta-Foam Products, Inc. A Division of FLEXIBLE PRODUCTS COMPANY

1500 Cedarwood Drive Joliet, IL 60435-3187 Phone: (815) 741-6800 (800) 800-3626

(416) 622-6844 (In Canada)

FAX: (815) 741-6822

# 3. PRODUCT DESCRIPTION

INSTA-STIK Professional Roofing Adhesive is a single component polyurethane adhesive dispensed from a portable prepressurized container requiring no external power source.

Basic Use: INSTA-STIK is used to attach compatible roof insulation boards to roof decks and substrates in new and reroof (replacement) applications; insulation board to insulation board; insulation board to Class I non-graveled (bald) built-up roofs for recover applications; insulation or gypsum board to 22 gauge (minimum) steel deck and wood deck.

INSTA-STIK is used to attach compatible roof insulation in loose laid and ballasted roof systems during low to moderate wind conditions.

# Monolithic Deck Applications Compatible Roof Insulations:

- Expanded polystyrene
- High density wood fiber
- Perlite
- Polyisocyanurate
- Foam glass

# Compatible Roof Decks and Substrates:

- Lightweight concrete
- Poured-in-place concrete
- Precast concrete
- Cementitious wood fiber plank
- LS plank
- Non-graveled (bald) Class I built-up roofs

### Compatible Underlying Class I Built-up Roof Decks and Substrates for Recover:

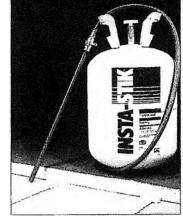
- Steel
- Treated lumber
- Treated plywood
- Cementitious wood fiber plank
- Concrete

# Steel Deck Applications Compatible Steel Deck Types:

Type A-18, 20, or 22 gauge steel Type B-18, 20, or 22 gauge steel Type F-18, 20, or 22 gauge steel

# Compatible Roof Insulation and Gypsum Boards to Steel Decks:

• Perlite (¾" minimum thickness)



- Polyisocyanurate (1.5" minimum thickness)
- Fire-rated gypsum board (5/8" minimum thickness)
- Dens-Deck® Fiberglass-Faced Gypsum Roof Board (Georgia Pacific—'/4" minimum thickness)

# Compatible Roof Insulations to Roof Insulations (subsequent layers):

- Perlite: flat or tapered
- Expanded polystyrene: flat or tapered (1.25pcf min.)
- Polyisocyanurate: flat or tapered
- Wood fiberboard (1/2" minimum thickness)

# Non-Compatible Applications Non-Compatible Roof Insulation Boards:

- Extruded polystyrene
- Fiberglass

# **Application Rate Chart**

Building Height	Parapet Wall Height	Perimeter Band Width	Deck Rate*	Perimeter Rate*
0-20'	0-24"	3'	1.0	2.0
0-20	25"+	O¹	1.0	1.0
	0-24"	6'	1.0	2.0
21-40'	25-48"	31	1.0	2.0
	49"+	0'	1.0	1.0
	0-24"	9'	1.0	2.0
41-70'	25-48"	6'	1.0	2.0
	49"+	3'	1.0	2.0
	0-24"	12'	1.5	2.0
71-100'	25-48"	9'	1.0	2.0
	49"+	9'	1.0	2.0
	0-24"	12'	1.5	2.0
101-200'	25-48"	12'	1.5	2.0
	49"+	12'	1.0	2.0
2011	0-48"	12'	1.5	2.0
201'+	49"+	12'	1.5	2.0

Yield: Approximately 500-800 lineal feet per 23# unit of INSTA-STIK (depending on bead size). Rates are for all monolithic and steel deck applications. \*Application rate in lineal feet per square foot of insulation board to be attached using a 1/4"-1" minimum diameter bead.

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# INSTA-STIK PROFESSIONAL ROOFING ADHESIVE

# Non-compatible Substrates:

- · Coal tar pitch built-up roofs
- Graveled built-up roofs
- Spudded built-up roofs
- Lightweight fill

# Application Features Include:

- No structural deck damage caused by mechanical fasteners
- No obnoxious odor
- No noise pollution
- No building height restrictions
- No melting of polystyrene
- No puncturing of vapor retarders

### Post-application Features:

- Maintains adhesion during freeze/thaw cycles
- Maximizes wind uplift resistance
- Minimizes wind penetration potential
- No fastener/steel deck corrosion
- No compressed insulation
- Prevents shifting of insulation boards in high wind conditions in loose laid and ballasted applications
- No fastener backout

Composition and Materials: **INSTA-STIK** Professional Roofing Adhesive is a single component, moisture-cured polyurethane adhesive. INSTA-STIK Complete is supplied in a 30 pound unit (23 pounds net chemical weight) with a 4' flexible dispensing hose and two 14" PVC dispensing wands (with coupler). A brass ball valve on the dispensing hose allows operational control for single hand application. INSTA-STIK Tank Only is supplied in a 30 pound unit (23 pounds net chemical weight) with no accessories. This is ideal for use with the Multi-Bead Applicator.

Accessories: The dispensing of INSTA-STIK can be dramatically increased using the Multi-Bead Applicator (MBA-28) and Day Pak System (DPS-4) accessory kits. The MBA-28 dispenses four equidistant beads of INSTA-STIK within a 4' wide path. Each MBA-28 is supplied with two Day Pak Systems. The DPS-4 is the dispensing tubing for the MBA-28. The DPS-4 must be replaced daily or whenever cured INSTA-STIK blocks or restricts flow within the tubing. The use of the MBA-28 is recommended on roof decks with few penetrations and obstructions.

# Limitations:

• INSTA-STIK is not recommended for use on insulation boards larger



than 4' x 4' square.

- INSTA-STIK is not recommended for residential roofing applications.
- INSTA-STIK is not recommended for application when surface or ambient temperatures are below 40°F (4.4°C) or above 110°F (43.3°C).
- INSTA-STIK is not recommended for use during inclement weather.
- INSTA-STIK is not recommended for use on wet surfaces.
- INSTA-STIK is not recommended for use on gravel, excessively dirty, or grease laden surfaces.
- INSTA-STIK is not recommended for use on coal tar pitch, spudded, and graveled built-up roofs.
- INSTA-STIK is not recommended for use if the product has expired.
- INSTA-STIK is not recommended for use on roof decks greater than 2:12 pitch.
- INSTA-STIK is not recommended for use on any deck that shows signs of deterioration or loss of structural integrity.
- INSTA-STIK is not recommended for use in attaching base sheets and membranes.

### 4. TECHNICAL DATA

Applicable Standards: INSTA-STIK Professional Roofing Adhesive meets the requirements of Factory Mutual Class 1-90 fire and wind uplift resistance tests for monolithic deck applications.

Consult with Roofing Technical Services for detailed information on Factory Mutual Class I-180 rated roofing systems.

INSTA-STIK Professional Roofing Adhesive meets the requirements of Underwriters Laboratories, Inc., (UL) 1897 wind uplift resistance tests for steel deck applications. If INSTA-STIK is used in a UL Class A rated roofing system, the roofing system will maintain its UL Class A rating.

INSTA-STIK Professional Roofing Adhesive meets the requirements of Metropolitan Dade County Florida windstorm and fire classifications for monolithic deck applications.

Typical Handling Characteristics Tack Free Time (Minutes)

Temperature	Relative Humidity	Time	
40°F	50%	35	
25-€	50%	15	
120°F	25%	13	

# Typical Physical Properties

Typical Physical Prope	Typical Physical Properties					
Tensile Adhesion (psi) (Concrete/	1					
Concrete)	259					
Lap Shear Adhesion (psi)	1					
Carbon Steel/Carbon Steel	342					
Galvanized Steel/Galvanized						
Steel	328					
Peel Adhesion to Concrete (lbs)	18					

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



# **INSTA-STIK PROFESSIONAL ROOFING ADHESIVE**

5. INSTALLATION

INSTA-STIK is packaged in a single container that should be stored between 45°F (7.2°C) and 75°F (23.9°C). At these temperatures, the shelf life is eight months from the date of manufacture. The minimum product temperature at the time of application should be 70°F (21.1°C). The minimum ambient and surface temperatures should be 40°F (4.4°C).

Safety: Before dispensing INSTA-STIK, the applicator must observe the following precautions: wear protective clothing, work gloves, and wear protective eyewear. A Self-Contained Breathing Apparatus (SCBA) is required in areas of insufficient ventilation only.

Surface Preparation: Lightweight and Structural Concrete, Plywood, and Cementitious Wood Fiber: These surfaces must be free of any debris, dirt, grease, oil, diesel fuel, and standing water before applying INSTA-STIK.

Recover Bituminous Asphalt (BUR): The non-graveled BUR surface must be free of debris, dirt, grease, oil, diesel fuel, and standing water SPUDDING IS NOT RECOMMENDED. An Insta-Foam Products lab pull test is required to determine INSTA-STIK/BUR compatibility. Contact the Roofing Technical Specialist at Insta-Foam Products, Inc., for details.

Steel: The upper flange of the steel deck must be free of debris, dirt, grease, oil, diesel fuel, and standing water. On new steel, the residual oil shop coating must be removed using acetone, naphtha, or comparable cleaner. The upper flange must be free of any cleaner residuebeforeapplyingINSTA-STIK.

**Insulation:** Review the roofing insulation plan. The roof insulation boards to be attached must be no larger than four foot square (4' x 4') as dictated by good roofing practices. In multiple layers of insulation, the staggered joint method must be used to eliminate thermal breaks

Product and Equipment Installation: INSTA-STIK Professional Roofing Adhesive should be mixed prior to use by firmly holding the container on its side and agitating the contents using a side to side motion for at least one minute. Attach the 4' dispensing hose swivel end to the cylinder valve. Tighten the connec-

tion using a 516° open end wrench being careful not to over-tighten. Verify that the on/off valve on the dispensing hose is closed. The handle should be perpendicular to the valve. Attach the dispensing wand kit to the brass valve by screwing in until it is handtight. The dispensing wand kit is recommended for roof decks with many penetrations or confined areas.

The Multi-Bead Applicator (MBA-28) is recommended for roof decks with open areas. Assemble the MBA-28 and attach a Day Pak System (DPS-4). Connect the 4' dispensing hose supplied with the MBA kit to the valve on the handle of the MBA. To connect the MBA-28 to the system, connect the swivel end of the MBA dispensing hose to the cylinder valve of an INSTA-STIK unit. Tighten all connections.

*Important:* To prevent pressure loss, use INSTA-STIK in an upright position.

Application Rate: Dispense one lineal foot of ¼"-1" diameter bead of INSTA-STIK for every square foot of insulation board to be attached. A ¼" diameter backer rod is supplied with each unit as a guide for proper bead size. The application rate may vary with roof system configuration.

**Note:** An increased amount of INSTA-STIK may be required at the perimeter band of the roof, depending on building and parapet wall heights. Refer to the Application Rate Chart.

Important: When applying INSTA-STIK, place the insulation boards onto the INSTA-STIK beads within 3 minutes and walk on the boards immediately to spread the beads for maximum contact. Continue to walk on the insulation boards every 5-7 minutes until the insulation is firmly attached.

Monolithic Deck Applications:
Use a parapet wall or gutter as a straight edge guide when dispensing the first bead of INSTA-STIK. Turn on the cylinder valve, slowly open the brass valve and dispense parallel ½"-1" beads. Underthe normal application rate, place the first bead 3" inside the outside edge of the insulation board to be attached. Apply three additional parallel beads approximately 14" apart so that the fourth bead is 3" inside the opposite edge of the insulation board. The result is four equidistant parallel

beads (sixteen lineal feet) for each four foot square (4' x 4') insulation board.

When using the Multi-Bead Applicator, open the valves to dispense four beads of INSTA-STIK, pulling the MBA as you dispense the ¼"-1" beads. Place the insulation boards onto the INSTA-STIK beads within 3 minutes and walk on the boards spreading the INSTA-STIK for maximum contact. Additional walkings are required every 5-7 minutes until firmly attached (usually 20-45 minutes).

Steel Deck Applications: With the edge of the insulation board centered over an upper flange under normal application rate, apply a ¼"-1" bead of INSTA-STIK on the first full upper flange nearest the edge of the insulation board. Continue to apply ¾"-1" beads on every other upper flange. Place the insulation board onto the beads within 3 minutes and walk on the boards spreading the INSTA-STIK for maximum contact. Additional walkings are required every 5-7 minutes until firmly attached (usually 20-45 minutes).

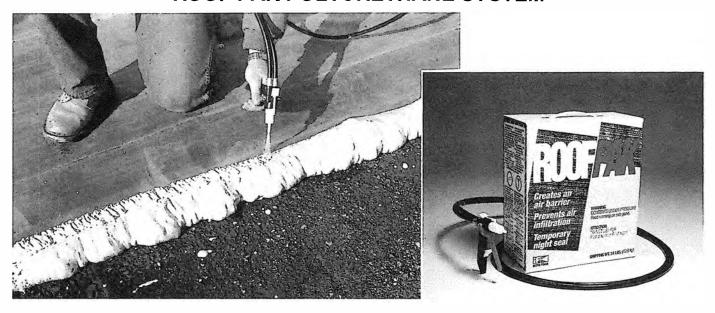
With the Multi-Bead Applicator, place the wheels of the MBA between the flanges centered with the insulation board. Adjust the DPS-4 so that the tubes are centered on the top of the upper flanges. The outside tubes must be centered over the nearest full upper flange nearest the edge of the insulation. Adjust the other three tubes to be centered on every other upper flange. Apply the INSTA-STIK in 3/4"-1" diameter beads by opening the valve. Place the insulation board onto the beads within 3 minutes and walk on the boards spreading the INSTA-STIK for maximum contact. Additional walkings are required every 5-7 minutes until firmly attached (usually 20-45 minutes).



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# **ROOF PAK POLYURETHANE SYSTEM**



ROOF PAK, a two component polyurethane foam kit, is used to temporarily seal the edge of single ply membranes at the end of the day or when inclement weather is imminent. The procedure is quick and easy to apply, resulting in labor savings. It produces a water resistant seal. Removal is easy with a spud bar or shovel when the job resumes.

The primary purpose for using ROOF PAK for night sealing is to protect costly insulation systems against moisture and water damage. The kit is portable, which makes it very convenient to have on a roof. It is the ideal product for quick tie-off protection.

Using ROOF PAK for a temporary night seal eliminates:

- the need for transporting a kettle to the job
- the loss of time and fuel in preheating a kettle
- the dangers associated with transporting hot asphalt
- the need for making a night seal with plastic cement and lumber

Another use for ROOF PAK is to create an air barrier to prevent roof deck air infiltration by sealing roof deck openings and penetrations. ROOF PAK is effective in air leakage control because of the following features:

- excellent adhesion to most roof surfaces
- maximum expansion qualities in filling cracks, voids and large openings

CEMENTITIOUS WOOD FIBER, ORIENTED STRAND BOARD, PLYWOOD, AND PRECAST CONCRETE DECKS

- Panel ioints
- Mechanical fastener penetrations\*

Use ROOF PAK to create an air barrier on:

# MONOLITHIC DECKS

- Drains
- HVAC units
- Wood nailers
- Roof perimeter edging

# STEEL DECKS

- Steel decking end and side lap joints
- Mechanical fastener penetrations\*

FSI ALSO STOCKS 2 PART 180 FROTH PAK

# TWIN LOC-NAIL®

# RECOVERY BOARD OR BASE SHEET TO WOOD FIBER

# **SPECIFICATIONS**

# **COMPOSITION**

Factory preassembled components consisting of:

**Tube:** Precision formed from Galvalume (AZ-55) coated steel to prevent corrosion. The 1.8" long tube is shaped to easily penetrate fibrous decking and existing membranes.

**Disk:** Precision formed from Galvalume (AZ-55) coated steel to prevent corrosion. Securely clamped to the tube, 2.7" diameter, rib reinforced to resist cupping. **Locking Staple:** Precision formed from .080" diameter high tensile steel. Coated to prevent corrosion. Factory preinserted into tube.

# TECHNICAL DATA

Wind Uplift: Pull out testing is recommended to establish withdrawal resistance performance. Uplift resistance will vary depending on the density and integrity of the substrate.

**Corrosion:** Components are made from Galvalume (AZ-55) coated steel to prevent corrosion.

Nailing Pattern: Consult deck and membrane manufacturer's requirements for recommended patterns in normal, exposed and hurricane areas.

# **INSTALLATION**

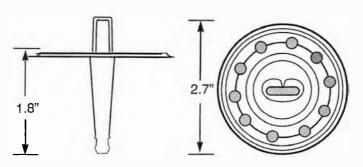
**Equipment:** Use ES Products' Twin Loc-Nail Driver. The specially designed Driver assures consistent speedy application. ES Nail Pouch holds up to 10 times the quantity of fasteners accomodated by standard nailing aprons.

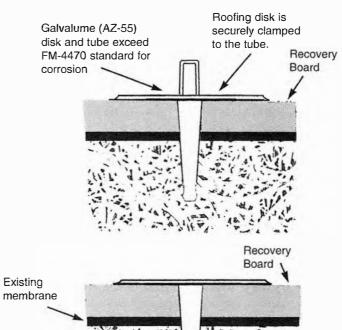
Method: Using ES Products' Twin Loc-Nail Driver, two impacts are required. Place fastener on face of driver positioning exposed staple into slot in driver face. Drive fastener with vertical motion into roofdeck with first impact seating cap flush with roofdeck. With second impact drive the locking staple thru the Tube/Disk unit into the deck until the top of the staple is flush with the cap (see illustration).

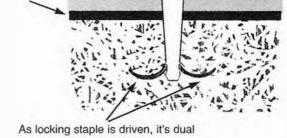
Operation: When locking staple is driven, it's dual wire legs diverge anchoring the fastener in place (see illustration). Uplift resistance will vary depending on the density and integrity of the substrate.

**Maintenance:** No maintenance is required after installation.

**Availability:** Twin Loc-Nail is a patented product manufactured only by ES Products, Inc., distributed by leading roofing material and equipment wholesalers throughout the United States. For details, information, and pricing, please contact ES Products.







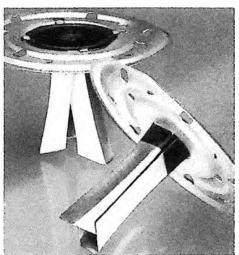
As locking staple is driven, it's dual wire legs diverge anchoring the fastener in place.

Proudly Made in The USA

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# FM-90 FASTENER





 $m{I}$  he FM-90 combines our standard length base ply fastener and disk into one fully integrated, self locking fastener for securing base ply to flat or sloped lightweight insulating concrete roof decks.

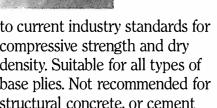
FM-90 is designed for use with lightweight concrete decking of minimum 2" thickness conforming

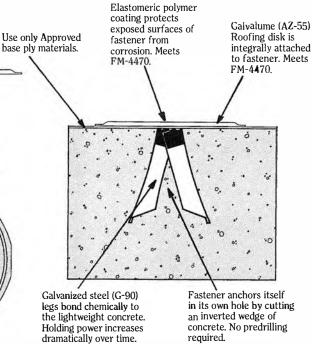
2.7 inches

1.7 inches

to current industry standards for compressive strength and dry density. Suitable for all types of base plies. Not recommended for structural concrete, or cement fiber decking.

Fully Factory Mutual Approved for both Wind Uplift and Corro-





# **COMPOSITION:**

Fastener: Precision formed from corrosion resistant Galvanized (G-90) steel. Exposed surfaces are further protected with a special elastomeric polymer coating to prevent corrosion. Rectangular dual gripping legs, 1.7" long. Disk: Integrally locked to fastener. Precision formed from Galvalume (AZ-55) coated steel to

prevent corrosion. Rib reinforced cap, 2.7'

# TECHNICAL DATA:

Wind Uplift: Meets or exceeds Factory Mutual requirements for Wind Uplift (1-90). Withdrawal resistance will vary depending on the density, compressive strength, and moisture content of the roof deck. Complete test reports available upon request.

Corrosion: Meets or exceeds Factory Mutual requirements for corrosion. Complete test report available upon request.

Nailing Pattern: Consult Factory Mutual, membrane, and deck manufacturer's requirements for recommended patterns in normal, exposed, and hurricane areas...

Roof Deck: Prior to installation of FM-90 fasteners, the lightweight concrete deck must be surface dry, reasonably smooth, and must support foot traffic without incurring damage.

# INSTALLATION:

Equipment: The ES Magnetic Driver and oversized Nail Pouch facilitate fastener installation. The Magnetic Driver assures consistent speedy application; The Nail Pouch holds up to 10 times the quantity of fasteners accommodated by a standard nailing apron.

Method: Drive FM-90 as an ordinary nail. DO NOT TOE. Seat cap flush with roofing surface (see

Operation: As FM-90 is driven, dual legs diverge and cut a plug of deck material which wedges and anchors the FM-90 in its own hole. No predrilling required.

Maintenance: No maintenance is required after installation.

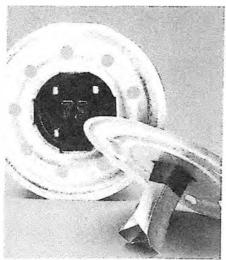
Availability: FM-90 is a proprietary product manufactured only by ES Products, Inc., distributed by leading roofing material and equipment wholesalers throughout the United States. For details and information please contact ES Products, Inc.

Packaging: 1,000 FM-90 fasteners per carton. Shrink wrapped and palletized. Gross weight: 42 lbs.

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# **FM-75 FASTENER**



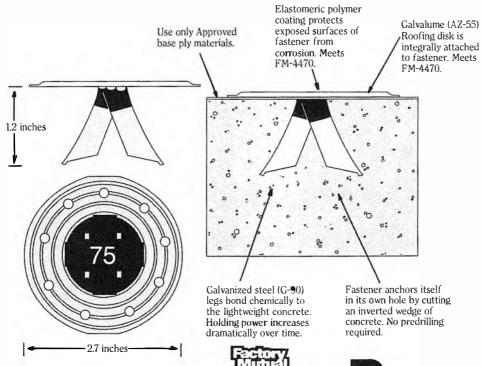


The FM-75 combines our 1.2" base ply fastener and Galvalume disk into one fully integrated, self locking fastener for securing base ply to flat or sloped lightweight insulating concrete roof decks.

FM-75 is designed for use with NVS concrete decking of minimum 1" thickness conform-

ing to current industry standards for compressive strength and dry density. Suitable for fastening all types of base plies. Not recommended for structural concrete or cement fiber decking.

Factory Mutual and Metro-Dade County Approved.



# COMPOSITION:

Fastener: Precision formed from corrosion resistant Galvanized (G-90) steel. Exposed surfaces are further protected with a special elastomeric polymer coating to prevent corrosion. Rectangular dual gripping legs, 1.2" long.

Disk: Integrally locked to fastener. Precision formed from corrosion resistant Galvalume (AZ-55) steel to prevent corrosion. Rib reinforced cap, 2.7° diameter.

# **TECHNICAL DATA:**

Wind Uplift: Meets or exceeds Factory Mutual requirements for Wind Uplift (I-90). Withdrawal resistance will vary depending on the density, compressive strength, and moisture content of the roof deck. Complete test reports available upon request.

Corrosion: Meets or exceeds Factory Mutual requirements for corrosion. Complete test report available upon request.

Nailing Pattern: Consult Factory Mutual, membrane, and deck manufacturer's requirements for recommended patterns in normal, exposed, and hurricane areas...

Roof Deck: Prior to installation of FM-75 fasteners, the lightweight concrete deck must be surface dry, reasonably smooth, and must support foot traffic without incurring damage.

### INSTALLATION:

Equipment: The ES Magnetic Driver and oversized Nail Pouch facilitate fastener installation. The Magnetic Driver assures consistent speedy application; The Nail Pouch holds up to 10 times the quantity of fasteners accommodated by a standard nailing apron.

Method: Drive FM-75 as an ordinary nail. DO NOT TOE. Seat cap flush with roofing surface (see, illustration).

Operation: As FM-75 is driven, dual legs diverge and cut a plug of deck material which wedges and anchors the FM-75 in its own hole. No predrilling required.

Maintenance: No maintenance is required after installation.

Availability: FM-75 is a patented product manufactured only by ES Products, Inc., distributed by leading roofing material and equipment wholesalers throughout the United States. For details and information please contact ES Products, Inc.

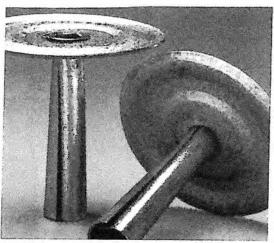
Packaging: 1,000 FM-75 fasteners per carton. Shrink wrapped and palletized. Gross weight: 34 lbs.

Warranty: ES Products, Inc., warrants its products for one year from dale of sale against defective workmanship and material, and its liability therefore shall be limited to replacing defective products reported defective during the warranty period. ES Products is not responsible for any failure attributed to Improper use or installation in any manner linconsistent with the manufacturer's specifications. THIS WARRANTY IS IN LEIU OF ANY OTHER WARRANTY ES SPRESSY, DOSCLAMIED INCLUDING ANY WARRANT TO SPRESSY OF MATERIAL TO SPRESSY OF THE SPR

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# **NAIL-TITE TYPE A**





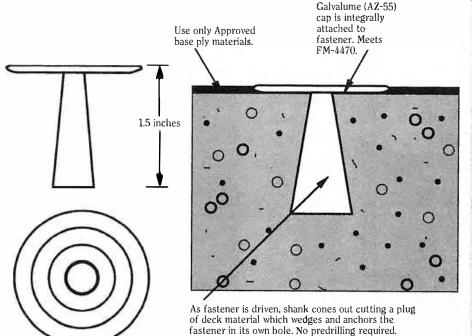
Self locking one piece fastener for securing base ply to flat or sloped poured gypsum concrete roof decks.

NAIL-TITE Type A is designed for use with gypsum decking of minimum 2" thickness conforming to compressive strength and dry density stan-

1.7 inches

dards currently recommended by leading gypsum suppliers. Suitable for fastening all types of base plies. Not recommended for shingle application, structural concrete or cement fiber decking.

Factory Mutual and Metro-Dade County Approved.



# **COMPOSITION:**

Shank: 1-1/2" tapered cone precision formed from corrosion resistant galvanized (G-90) steel.

Cap: 1.7° round cap formed from corrosion resistant Galvalume (AZ-55) steel, reinforced to resist cupping during driving.

Assembly: Shank securely swedged to cap forming rigid one piece fastener.

# **TECHNICAL DATA:**

Wind Uplift: Meets or exceeds Factory Mutual requirements for Wind uplift (I-60 and I-90).

Corrosion: Meets or exceeds Factory Mutual requirements for corrosion.

Nailing Pattern: Consult Factory Mutual, membrane, and deck manufacturer's requirements for recommended patterns in normal, exposed, and hurricane areas.

Roof Deck: Prior to installation of NAIL-TITE Type A fasteners, the Gypsum deck must be surface dry, reasonably smooth, and must support foot traffic without incurring damage. Fastener withdrawal resistance will vary depending on the density, compressive strength, and moisture content of the roof deck.

# **INSTALLATION:**

Equipment: The ES Magnetic Driver and oversized Nail Pouch facilitate fastener installation. The Magnetic Driver assures consistent speedy application; The Nail Pouch holds up to 10 times the quantity of fasteners accommodated by a standard nailing apron.

Method: Drive as an ordinary nail. DO NOT TOE. Seat cap flush with surface (see illustration).

Operation: As NAIL-TITE Type A is driven, shank cones out and cuts a plug of deck material which wedges and anchors the NAIL-TITE in its own hole. No predrilling required.

Maintenance: No maintenance is required after installation.

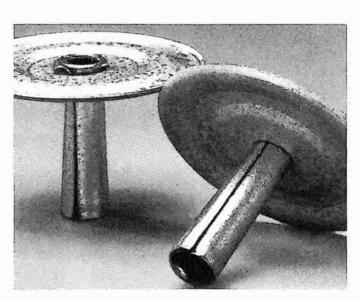
Availability: NAIL-TITE Type A is a patented product manufactured only by ES Products, Inc., distributed by leading roofing material and equipment wholesalers throughout the United States. For details and information please contact ES Products, Inc.

Packaging: 3,000 NAIL-TITE Type A per carton. Shrink wrapped and palletized. Gross weight: 46 lbs.

Warranty: ES Products, Inc., worrants its products for one year from date of sale against defective workmanship and material, and its liability therefore shall be limited to replacing defective products reported defective during the warranty period. ES Products is not responsible for any failure attributed to improper use or installation in any namere inconsistent with the manufacturer's specifications. THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY EXPRESS OR IMPLIED, ALL, OF WHICH ARE EXPRESSES, DOSCLABBLED RICULDING ANY WARRANTY OF PITNESS FOR PARTICULAR U.S., Tals warranty provides specific legal rights and remodels which may vary from state to statistics.

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# **NAIL-TITE TYPE R**

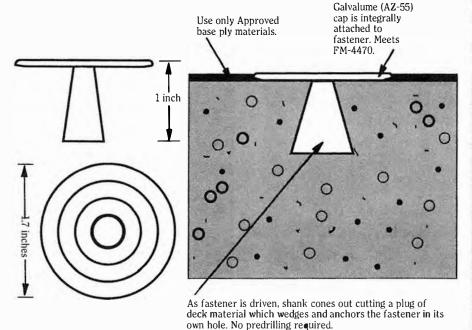


Self locking one piece fastener for securing base ply when re-roofing over flat or sloped poured gypsum concrete roof decks.

NAIL-TITE Type R is designed for the re-roofing of structurally sound, tough, aged

gypsum roof decks. Suitable for fastening all types of base plies. Not recommended for shingle application, structural concrete or cement fiber decking.

Factory Mutual and Metro-Dade County Approved.





# **COMPOSITION:**

Shank: 1" tapered cone precision formed from corrosion resistant galvanized (G-90) steel.

Cap: 1.7" round cap formed from corrosion resistant Galvalume (AZ-55) steel, reinforced to resist cupping during driving.

Assembly: Shank securely swedged to cap forming rigid one piece fastener.

# **TECHNICAL DATA:**

Wind Uplift: Meets or exceeds Factory Mutual requirements for Wind Uplift (I-60 and I-90).

Corrosion: Meets or exceeds Factory Mutual requirements for corrosion.

Nailing Pattern: Consult Factory Mutual, membrane, and deck manufacturer's requirements for recommended patterns in normal, exposed, and hurricane areas.

Roof Deck: Prior to installation of NAIL-TITE Type R fasteners, the Gypsum deck must be surface dry, reasonably smooth, and must support foot traffic without incurring damage. Fastener withdrawal resistance will vary depending on the density, compressive strength, and moisture content of the roof deck.

# INSTALLATION:

Equipment: The ES Magnetic Driver and oversized Nail Pouch facilitate fastener installation. The Magnetic Driver assures consistent speedy application; The Nail Pouch holds up to 10 times the quantity of fasteners accommodated by a standard nailing apron.

Method: Drive as an ordinary nail. DO NOT TOE. Seat cap flush with surface (see illustration).

Operation: As NAIL-TITE Type R is driven, shank cones out and cuts a plug of deck material which wedges and anchors the NAIL-TITE in its own hole. No predrilling required.

Maintenance: No maintenance is required after installation.

Availability: NAIL-TITE Type R is a patented product manufactured only by ES Products, Inc., distributed by leading roofing material and equipment wholesalers throughout the United States. For details and information please contact ES Products, Inc.

Packaging: 3,000 NAIL-TITE Type R per carton. Shrink wrapped and palletized. Gross weight: 40 lbs.

Warranty ES Products, Inc. warrants its products for one year from date of sale against defective workmands)s and material, and its liability therefore shall be limited to replacing defective products reported defective during the warranty period. ES Products is not responsible for any failure attributed to improper use or installation in any nameric sconsistent with the naumfacturer's specifications. THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR MEHLED, ALL, OF WHICH ARE EXPRESSED (INCLAIMED INCLDING ANY WARRANTY OF MERCHANTABILITY AND ANY WARRANTY OF FITNESS FOR PARTICULAR USE. This warranty provides specific legal rights and remedies which may vary from state to statistics.

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# **MAGNETIC DRIVER**





39" overall

accommodates all

lenath

roofers.



Our Lightweight Insulating Concrete and Gypsum base ply fasteners must be driven perpendicular to the roofing surface. The Magnetic

Driver assures straight positive fastener installation.

With the pivoting motion required to swing a hand hammer, you are never certain that the fastener will be driven straight. Loss of withdrawal resistance may result from improper fastener installation.

The vertical driving action of the Magnetic Driver assures consistent application of fasteners with less worker fatique. Use of the Magnetic Driver allows the roofer to install fasteners from a standing position; get-

ting up off the hands and knees speeds production and limits back strain.

Use of the accompanying oversized Nail Pouch means fasteners are always at hand.

# RUGGED, SIMPLE, AND EFFECTIVE

The ES Products' Magnetic Driver is a durable tool designed and built to withstand the abuses of roofing. Features include:

- ✓ Heavy-duty 3/4" steel driving shaft with foam covered grip.
- ✓ Large 3" diameter, wear resistant polyethylene driving head assures that fasteners are driven flush and prevents overdriving which damages the base sheet.
- ✓ Super strength Alnico-5 gripping magnet positively holds fastener and disk unit.

# THE DRIVING FORCE

Choosing the right fastener for your roofing application is only half the job. If the fastener isn't installed correctly, you might as well have left it in the box.

When driving base sheet fasteners for Lightweight Insulating Concrete and Gypsum, the best results are achieved when the fastener is installed with a single impact. The multiple blows required when using a hand hammer may be off center- crookedly applied or bent fasteners being the result. Worse yet, with repeated impact and the associated shock waves, the Lightweight Insulating Concrete or Gypsum roofdeck can break up such that the roofdeck will no longer adequately retain fasteners.

With the ESMagnetic Driver, you can apply fasteners with the speed and force required to penetrate the roofdeck without damage.

# THE MODIFIED MAGNETIC DRIVER

Our standard Magnetic Drivers have been used successfully to apply our Lightweight Insulating Concrete fasteners for years. To accomodate fasteners with a smaller impact area, such as our NAILTITE TYPE A NAILTITE TYPE R, and DO-ALL LOC NAIL, we now offer our Drivers with a stainless steel face plate. By adding the 125" Type 302 stainless plate, the magnet is protected from direct impact.

Stainless steel, being non-magnetic, allows magnetism to pass through it without compromising the magnet's ability to hold onto the fastener.

The ES Products Modified Magnetic Driver is the perfect tool to drive our fasteners into Lightweight Insulating Concrete and Gypsum.

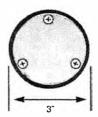
# ORDER TODAY

Speed up fastening. Save labor. Walk through your next roofing job. Order the ES Magnetic Driver today from an authorized ES Products Distributor, or call ES Procucts.

31/2" long wear resistant polyethylene driving head.



3" diameter oversized driving head with 1" diameter super strength magnet drives fastener flush.

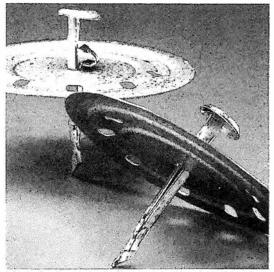


Optional .125 in. thick stainless steel face plate prolongs life of tool.

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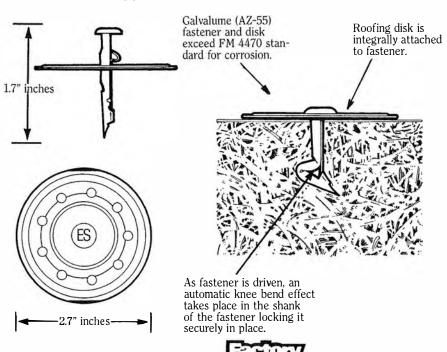
# INSULDECK LOC-NAIL





The Insuldeck Loc-Nail, a self-locking fastener that is factory preassembled to a 2.7" stress plate, is used for securing base ply to flat or sloped structural wood fiber and structural cement fiber roof decks.

Insuldeck Loc-Nail is designed for use with fibrous decking such as Tectum, Fibroplank, Permadeck, or equal. Suitable for all types of base plies.



# COMPOSITION

Shank: Precision formed from Galvalume (AZ-55) coated steel to prevent corrosion. The 1.7" long dual shank with fine angular point is tough enough to penetrate all Approved fiber decks. The shank is self-clinching when driven.

Disk: Precision formed from Galvalume (A**Z**-55) coated steel to prevent corrosion. Securely clamped to shank, 2.7" diameter, rib reinforced to resist cupping when driven.

# TECHNICAL DATA

Wind Uplift: Meets or exceeds Factory Mutual requirements for Wind Uplift (I-60). Withdrawal resistance will vary depending on the density and integrity of substrate.

Corrosion: Meets or exceeds Factory Mutual requirements for corrosion.

Nailing Pattern: Consult deck and membrane manufacturer's requirements for recommended patterns in normal, exposed, and hurricane areas.

# INSTALLATION

Equipment: Use ordinary roofer's hammer or the ES Insuldeck Driver. The specially designed Driver assures consistent speedy application. The handy, specially designed, ES Nail Pouch holds up to 10 times the quantity of fasteners accommodated by a standard nailing apron.

Method: ES Insuldeck Driver is strongly recommended. Place fastener on face of driver. Driver self-centers fastener and holds fastener perpendicular to face. Drive fastener with vertical motion into roofdeck. Using roofer's hammer, hold fastener between fingers with cap parallel to roofdeck. DO NOT TOE. Tap lightly through base sheet to lodge shank in deck. Hit firmly until cap is seated flush with roofing surface. (see illustration)

Operation: When cupped head is driven flush against rigid cap, an automatic knee bend effect takes place in the shank of the fastener (see illustration) locking fastener in place. Uplift resistance may vary depending on the density of the substrate.

Maintenance: No maintenance is required after installation.

Availability: Insuldeck Loc-Nail is a patented product manufactured only by ES Products, Inc., distributed by leading roofing material and equipment wholesalers throughout the United States. For details, information, and pricing, please contact ES Products.

Packaging: 1,000 assembled Insuldeck Loc-Nails per carton. Shrink wrapped and palletized. Gross weight-28 lbs.

Warranty, ES Products, Inc. warrants its products from one year from the date of sale against defective workmanship and material, and its liability therefore shall be limited to replacing defective products reported defective during the warranty period. ES Products is not responsible for any failure attributable to improper use or installation in any manner inconsistent with manufacturer's specifications. THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR INPILIDA. ALL OF WHICH ARE EXPRESSES INSICALMED INCLIDING ANY WARRANTY OF MERCHANTABILITY AND ANY WARRANTY OF THINSES FOR PARTICULAR USE. This warranty provides specific legal rights and remedies which may vary from state to state.

# Fastener Systems, Inc.

# INSULDECK DRIVER





Insuldeck Loc-Nail base ply fasteners must be driven perpendicular to the roofing surface. The Insuldeck Driver assures straight positive fastener installation.

With the pivoting motion required to swing a hand hammer, you are never certain that the fastener will be driven straight. Loss of withdrawal resistance may result from improper fastener installation.

The vertical driving action of the Insuldeck Driver assures consistent application of fasteners with less worker fatigue and prevents overdriving. Use of the Insuldeck Driver allows the roofer to install fasteners from a standing position. Getting up off the hands and knees speeds production and limits back strain

Use of the accompanying oversized nail pouch means fasteners are always at hand.

# RUGGED, SIMPLE AND EFFECTIVE

The ES Products' Insuldeck Driver is a durable tool designed with only two moving components and built to withstand the abuses of roofing. Features include:

- Heavy-duty 3/4" steel driving shaft which incorporates a 4 1/2" vinyl handle with finger grips.
- Large 3" diameter, wear resistant polyethylene driving head assures that fasteners are driven flush and prevents overdriving which damages the base sheet.

- Steel tube in driving head prevents wear and positively guides fastener during application.
- Super strength Alnico-2 gripping magnets positively hold fastener and disk unit.

## A SURE HIT

Choosing the right fastener for your roofing application is only half the job. If the fastener isn't installed correctly, you might as well have left it in the box.
When driving Insuldeck
Loc-Nail base ply fasteners

into structural wood fiber roof decks (Tectum), the best results are achieved when the fastener is installed with a single impact. The multiple blows required when using a hand hammer may be off center, crookedly applied or bent fasteners being the result. With the Insuldeck Driver, you can apply fasteners with the speed and force required to penetrate the roofdeck without damage.

### **MAINTENANCE**

To assure that the Insuldeck Driver performs as intended, a minimum of maintenance is required. By keeping the driver head clean, consistent positive application is assured.



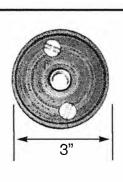


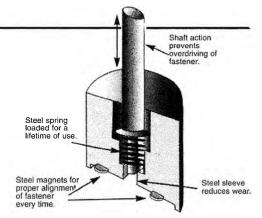






3 1/2" long wear resistant polyethylene driving head





(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# LIGHTWEIGHT INSULATING CONCRETE **BASE SHEET ATTACHMENT**

ES Products uses Factory Mutual's Approval Guide, FM's Loss Prevention Guide, and FM Approval Reports as the basis for discussion of wind uplift ratings.

A roof covering system over a low slope monolithic roof deck, such as lightweight insulating concrete, must utilize an appropriate membrane system including a compatible base sheet attached to the deck with an adequate number of properly spaced fasteners

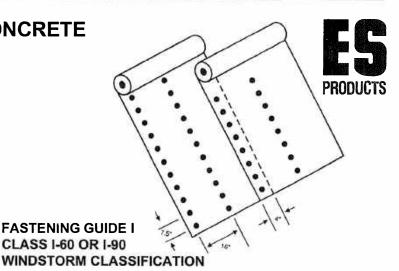
Proper fastener density is considered to be about one fastener per square foot with a fifty percent increase at the perimeter.

A fastener density of approximately one fastener per square foot can be expected to provide FM I-60 wind uplift resistance if at least forty pounds is required to withdraw single fasteners from the deck or pull the heads through the assembled base sheet.

If the withdrawal and pull through resistance is at least sixty pounds, the roof covering should provide FM I-90 wind uplift resistance.

Discs or plates are often required to insure adequate base sheet pull through resistance for FM I-90.

While some Approved fastener spacings are shown, specific spacing and density should be recommended or approved by the membrane manufacturer.



An FRMC Approved base felt is secured to an FMRC Approved lightweight insulating concrete roof deck as outlined in the current edition of the FMRC Approval Guide.

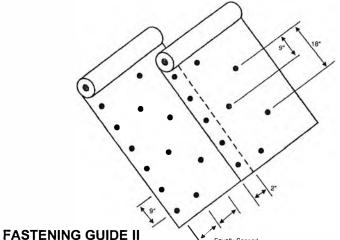
The base felt is secured with FM-60 base ply fasteners and FM-30 discs, or FM-90 base ply fasteners installed 9 in. on center in the 2 in. wide base felt side laps and 18 in. on

center staggered in 2 rows, equally spaced, between the base felt side laps.

When fastening with this pattern, expect to use approximately 95 fasteners per square (100 FT2).

### IMPORTANT:

The Illustrated fastening pattern is typical of FMRC Approved fastening patterns. Consult the membrane manufacturer for their specific construction requirements. The ES Products Magnetic Driver is the recommended tool when installing lightweight insulating concrete base ply fasteners.



**CLASS I-60 OR I-90** WINDSTORM CLASSIFICATION

An FRMC Approved base felt is secured to an FMRC Approved lightweight insulating concrete roof deck as outlined in the current edition of the FMRC Approval Guide.

The base felt is secured with FM-60 base ply fasteners and FM-30 discs, or FM-90 base ply fasteners installed 7 1/2 in. on center in the 4 in. wide base felt side laps and in rows centered

between the base felt side laps. When fastening with this pattern, expect to use approximately 120 fasteners per square (100 FT2).

### IMPORTANT:

The Illustrated fastening pattern is typical of FMRC Approved fastening patterns. Consult the men manufacturer for their specific construction requirements. The ES Products Magnetic Driver is the recommended tool when installing lightweight Insulating concrete base ply fasteners

**CLASS I-60** WINDSTORM CLASSIFICATION An FRMC Approved base felt

**FASTENING GUIDE III** 

is secured to an FMRC Approved lightweight insulating concrete roof deck as outlined in the current edition of the FMRC Approval Guide.

The base felt is secured with FM-60 base ply fasteners installed 4 in. on center in 4 in. wide base felt side laps.

When fastening with this pattern, expect to use approximately 113 fasteners per square (100 FT2).

### IMPORTANT:

The Illustrated fastening pattern is typical of FMRC Approved fastening patterns. Consult the membrane manufacturer for their specific construction requirements. The ES Products Magnetic Driver is the recommmended tool when installing lightweight Insulating concrete base ply fasteners.

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# BASE SHEET ATTACHMENT TO POURED GYPSUM CONCRETE

A roof covering system over a low slope monolithic poured gypsum concrete roofdeck must utilize an appropriate membrane that includes a compatible base sheet attached to the deck with an adequate number of properly spaced fasteners.

Nail-Tite Type A Fasteners are Approved by both Factory Mutual and Metro Dade County for fastening base sheet to poured gypsum roofdecks. Nail-Tite Type R Fasteners are Approved by both Factory Mutual and Metro Dade County for fastening base sheet when re-roofing over tough, aged poured gypsum roofdecks. For all applications, particularly reroofing, a careful survey should determine whether the roofdeck is sound and that fastener withdrawal resistance is satisfactory. Application of the fasteners should not result in detrimental deformation of the fasteners nor damage to the roofdeck.

Approximately one Nail-Tite Type A or Type R Fastener per square foot can be expected to provide FM I-60 wind uplift resistance if at least an average of fifty-one pounds is required to withdraw single fasteners from the deck or pull the heads of the fasteners through the assembled base sheet.

If the withdrawal and pull through resistance is at least seventyseven pounds on average, the roof covering should provide FM I-90 wind uplift resistance with one Nail-Tite fastener per square foot.

ES Products recommends the use of a Magnetic Driver to help insure proper installation of Nail-Tite base sheet fasteners in gypsum concrete.

Individual manufacturers of membrane systems should be consulted for fastening patterns and any other requirements specific to the application of their products.



# FASTENING GUIDE I CLASS I-60 or I-90 WINDSTORM CLASSIFICATION

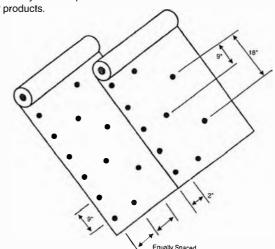
An FMRC Approved base felt is secured to an FMRC Approved Gypsum roof deck as outlined in the current edition of the FMRC Approval Guide.

The base felt is secured with Nail-Tite Type A or Type R base ply fasteners installed 9 in. on center in the 2 in. wide base felt side laps and 18 in. on center staggered in 2 rows, equally spaced, between the felt side laps.

When fastening with this pattern, expect to use approximately 95 fasteners per square (100 FT<sup>2</sup>).

### IMPORTANT:

The illustrated fastening pattern is typical of FMRC Approved fastening patterns. Consult the membrane manufacturer for their specific construction requirements. The ES Products Magnetic Nall-Tite Driver is the recommended tool when installing Nall-Tite base ply fasteners.



# CEMENTITIOUS WOOD FIBER BASE SHEET ATTACHMENT

ES Products uses Factory Mutual's Approval Guide, FM's Loss Prevention Guide, and FM Approval reports as the basis for discussion of wind uplift ratings.

A roof covering system over a low slope cementitious wood fiber roof deck must utilize an appropriate membrane system including a compatible base sheet attached to the deck with an adequate number of properly spaced fasteners.

A fastener density of 1.25 fasteners per square foot

can be expected to provide FM Class I-60 wind uplift resistance if at least fourty-eight pounds is required to withdraw single fasteners from the deck or pull the heads through the assembled base sheet.

Fastener density should be increased in perimeters and corner areas. Specific spacing and density should be recommended or approved by the membrane manufacturer.

# FASTENING GUIDE III CLASS I-60 WINDSTORM CLASSIFICATION

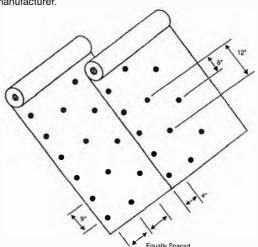
An FMRC Approved base felt is secured to an FMRC Approved cementitious wood fiber roof deck as outlined in the current edition of the FMRC Approval Guide.

The base felt is secured with Insuldeck Loc-nails installed 9 in. on center in the 4 in. wide side laps and 12 in. on center staggered in 2 rows, equally spaced, between the base sheet side laps.

When fastening with this pattern, expect to use 125 fasteners per square (100 FT<sup>2</sup>).

### IMPORTANT:

The illustrated fastening pattern is typical of FMRC Approved fastening patterns. Consult the membrane manufacturer for their specific construction requirements



We're experts in our field so you don't have to be

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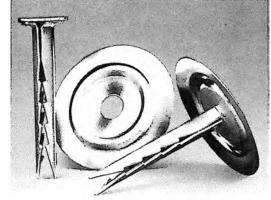
# HARDENED DO-ALL LOC-NAIL

# PRODUCT:

Self-locking one piece fastener for securing base-ply, shingles, and flashing to a wide variety of roofing substrates. For use in concealed applications only.

The Hardened Do-All Loc-Nail is recommended for use in Oriented Strand Board, Plywood, Nailable Concrete, and Gypsum (new & reroof). Provides superior withdrawal resistance over conventional fasteners in virtually any nailable substrate.

Suitable for securing all types of base plies, shingles (asphalt, metal, non-metal) and flashings. When securing base ply, the Hardened Do-All Loc-Nail must be used with our Metal Cap (pictured) with .235" Hole. Metal Cap is not required for shingle or flashing applications.





# **COMPOSITION:**

Cap:

Fastener: 1-3/8" long precision formed one-piece steel construction featuring dual serrated legs with sharp angular

points. 3/8" diameter head. Zinc plated for superior corrosion resistance.

1-3/16" diameter. Precision formed steel with reinforcing asphalt barrier ring. Zinc plated for superior

corrosion resistance.

# **TECHNICAL DATA:**

Wind Uplift: Individual nail withdrawal resistance varies with thickness, density and compressive strength of the

roofdeck material.

Nailing Pattern: Consult deck and shingle/membrane manufacturer's requirements for recommended patterns in normal,

exposed, and hurricane areas.

Approvals: Approved and specified for shingle application to Loadmaster Roofdeck Assemblies.

# **INSTALLATION:**

**Equipment:** Use an ordinary roofer's hammer. No special tools required.

Method: Drive Hardened Do-All Loc-Nail as an ordinary nail. DO NOT TOE. Seat head/cap flush with roofing

surface.

**Operation:** As Hardened Do-All Loc-Nail is driven, dual legs diverge and serrations grip substrate, permanently

locking fastener in place. No predrilling required.

Maintenance: No maintenance is required after installation.

**Availability:** Hardened Do-All Loc-Nail is a patented, proprietary product manufactured only by ES Products, Inc., distributed by leading roofing material and equipment wholesalers throughout the United States. For details, information, and pricing, please contact ES Products, Inc.

**Packaging:** 2500 Hardened Do-All Loc-Nails per carton. Shipping weight 13 lbs. Master cartons contain 10,000 fasteners and weigh 52 lbs.

per ntain Warranty: ES Products, Inc. warrants its products for one year from date of sale against defective workmanship and material, and its liability therefore shall be limited to replacing defective products reported defective during the warranty period. ES Products is not responsible for any failure attributable to improper use or installation in any manner inconsistent with manufacturer's specifications. THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, ALL OF WHICH ARE EXPRESSLY DISCLAIMED INCLUDING ANY WARRANTY OF MERCHANTABILITY AND ANY WARRANTY OF FITNESS FOR PARTICULAR USE.

This warranty provides specific legal rights and remedies which may vary from state to state.

Proudly Made in The U.S.A.



# **Purpose:**

To document and record on site Pull-out Values. Horizontal or vertical in all types of substrates.

# Use:

Use with screws, togglebolts, fasteners for Gypsum and Tectum type decks.

# Design:

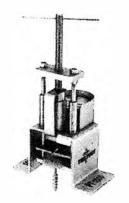
Sturdy and rugged, pull tests up to 2000 lb. Simple to operate.

# Weight 9½ lb.

Each test unit comes in its own carrying case.



# Proves Fastening Integrity for Existing or New Roof Construction



# **Plastic Fasteners:**

Conduct Pull Tests with larger diameter Tectum and Gypsum Type Fasteners with no changes or extra pieces.

# Steel Fasteners:

Conduct Pull Tests with screws, toggle bolts, concrete (threaded or drive-in) Type Fasteners.

# **Corrosion Protection:**

Complete Test Unit is zinc plated.

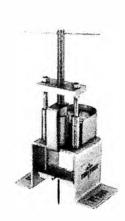
# **Pressure Gauges**

Accuracy — ANSI grade A — 1%

Large 21/2" Diameter dial includes maximum reading hand.

Choice of 0-1000 or 0-2000 PSI pressure readings.

Positioned on Tester for easy visibility by operator.

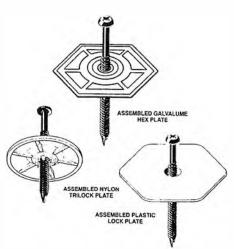


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# **DEKFAST**\*\*

**Preassembled Screw & Plate Fastening Systems Dekfast Pick-Up Tool** 





# PREASSEMBLED SCREW AND PLATE FASTENING SYSTEMS

- Factory assembly makes installation faster
- Assembled components can be easily prepositioned in roof insulation
- Can be installed using standard electric screw gun.
- Dekfast Pick-up Tool™ provides easy three step installation >>

# the magnetic nosepiece.

Touch the nose of the tool to the head of the

fastener and it pops into

Lift the tool to let the fastener hang on the nose of the tool. Move and position the tool to install.



Push down on the tool to engage the vertical fastener in the drive bit and trigger the tool to install.







# ASSEMBLED INSULATION PLATES (HEX)

			AVAIL	ABLE	LEN	GTHS			
21/8"	31/4"	33/4"	41/2"	5"	6"	7"	8"	10"	12"

# ASSEMBLED MEMBRANE PLATE (ROUND)

		AVAI	LABLE	LENG	THS		
21/8"	31/4"	3¾"	41/2"	5"	6"	7"	8"

MATERIAL AND NOMINAL DIMENSION SPECS.								
MAT'L.	MAJ. DIA.	THREADS	HEAD TYPE	HEAD SIZE				
Carbon Steel Screw with Sentri Coating	.240" Nom.	13 T.P.I.	#3 Phl. Drive Flat Truss	.440" Nom. Dia.				
Copolymer	3" A/F	Hexagonal Lock Plate						
Galvalume *	21/8" A/F	Hexagonal Steel Plate						
Nylon	2"	Roun	d Plate with S	pikes				

<sup>\*</sup> Galvalume is a registered trademark of Bethlehem Steel Co.

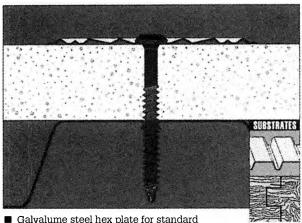
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# **DEKFAST** \*\*

# **Roof Insulation Fastening Systems**

# **Steel Hex Plate**

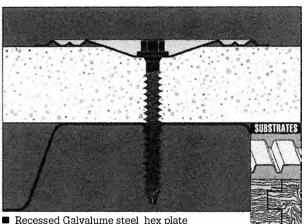
For Steel, Wood and Structural Concrete Decks



- Galvalume steel hex plate for standard insulation requirements
- Use with Dekfast 12, 14 or 15 fastener with reinforced truss head and deep #3 phillips recess to improve driving stability

# **Recessed Steel Hex Plate**

For Steel and Wood Boof Decks



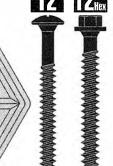
- Recessed Galvalume steel hex plate provides exceptional uplift resistance
- Fastener head is countersunk below top surface of plate
- Use with Dekfast 12 Hex (1/4" hex head) or Dekfast 12 (#3 phillips head) fastener

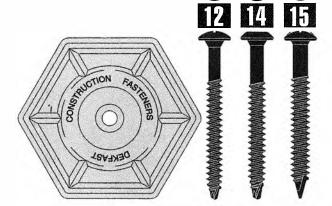
FASTENERS

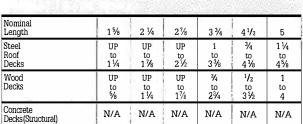












Material	Maj. Dia.	Threads	Head Type	Head Size
Carbon Steel Sentri Coating	.220"	13 T.P.I.	HWH or #3 Phillips Head Truss	<sup>1</sup> / <sub>4</sub> (AF) or Nom440" O.D.

1/4	to 1%	2¾	to 3½	to 4	Decks	to 1/4	to %	to 11/4	to 1%	to 21/4	to 23/4	to 3½	to 4	to 5
'A	N/A	N/A	N/A	N/A	Concrete Decks (Structural)	to	UP to 5%	3/4 to 1 1/4	1% to 1%	1¾ to 2¼	21/4 to 23/4	3 to 3½	3 ½ to 4	4½ to 5
ads	l He	ad Type	Head	Size	Material	7	N	Iaj. Di	a.	Т	hread	s	Не	ad '
1		WH or	1/4 (A		Carbon Stool Son	tri		240"	1		13	1	#3 Ph	illip

Nominal

Steel Roof

1%

21/4

UP 3/4

to 2½ to 2% to 3 %

- Steel Roof Decks include all FM approved 18-20-22 gauge. FM approved wood decks include F.R. plywood and 2x dimension lumber.(See FM Approval Guide) Install with 2000-2500 RPM screw guns with #3 hardened Phillips drive bit or 1/4" hex socket (for 12Hex).

(Structural) 1/4	to to to 5% 11/4 11/8	2 1/4 23/4 3 1/2	to to to 4	to to to 7 9 11
Material	Maj. Dia.	Threads	Head Type	Head Size
Carbon Steel Sentri Coating	.240"	13 T.P.I.	#3 Phillips Drive Flat Truss	.440"

34 41/2

3/4

11/4 21/4 31/4 41/4

- Steel Roof Decks include all FM approved 18-20-22 gauge. Install with 2000-2500 RPM screw guns and #3 hardened Phillips bit.
   FM approved wood decks include F.R. plywood and 2x dimension lumber
   Structural concrete to be predrilled with standard 3/16 carbide bit to minimum 1/2" deeper than fastenerpenetration. Install fasteners with slow speed (1500RPM maximum) hammer drill with tool in hammer mode. Use #3 hardened Phillips bit to drive fasteners

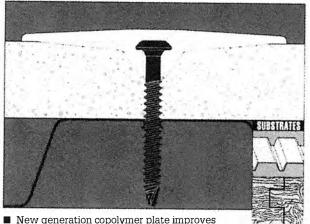
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# **DEKFAST**\*\*

# **Roof Insulation Fastening Systems**

# **Plastic Hex Lock Plate**

For Steel, Wood and Structural Concrete Decks



- impact strength and cold crack resistance
- Large hexagonal (3" A/F) bearing surface ideal for all insulation boards
- Fastener head locks into plate to prevent roof membrane damage and resist rotation
- Use with Dekfast 12 or 14 fastener

PASTENE NOITOUR



Nominal Length	11/4	2	3	4	5	6	7	8	10	12	14	16*
Steel	17P	UP	UP	1 1/4	1 1/4	21/4	3 1/4	4½	61/4	81/4	10¼	12 1/4
Roof	10	to	to	10	to	to	to	to	to	to	to	to
Decks	3/4	1½	21/4	3 1/4	4 1/2	51/2	6 1/2	7½	91/2	111/2	13⅓	15 1/2
Wood Decks	to to 1/4	UP to 1	UP to 2	to 3	to 4	to 5	3 to 6	4 to 7	6 to 9	8 to 11	10 to 13	12 to 15
Concrete	UP	UP	to 2	2	3	4	5	6	8	10	12	14
Decks	10	to		to	to	to	to	to	to	to	to	to
(Structural)	1/4	1		3	4	5	6	7	9	11	13	15

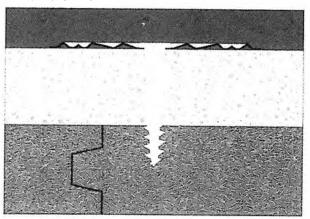
Material	Maj. Dia.	Threads	Head Type	Head Size
Carbon Steel Sentri Coating	.260°	13 T.P.L	#3 Phillips Drive Truss w/ Beads	.440"

- Steel Roof Decks include all FM approved 18-20-22 gauge. Install with 2000-2500 RPM screw quns and #3 hardened Philips bit. FM approved wood d. cks include F.R. plywood and 2x dimension lumber Structural concrete to be predrilled with standard 7/32" carbide bit to minimum 1/2"deeper than fastener penetration. Install fasteners with slow speed (1500 RPM maximum) harmer drill with tool i harmer mode. Use #3 hardened Phillips bit to drive fasteners.

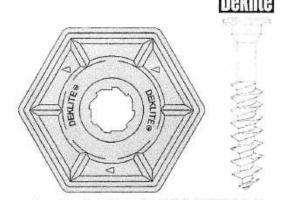
  \*Additional Lengths Available to 26"

# **Non-Penetrating Fastener and Metal Plates**

For Gypsum, Lightweight Concrete and other Cement Fiber Decks



- High thread design and tapered root diameter provide exceptional pull-out strength
- Hex steel retaining plate for insulation attachment provides maximum up-lift resistance
- Installs with a standard electric screw gun and a 1/4" square driver bit



Length	2 2 1/2 3 3 1/2	4 4 1/2 5 5 1/2 6	6½ 7 7½ 8	81/2 9 91/2 10
Material	Maj. Dia.	Threads	Head Type	Head Size
Glass Reinforced Nylon	¹⅓ıє" Nom.	3.5 T.P.I.	Internal Square Drive	1" Dia. with ¼" Sq. Drive

# FOR ALL DEKFAST FASTENERS

Refer to Technical Bulletin 701, F.M. Approval Guide, and supplements for current F.M. approved insulation fastening patterns

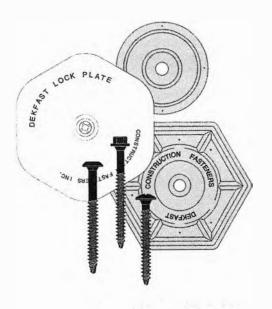
Galvalume is a registered Trademark of Bethlehem Steel Corporation.

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# **DEKFAST**

# **Roof Insulation Fastening Systems**

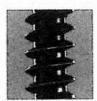






The Head... Reinforced truss head with deep #3 phillips recess, available with Dekfast 12\*, 14 and 15 fasteners, improves driving stability.

\*Dekfast 12 also available in hex washer head\*



The Thread... larger diameter and unique thread profile increases overall strength and 13 threads per inch means higher strip torque.



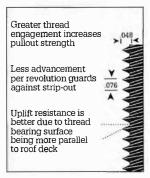
The Point... Dekfast 12, 12 Hex and 14... patented, tapered offset drill-type point actually extrudes the hole, reinforcing the perimeter to improve pull-out resistance and speed installation.



Dekíast 15... small drill point design and larger root diameter provide exceptional drilling performance allowing excellent "drift" through built-up and aggregate surfaces.

All Dekíast fasteners have Sentri Long-Life coating

### DEKFAST 13 T.P.I.



Compared to typical fasteners with ten threads per inch, there is less advancement per revolution and significantly greater thread engagement in the deck.

This combination helps to guard against strip-out, reduces the likelihood of backouts and provides greater pull-out strength. Uplift resistance is further enhanced due to the fact that the thread bearing surface is more parallel to the roof deck.

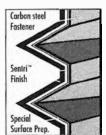
### Typical 10 T.P.I.



All DEKFAST screws are coated with our exclusive Sentri Long-Life finish. Developed by CFI, this new waterborne formulation is applied in an electro-deposition process similar to plating.

This electrolytic coating (E-Coat) process results in an exceptionally smooth and uniform finish in a precise thickness that virtually eliminates irregularities or fastener head fills.

# SENTRI " LONG-LIFE FINISH





Sentri "E"-coat is a catalyzed epoxy coating that provides outstanding resistance to rust and corrosion. In Kesternich tests performed in strict accordance with DIN 50018 specifications it exceeds Factory Mutual's Standard 4470!

CONSTRUCTION FASTENERS, INC.

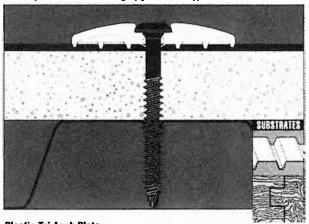
(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# DEKFAST

# **Roof Insulation Fastening Systems**

# Plastic Tri-Lock Plate & Round Steel Plate

For Steel, Wood and Concrete Single-ply Membrane Applications



# Plastic Tri-Lock Plate

- Dupont certified virgin nylon is resilient and strong, assuring consistent quality and performance
- Lock-in and anti-rotation features prevent fastener back-out
- Flat bottom design permits use with all roofing substrates

# The Pick-Up Tool

The Pick-Up Tool is designed for use with pre-assembled **DEKFAST** screws and plates. The magnetic nose piece enables the installer to pick up individual assemblies from a standing position. It provides quick and precise depth-sensitive installation and comes complete with a Milwaukee (Model #6799-69) screw gun.

# The Stand-up Tool\*

The Model 300 Stand-up tool can be used to install either hex head or phillips drive **DEKFAST**  fasteners (all diameters) up to 8" long from a standing position. Adaptable to Black & Decker or Milwaukee (AEG) electric screwdrivers, the stand-up tool features a depth-sensing adjustment to insure precise attachments.

# The Shortool'

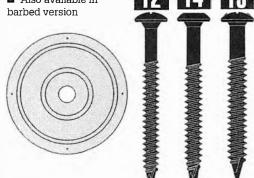
The shortool is lightweight and simple to use, installing any length fastener quickly and easily. Featuring an adjustable depth setting, the shortool is available for Milwaukee, or Black & Decker screw drivers.

\*Flange Kit available for adapting either tool to preassembled parts.

# **Round Steel Plate**

- Galvalume steel retaining plate
- Flat bottom design permits use with all

roofing substrates Also available in



# **Assembled Membrane Plate (AMP)**

AMP Optional... Assembled Membrane Plate with Dekfast 14 fastener available from the factory preassembled **Assembled Insulation Plate (AIP)** TRI-LOCK ■ AIP Optional...Assembled Insulation Plate with Dekfast 14 fastener available from the factory preassembled AIP assemblies also available using standard Galvalume Steel Hex Plates **CONSTRUCTION** 

194

Same day color match - In house painting

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

**Toggle Bolts** 

OLYMPIC FASTENERS

# ALSO AVAILABLE IN IRON LOK ANTI BACK OUT COATING

# PRODUCT DESCRIPTION

The Olympic Toggle Bolt is designed to attach insulation to gypsum, all cementitious wood fiber decks (Permadeck, Insulrock, Tectum®, etc.) and lightweight concrete decks. This fastener can also be used for applications where conditions require a positive locking fastener.

The Olympic Toggle Bolt can be ordered assembled with 2" or 3" steel or plastic plate, plastic strap and wing.

The Olympic Toggle Bolt is Factory Mutual and Dade County approved.

### **APPLICATION**

A 3/4" pilot hole must be drilled entirely through the deck. Using a screwshooter, drive the fastener until the wing is drawn up against the underside of the deck and the attachment is tight.

The Olympic Toggle Bolt must be long enough to allow a minimum of  $1\ 1/2$ " clearance on the underside of the deck in order for the wing to open.

**Note:** Care must be taken not to overdrive the fastener causing the wing to damage the underside of the deck. Prior to job bid, contact Olympic to perform a pullout test to determine the pullout values,

PHYSICAL DATA	Cat. No	Length	Thread Length	Packaging	Weight
	CRT04	4"	3"	500	22 lb
	CRT06	6"	4"	500	33 lb
The data below is constant for each Olympic Toggle Bolt.	CRT07	7"	4"	500	38 lb
, , , , ,	CRT08	8"	4"	500	43 lb
Thread Diameter: .250	CRT10	10"	4"	500	54 lb
Head Height: .125	CRT12	12"	4"	500	67 lb
Head Diameter: .435	CRT14	14"	4"	500	74 lb
Head Style: #3 Phillips Truss Head	CRT16	16"	4"	500	83 lb
Coating: CR-10	ASSI	EMBLED	TOGO	LE BOL	TS**
Toggle Height: 1.25"	RST04**	4"	3"	250	28 lb
(Closed)	RST06_	6"	4"	250	33 lb
Toggle Spread: 2.25"	RST07_	7"	4"	250	36 lb
	RST08_	8"	4"	250	39 lb
*#3 phillips bit included in each carton.	RST10_	10"	4"	250	45 lb
**Indicate to your Olympic	RST12	12"	4"	250	50 lb
Sales Rep plate material	RST14	14"	4"	150	57 lb
and diameter.	RST16	16"	4"	150	61 lb
			Annual Control		



# Fast Facts

The Olympic Toggle Bolt is designed to attach insulation to gypsum, all cementitious wood fiber, Tectum® and lightweight concrete decks or decks where conditions require a positive locking fastener.

# **FEATURES & BENEFITS**

- •F.M. and Dade County approved.
- Assembled Toggle Bolt saves time and money on job.
- The Olympic Toggle Bolt is a positive locking fastener.
- •Each Olympic Toggle Bolt that is 6" or longer has 4" of thread.

### COATING

Olympic CR-10 corrosion resistant coating exhibits less than 15% red rust after 25 Kesternich cycles. CR-10 coating exceeds F.M. Approval Standard 4470.

# **PLATES & ACCESSORIES**

Use a 2" or 3" steel or plastic plate, depending upon the application. See Plates section.

Use a 3/4" carbide tip SDS or straight shank drill bit. See Accessories section.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

CD-10 Structural
Concrete Deck
Fastener

OLYMPIC FASTENERS

# PRODUCT DESCRIPTION

The Olympic CD-10 is a hammer-in, non-threaded fastener designed to secure insulation and single-ply membrane to structural concrete. This fastener is available in 2" - 12" lengths. The CD-10 is Factory Mutual and Dade County approved.

## **APPLICATION**

Predrill a 7/32" hole using an SDS or straight shank bit. The fastener is then installed with a 2 lb. short handle sledge hammer.

Minimum fastener embedment into the deck should be 1". The predrilled hole must be a minimum of 1/2" deeper than fastener embedment.

**Note:** Prior to job start, contact Olympic to perform a pullout test to determine the pullout values. Also, care must be taken not to overdrive the fastener causing subsequent damage to the insulation facer.

PHYSICAL	DATA	Cat: No.	Length	Packaging	Weight
		CD002	2"	500	12 lb
The data below is	constant for	CD212	2 1/2"	500	15 lb
each Olympic C[	D-10.	CD003	3"	500	18 lb
		CD312	3 1/2"	500	20 lb
Head Diameter:	.435	CD004	4"	500	23 lb
Head Height:	.125	CD412	4 1/2"	500	25 lb
nead neight.	.125	CD005	5"	500	28 lb
Head Style:	Flat Top Pan	CD512	5 1/2"	500	31 lb
Split Diameter:	.265/.275	CD006	6"	500	34 lb
Continu	on 10	CD007	7"	500	39 lb
Coating:	CR-10	CD008	8"	500	45 lb
1		CD009	9"	500	49 lb
		CD010	10"	500	55 lb
		CD011	11"	500	60 lb
50.5		CD012	12"	500	65 lb



# Fast Facts

The Olympic CD-10 is designed for attaching insulation and single-ply membrane to structural concrete.

# **FEATURES & BENEFITS**

- 45° point angle allows easier installation and less chance of hole damage.
- •Split bulb exerts pressure on walls of hole, producing remarkable holding power.
- •Strongest hammer-in fastener available.
- Typical pullout values in cured concrete (3000 psi) are 1000 lbs. to 1200 lbs. A pullout test is recommended.
- •The Olympic CD-10 is F.M. and Dade County approved.

### COATING

Olympic CR-10 corrosion resistant coating exhibits less than 15% red rust after 25 kesternich cycles. CR-10 coating exceeds F.M. Approval Standard 4470.

### **PLATES & ACCESSORIES**

2" or 3" steel or plastic plates, depending on application. See Plates section.

Use a 7/32" carbide tip SDS or straight shank drill bit.

# OLYMPIC FASTENERS

# ALSO CAN BE USED TO FASTEN INSULATION TO CONCRETE

### PRODUCT DESCRIPTION

The Olympic Heavy Duty Roofing Fastener is designed to secure insulation and single-ply membrane to heavy steel (18 ga. - 20 ga.). It is available in lengths from 1 1/4" - 16" in stock, longer lengths are made to order. The Olympic Heavy Duty Roofing Fastener is Factory Mutual and Dade County approved.

# **APPLICATION**

The Olympic Heavy Duty Roofing Fastener must penetrate the deck a minimum of 1/2". Using a screwshooter, drive the fastener until a slight depression is seen around the plate, or with very rigid insulation boards, watch for the plate to dimple.

**Note:** Care must be taken not to overdrive the fastener and fracture the skin of the insulation. Fastener must be tight enough so that the plate doesn't turn.

PHYSICAL DATA	Cat. No.	Length*	Thread Length	Packaging	Weight
The data halo, is constant	CR114	1 1/4"	Full	1000	12 lb
The data below is constant for each Olympic Heavy Duty	CR134	1 3/4"	Full	1000	16 lb
Roofing Fastener.	CRHD2	2"	Full	1000	18 lb
	CRHD3	3"	Full	1000	26 lb
Thread Diameter: .245	CRHD4	4"	3"	1000	34 lb
Shank Diameter: .190	CRHD5	5"	4"	500	21 lb
Head Diameter: .435	CRHD6	6"	4"	500	25 lb
Head Style: #3 Phillips	CRHD7	7"	4"	500	29 lb
Truss Head**	CRHD8	8"	4"	500	33 lb
Coating: CR-10	CRHD9	9"	5"	500	36 lb
	CRH10	10"	5"	500	40 lb
* Longer length fasteners are made to order.	CRH11	11"	5"	500	44 lb
	CRH12	12"	5"	500	49 lb
**#3 phillips bit included in each carton.	CRH14	14"	5"	500	57 lb
	CRH16	16"	5"	250	36 lb



# Fast Facts

The Olympic Heavy Duty Roofing Fastener is designed to secure insulation and single-ply membrane to heavy steel (18 ga. - 20 ga.) decks.

# **FEATURES & BENEFITS**

- Heavier shank & thread diameters than most "heavy duty" roofing fasteners.
- Deep thread for high pullout resistance.
- •Extra sharp point for quick installation in new or reroof applications.

# COATING

Olympic CR-10 corrosion resistant coating exhibits less than 15% red rust after 25 Kesternich cycles. CR-10 coating exceeds F.M. Approval Standard 4470.

### **PLATES & ACCESSORIES**

Use 2" or 3" steel or plastic plates, depending upon the application. See Plates section.

For best installation results, use AEG SCR1E-1 variable speed screw gun with 0-2500 rpm. See Accessories section.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

NTB-H Nylon Fastener

# OLYMPIC FASTENERS

# ALSO AVAILABLE WITH LOCKING WIRE BARBS TO PREVENT BACK OUT AND ADD PULLOUT RESISTANCE

### PRODUCT DESCRIPTION

The Olympic NTB-1H is a glass-filled nylon fastener with a 1" head. It is designed to secure insulation and single-ply membrane to gypsum, all cementitious wood fiber decks (Permadeck, Insulrock, Tectum®, etc.) and lightweight concrete decks.

The NTB-1H may be used with a 3" steel plate for insulation attachment. For single-ply membrane attachment, use a 2" barbed plastic plate, a 2" steel plate (with or without barbs) or batten bar.

The NTB-1H is available in 2 1/2" to 10" lengths.

The NTB-1H is Factory Mutual and Dade County approved.

# **APPLICATION**

The Olympic NTB-1H can be installed into Tectum® decks without predrilling. A pilot hole is required for gypsum, lightweight concrete and some cementitious wood fiber. Use a 7/16", 1/2" or 9/16" carbide tip drill bit. Diameter of drill bit is determined by pullout test results. Hole depth must be 1/2" deeper than minimum embedment.

Minimum fastener embedment into the deck should be  $1\,1/2$ " (2" recommended). NTB fastener should never penetrate the underside of the deck.

The use of a 3" plate is recommended for securing insulation.

**Note:** Prior to job bid, contact Olympic to perform a pullout test to determine drill bit size and the pullout values. Also, care must be taken not to overdrive the fastener causing subsequent damage to the insulation facer.

PHYS	ICAL DATA	Cat. No.	Length	Packaging	Weight
		NTB1025WO	2 1/2"	500	13 lb
	The data below is constant for each Olympic NTB-1H		3"	500	15 lb
each Olymp			3 1/2"	500	16 lb
		NTB1040WO	4"	500	18 lb
Head Size:	1" Diameter	NTB1045WO	4 1/2"	500	18 lb
Head Style:	Double Internal	NTB1050WO	5"	500	22 lb
,	Hex Drive	NTB1055WO	5 1/2"	500	23 lb
Major		NTB1060WO	6"	500	25 lb
Thread		NTB1065WO	6 1/2"	500	26 lb
Diameter:	.750	NTB1070WO	7"	500	27 lb
Thread:	3.5 T.P.I. Buttress	NTB1075WO	7 1/2"	500	28 lb
Material:	Glass-Filled	NTB1080WO	8"	250	14 lb
Maieriai.	Nylon	NTB1085WO	8 1/2"	250	15 lb
		NTB1090WO	9"	250	16 lb
		NTB1095WO	9 1/2"	250	17 lb
		NTB1100WO	10"	250	18 lb

# NTB-TM Rectory System Approved METRODALS

# Fast Facts

The Olympic NTB-1H with a 1" head is a glass-filled nylon fastener designed to secure insulation and single-ply membrane to gypsum, all cementitious wood fiber, Tectum® and lightweight decks.

## **FEATURES & BENEFITS**

- •Thread design & large root diameter:
- Increase pullout resistance
- Increase side shear strength
- Made from glass-filled nylon which:
- Eliminates corrosion
- Eliminates thermal bridging and condensation
- Yields high tensile strength
- •The Olympic NTB-1H is F.M. and Dade County approved.

# **PLATES & ACCESSORIES**

Use 3" steel plate, 2" barbed plastic plate, 2" steel plate (with or without barbs), or batten bar. See Plates section. Use a carbide tip drill bit for gypsum, lightweight concrete and some cementitious wood fiber applications.

# Lite-Deck Fastener



# PRODUCT DESCRIPTION

The Olympic Lite-Deck Fastener is designed to secure insulation to gypsum, all cementitious wood fiber decks (Permadeck, Insulrock, Tectum®, etc.) and lightweight concrete. It is available in lengths from 2 5/8"-12". The Olympic Lite-Deck Fastener is Factory Mutual and Dade County approved.

### **APPLICATION**

The Olympic Lite-Deck Fastener can be installed into cementitious wood fiber decks without predrilling. A pilot hole is required for gypsum and insulating concrete. Hole size is determined by pullout results.

The Olympic Lite-Deck Fastener must penetrate the deck a minimum of 2". Using a screwshooter, drive the fastener until a slight depression is seen around the plate, or with very rigid insulation boards, watch for the plate to dimple.

**Note:** Prior to job bid, contact Olympic to perform a pullout test to determine the pullout values. Also, care must be taken not to overdrive the fastener causing subsequent damage to the insulation facer. Fastener must be tight enough so that the plate doesn't turn.

PHYSICAL DATA	Cat. No.	Length	Thread Length	Packaging	Weight
	TFH258	2 5/8"	Full	500	31 lb
The data below is constant for each Olympic Lite-Deck Fastener.	TFHR3	3"	Full	500	35 lb
i usierier.	TFHR4	4"	3"	500	43 lb
Thread Diameter: .375 Shank Diameter: .310	TFHR5	5"	3"	250	28.5 lb
Head Diameter: .710	TFHR6	6"	3"	250	32.5 lb
Head Style: #3 Phillips Flat Head*	TFHR7	7"	3"	250	40 lb
Coating: CR-10	TFHR8	8"	3"	250	43 lb
*#3 phillips bit included in	TFHR9	9"	3"	250	50 lb
each carton.	TFH10	10"	3"	250	57 lb
	TFH12	12"	3"	250	67.5 lb

# LITE-DECK FASTENER Figure 1 Approved METRO DAGS

# Fast Facts

The Olympic Lite-Deck Fastener is designed to secure insulation to gypsum, Tectum® and lightweight concrete decks.

# **FEATURES & BENEFITS**

- •The Olympic Lite-Deck Fastener is F.M. and Dade County approved.
- •Deep, coarse thread provides high pullout resistance.
- •Can be installed into cementitious wood fiber decks without predrilling.

### COATING

Olympic CR-10 corrosion resistant coating exhibits less than 15% red rust after 25 Kesternich cycles. CR-10 coating exceeds F.M. Approval Standard 4470.

# **PLATES & ACCESSORIES**

A specially designed 3" steel plate or batten bar with holes 12" on center is to be used when securing insulation. See Plates section.

For best application results, use AEG TC18E-1 high torque variable speed screw gun. See Accessories section.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

**NC** Fastener

# OLYMPIC FASTENERS

#### PRODUCT DESCRIPTION

The Olympic NC Fastener is a nylon fastener with a preassembled nylon nut. This fastener is available with a 1" or 2" head diameter. It is designed to attach insulation and single-ply membrane to fiberglass reinforced plastics, light gauge metal and decks with highly humid or corrosive atmospheres.

The Olympic NC Fastener with a 1" head may be used with a 2" steel or plastic plate to secure single-ply membrane to the deck. The 1" head fastener can also be used with a 3" Galvalume® plate to secure insulation to the deck.

The Olympic NC Fastener with a 2" built-in stress plate may be used to secure single-ply membrane to the deck. The 2" head fastener can also be used with a 3" plastic plate to secure insulation to the deck.

The Olympic NC Fastener is Factory Mutual and Dade County approved.

#### **APPLICATION**

Using a high speed steel or centering drill bit, predrill a 7/16" hole through the entire deck. Install the NC Fastener into the hole, lightly tapping the fastener head to seat the nut into the deck. Using an AEG low rpm screw gun, drive the fastener until it sits tightly against the stress plate.

**Note:** Caution should be taken not to overdrive the fastener causing stress plate surface to deflect more than 1/16". Prior to job bid, contact Olympic to perform a pullout test to determine the pullout values.

PHYSICAL DATA		Cat. No.	Length	Packaging	Weight
		NC104	4"	500	14 lb
Head Diameter: 1" or 2"		NC106	6"	500	16 lb
Head Height:	.100 or .260	NC108	8"	500	18 lb
Head Style:	Double Internal Hex Head	NC110	10"	500	28 lb
		NC112	12"	500	34 lb
Material: Nylon		2" BUI	LT-IN ST	RESS PLA	TE
Body	idi. Nyion	NC204	4"	500	21 lb
Diameter:	.290	NC206	6"	500	25 lb
		NC208	8"	500	27 lb
		NC210	10"	250	19 lb
		NC212	12"	250	22 lb



# Fast Facts

The Olympic NC Fastener is designed for attaching insulation and single-ply membrane to fiberglass reinforced plastics, light gauge metal and decks with highly humid or corrosive atmospheres.

#### **FEATURES & BENEFITS**

- •The Olympic NC Fastener is made of a specially formulated nylon which:
- Eliminates thermal bridging.
- Eliminates fastener corrosion.
- Preassembled nut & bolt design offers:
- High pullout values in fiberglass reinforced decks and marginal metal decks.
- Increased back out resistance.
- The 2" built-in stress plate:
  - Reduces installation time.
  - Prevents fastener pop-up.
- •The Olympic NC Fastener is F.M. and Dade County approved.

#### **PLATES & ACCESSORIES**

There are various 2" and 3" plate combinations. See Plates section.

Use a high speed steel or centering drill bit.

# **Purlin Fastener**

# OLYMPIC FASTENERS

#### PRODUCT DESCRIPTION

The Olympic Purlin Fastener is designed for attaching singleply membrane systems to structural steel purlins (18-12 gauge) in standing seam metal roof retrofit applications.

The Olympic Purlin Fastener has a 3/4" drill point which allows the screw to quickly drill through the purlin before the threads engage into the standing seam metal roof. This greatly reduces point burnout and breakage as well as eliminates "gapping" between purlin and standing seam metal.

The Olympic Purlin Fastener is available in 3 3/4" to 8" lengths. The Olympic Purlin Fastener is Factory Mutual approved.

#### **APPLICATION**

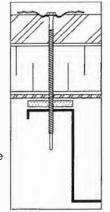
The Olympic Purlin Fastener must penetrate the purlin or bar joist a minimum of 1". This ensures a minimum of 1/4" thread penetration into the structural beam.

Using a screw gun with a maximum of 1800 RPM, drive the fastener through the purlin or bar joist until a slight depression is seen around the plate.

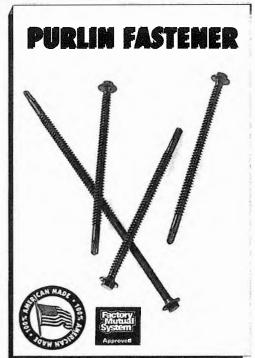
**Note:** Caution should be taken not to overdrive the fastener causing stress plate surface to deflect more than 1/16". Prior to job bid, contact Olympic to visit the job site and inspect the deck.

\*Hex head drive included in

each box.



PHYSICAL DATA	Cat. No.	Length	Packaging	Weight
The data below is constant	PUR334	3 3/4"	500	13 lb
for each Olympic Purlin	PUR434	4 3/4"	500	16 lb
Fastener.	PUR534	5 3/4"	500	20 lb
Thread Diameter: .205	PUR700	7"	500	23 lb
Shank Diameter: .168	PUR800	8"	500	28 lb
Head Diameter: .435 Head Style: 1/4" hex head* Coating: CR-10	Note: Each Purlin Fastener has a		ive	



### Fast Facts

The Olympic Purlin Fastener is designed for attaching single-ply membrane systems to structural steel purlins in standing seam metal roof retrofit applications.

#### **FEATURES & BENEFITS**

- •The Olympic Purlin Fastener drills through 24 gauge over 12 gauge steel in seconds
- •The 3/4" drill point allows the point to be drilled through the purlin before the threads engage into the the standing seam metal roof.
- Hex head snaps into Olympic Plastic Locking Plate.
- Low profile hex head has a smooth surface to ensure that there is no damage to the membrane.
- F.M. approved.

#### **PLATES & ACCESSORIES**

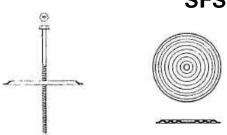
Use 2" steel barbed or 2" locking plastic plates. See Plates section.

For best installation results, use an AEG TC 18 low RPM drill. See Accessories section.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



### SFS Preassembled Metal ES



	Hex Head Fastener	
Material	Case Hardened Carbon Stee	
Thread Diameter	.189	
Shank Diameter	.155	
Head Diameter	5/16 "	
Head Style	Hex Head	
Point Type	Drill point	
Coating	Tuff-Tite II     Salt spray resistance - 500 hrs no corrosion     Kesternich, 30 cycles - Less than 15% red rust     Exceeds FM 4470	
Pull Out Load	552 lbs. 20 ga. Steel deck 505 lbs. 22 ga. Steel deck 311 lbs. 24 ga. Steel deck	





Material	AZ 55 Galvalume
Diameter	3"

# Preassembled ES Advantages: Rigid fixed preassembly insures

- perpendicular drive.
- Screw coating will not be compromised Fast installation with ES adaptor tools.
- Large 5/16" hex head for positive engagement in high torque applications
- Positive depth stop. Eliminates overdriven fasteners when installed with ES adaptor tools.
- Approved with torch applied, hot mop, and single ply applications

PART NO		ENGTH	THREAD LENGTH	PIECES/BOX	WEIGHT/BOX
IF2-3" S x 2		2	Full	500	34
IF2-3" S x 2	1/4	2 1/4	Full	500	35
IF2-3" S x 2	3/4	2 3/4	Full	250	18
IF2-3" S x 3	1/8	3 1/8	Full	250	19
IF2-3" S x 3	7/8	3 7/8	Full	250	20
IF2-3" S x 4	3/4	4 3/4	3 3/8	250	21
IF2-3" S x 5	1/2	5 1/2	4 1/8	250	22
IF2-3" S x 6	1/4	6 1/4	4 1/8	250	23

<sup>\*</sup> Additional lengths available upon request.

APPLICATION
Preassembled Metal ES Fasteners are designed for the attachment of rigid insulation surfaces used with torch applied, hot mop and single ply steel roof deck projects (18-24 ga.). To achieve maximum installation performance, Metal ES should be installed using an ES Adaptor Tool.

# SFS System ES-1 # 14HD Preassembled Fastener / Plate For Heavy Duty Insulation Attachment





#14-10 Phi	lips Head Fastener
Material	Case Hardened Carbon Steel
Thread Diameter	.245
Shank Diameter	.190
Head Diameter	.435
Head Style	#3 Deep recess phillips
Point Type	Drill point
Coating	Tuff-Title II Salt spray resistance - 500 hrs no corrosion Kesternich, 30 cycles - Less than 15% red rust Exceeds FM 4470
Pull Out Load	490 lbs. 22 ga Steel deck 690 lbs. 3/4" Plywood 890 lbs. 5500 psi. Concrete





Plastic Stress Plate				
Diameter	3"			
Material	HDPE			
Melt Index	+ 650 F			
Brittleness	- 100 F			

System ES is a preassembled screw and plate. A second set of threads directly beneath the head of the screw tap into an anti-rotational stress plate. This patented design offers the following technical advantages:

- Eliminates fastener backout
- Eliminates fastener pop-up
- Cannot be driven at an angle
- Approved for hot mop and single ply
- Eliminates overdriven fasteners

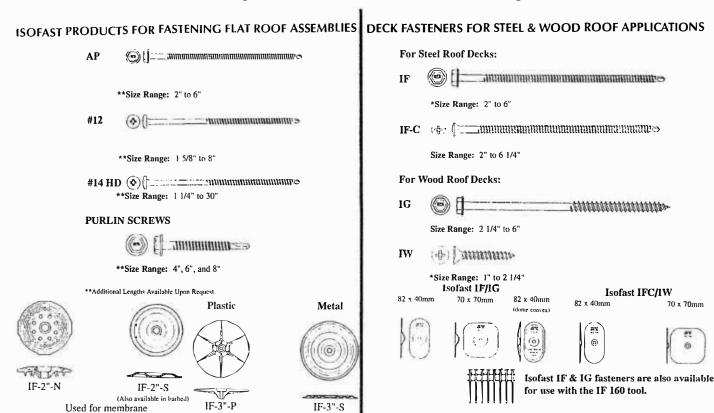
PART NO.	LENGTH	THREAD LENGTH	PIECES/BOX	WEIGHT/BOX
14-10 x 2	2	1 -1/2	500	23
14-10 x 3	3	2	250	13
14-10 x 4	4	3	250	16
14-10 x 5	5	4	250	17
14-10 x 6	6	4	250	19
14-10 x 7	7	4	200	17
14-10 x 8	8	4	200	20
14-10 x 10	10	4	100	11
14-10 x 12	12	4	100	13

#### APPLICATION

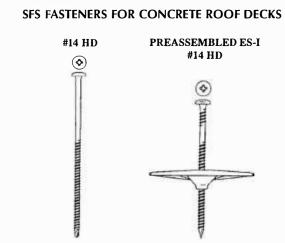
Preassembled ES Fasteners are designed for the Heavy Duty attachment of insulation to steel decks (18-24 ga.) wood and structural concrete. To achieve maximum installation performance, Preassembled ES Fasteners should be installed using an ES Adaptor Tool.

# **SFS**

# SFS Fastening Systems For The Roofing Industry

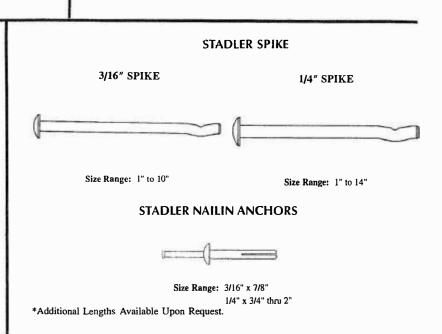


Used for insulation.



\*Size Range: 2" to 12"

\*Size Range: 1 1/4" to 16"

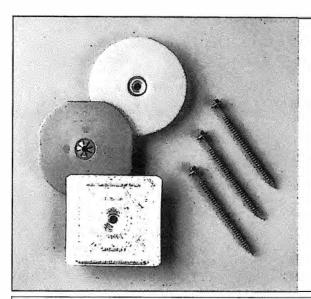


\*Also Available in Stainless by special order.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# S|C|H|U|L|L|E|R Roofing Systems

### **UltraFast Fasteners & Plates**



#### **Application**

UltraFast Fasteners shall be installed through UltraFast Metal or Locking Plastic Plates at Factory Mutual usage rates and patterns appropriate for the size and type of insulation.

An ITW Buildex Accudrive XL or a standard screwgun with a disengaging clutch should be used to install UltraFast Fasteners. The screwgun should have an RPM range of 1,800 - 2,500 only.

UltraFast must penetrate the metal or wood deck a minimum of  $\frac{1}{2}$ " (13 mm). UltraFast is fully seated when the head is tight against the metal plate, or snaps into the UltraFast Locking Plastic Plates. UltraFast should not be overdriven as to cause the plate surface to deflect more than  $\frac{1}{2}$ " (1.6 mm). Overdriven fasteners will significantly reduce fastener and plate performance and corrosion resistance and/or strip the deck. Cupped plates, caused by overdriving fasteners, will also damage the membrane. Underdriven fasteners will not distribute the load over the plate properly.

#### Description

UltraFast Mechanical Fasteners for roof insulation are #12 diameter, hex washer head fasteners with a modified buttress thread form, "X"-point tip and blue Climaseal® Premium Coating.

UltraFast is manufactured from case hardened st el and coated with SPEX, a polymer coating. A second, metal filled, premium, polymer coating called Climaseal is then applied over the SPEX coating.

UltraFast Locking Plastic Plates are blue, 3" (76 mm) round, high strength palyolefin plates with a patented locking feature for use with UltraFast Fasteners.

 $\label{thm:continuous} \mbox{UltraFast Galvalume Metal Plates are 3" (76 mm) square, premium Galvalume metal plates for use with UltraFast Fasteners.}$ 

GlasFast Plastic Plates are red, 3" (76 mm) octagonal, high strength polyolefin plates with a recess cavity for the fastener head. They are strictly for use with Schuller Fiber Glass Roof Insulation.

#### Use

UltraFast Fasteners and Plates are used to attach roof insulation to either metal (16-22 gauge [1.5 mm - 0.8 mm]), or wood decks. The screw and plate system provides positive attachment and resistance to up-lift forces. UltraFast Mechanical Fasteners for roof insulation are the fasteners approved to install Schuller roof insulation within any Schuller Roofing System Guarantee, either penal sum or NDL.

#### Advantages

- Hex washer head improves driveability
- Buttress thread design provides maximum pullout values and minimizes fastener pullout
- Thread length permits attachment of insulation through high or low rib of roof deck
- Patented "X"-point provides unsurpassed drilling
- UltraFast exceeds the corrosion resistance standards of Factory Mutual Specification #4470 for Class 1A Insulated Steel Deck Construction, including Windstorm Resistance I-60 and I-90 Classification. UltraFast is also approved for use in Dade County, Florida.

#### Sizes

Available in a wide range of screw lengths, ranging from 1%" (41 mm) for insulation (top flange) thicknesses of ½" to 1%" (13 to 29 mm) up to 14" (356 mm) for thicknesses up to 10%" to 13%" (260 to 343 mm).

Also available in lengths of 3% (83 mm) to 14" (356 mm) for insulation (top or bottom flange) thicknesses from 1" to 1%" (25 to 32 mm) up to 10%" to 12" (260 to 305 mm).

UltraFast Galvalume Metal Plates - 3" (76 mm) square.

UltraGrip Plastic Plates for roof insulation – orange, 3" (76 mm) round, high strength polyolefin plastic.

Refer to the Material Safety Data Sheet and Product Label prior to using this product.



# #14 HD Stainless Steel Drill Point Fastener

• Alloy: Stainless steel (TrimRite\*) UNS 42010. The alloy used in HD Drill Point Stainless Steel Fasteners is generically called 14Cr-1ni-1mo. (14% Chrome - 1% Nickel - 1% Molybdenum).

Compositional requirements meet ASTM 493 alloy \$42016.

 $TrimRite^{t}$  stainless is balanced to be fully martensitic in the hardened condition and is magnetic in all conditions.

• Corrosion Resistance: ASTM-B117 - 95°F 5% salt (NAC1) for 200 hours.

ASTMB368 (cass test) copper acidified salt spray (light staining allowed) 22 hours.

Kesternich - DIN 50018 SFW 2.0S 30 cycles

. Drilling Capability: RC 50-52 Hardness Self drilling point

Factory Mutual Systems Approved: JI-1H2Ao.AM, JI-0J9Al.AM, JI IGIAE.AM. 18 ga.- 20 ga. - 22 ga. metal decks, wood decks and reroot steel decks.

• Uses: Predominately steel (16 ga. - 22 ga.). Also Factory Mutual approved for wood decks.

Part No.	Screw Length*	Thread Length*	Pieces/Box	Weight/Box
HD-1500-SS	1 1/2	FULL	1000	14#
HD-2000-SS	2	FULL	1000	18#
HD-3000-SS	3	FULL	1000	26#
HD-4000-SS	4	3 7/8	1000	31#
HD-5000-SS	5	3 7/8	1000	42#
HD-6000-SS	6	3 7/8	1000	47#
HD-7000-SS	7	3 7/8	500	27#
HD-8000-SS	8	3 7/8	500	30#
HD-9000-SS	9	3 7/8	500	34#
HD-10000-SS	10	3 7/8	500	38#
HD-11000-SS	11	3 7/8	500	43#
HD-12000-SS	12	3 7/8	500	45#

	0.095	SCREW LENGTH
	0.475 0.430 BIA	1/6 RE
PHILLIPS TRUS	S HEAD	13 SINGLE LEAD THREADS/INCH & TWO-FLUTE FORMED ORIFL TIP

Pull-ou	t Values in Steel	Pull-out Values in Wood
		1/2" Plywood-442 lbs.
20 Ga	656 lbs.	3/4" Plywood-495 lbs.
22 Ga	472 lbs.	Wood Plank
24 Ga	. ~ 347 lbs.	1" Embedment-517 lbs.

 A threaded fastener at root diameter .150 nominal = 4500 lbs. ultimate tensile force.

 A threaded fastener at root diameter .150 nominal = 3000 lbs. ultimate shear force.



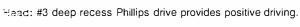
Screw length = ± 1/16\* Thread length = ± 1/16\*

#### **Room Temperature Mechanical Properties:**

(wire and small bar 1/2" diameter and less)

Properties	Annealed	Hardened*
02% Yield Strength  KSi  MPa	57 394	184 1270
Tensile Strength  KSi  MPa	94 650	260 1800
% Elongation (in 1")	35	14
% Reduction of Area	68	52
Hardness	В87	C50
*1900°F 15 minute aircool plus 400°F hr, A	.c	





Threads: 11 twin lead threads per inch. Twin lead threads are two complete sets of threads, one opposite the other. This provides faster drilling, and perpendicular entry into the deck.

Corrosion Protection: TRU-KOTE ™ PC-3 coating meets or exceeds FM4470 corrosion standards and withstands 30 cycles of the Kesternich DIN 50018 SFW 2.0 test.

Back-out Resistance - tacered wedge entry: The sharp rolled (Gimlet) point combined with twin lead threads penetrate steel or wood decks actually pulling and forcing the fasteners entry, wedging it tightly to provide back-out resistance. RESULTS! No costly call backs.

Thread Point: A sharp rolled (Gimlet) point to drill wood or 20 ga. - 22 ga. steel

STEEL	WOOD
Pull-out Values	Pull-out Values
20 Ga 560 lbs.	1/2" Plywood - 348 lbs.

Note: All tests were conducted by an independent testing laboratory. Results of these tests are offered only as a guide and are not guaranteed in any way by TRUFAST CORPORATION. Designated holding values depend on the quality of materials being anchored to TRUFAST CORPORATION recommends that pull-out tests be conducted to verify that the substrate provides adequate pull-out values.

#### **DL Drill Point Fastener**

Heads: Low profile #3 deep recess Phillips drive provides positive driving.

The add the

Threads: 11 deep single lead threads per inch. Universal use with wood, steel or concrete. (Concrete - predrill with a standard 3/16"masonry bit)

Corrosion Protection: TRU-KOTETM PC-3 torque coating meets or exceeds FM4470 corrosion standards. Formulated to enhance back-out resistance and withstand 30 cycles of the Kesternich DIN 50018 SFW 2.0 test.

Back-out Resistance - tapered wedge entry: Exclusive TRU-FAST TAPERED ENTRY action wedges the screw tightly into the deck providing back-out resistance. **RESULTS:** No costly call backs.

Sharp Drill Point: Drill point drills a hole slightly smaller in diameter than the root diameter (shaft of screw in threaded area) to assure full thread depth for increased holding power even in 14 ga. steel.

STEEL	WOOD			
Pull-out Values				
Roof Decking '8 Ga - 801 lbs.	3/4* 5 - Ply Plywood			
20 Ga 598 lbs	499 lbs			
22 Ga 432 lbs.	1			

Note: All tests were conducted by an independent testing laboratory Results of these tests are offered only as a guide and are not guaranteed in any way by TRU-FAST CORPORATION. Designated holding values depend on the quality of materials being anchored to TRU-FAST CORPORATION recommends that pull-out tests be conducted to verify that the substrate provides acequate pull-out values.





# **Metal & Plastic Stress Plates**









Metal Stress Plates

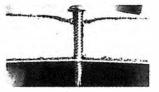
Formed from 26 gauge Galizalume 1 steel. They are equally effective when used for either BUR or single ply reofing systems.

Plastic Stress Plates

High impact resistant Tru-Fast plastic stress plates are for use with virtually all types of insulation board used for roofing systems, however, they should not be used for roofing systems which require direct heat to the plastic plate







using a Tru-Fast DPH (Drill Point Hex) Screw

Cross section of installation with a metal stress plate using a Tru-Fast TP (Threaded Point) Screw.

Cross section of installation with a plastic stress plate using a Tru-Fast DP (Drill Point) Screw.

CTDECC			ROO	FING SYS	STEM		
STRESS L PLATE TYPE		I		SING	LE PLY		
	BUR	Adhered Hot Asphalt	Loose Laid Ballosled	Partially Adhered	Totally Adhesed	Mechanically Attached	Torch
METAL	1	1	1	1	1	1	1
PLASTIC			1	1	1	1	

Specify TRU-FAST Stress Plates with confidence. Both metal and plastic types are FM Approved and mate perfectly with all types of Tru-Fast Screws.

# **Galvalume Coated Steel Batten Bar**

#### BB-18 BATTEN BAR FLAT

Material: 18 gauge Galvalume Steel without sharp edges.

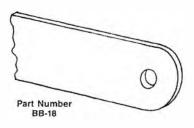
Dimensions

.043" (min.) thick x 1" wide x 121" long per piece.

1/4" diameter round holes on 12" centers.

Packaged: 50 pieces per tube.

Approx. Shipping Weight:



#### BB-18-R BATTEN BAR RECESS HOLES

Material: 18 gauge Galvalume Steel without sharp edges.

Dimensions

.043" (min.) thick x 1" wide x 121" long per piece.

Holes: 1/4" diameter round holes on 12" centers.

Packaged: 50 pieces per tube.

Approx. Shipping Weight: 81 pounds per tube.



Part Number

BB-18-R

We at Tru-Fast believe our customers deserve the best All Termination Bars are specially manufactured of high quality material using modern methods, equipment and tooling to assure a high quality product.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



# **Aluminum Extrusions With Mill Finish**

#### Specifications

#### TB-50 TERMINATION BAR - With sealant ledge

Material: Specially extruded aluminum without sharp edges.

Dimensions:\* .050 thick x 1" wide x 10' long per piece.

Holes: 1/4" x 3/8" slotted holes on 6", 8" or 12" centers

Packaged: 50 pieces per tube.

Approx. Shipping Weight: 45 pounds per tube



#### TB-75 TERMINATION BAR - With sealant ledge

Material Specially extruded aluminum without sharp edges.

Dimensions:\* .075 thick x 1" wide x 10' long per piece.

Holes: 1/4" x 3/8" slotted holes on 6", 8" or 12" centers.

Packaged: 50 pieces per tube.

Approx. Shipping Weight: 51 pounds per tube.



#### TB-85 TERMINATION BAR - With sealant ledge

Material: Specially extruded aluminum without sharp edges

Dimensions:\* .085 thick x 1" wide x 10' long per piece.

Holes: 1/4" x 3/8" slotted holes on 6", 8" or 12" centers.

Packaged: 25 pieces per tube.

Approx. Shipping Weight: 43 pounds per tube.



#### TB-90 TERMINATION BAR - Flat

Material: Specially extruded aluminum without sharp edges.

Dimensions:\* .090 thick x 1" wide x 10' long per piece

Holes: 1/4" x 3/8" slotted holes on 6", 8" or 12" centers.

Packaged: 50 pieces per tube.

Approx. Shipping Weight: 57 pounds per tube.



#### TB-100 TERMINATION BAR - With sealant ledge

Material: Specially extruded aluminum without sharp edges.

Dimensions:\* .100 thick x 1" wide x 10' long per piece.

Holes: 1/4" x 3/8" slotted holes on 6", 8" or 12" centers.

Packaged: 50 pieces per tube.

Approx. Shipping Weight 68 pounds per tube.



#### TB-120 TERMINATION BAR - With double flat sealant ledge

Material: Specially extruded aluminum without sharp edges.

●imensions.\* 1" wide x 10' long per piece.

Holes: 1/4" x 3/8" stotted holes on 6", 8" or 12" centers.

Packaged: 50 pieces per tube.

Approx. Shipping Weight: 60 pounds per tube.



#### TB-125 TERMINATION BAR - Flat

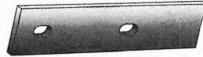
Material: Specially extruded aluminum without sharp edges

Dimensions:\* .125 thick x 1" wide x 10' tong per piece.

Holes: 1/4" x 3/8" slotted holes on 6", 8" or 12" centers.

Packaged: 50 pieces per tube.

Approx. Shipping Weight: 78 pounds per tube.



#### RD-100 RETAINING DRAINBAR -

For use with ballasted or non-ballasted systems

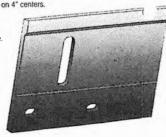
Material: Specially extruded aluminum without sharp edges.

Dimensions: 100 thick x 3 1/2" wide x 10' long per piece.

Mounting Holes: 1/4" x 3/8" slotted mounting holes on 6" centers Drainage Holes: 3/8" x 1-1/2" slotted drain holes on 4" centers.

Packaged: 10 pieces per bundle.

Approx. Shipping Weight: 42 pounds per lube.



(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

# HAMMER DRIVE ANCHORS



he body of the hammer drive anchor is made from high grade Zamac 3 zinc alloy (which provides you with high pullout values). It is rustproof and designed to virtually eliminate embrittlement which frequently occurs in lower grades of zinc alloy. Good for applications in concrete, brick, block or stone, the hammer drive comes assembled and provides for a quick and easy fastening in medium and light duty jobs. Hammer drives have a mushroom head, are relatively tamperproof, and are available with both the standard zinc plated steel and stainless steel nails depending upon the application requirements.

# ORDERING INFORMATION

HAMMER DRIVES WITH ZINC PLATED NAILS					
ITEM CODE	ANCHOR DIAMETER & LENGTH	HOLE SIZE	GRIP RANGE	BOX / CTN QUANTITY	WEIGHT (LBS.) PER 100
H3107	3/16" x 7/8"	3/16"	0-1/8"	100/1000	1.15
H1406	1/4" x 3/4"	1/4"	0-1/8"	100/1000	1.70
H1410	1/4" x 1"	1/4"	1/8" - 1/4"	100/1000	2.00
H1412	1/4" x 1 1/4"	1/4"	1/4" - 1/2"	100/1000	2.35
H1414	1/4" x 1 1/2"	1/4"	1/2" - 3/4"	100/1000	2.65
H1420	1/4° x 2"	1/4"	3/4" - 1 1/4"	100/1000	3.35

HAMMER DRIVES WITH STAINLESS STEEL NAILS					
ITEM	ANCHOR DIAMETER	HOLE SIZE	GRIP	BOX / CTN	WEIGHT (LBS.)
CODE	& LENGTH		RANGE	QUANTITY	PER 100
H1406S	1/4" x 3/4"	1/4"	0 - 1/8"	100/1000	1.64
H1410S	1/4" x 1"	1/4"	1/8" - 1/4"	100/1000	2.00
H1412S	1/4" x 1 1/4"	1/4"	1/4" - 1/2"	100/1000	2.35
H1414S	1/4" x 1 1/2"	1/4"	1/2" - 3/4"	100/1000	2.65
H1420S	1/4" x 2"	1/4"	3/4" - 1 1/4"	100/1000	3.35

GSA Spec. FF-S-325, Group V, Type 2, Class 3

FSI STOCKS
COMPLETE LINE
OF
FIRESTONE
FASTENERS
AND
TERM BAR

FSI
ALSO
STOCKS
NYLON
NAIL INS
FROM
1" TO 6"

### **Peel Rivet**

# **TPR Fasteners & Installation Systems**

#### A Fastener that won't Back Out

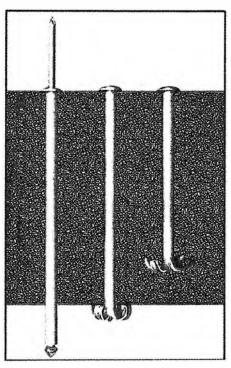
Thenewpeelrivet, TPR\*, offers a unique solution to the problems associated with the mechanical attachment of commercial roofing materials and systems. Designed to curl tightly either inside or undermeath the roof deck, the TPR's fingers create a gripping area four times wider than the fastener itself. Unlike threaded fasteners which depend on their thread width for holding p; the TPR has no threads and can back out ... ever.

#### Saperior Corrosion Resistance

The TPR is made from an aircraft-grade, high magnesium aluminum alloy that can't rust and is extremely resistant to corrosion, even in the harshest environments. That's why we are able to warrant the TPR for 15 years against corrosion, as well as back-out.

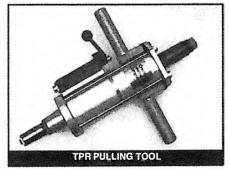
#### A Fastener for all Systems

The TPR can be used to secure virtually all roofing systems including concrete, wood and metal. It is particularly well suited for lightweight decks where conventional threaded fasteners can't achieve sufficient pull-out values. And because the TPR is automatically set with even compression, it cannot be overdriven.



The TPR is installed using two pneumatic tools — a Driving Tool for driving the fastener into the deck — and a Pulling Tool for setting the rivet:



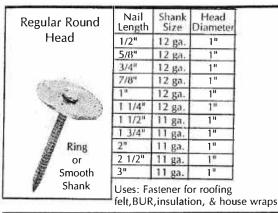


TPR FAS	TENERS	& PLATES	TPR TOOLS & ACCESSORIE		PULL TEST DA	ATA
Item #	Descri	ption	Item#	Description	Deck Type	Lbs. Pull
TPR-1 1/2 TPR-2	1 1/2" 2"	Peel Rivet Peel Rivet	TPR-DT TPR-PT	Driving Tool Pulling Tool	22 ga metal	766
TPR-3 TPR-4	3" 4"	Peel Rivet Peel Rivet	TPR-MC	Mandrel Container	26 ga metal	618
TPR-5	5*	Peel Rivet			1/2" ply <b>w</b> ood	565
TPR-6 TPR-7 TPR-8	6" 7" 8"	Peel Rivet Peel Rivet Peel Rivet	Emglo	Model #D8GA17P Compressor recom-	Tectum (underside)	374
TPR-9	9"	Peel Rivet		mended by SPC	Tectum (inside)	335
TPR-10	10*	Peel Rivet		Critical performance factors are delivery of	Gypsum (underside)	507
SP-2	2*	Membrane Plate	1	minimum 110 psi and 15.3 cfm.	Gypsum (inside)	415
SP-3	3*	Insulation Plate			Loadmaster std.	605

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



# **Simplex Nails**



Insulation Round	3"	9 ga.	1"	
Head 🕌	3 1/2"	9 ga.	1"	
1	4"	9 ga.	1"	
/	5"	9 ga.	1"	
	6"	8 ga.	1"	
	7"	8 ga.	1"	
∦ Ring	8"	8 ga.	1"	
∫ or Smooth	Uses: E	BUR appli	cations and o	othe

Smooth Shank Uses: BUR applications and other applications where thick insulations are

attached to wood substrates. Available in ring shank or smooth shank.

Masonry Round	3/4"	
Head Fluted	1"	
Shank	1 1/4"	
	1 1/2"	
	1 3/4"	
· • ·	2"-6"	
	Uses: N or mort	a

3/4"	9 ga.	1"
1"	9 ga.	1"
1 1/4"	9 ga.	1"
1 1/2"	9 ga.	1"
1 3/4"	9 ga	1"
2"-6"	9 ga	1"

Uses: Masonry fasteners drive easily into concrete or mortar joints. Used for applying flashing to parapet or curtain walls also used for water

proofing applications in block foundations below grade.

Т	Gypsum Deck
	Nail
	8
	#
	#

1 1/2"	12 ga.	1"
1 3/4"	12 ga.	1"
2"	12 ga.	10

Uses: Used for fastening systems in wet gypsum decks. Unique four sided cut nail design increases holding power in gypsum decks.

3/4"	12 ga.	111
7/8"	12 ga.	1"
1"	12 ga.	1"
1 1/4"	12 ga.	1"
1 1/2"	12 ga.	1"
1 3/4"	12 ga.	1"
	7/8" 1" 1 1/4" 1 1/2"	7/8" 12 ga. 1" 12 ga. 1 1/4" 12 ga. 1 1/2" 12 ga.

Uses: For attaching felt and insulation to roof decks.





Nail Length	Shank Size	Head Diameter
3/4"	12 1/2 ga.	1"
7/8"	12 1/2ga.	1"
111	12 1/2 ga.	1"
1 1/4"	12 1/2 ga.	1"
1 1/2"	12 1/2 ga.	1"
1 3/4"	12 1/2 ga.	1"
2"	12 ga.	1"
2 1/2"	12 ga.	1"
3"	12 ga.	1"

Uses: For fastening applications of roofing felt, insulation, house wraps,&

polyfilm. Manufactured from high strength polymer plastic.

Nail Length	Tube Dia	Head Diameter
1"	.108	1"
1 3/4"	.108	1"
2 1/2"	.108	1"
3"	.108	1"
3 1/2"	.108	1"
4 1/2"	.108	1"
5 1/2"	.108	1"
6 1/2"	.108	1"

Uses: Effective attachment of roofing products to low and steep slope decks fabricated from gypsum, cellular and

aggregate lightweight concrete, cementitious wood fiber and other lightweight deck assemblies.



Patented

1 3/4"

Uses: The Simplex Base-Lok is used to secure base sheet to aggregate light-weight concrete, cellular lightweight concrete decks. Easy to install one piece fastener manufactured from engineered plastic.

Zanchors		Dia
Drive Nail	7/8"	3/1
Masonry Anchors	1"	1/4
. 9	1 1/4"	1/4
1	1 1/2"	1/4
37-	1 3/4"	1/4
1	2"	1/4
1/	Uses: Fo	r atta

Uses: For attaching items to concrete, block, brick, and stone. Pins available in carbon steel and stainless steel.



Uses: The Simplex disc is used in conjunction with other Simplex products to increase the rupture values of insulation and base sheets. This product is manufactured from galvalume coated steel to provide top quality corrosion resistance.

<sup>\*</sup> Approximate Count Per LB

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

### **NAILS**

# THREADED NAILS

SCREW SHANK RING BARB

FLAT HEAD DIAMOND POINT · SCREW SHANK · RING BARB

Penny Size	Length	Gauge	Shank Dia.	SS Head Dia.	Bronze & Monel Head Dia.	Approx. Count/Lb
	5/8	16	.065	11/64	13/64	1480
-	3/4	16	.065	11/64	13/64	1175
-	3/4	15	.072	11/64	13/64	1050
-	3/4	14	.083	13/64	15/64	757
-	3/4	12	.109	1/4	9/32	416
-	7/8	14	.083	13/64	15/64	657
1,=	7/8	12	.109	1/4	9/32	373
2d	1	15	.072	11/64	13/64	807
-	1	14	.083	13/64	15/64	622
: 3	1	12	.109	1/4	9/32	355
3d	11/4	14	.083	13/64	15/64	473
	11/4	12	.109	1/4	9/32	272
-	11/4	10	.135	9/32	11/32	147
-	11/2	14	.083	13/64	15/64	413
4d	11/2	12	.109	1/4	9/32	228
) (+++)	11/2	10	.135	9/32	11/32	148
5d	13/4	12	.109	1/4	9/32	193
	13/4	10	.135	9/32	11/32	130
2.5	2	12	.109	1/4	9/32	175
6d	2	11	.120	17/64	19/64	144
	2 2 2 2	10	.135	9/32	11/32	114
		8	.165	11/32	13/32	75
-	21/4	12	.109	1/4	9/32	165
- 5	21/4	10 8	.135	9/32	11/32	94 65
1	21/ <sub>4</sub> 21/ <sub>2</sub>	12	.165 .109	11/32 1/4	13/32 9/32	138
8d	21/2		.109	9/32	11/32	94
ou	21/2	10 8	.165	11/32	13/32	62
-	3	10	.135	9/32	11/32	79
10d	3	9	.133	5/16	3/8	67
100	3	8	.165	11/32	13/32	51 0
100	3	6	.203	13/32	15/32	33
16d	31/2	8	.165	11/32	13/32	44 SILI
100	372	'	.105	11/02	10/02	25 300

# COMMERCIAL BRONZE SILICON BRONZ 304 STAINLESS 316 STAINLESS

# **ALUMINUM TRIM NAILS**

1 LB. BOXES AND 1/4 LB. BOXES

LENGTH	SHANK DIA.	HEAD DIA.	APPROX. COUNT/LB.	
1. "	.099	3/16"	1320	
11/4"	.099	3/16"	981	

## STAINLESS STEEL TRIM NAILS

1 LB. BOXES AND 1/4 LB. BOXES

LENGTH	SHANK DIA.	HEAD DIA.	APPROX. COUNT/LB.
1 "	.072	11/64"	795
11/4"	.072	11/64"	649

NOTE

ALL TRIM NAILS AVAILABLE IN MANY COLORS, OTHER SIZES AND SPECIAL PACKAGING

#### ALUMINUM SIDING NAILS

1 LB. BOXES AND BULK

LENGTH	SHANK DIA.	HEAD DIA.	APPROX. COUNT/LB.
1 "	.120	3/8"	810
11/4"	.120	3/8"	686
11/2"	.120	3/8"	577
13/4"	.120	3/8"	497
2 "	.120	3/8"	437
21/4"	.120	3/8"	389
21/2"	.120	3/8"	360

AVAILABLE PLAIN SHANK AND SCREW SHANK

# WOOD SIDING NAILS

T-304 STAINLESS STEEL Maria de de la compansión de la compansi

RING BARB • CHECKERED-SINK HD. NAIL LENGTHS AND NUMBERS PER POUND

SIZE OR EQUIV.		ss Steel ding Nails	Aluminum Wood Siding Nails		
	Length (Inches)	Nails Per Pound	Length (inches)	Nails Per Pound	
6d	17/8	270	17/8	566	
7d	21/8	227	21/8	468	
8d	23/8	201	23/8	319	
10d	27/8	140	27/8	215	
16d	31/2	70	31/4	120	
	1		100		

- BULK PACKAGED IN 50 LB. BOXES. AVAILABLE PAINTED REDWOOD FOR REDWOOD SIDING.
- · AVAILABLE PAINTED TAN FOR CEDAR SIDING
- AVAILABLE IN MANY OTHER COLORS. RECOMMENDED BY THE CALIFORNIA REDWOOD ASSOCIATION

PLAIN SHANK · FLAT HEAD · DIAMOND POINT

COMMON NAILS

6

Nails Per Pound	Size	Length	Gauge	Dia.	Dia.	Count/Lb.
566	2d	1	15	.072	11/64	807
468	3d	11/4	14	.083	13/64	473
	4d	11/2	12	.109	1/4	228
319	5d	13/4	12	.109	1/4	193
215	6d	2	11	.120	17/64	144
120	8d	21/2	10	.134	9/32	94
	10d	3	9	.148	5/16	67
	16d	31/2	8	.165	11/32	44
OMMERCIAL BRONZ	20d	4	6	.203	13/32	25
SILICON BRONZE	30d	41/2	5	.220	7/16	18
304 STAINLESS 316 STAINLESS	40d	5	4	.238	15/32	14
310 STAINLESS	60d	6	4	.284	17/32	13
	-					

.203

13/32

15/32

THREADED COMMON NAILS HOLD LIKE WOOD SCREWS AT A COST ONLY SLIGHTLY GREATER THAN PLAIN SHANK NAILS

COMMERCIAL BRON



# Stainless Steel & Copper Alloy Nails & Screws

# FASTENER PACKAGING

All Swan Secure Products are put up in containers befitting the high quality of their contents.

#### NAIL PRODUCTS:

- 25 Lb and 50 Lb Corrugated Bulk Cartons
- 5 Lb Corrugated Boxes in 10-Box Masters
- 1 Lb Corrugated Boxes in 30-Box Masters
- 1 Lb Clear Plastic Reusable Boxes with "Living Hinge"

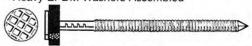
#### SCREW PRODUCTS:

- Bulk Packed by Piece-Count in Corrugated Cartons Averaging 25 Lbs
- 1 Lb Corrugated Boxes in 30-Box Masters
- 100 Piece Count Boxes in 30-Box Masters
- 1 Lb or 100 Pieces in Clear Plastic Reusable Boxes with "Living Hinge"

# Swan Secure Washered Roofing Nails

#### 304 Stainless Steel

- Annular Thread Large Checkered Head
- Heavy EPDM Washers Assembled



Length	Gauge	Shank Ola.	Head Dia.	Approx. Count/Lb.	List Price/Lb.
2	10	.134	3/8	98	9.65
21/2	10	.134	3/8	83	9.55
3	10	.134	3/8	72	9.45
31/2	10	.134	3/8	62	9.30
4	10	.134	3/8	53	9.00

- Best for application of asphalt panel roof systems particularly in corrosive environments and seaside installations.
- Also recommended for longest life from galvanized sheet metal roofing and siding.
- Standard washer dimensions: 9/16" O.D. x 1/8" thick.
- Annular ring threads and large resilient EPDM washers combine to provide permanent, weathertight fastening.

### PILOT HOLE GUIDE FOR ANNULAR THREAD NAILS

Though pilot holes aren't always necessary, bent nails and split wood can be reduced to a minimum or eliminated by pre-drilling in accordance with this guide. Recommended pilot hole depth is three-fourths the length of the nail used.

Nall Gauge	Nominal Diameter (Before	Hard Pilot Hole	Wood Oriti No.	Soft 1 Pilat Hoin	Mood Drill No.
-11	shreading)		200		(S)(C)
14	.083	.076	48	.059	53
12	.109	.101	38	.076	48
10	.134	.120	31	.089	43
8	.165	.149	25	.120	31

# **Swan Secure Roofing Nails** (Slating Nails)

Copper or 304 Stainless Steel

- Large Flat Head Smooth Shank
- Diamond Point



16	20	Shank		Copper			304 Steinles	
Longth	Gande	Dia.	Mead Dia.	Apprex, Count/Lb.	Price/Lb.	Head Dia.	Approx.	Price/Lb
34	12	.109	21/64	360	5.25	5/16	380	8,50
1	12	.109	21/64	288	5.25	5/16	348	8.20
11/4	12	.109	21/64	236	5.25	5/16	255	8.10
11/2	12	.109	21/64	202	5.25	5/16	218	8.05
134	12	.109	21/64	176	5.25	5/16	189	8.00
2	12	.109	21/64	156	5.25	5/16	170	8.00
3/4	11	,120	3/8	302	5.25	1 1/32	323	8.20
1	11	.120	3/8	229	5.25	11/32	244	8.10
11/4	11	.120	3/8	187	5.25	11/32	199	8.00
11/2	11	.120	3/8	155	5.25	11/32	170	7.95
1%	11	.120	3/8	139	5.25	11/32	149	7.95
2	11	.120	3/8	124	5.25	11/32	136	7.95
1	10	.134	7/16	187	5.25	3/8	212	7.95
11/4	10	.134	7/16	147	5.25	3/8	166	7.95
11/2	10	.134	7/16	123	5.25	3/8	139	7.95
13/4	10	.134	7/16	112	5.25	3/8	126	7.90
2	10	.134	7/16	93	5.25	3/8	105	7.80
21/2	10	.134	7/16	61	5.25	3/8	91	7.80
3	10	.134	7/16	67	5,25	3/8	78	7.80

- Annular threaded roofing nails provide superior holding power in wood and plywood. Add 5% to smooth shank net price for threading.
- To determine correct nail length to use add one inch to twice the thickness of slates.



# Stainless Steel & Cooper Alloy Nails & Screws

# **Swan "Sea-Cure" Nails For Marine Service**

304 Stainless or 316 Stainless Steel CCC Commercial or Silicon Bronze, Monel

- Large Flat Head Annular Ring Thread
- Diamond Point



		Shank	Head	Apprex. C	ount/Lb.		List Pri	ice/Lb.		2000
Length	Gauge	Diameter	Diameter	Statisless	Copper Alloy	304 Stainless	316 Stainless	Gam't Bronze	Silicon Bronze	Mone
34	15	.072	3/16	1050	913	9.75	11.20	_	7.60	-
3/4	14	.083	7/32	757	864	9.05	10.50	7.15	7.40	14.5
%	14	.083	7/32	657	617	8.90	10.30	7.10	7.35	14.5
1	15	.072	3/16	807	689	9.10	10.25	-	7.40	-
1	14	.083	7/32	622	536	8.85	10.00	7.00	7.25	14.5
1	12	.109	17/64	364	303	8.45	9.90	6.85	7.10	14.0
1%	14	.083	7/32	473	424	8.70	9.95	6.90	7.15	14.5
11/4	13	.095	9/32	357	324	8.60	9.80	6.85	7.15	12
1%	12	.109	17/64	272	245	8.35	9.60	6.80	7.05	14.00
1%	14	.083	7/32	413	374	8.65	9.90	6.90	7.10	14.5
1%	12	.109	17/64	228	204	8.30	9.55	6.75	7.00	14.0
11/2	10	.134	3/8	147	132	8.20	9.40	6.70	6.90	13.7
1%	12	.109	17/64	193	179	8.30	9.50	6.70	6.95	14.0
1%	10	.134	3/8	130	118	8.15	9.35	6.85	6.90	13.7
2	12	.109	17/64	175	161	8.25	9.50	6.70	6.95	14.0
2	10	.134	3/8	114	104	8.10	9.30	6.65	6.90	13.7
2	8	.165	7/16	75	65	8.05	9.30	6.65	6.90	13.5
21/2	12	.109	17/64	138	128	8.25	9.50	6.65	6.90	14.0
21/2	10	.134	3/8	94	83	8.05	9.30	6.65	6.85	13.7
21/2	8	.165	7/16	62	54	7.90	9.10	6.65	6.85	13.5
3	10	.134	3/8	79	71	8.05	9.30	6.65	6.85	13.7
3	9	.148	3/8	67	58	7.95	9.15		6.85	-
3	8	.165	7/16	51	45	7.90	9.10	6.60	6.85	13.5
3	6	.203	1/2	34	31	7.90	9,10	N-05	6.85	13.5
31/4	9	.148	3/8	60	52	7.95	9.15	-	6.85	_
314	8	.165	7/16	48	43	7.90	9.10	6.60	6.85	13.5
31/4	6	.203	1/2	31	27	7.90	9.10	6.60	6.85	13.5
31/2	8	.165	7/16	44	40	7,85	9.05	6.60	6.85	13.5
31/2	6	.203	1/2	29	26	7.85	9.05	_	6.85	13.5
4	6	.203	1/2	25	23	7.65	8.90	-	6.85	13.5
4	4	,238	9/16	18	17	7.65	8.90		6.85	-
41/2	6	.203	1/2	22	20	7.65	8.90	_	6.85	13.5
41/2	4	.238	9/16	16	15	7.65	8.90		6.85	_
5	6	.203	1/2	19	18	7.65	8.90	5-	6.85	13.5
5	4	.238	9/16	15	14	7.65	8.90	_	6.85	-
6	4	.238	9/16	12	11	7.65	8.90	_	6.85	_

- Large bearing surface under heads holds planking securely to framing members on new construction and re-nailing projects.
- Annular Ring "Barbed" Threads provide maximum holding power and resistance to nail head popping.
- Specify Type 316 Stainless Steel to minimize discoloration of heads and paint bleed-through.
- Silicon Bronze offers best resistance to stress-corrision cracking under heads in salt water service.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

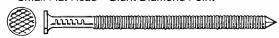


# Stainless Steel & Copper Alloy Nails & Screws

**Wood Siding Nails** 

304 Stainless or 316 Stainless Steel

• Small Flat Head • Blunt Diamond Point



# Shake & Shingle Nails

304 Stainless Steel

• Slender Shank • Annular Thread



Penny Size	Length	Sauge	Shank Dia.	Head Dia.	Approx. Count/Lb.
3d	11/4	14	.083	7/32	470
4d	11/2	14	.083	7/32	394
5d	134	14	.083	7/32	337
6d	2	13	.095	7/32	237
8d	21/2	13	.095	7/32	192

- Slender shanks minimize splitting.
- 7/32" Diameter flat heads provide ample bearing surface to firmly secure shakes & shingles of all types including hand splits.
- Annular ring threads insure against wind damage, nail-head popping.

# **Swan Secure Stainless Steel "Un-Commons"**

304 Stainless or

316 Stainless Steel

- Smooth Shank or Threaded
- Flat Head
- Diamond Point

R .	R.
0	

Penny Size	Length	Gauge	Shank Dia.	Head Dia.	Approx. Count/Lb.		Price nless Steel I Threaded		Pound niess Steel 1 Threaded
						OHIUUH	IN SAUGU	SHIOUTI	THEADED
2d	1 "	15	.072	3/16	807	8.60	9.10	9.80	10.25
3d	11/4	14	.083	7/32	473	8.20	8.70	9.50	9.95
4d	11/2	12	.109	1/4	228 193	7.80 7.80	8.30 8.30	9.10 9.05	9.55 9.50
5d 6d	134	12 11	.109	17/64	144	7.60	8.20	8.90	9.40
74	2 2 1/4	11	.120	17/64	133	7.60	8.20	8.90	9.40
7d 8d	21/2	10	.134	9/32	94	7.55	8.05	8.80	9.30
10d	3	9	.148	5/16	67	7.45	7.95	8.70	9.15
12d	31/4	9	.148	5/16	60	7.45	7.95	8.65	9.15
16d	31/2	8	.165	11/32	44	7.35	7.85	8.55	9.05
20d	4	6	.203	7/16	25	7.15	7.65	8.40	8.90
30d	41/2	6	.203	7/16	22	7.15	7,65	8.40	8.90
40d 60d	5	6	.203	7/16	19 12	7.15 7.15	7.65 7.65	8.40 8.40	8.90 8.90
oou			,200	10/02	15 SH	7.10	1,.00	0.40	0.50

- Our all-around general purpose structural nails have the heft to penetrate even the toughest seasoned lumber.
- Recommended first choice for construction of permanent wood foundations by the American Plywood Association.
- Available in Smooth Shank, Annular Ring or Screw Shank. Specify Annular Ring for greatest pullout resistance. Use Screw Shank nails for end grain and shear loading applications.

Penny Size	Length	Gauge	Shank Dia.	Head Diz.	Approx. Count/Lb
3d	1%	14	.083	5/32	495
4d	11/2	14	.083	5/32	398
5d	134	14	.083	5/32	354
6d	2	13	.095	5/32	245
7d	21/4	13	.095	5/32	215
8d	21/2	13	.095	5/32	196
10d	3	12	.109	7/32	120
16d	31/2	11	.120	1/4	88

# **Fiber Cement Siding Nails**

316 Stainless Steel

- Annular Ring Thread Sharp Diamond Point
- Checker Pattern Head



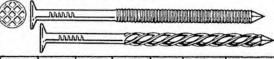
Length	Gauge	Shank Dia.	Head Dia.	Approx. Count/Lb
1%	11	.120	11/32	199
11/2	11	.120	9/32	179
2	11	.120	9/32	144
21/2	11	.120	9/32	115

- Produced expressly for application of various lap and panel siding materials fabricated of fiber cement composites.
- 1%" roof head nails for blind nailing lap siding. Other sizes for face nailing siding planks or panels.
- Extra sharp point for optimum driveability.
- Checkered heads diffract sunlight, accept surface finishes.
- 316 Stainless Steel offers ultimate corrosion resistance.

# Swan Secure Decking Nails For Pressure Treated Lumber

304 Stainless or 316 Stainless Steel ACC

- Checker Pattern Sinker Heads
   Blunt Diamond Point
- Annular Ring or Screw Shank



Penny Size	Length	Gauge	Shank Dia.	Head Dia.	Approx. Count/Lb.	List Pric 304 SS	e Per Lb. 316 \$\$
8d	2%	11	.120	1/4	126	8.20	9.40
10d	2%	10	.134	17/64	85	8.10	9.30
16d	31/4	9	.148	5/16	61	8,00	9.20
20d	3%	8	.165	11/32	43	7.85	9,05

- Sinker heads drive flush with work surface.
   Checker pattern blends with wood grain.
- Specify Ring Shank for greatest pull-out resistance in less stable materials like unseasoned pressure treated boards.
- Use Screw Shank Nails for easier driving in harder seasoned wood.



Stainless

Steel



# Stainless Steel & Copper Alloy Nails & Screws

#### **DESIGN FEATURES**

- Self-countersinking bugle head sets flush with work surface
- Square Drive recess is deep and cleanly formed — eliminates driver bit cam-out
- New and improved "Beaver Bite" point.
  Precision machined self-drilling point
  drills its way into
  all types of wood
  by removing
  material during
  penetration
- Self-tapping coarse threads are uniformly sharp require less driving torque
- Coated with non-stick clear, dry lubricating film to enhance driveability

- Ideal for fastening corner boards, facia, and mitred ends on quality wood siding jobs.
- Use in traditional toenailing-type applications such as affixing balusters and handrails.
- Use on decking jobs when screw heads need to be inconspicuous or concealed.
   NOTE: Predrilling is a must near board ends to prevent splits.

#### **APPLICATIONS**

Specify **SWANEZE** for these wood construction applications:

- Decks Fences
- House Trim
- Piers & Docks
- Outdoor
   Furniture
- Boat
- Stairs & Furniture
  Railings Window
  Boxes &
- Repair
- Boxes & Planters
- Lattice

#### **CORROSION RESISTANCE**

SWANEZE are manufactured of solid AISI Grade 305 Stainless Steel for superior corrosion resistance under all conditions. Grade 305 contains the highest nickel content (10.5-13.0%) of the austenitic stainless steels considered to be in the 18-chromium 8-nickel family. It is completely resistant to tannic acid and other extractives common to redwood and cedar lumber, and will not discolor or stain the wood surrounding screw heads.

#### STRENGTH

Stainless steel screws are **STRONG!**Typical mechanical properties for Grade 305 are 85,000 psi tensile and 40,000 psi yield strength — more than adequate for wood construction applications.

#### **DRIVING**

**SWANEZE** are designed to be driven by electric-powered screw gun or by hand using a standard size **square bit** or driver. Use size #2 drive for all bugle head screws and size #1 drive for all finishing screws.

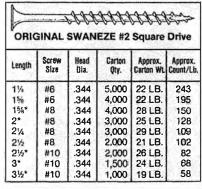
**SWANEZE** can be driven without predrilling in cedar, redwood and softer woods although pilto holes are recommended in all materials to minimize splitting.

IMPORTANT: When screw gun is used, drive SWANEZE slowly at first and gradually increase speed until screw heads set flush consistently. Driving at top speed may result in stripping of square drive recess

#### **FINISH WORK AND TRIM**

SWANEZE FINISHING SCREWS combine the best features of our original screws with small deeply countersunk heads and slender shanks for finish work and trim applications.

Unobtrusive small trim heads are easily driven **flush** with or **below** the work



ORIC	INAL	SWAN	EZE #3	Square	Drive
Length	Screw Size	Head Dia.	Carton Qty.	Approx. Carton Wt.	Approx. Count/Lb.
4*	#12	.430	1,000	28 LB.	38

SI		ZE FIN		ATATA SCREV Ve	
Length	Scraw Size	Head Dia.	Carton Oty.	Approx. Carton WL	Approx. Count/Lb
1	.#7	.230	5,000	17 LB.	316
1%*	#7	.230	4,000	22 LB.	195
2¼*	#7 #7	.230	3,000 2,000	23 LB. 22 LB.	138

\* Starred sizes available in AISI Type 316 Stainless Steel for maximum corrosion resistance. 316 screws have plain sharp points.

#### **BITS**





Square Drive Bits available for both standard screw guns and power drywall drivers. Screw gun bits 1-15/16" long, drywall gun insert bits 1" long. Both have 1/4" hex shank.

# Here's a very good fastener for wood joints exposed to the weather. Conceived and engineered expressly for building cedar and redwood decks, SWANEZE are equally well suited for any number of outdoor construction projects which call for superior corrosion resistance combined with maximum holding power and ease of use.

**Wood Screws** 

**For Outdoor** 

Construction

WITH THE

**"Beaver Bite"** 

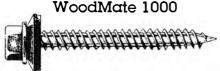
**Point** 

# We put the fast in fasteners

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151

The Atlas family of WoodMate metal-to-wood fasteners offers builders a variety of shanks, threads and heads to meet various performance and cost considerations. WoodMate fasteners are available in five lengths through three inches, each with a high, sharp cornered head for fast, positive driving. An Oxyseal polymer coating is available to supplement the standard zinc-and-chromate finish, and heads can be painted to match any color panels. The WoodMate is also available with the ColorMate injection-molded nylon head that prevents corrosion and seals without a washer. Bonded and two-piece washers are available to seal WoodMate fasteners with metal heads.

#### **Mechanical Specifications**



#### Plated Steel #9-16 Hex Washer Head (HWH)

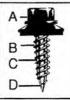
Platea
Mechanic
Minimum <sup>*</sup>
Minimum <sup>-</sup>
Minimum

Mechanical Properties

Minimum Tensile Strength: 1390 lbs.

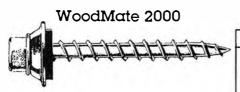
Minimum Torsional Strength: 39 in.-lbs.

Minimum Shear Strength: 960 lbs.



Dimensional Properties	
A - Head, Across Flats:	.244"250"
B - Major Diameter:	.175"180"
C - Minor Diameter:	.121"127"
Stress Area:	.01068 in.2

D - Type A Sharp Point



#### Plated Steel #10-9 Hex Washer Head (HWH)

#### **Mechanical Properties**

Minimum Tensile Strength: 890 lbs.

Minimum Torsional Strength: 39 in.-lbs.

Minimum Shear Strength: 550 lbs.



Dimensional Properties					
A - Head, Across Flats:	.244"250"				
B - Major Diameter:	.186"191"				

C - Minor Diameter: .116"-.122" Stress Area: .00500 in.² D- Type A Sharp Point

WoodMate 3000



#### Plated Steel #10-9 Hex Washer Head (HWH)

#### Mechanical Properties

Minimum Tensile Strength: 890 lbs.

Minimum Torsional Strength: 39 in.-lbs.

Minimum Shear Strength: 550 lbs.



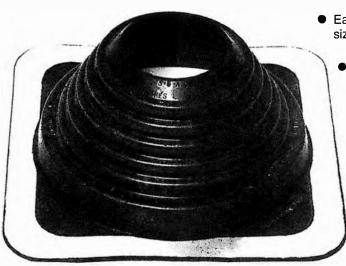
#### Dimensional Properties

A - Head, Across Flats: .244"-.250"
B - Major Diameter: .186"-.191"
C - Minor Diameter: .116"-.122"
Stress Area: .00500 in.²

D - RICO Self-Drilling Point

# ALL ABOVE IN STOCK PAINTED

# **MASTER FLASH** makes pipe flashing simple



- Easily customized pipe opening. Ten different sizes fit pipes 1/," to 26".
  - Tough, ultraviolet resistant EDPM or Silicone.
    - Square flange design adapts to any roofing material. Seals tightly with silicone sealant and standard roofing fasteners.
      - Aluminum base bends to form a perfect seal with any contour, surface irregularities or roof pitch.

# **Quick Installation Means Higher Profits.**



**Step One** TRIM. Trim opening to 20% smaller than pipe diameter.



**Step Two** SLIDE. Slide down over pipe.



Step Three SEAL.

Apply urethane/silicone sealant between MASTER FLASH and roofing.



Step Four FORM.

Press down, bending flashing to fit irregularities. Use large slotscrewdiver to press into tight angles.



**Step Five** FASTEN. Use fasteners to finish sealing.

# **Master Flash Sizing Chart**

	_				
MASTER FLASH Number	Carton Quantity	Carton Weight	Pipe Size	Base Dimension	Opening Diameter
1	15	2.5	1/4-2"	41/2"	Closed
2	15	4.5	11/4-3"	6"	7⁄a″
3	15	7.5	1/4-4"	8"	Closed
4	10	8.0	3-6"	10"	21/2"
5	10	9.5	4-7"	11"	3½"
6	10	12.0	5-9"	12"	4"
7	10	15.5	6-11"	14"	5"
8	5	12.8	7-13"	17"	6"
9	5	19.3	10-18"	25"	81/2"
10	5	25.6	13-26"	34"	11"

Note: Numbers 1 and 3 are closed top. When using on very steep pitched roofs or on surface with deep corrugation, use next largest size for increased flange flexibility.

(800) 232-5060 (610) 692-6658 FAX (610) 692-8151



### **BANDING KITS**

# Scru-Band Scru-Seal™ Clamps Clamp-Pak™









#### Scru-Band

A reusable band clamp with continuous roll-formed teeth and a patented side load housing for fast, easy, no-slip clamps of any diameter - from 1" to 30 feet and more - from one kit. Work right out of box without critical measuring or waste using only a screwdriver for tensioning. Fast take-up, fewer components and simple 1-2-3 installation procedure for faster clamping. Smooth I.D. band prevents material from squeezing through. 100% stainless steel construction for strong, corrosion free durability.

# Scru-Seal Clamps with BAND-IT Band

A screw driver is the only tool needed to tension these clamps.  $^{3}/_{8}$ " or  $^{1}/_{2}$ " wide stainless steel band is used single or double wrapped, cut as required from the 100' roll. Scru-Seal clamps with slotted hex can be used around objects as small as 2" in diameter. Instructions for use are on the back side of the carton.



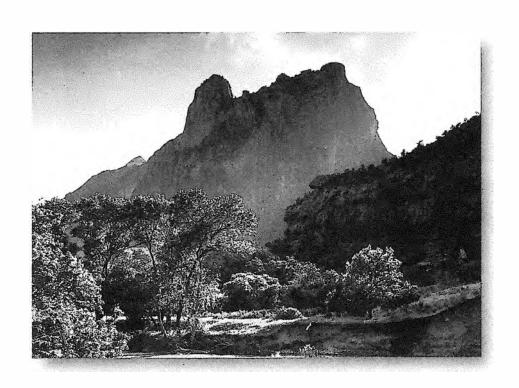
#### Clamp-Pak

Make your own clamps, 2" to 38" in diameter, with the contents of this Clamp-Pak. Ten shrink-packed cards to a carton with hanghole at top. Instructions are on the back side of the Clamp-Pak card.

	ss Steel			ъ.		
Cat	UIC			Pkg.	Wei	ght
No.	No.	Description	Contents	Qty	Lbs	Kg
M150	23150	Housings and	100 ea.	1	2.8	1.3
M155	23155	Screws	25 ea.	1	0.5	0.3
M151	23151	Scru-Band <sup>3</sup> /8" (9.5 mm) x.025"(30.5 M) (.64 mm)	100 ft.	1	3.4	1.6
MI56	23156	Scru-Band Kit	100 ft.(30.5 M) of Scru-Band 25 Housings 25 Screws	1	4.0	1.8
M157	23157	Scru-Band Kit	50 ft. (15.25 M) of Scru-Band 10 Housings 10 Screws	1	2.1	1.0
M158	23158	Scru-Band Pak	10 ft. (3.5 M) 5 Housings 5 Screws	10	4.4	2.0

Scru	Seal Cla	Hips With	BAND-IT	Band			
		Stainles	ss With				
All Sta	inless	Plated (	Carbon Scr	ew			
Cat.	UIC	Cat.	UIC		Pkg	Wei	ght
No.	No.	No.	No.	Description	Qty	Lbs	Kg
M210	23210	M310	23310	25 ea Scru-Seals, racks, 100' (30.5 M) <sup>3</sup> /8" (9.53mm) Band	1 set	4.3	1.9
M211	23211	M311	23311	Scru-Seal Seals and racks	10ea	.7	.3
C133	13133			Valustrap <sup>3</sup> /8" (9.53mm) x .015 (.38mm)	100 ft (30.5M)	2.2	1.0
C134	13134			Valustrap <sup>1</sup> /2" (12.70mm) x .015 (.38mm)	100 ft (30.5M)	2.9	1.3

Cat.	UIC		Pkg	Wei	ght
No.	No.	Description	Qty	Lbs	Kg
M218	23218	Each card contains 10' (3M) x 3/s" (9.53 mm) stainless steel band, 3 racks and 3 seals with slotted hex screws.	10 cards	5.0	2.3



# You Want Power... Where?



MODELS:	NGK-2900H	NGK-4300H	NGK-6000H/E	NGK-7000H/E	NGD-2900R	NGD-4300R	NGD-6200R/E
			GENE	RATOR			
Voltage	120V	120/240V	120/240V	120/240V	120V	120/240V	120/240 <b>V</b>
Max. Output	2900W	4300W	6000W	7000W	2900W	4300W	6200W
Max. Amps	24.2	35.8	50	58.3	24.2	35.8	51.7
Rated Output	2400W	3800W	5000W	6000W	2300W	3600W	4800W
Rated Amps	20	31.7	41.7	50	19.2	30	40
			AC O	JTLETS			
GFC1 120 <b>V</b> , 20A	1	2	2	2	1	1	2
Twist Locks 120 <b>V</b> , 30A		1	1	1		1	1
120/240 <b>V</b> , 20A		1	1			1	2
120/240 <b>V</b> , 30A			E N	1 			1
				GINE			
Manufacturer	Honda	Honda	Honda	Honda	Robin	Robin	Robin
Model	OHV GX-160	OHV GX-240	OHV GX-340	OHV GX-390	OHV EH17-2D	OHV EH25-2D	OHV EH34D
Horsepower	5.5	8	11	13	5.5	8.5	11
Starting System	Recoil	Recoil	Recoil / E.S.	Recoil / E.S.	Recoil	Recoil	Recoil / E.S.
Auto Idle	No	Yes	Yes	Yes	No	Yes	Yes
Tank	3.0 Gal.	4.5 Gal.	4.5 Gal.	4.5 Gal.	3.2 Gal.	4.4 Gal.	4.4 Gal.
Run Time	9 Hours	8.5 Hours	5.6 Hours	5.2 Hours	9 Hours	7 Hours	7 Hours
Dimensions	22.4x17.3	24.2x20.2	26.0x21.3	26.0x21.3	22.0x16.3	24.4x16.9	26.8x18.5
(LxWxH) in.	x18.9	x20.1	x20.5	x20.5	x19.4	x20.6	x24.8
Dry Weight	95 lbs.	150 lbs.	176 lbs.	191 lbs.	106 lbs.	132 lbs.	172 lbs.
			0 P T	10 N S			
Wheel Kit	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lifting Eye	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tank Protection Bars	Yes	Yes	Yes	Yes	<b>N</b> o Specificatio	No ns subject to chan	No ge without notice

Standard features: Brushless, self-exciting, 1.0 power factor, Full power and Idle control on 240V models, Electro- magnetic breakers;
Full roll cage with vibration isolation. Engine: 3600 RPM air cooled, low oil shutdown, automatic decompression, deluxe large muffler and air cleaner.

Limited Warranty: - Two Year Engine and Generator. Contact NAC for complete information.

# Peel & Seal Self-Stick Aluminum

# You'll find a hundred uses for Peel & Seal!



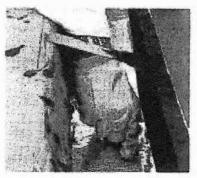
Patch leaking roofs quickly & effectively with Peel & Seal.



Peel & Seal helps solve metal roof problems— corrugated or standing seam— on industrial, commercial and farm buildings.



Peel & Seal is a valuable tool for flashing vents, skylights and HVAC units.

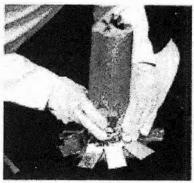


Use Peel & Seal – available in widths from 4" to 36" – to reline leaking gutters.



Deal & Sealing and that shairs for

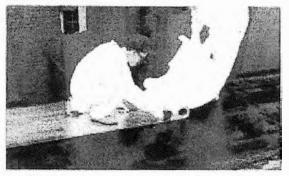
Peel & Seal is an excellent choice for waterproofing mobile home roofs... plus it reflects the sun's heat.



Cut and shape Peel & Seal... use it to solve many roofing problems.



Coping joints are a common source of leaks... here Peel & Seal provides a simple, economical solution.



Advanced Peel & Seal replaces old style roll roofing. Adheres without torches, adhesives or fasteners... and no coating is necessary.

SEE
PAGES
18 AND 19
FOR
MORE
INFORMATION

Fastener Systems, Inc.

# PHILLIPS PANCAKE LOW PROFILE CLIP SCREW

SELF-DRILLER CARBON STEEL WITH TRU-KOTE E-COATING



Factory Mutual Approved Coating

Tests show that the fasteners with alternate coating (Tru-Kote E-Coating) meet the FMRC Standard 4450 (1989) requirements for corrosion resistance



Low profile design provides added clearance for concealed fastener panel systems



# SIZES NOW AVAILABLE AT FASTENER SYSTEMS

#12-1" #12-2" #12-3" #12-4" #12-5" #12-6"

# PULL OUT VALUES ON #12 METAL FASTENER

16 Gauge	18 Gauge	20 Gauge
825#	640#	525#
870#	675#	550#
875#	675#	525#

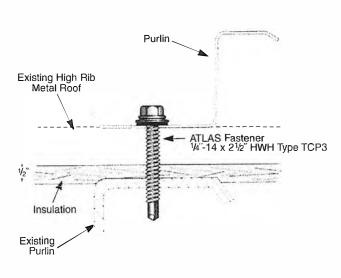
Parts drilled at 50 PSI & averaged 1.7 seconds with 1" embedment

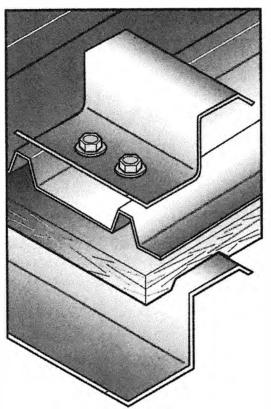
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## **METAL ROOF FASTENERS**

# **Metal Roof**

# **Base Clip to Structural**





# **Fastener Selection**

# **Ultra Z TCP3 Drilling Fastener with Oxyseal II Long-Life Coating**

Thickness Range #12 - 14 x 2 1/2" HWH .250 to 1.750 .250 to 2.250

#12 - 14 x 3" HWH Drills up to .210 thick steel

Size Thickness Range <sup>1</sup>/<sub>4</sub>" - 14 x 2 <sup>1</sup>/<sub>2</sub>" HWH .250 to 1.750 .250 to 2.250 1/4" - 14 x 3" HWH

Drills up to 1/4" thick steel

# **Fastener** Strength

### **Specifications**



#6, #8, #10, #12 & 1/4", #18 Diameters: Lengths: 3/4" thru 8" Points: Self-Drilling

Material: Carbon Steel and 410 Stainless Steel Plating: .0005 min mechanical zinc

Fastener Diameter	Minimum Tensile	Minimum Torque	Minimum Shear
6-20	1125 lbs	25 in. lbs.	750 lbs.
8-18	1575 lbs.	42 in. lbs.	1000 lbs.
9-16	2350 lbs	65 in lbs.	1500 lbs.
10-16	2100 lbs.	61 in, lbs.	1400 lbs.
10-24	2350 lbs.	65 in. lbs.	1500 lbs.
12-14	2800 lbs.	92 in. lbs.	2000 lbs.
12-24	3250 lbs.	100 in. lbs.	2100 lbs.
1/4-14	3850 lbs.	150 in. lbs.	2600 lbs.
1/4-20	4275 lbs.	168 in. lbs.	2700 lbs.
17-14	5200 lbs.	175 in. lbs.	3125 lbs.
18-9	4550 lbs	170 in. lbs.	2575 lbs.