

CONDENSED ACCESSORY HANDBOOK

CONCRETE CONSTRUCTION PRODUCTS





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#### Dayton Superior — We're Here To Meet Your Needs...

Dayton Superior Concrete Accessories is one of the fine construction related divisions of the Dayton Superior Corporation. By combining quality products, service and expertise, Dayton Superior is able to serve the needs of the concrete construction industry quickly and efficiently.

Dayton Superior offers the industry the most comprehensive line of concrete accessories and construction chemicals. Dayton Superior has a full complement of accessories and equipment for light and heavy forming, form and deck hangers, inserts and anchors, rebar supports, precast, tilt-up and rebar splicing. All told, there are over 5,000 standard concrete accessory products and construction chemicals. Dayton Superior also has the capability to design and fabricate special concrete accessory items, when the need presents itself.

Dayton Superior has combined service of over 200 years in the concrete accessory field and technical expertise ready to assist you with any concreting problem that may arise. Quality products, experience, coast-to-coast plants and service centers and the industry's largest dealer network — available to you as a valued Dayton Superior customer.

### Safety Notes and Product Application

Do not use any Dayton Superior product before reading and understanding the product instructions in the appropriate Dayton Superior product publication. For maximum

## safety, product information must be extended to field personnel. Contractors must make sure that their employees are properly instructed in the use and installation of all concrete accessories.

The safety factor applied to a particular product is a variable, dependent on the degree of hazard or risk involved in the application of that product. In concrete construction, various job site conditions can often increase the degree of risk. Concentrated loads on the formwork, unsymmetrical placement of concrete, using a crane inadequate for the job, uplift, impact, use of motorized carts, formwork height, jerking the crane during lifting or handling, are job site conditions that may raise the degree of risk. Dayton Superior lists minimum safety factors. If a job site condition exists that increases job site risks, such as those previously stated, the user must increase the product safety factor to compensate for the job site conditions.

Dayton Superior develops products for the concrete construction industry and has stressed that the products it supplies meet or exceed all pertinent safety requirements. All tests on the products shown in this publication have been performed by Dayton Superior or independent testing laboratories.

Dayton Superior recommends that the provisions of the American National Standards Institute (Standard ANSI A 10.9), Occupational Safety and Health Administration (OSHA Part 1926) and American Concrete Institute (ACI 347 Guide to Formwork for Concrete) be strictly followed when considering safety factors and safe working loads. The minimum safety factors listed in the table below are a guide and should not be compromised. When unusual job conditions exist, these minimum safety factors must be increased by the user.

### Safety Factors

ACCESSORY	MIN. SAFETY FACTOR	TYPE OF CONSTRUCTION
Form Ties	2.0	All Applications
Form Anchoro	2.0	Formwork supporting form weight and concrete pressures only
Form Anchors	2.0	Formwork supporting weight of forms, concrete, live loads and impact
Form Hangers	3.0	All Applications
Anchoring Inserts (Used as Form Ties)	2.0	Precast concrete panels when used as formwork
Lifting Inserts	2.0	Tilt-up concrete panels
	4.0	Precast concrete elements

Dayton Superior recommends the following minimum safety factors and the provisions of OSHA Part 1926 and ANSI 10.9 when considering safety factors.

If a different safety factor is required for any reason, a product's safe working load must be changed accordingly. The following equation is used to increase or reduce a safe working load.

New Safe Working Load =

Original Working Load x Original Safety Factor

New Required Safety Factor

Note: Users of Dayton Superior products must evaluate the product application, calculate induced loads, determine the necessary safety factor, calculate the safe working load and then control field conditions to prevent application of loads in excess of the calculated safe working loads.



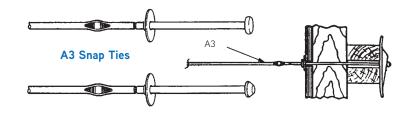
### **A2 Plastic Cone Snap Tie**

Dayton Superior's Plastic cones can be added to A3, A4, A44, A46 or A48 ties and act as positive form spreaders to aid in reducing concrete leakage. Plastic cones are available in 1", 1-1/4" and 1-1/2" nominal setbacks.



### A3 Snap Tie Standard and Heavy

Dayton Superior's A3 Snap Ties, Standard and Heavy, are equipped with 15/16" flat washers and are manufactured for specified wall thicknesses. A3 Snap Ties provide a 1" breakback from the concrete surface. Other breakbacks are available on special order.



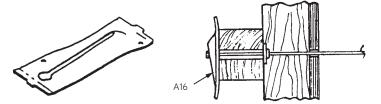
### A4 Sure-Snap Hex Head Tie

Dayton Superior's A4 Sure-Snap Hex Head Tie is produced with hot forged hexagon heads that permit easy breakback of short-end snap ties while the formwork is still in place.



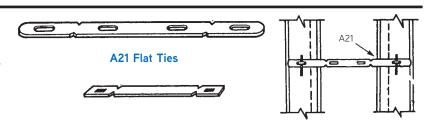
### A16 Omni Wedge

Dayton Superior's A16 Heavy Steel Wedge is used with any standard or heavy Dayton Superior's Snap Tie to provide a quick and easy wedging action to securely hold the tie and formwork in place.



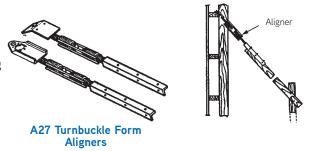
#### **A21 Flat Tie**

Dayton Superior's A21 Flat Ties are available in several styles and breakbacks for use with various modular steel frame forming systems.



### A27 Turnbuckle Form Aligner

Dayton Superior's A27 Turnbuckle Form Aligner is designed to align and position all types of vertical forms. It is combined in the field with any size stud to allow easy adjustment for final form positioning and alignment.





### A46 Loop Panel Tie, Standard and Heavy

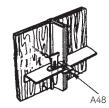
Dayton Superior's A46 Loop Panel Ties are designed for use with standard modular panel forming systems; available with various breakbacks, plastic cones and/or water resistant washer.



### A48 Gang Loop Panel Tie, Standard and Heavy

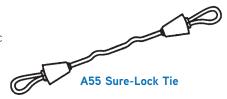
Dayton Superior's A48 Gang Loop Panel Ties are similar to the A46 Ties, above, but have longer ends to allow them to be used with various modular systems' gang form bolts.

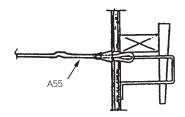




#### **A55 Sure-Lock Tie**

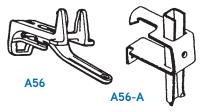
Dayton Superior's A55 Sure-Lock Tie is a short-end loop tie fitted with high-impact, self-centering plastic cones. The A55 Sure-Lock Tie is used with the A56 Sure-Lock Clamp or the A56A Speedy Bracket, shown below, for loose plywood forming.

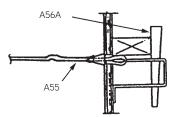




### A56 Sure-Lock Bracket and A56A Speedy Bracket

Dayton Superior's A56 Sure-Lock Bracket and A56A Speedy Bracket are rugged units designed to accept the A55 Sure-Lock Tie. They will accommodate a single 2x4, 3x4 or 4x4 waler; horizontally or vertically.





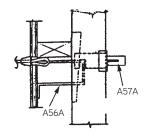
A56 and A56-A Short-End Loop Tie Brackets

### A57 Sure-Lock Strongback Clamp and A57A Stiffback Bracket

Dayton Superior's A57 Sure-Lock Strongback Clamp and A57A Stiffback Bracket are used in conjunction with the Sure-Lock Bracket or the Speedy Bracket, respectively, to securely hold 2x4 strongbacks to the form. This provides added strength and alignment to the form.







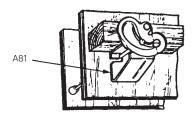
A57 and A57A Strongback Brackets



#### A81 Jahn® "A" Bracket

Dayton Superior's A81 Jahn "A" Bracket is designed to be used with any standard Dayton Superior short-end snap tie. This durable bracket can be used with horizontal walers or vertical studs.





### A82 Jahn® "C" Bracket

Dayton Superior's A82 Jahn "C" Bracket is used to attach vertical strongbacks to the formwork for added strength and alignment.



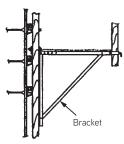


A82 Jahn "C" Bracket

#### **A90 Scaffold Bracket**

Dayton Superior's's A90 Scaffold Bracket is used to support scaffolding on nearly any type of formwork. It can be flush mounted or adjusted to fit the various size vertical or horizontal walers or strongbacks. The Scaffold Bracket has a safe working load of approximately 1,000 pounds.



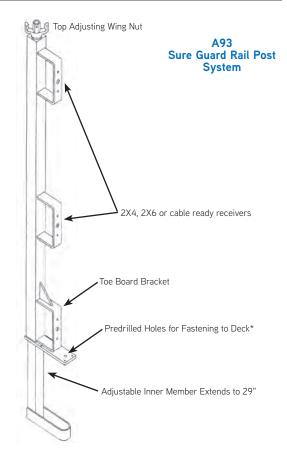


### A93 Sure Guard® Rail Post System

The Sure Guard Rail Post System opens wide and tightens quickly, allowing for application to practically any project. The post is easily installed utilizing a top adjusting wing nut which creates the ability to tighten from a standing position. A specially designed base adds to the simplicity of setup with predrilled holes providing trouble-free fastening to decks.

This post can adjust to any floor slab thickness between 4" - 29". A drop pin makes the Sure Guard Rail Post System simple and efficient to use. The 30 lb. Sure Guard Rail Post System is also hot-dipped galvanized for durability and designed to withstand the toughest jobsite conditions.

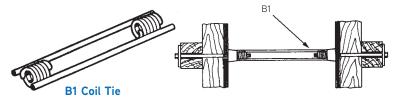
\* WARNING: Rail Post must be secured to deck with proper fasteners to ensure safety.





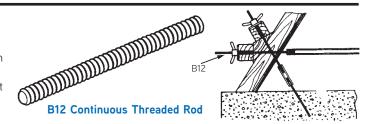
#### B1, B2, B3 Coil Tie

Dayton Superior's Coil Ties are strong, resistance welded ties designed for medium and heavy forming applications. Coil tie products are available in two or four struts, with screw-on plastic cones and water-resistant versions. 1/2", 3/4", 1" and 1-1/4" diameters are available.



#### **B12 Coil Rod**

Dayton Superior's B12 Coil Rod is continuous coil threaded rod available in 1/2" to 1-1/2" diameters in 1/4" increments. Available in special cut-to-length sizes or in standard 12' lengths, Coil Rod and threaded bar are used with other coil tie products in many different combinations and applications. Available with galvanized and stainless steel finishes.



## B12A D/R<sup>®</sup> Thread Bar and B12AD D/R<sup>®</sup> Euro Thread Bar

D/R Thread Bar is a high strength, 15mm and 20mm ductile steel with a full length, cold-rolled contour thread. The 2-1/2 threads per inch offers fast installation and stripping. D/R Thread Bar is available in 20'-0" standard lengths and can be cut to specific project requirements. Field cutting, with Carborundum blades, is easily accomplished without thread damage.

The D/R Euro Thread Bar is a hot-rolled high strength steel with two flat sides in the thread pattern. This bar has been used in Europe on all types of projects for years. The flat sides provide self-cleaning and allow a gripping surface for turning the bar. Euro Thread Bar is available in 15mm (5/8") and 20mm (7/8") diameters, in standard in 19'-1" lengths. It is bendable and weldable.

B12-AD D/R Euro Thread Bar

#### B12ACN Cast Hex Nut and B12ASN D/R® Steel Hex Nut

15mm and 20mm hex nuts, in cast and steel versions, are available with 2-1/2 threads per inch to be used in conjunction with the appropriate D/R Thread Bar.



B12-ACN Cast Hex Nut



B12ASN Steel Hex Nut

## B12AW D/R® Wing Nut, B12ASW D/R® Swivel Wing Nut, and B12AWN D/R® Cast

### **Nut Washer**

15mm, 20mm and 32mm Wing Nut is a high strength malleable steel nut with 2-1/2 threads per inch for use with the D/R Thread Bar. For added versatility, the Swivel Wing Nut features a heavy duty, ribbed washer base, reducing the number of loose working parts required. Made with electro galvanized finish per ASTM B633 SCI Type II.



B12AW Wing Nut



B12AWN D/R Cast Nut Washer



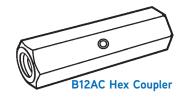
B12ASW Swivel Wing Nut



Swivel Wing Nut with a Round Plate.

### B12AC D/R® Hex Coupler

15mm and 20mm Hex Couplers are available to couple two D/R Thread Bars. The Hex Coupler is supplied with 2-1/2 threads per inch and a positive stop. This coupler is weldable.

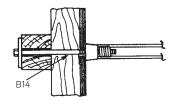




#### **B14 Coil Bolt**

Dayton Superior's B14 Coil Bolts are hex head bolts threaded for the contour of the coil tie helical coil. Available in 1/2", 3/4", 1", 1-1/4" and 1-1/2" diameter and length as required in 1" increments.





### **B14A Adjustable Coil Bolt**

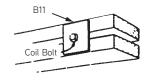
Dayton Superior's B14A Adjustable Coil Bolt is adaptable for special applications at corners, batter walls, etc., where one-size Adjustable Coil Bolt may replace several different lengths of the standard Coil Bolt.



#### **B11 Flat Washer**

Dayton Superior's B11 Flat Washers - flat steel plate available in sizes to fit all coil bolt, she-bolt and taper tie applications.



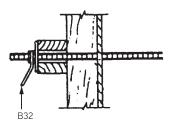


### B13 Coil Nut and B32 Handle Coil Nut

Dayton Superior's B13 Coil Nut and B32 Handle Coil Nut are available in 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4" and 1-1/2" diameters with coil thread. The Handle Coil Nut eliminates the need for a wrench and makes installation and stripping fast and simple.

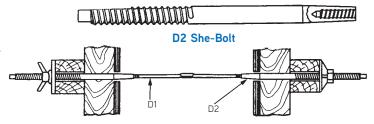






#### D2, D30 She-Bolt

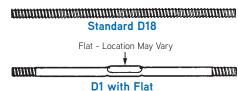
Dayton Superior's She-Bolts are high strength units suitable for heavy concrete construction. Manufactured with either Acme or Coil external threads, for use with gang and/or steel forms. She-Bolts are used in conjunction with inside tie rods (D1, D18).



### D1, D18 Inside Tie Rod

Dayton Superior's D1 and D18 Inside Tie Rods for She-Bolts are manufactured in three styles; plain, with flats and continuous threaded. Positive stops and/or water-resistant models are available.

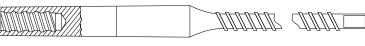






#### D30A Thread Bar She-Bolt

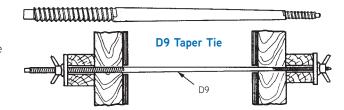
The Dayton Superior D/R Thread Bar She-Bolt is a heavy duty, reusable form ties for medium and heavy concrete construction. Two she-bolts are used with a length of D/R Thread Bar to tie formwork for any wall thickness. D30A She-Bolts are available in 15mm and 20mm diameter. Other sizes available on request.



D30A Thread Bar She-Bolt

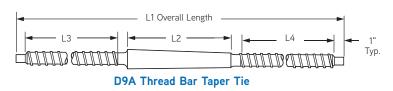
### D9, Taper Tie

Dayton Superior's D9 and Taper Ties are used where specifications permit complete removal of the form tie from the concrete. They are manufactured with coil thread and with up to 90" of taper.



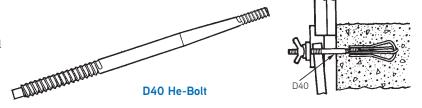
#### **D9A Thread Bar Taper Tie**

Dayton Superior D/R Thread Bar Taper Ties (D9A) are used when specifications require or permit complete removal of the form tie from the concrete. The D9A features the D/R Thread Bar's 2-1/2 threads per inch for rapid installation and stripping. Standard 15mm, 20mm and 32mm diameter taper ties are available in 41", 49", 58" and 66" overall length.



#### D40 He-Bolt

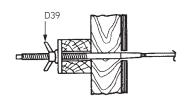
He-Bolts are used in conjunction with one of the many form anchorage units to provide an economical method of anchoring cantilever forms.



### **B39 Wing Nut**

Dayton Superior's B39 Wing Nuts are available in 1/2" through 1-1/2" diameters. Wing Nuts are normally supplied with coil threads. Acme thread is available on special order. Wing Nuts are typically used with she-bolts, he-bolts, taper ties and through bolting in heavy forming applications.





#### B42, D22 Batter Washer

Dayton Superior's B42 Batter Washers are designed to swing freely to any desired angle up to 45°. They are available in 1/2" through 1-5/8" diameters. Nail holes permit nailing to the waler and multiple grips on the underside help prevent slippage.



D22

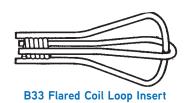
**B42 Batter Washer** 

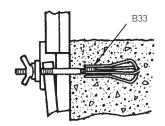
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#### B18, B33, B43 Flared Coil Loop Insert

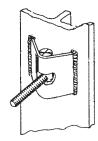
Dayton Superior's Flared Coil Loop Inserts are used with coil thread bolts to effectively anchor formwork. Available in several configurations with 3/4", 1", 1-1/4" and 1-1/2" diameter coil thread.



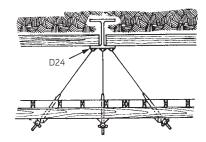


### **D24 Adjustable Weld Angle Bracket**

Dayton Superior's D24 Adjustable Weld Angle Bracket is designed to tie single-sided forming to steel piles, metal beams, etc. The brackets provide 110° of bolt adjustability and are available in 1/2", 5/8", 3/4", 7/8", 1" and 1-1/8" diameter coil threrad as well as 15mm and 20mm D/R thread.



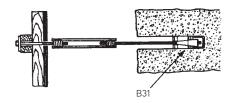
D24 Adjustable Weld Angle Bracket



#### **B31 Rock Anchor**

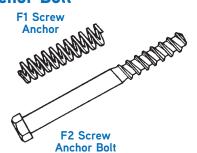
Dayton Superior's B31 Rock Anchor is designed for use in sound rock or concrete to secure one-sided forming. Available in 1/2", 3/4" and 1" nominal diameters with coil thread.

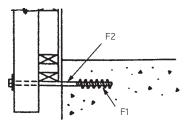




#### F1 Screw Anchor and F2 Screw Anchor Bolt

Dayton Superior's F1 Screw Anchor is a helical coil used in conjunction with the skein thread F2 Screw Anchor Bolt. Available in 3/4" to 1-1/2" diameters, the screw anchor is very effective supporting cantilever forms and transferring the bolt load into the concrete.



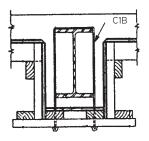




#### C1B, C1C Wedge Hanger

Dayton Superior's Wedge Hangers are standard snap ties bent to fit over the flanges of a steel beam to support deck formwork. Standard breakback is 1", other breakbacks can be furnished on special order.

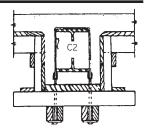




### C2 Coil Hanger, Saddle Type

Dayton Superior's C2 Coil Hanger is similar to the Wedge Hanger, above. It utilizes a two strut coil tie to support heavier forming loads.

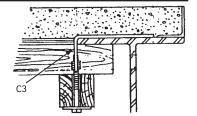




### C3 Coil Half Hanger

Dayton Superior's C3 Coil Half Hanger is designed to be welded to an exterior steel beam or bent around an exterior steel beam flange to support double ledgers.

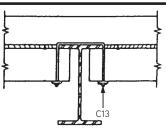




### C13 Plate Saddle Hanger

Dayton Superior's C13 Plate Saddle Hanger is placed over a beam to provide support for joists on both sides of the beam. Plate Saddle Hangers can be ordered with any drop and/or beam width to fit the application.

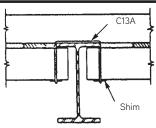




### C13A All-Wire Saddle Hanger

Dayton Superior's C13A All-Wire Saddle Hanger is similar in design and function to the C13 above but without the plate.

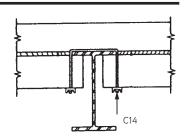




### C14 Channel Saddle Hanger

Dayton Superior's C14 Channel Saddle Hanger is similar in design and use as the C13 Hanger above but utilizes channels in place of the plates to reduce crushing of wood joists.

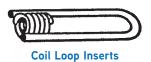


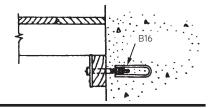




### B16, B17, B18, B33 Coil Loop Insert

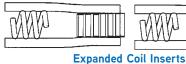
Dayton Superior's Coil Loop Inserts are made of a single or multiple looped wires welded to a helix coil. They are available in 1/2" to 1" diameters suitable for many concreting applications.

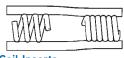


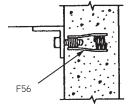


### F56, F57, F58, F59, F60, F61 Expanded Coil Insert

Dayton Superior's Expanded Coil Inserts are coil or closed ferrule structural connection inserts available in two, four or six strut versions, in 1/2" through 1-1/2" diameters, with or without nailing washer.



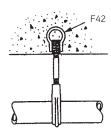




### F42 Loop Ferrule Insert

Dayton Superior's F42 Loop Ferrule Insert is a versatile insert suited for structural connections and suspension of equipment, ceilings, piping, etc. Available in 1/4" to 1" diameter closed ferrules in 1/8" increments.



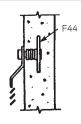


#### F44 Thin Slab Ferrule Insert

Dayton Superior's F44 Thin Slab Ferrule Insert is used where the depth of embedment is limited. The F44 is specially designed to develop good working loads in very thin concrete slabs. Available in 1/4" through 1" diameter, in 1/8" increments, closed ferrules.

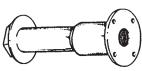


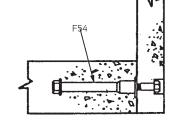
Insert



#### F54 Ductile Embed

Dayton Superior's F54 Ductile Embed is a structural embed available in 5/8" through 1-1/4" diameters and is available in several configurations. This is an integrally forged embed with no welds. It is designed to develop pullout and shear loads exceeding A325 bolt capacities.





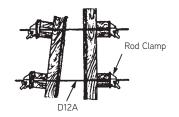
F54 Ductile Embed



#### D12A Pencil Rod

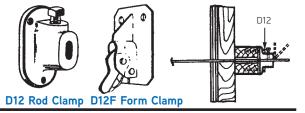
Dayton Superior's D12A Pencil Rod is available in .225" and .375" mild steel smooth rod for use with the rod clamps shown below. Pencil rod is available in rolls or straightened and cut to length.





### D12 Rod Clamp

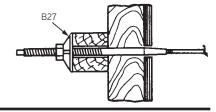
Dayton Superior's D12 Rod Clamps are available for use with .1/4" through 3/8" smooth or deformed rod to tie various types of concrete forms. Rod clamps are especially useful on battered and curved wall applications.



#### **B27 and D6 Nut Washer**

Dayton Superior's B27 and D6 Nut Washers are one-piece ductile steel designs combining the washer and nut in a single unit. Nail Holes are provided to secure the washer to the formwork. B27 Nut Washers are furnished with coil thread in 1/2" through 1" diameters for use with any coil thread device. The D6 Nut Washer has 3/4" Acme thread and is used with the D2 She-Bolt.

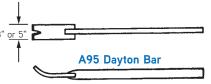




**B27 Nut Washer** 

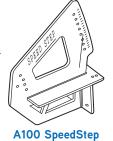
### **A95 Dayton Bar**

Dayton Superior's A95 Dayton Bar is a heavy duty pry bar ideally suited for use by tilt-up erectors to strip forms and to "jockey" a panel into position. The Dayton Bar is available in 3" and 5" blade widths.

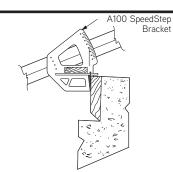


### A100 Speed Step® Bracket

The Dayton Superior A100 SpeedStep Bracket is a reusable bracket designed to simplify layout, set-up and stripping of concrete stair forming. One size fits all standard stairs.



**Bracket** 



## PC110 Rebar Safety Caps and D48 Sure-Guard® Rebar Protectors

The patented PC110 meets OSHA requirements. It contains a curved steel plate which provides extra protection in falls that occur from an angle, preventing hazardous impalement.

- Protects workers from protruding rebar
- Impalement protection
- One size fits #3 through #11 rebar
- Safety orange color
- Fully tested and approved (OSHA C-1730)
- Meets Cal OSHA max. drop test requirements
- Complies with Cal OSHA, Section 1712

Size	Part	Product Code	Weight	Packaging
#3 Up to #11 bar	PC110	146207	0.37 lb.	100/box
#3 Up to #9 bar	D48	60045	0.064 lb	50/box
#9 Up to #18 bar	D48	60046	0.102 lb	50/box



PC110 Rebar Safety Cap



D48 Sure-Guard® Rebar Protector

The D48 Sure-Guard Rebar Protector is a rebar safety cap used to prevent bar end contact in applications where impalement protection is not required.

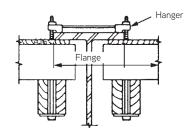
- Fits size #3 available up to #18
- Safety orange color
- Usable on most jobsites
- Faster product fulfillment times



### C60 Pres-Steel Hanger, Type 1

Dayton Superior's C60 Pres-Steel Hanger, Type 1 permits installation and adjustment from above the deck. C60 Pres-Steel Hanger, Type 1 has a nominal 3/8" setback and is used to support deck formwork on interior bridge beams.

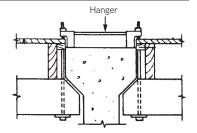




# C60 Pres-Steel Hanger, Type 2 and Type 7

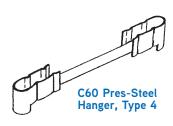
Dayton Superior's C60 Pres-Steel Hangers, Type 2 and Type 7 are similar to Type 1 hanger, above, except Type 2 and Type 7 hangers provide for 1" to 2-3/4" haunch conditions, respectively.

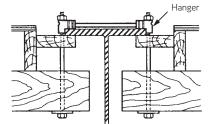




### C60 Pres-Steel Hanger, Type 4

Dayton Superior's C60 Pres-Steel Hangers, Type 4 are used on steel interior bridge beams to support deck formwork. The hanger's end sections extend over the edge of the beam to resist shifting.

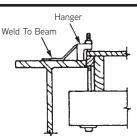




### C24 Pres-Steel Half Hanger

Dayton Superior's C24 Pres-Steel Half Hangers are designed to be field welded to a steel bridge beam or to bridge beam rebar stirrups and provide one-sided forming support.

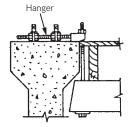




### C25 Adjustable Half Hanger

Dayton Superior's C25 Adjustable Half Hanger attaches to a bridge beam stirrup and is designed to support one-sided forming on applications where welding is not an option.

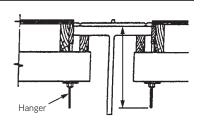




### C41 Coil Rod Hanger

Dayton Superior's C41 Coil Rod Hanger is designed to support interior forming on both sides of a bridge beam and to breakback inside the concrete. The C41 Coil Rod Hanger can be used effectively with any haunch height condition.



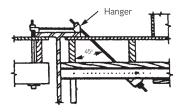




### C60 Pres-Steel Hanger, Type 1-A

Dayton Superior's C60 Pres-Steel Hanger, Type 1-A is designed with a 45° end section at one end and is used to support fascia overhang formwork.

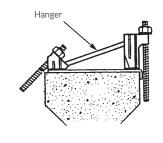




### C62 45° Pres-Steel Hanger

Dayton Superior's C62 Pres-Steel Hanger is designed with a 45° end section at one end and is used to support fascia overhang formwork. Haunch heights up to 2-3/4" can be accommodated.

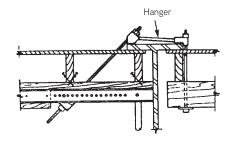




### C60 45° Pres-Steel Hanger, Type 4-A and Type 5-A

Dayton Superior's C60 Pres-Steel Hangers, Type 4-A and Type 5-A are designed with a 45° end section at one end to support fascia overhang formwork. The 90° end section extends over the edge of the bridge beam for added support and resistance to shifting.

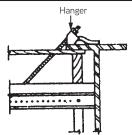




### C24 45° Pres-Steel Half Hanger

Dayton Superior's C24 45° Pres-Steel Half Hanger is designed to be field welded to a steel beam or to concrete beam rebar stirrups to provide one-sided forming support.

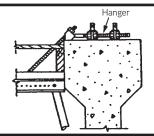




### C25 45° Adjustable Half Hanger, Type 1-A

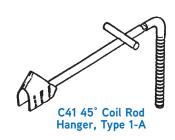
Dayton Superior's C25 45° Adjustable Half Hanger, Type 1-A attaches to a bridge beam rebar stirrup to support one-sided forming applications where welding is not an option.

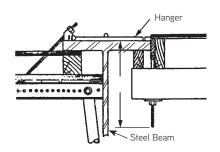




### C41 45° Coil Rod Hanger, Type 1-A

Dayton Superior's C41 45° Coil Rod Hanger, Type 1-A is designed to support interior forming on one side of a bridge beam and fascia forming on the other. The C41 45° Coil Rod Hanger, Type 1-A can be used effectively with any haunch height condition and can be broken back inside the concrete.







### C49 Bridge Overhang Bracket

Dayton Superior's C49 Bridge Overhang Bracket supports bridge deck fascia formwork. It can be mounted to steel or concrete girders using an appropriate hanging device.



### C49D Bridge Overhang Bracket For Deep Girders

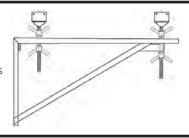
Dayton Superior's C49D Bridge Overhang Bracket for deep girders supports bridge deck fascia formwork. It has been designed to mount to deep steel or concrete girders, using an appropriate hanging device.



C49D Deep Overhang Bracket

### C49W Bridge Overhang Bracket

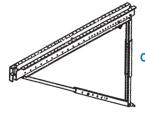
Dayton Superior's C49W Bracket aids in preventing web of beam from bending during construction of bridge deck. Constructed with all-steel support frame to improve stablity and resist movement. Meets ANSI Specification A 10.9, Sections 6.5.1, 6.6.1, 7.2.1 and ACI 347 Specification 2.4 Screw Jacks extend up to 6".



C49W Bridge Overhang Bracket

### **C89 Heavy Duty Bridge Overhang Bracket**

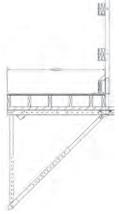
Dayton Superior's C89 Heavy Duty Bridge Overhang Bracket supports bridge deck fascia formwork. The bracket, available in 72" or 90" versions, can be utilized on steel or concrete girders using the appropriate 3/4" hanging device.



C89 Heavy Duty Bridge Overhang Bracket

### C52P Guard Rail Speed Bracket Assembly

The C52P Guardrail Speed Bracket Assembly is designed for fast and easy attachment to the C49 Bridge Overhang Bracket. The C52P's Speed Bracket bolts securely to the C49 Bridge Overhang Bracket and provides a base to simply install the Guardrail Post. The Guardrail Post has a nail down feature to prevent uplift. The C52P is compatible with lumber or cable railings. The Guardrail Assembly weighs a convenient 15.6 lbs.



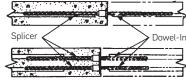
C52P Guardrail Speed Bracket Assembly



### D101A, D102A, D103A and D104A Dowel Bar

Dayton Superior's D101A through D104A DBSAE Splicers are one-piece forged units made from grade 60 rebar and are supplied with NC or UNC threads depending on size. Splicers are available in bar sizes #4 through #11 in straight, hooked, double-ended and bolt-headed configurations.

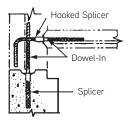




#### D101, D102, D103 and D104 Dowel-In

Dayton Superior's D101 through D104 Dowel-Ins are manufactured from grade 60 rebar material and are available in sizes #4 through #11 for use with the DBSAE Splicer shown above. Dowel-Ins are available in straight, 90° hooked, 180° hooked and double-ended configurations.

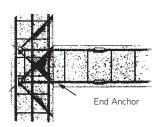




#### D158 End Anchor

Dayton Superior's D158 End Anchors are available in all rebar sizes and in various configurations to aid in situations where rebar congestion or other difficult concreting conditions restrict placement of hooked rebar or long lap splices.

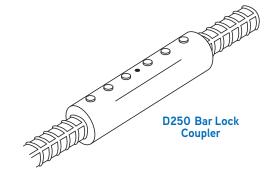






### D250 Bar Lock® Couplers

Dayton Superior's D250 Bar Lock Couplers provide a simple, quick, cost effective method for splicing rebar in tension and/or compression. Bar Lock Couplers are available for use with smooth or deformed bars in sizes #4 through #18.



### Taper-Lock®

Dayton Superior is proud to offer the portable, high-speed taper cut solution! Turn the system that has already been proven on sites throughout Europe into your on-site advantage. Dayton Superior is the only company able to bring the reliable Taper-Lock design to North American fabricators and contractors.

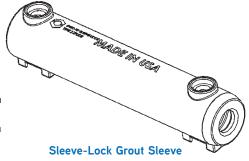
Taper-Lock's portable design allows you to take the system wherever you need it. Its revolutionary high-speed taper cut more than doubles the production of conventional cutters, allowing you to beat deadlines. The system uses conventional water-soluble cutting fluid. The strong unit withstands tough projects. Its straightforward process makes operation and repair easy.



### D410 Sleeve-Lock® Grout Sleeve

The Dayton Superior D410 Sleeve-Lock Grout Sleeve is a one-piece mechanical coupler designed to butt-splice reinforcing steel in concrete structures. The Grout Sleeve is available in seven (7) sizes to accommodate deformed bar sizes #4 through #18. Bars of like size or of different sizes can be effectively spliced by the System. Typical sleeve applications include precast and cast-in-place concrete structures.

The D410 Sleeve-Lock Grout Sleeve is a ductile casting with a minimum yield strength of 55,000 psi and a minimum tensile strength of 80,000 psi. It exceeds all known building codes and agency standards. The System achieves 160% fy strength criteria with the Dayton Superior Sleeve-Lock Grout D490, a high strength, non-shrink grout.

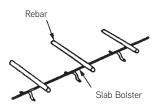




#### Slab Bolster

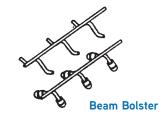
Dayton Superior's Slab Bolster is used to support lower slab steel from the slab form. Legs are spaced on 5" centers. Available in 3/4" to 3" heights in 5' lengths and in bright basic, galvanized, plastic protected, epoxy coated or stainless steel protected.

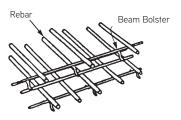




#### **Beam Bolster**

Dayton Superior's Beam Bolster is used to support lower beam steel from the soffit form. Legs are spaced on 2-1/2" centers. Available in 1-1/2" to 5" heights in 5' lengths. Manufactured in bright basic, plastic protected, epoxy coated, galvanized or stainless steel protected.

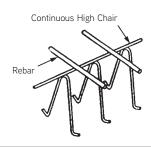




### **Continuous High Chair**

Dayton Superior's Continuous High Chair provides support for upper slab steel eliminating the need for carrier bars. Fabricated in 2" to 15" heights in 5' lengths with legs spaced on 7-1/2" centers. Available in bright basic, plastic protected, epoxy coated, galvanized and stainless steel protected.

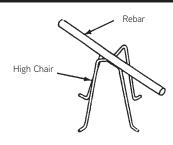




### Individual High Chair

Dayton Superior's Individual High Chair is used to support upper steel directly or by means or a carrier bar. Available in 2" to 15" heights in bright basic, plastic protected, epoxy coated, galvanized and stainless steel protected.

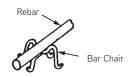




#### **Bar Chair**

Dayton Superior's Bar Chair is used to support wide spaced light steel in slab construction. Available in 3/4" to 2" heights in bright basic, plastic protected, epoxy coated, galvanized and stainless steel protected.

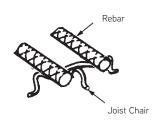




#### Joist Chair

Dayton Superior's Joist Chair is used to support two bottom bars in the ribs of joist or grid type slabs. Available in 4", 5" and 6" overall widths; 3/4", 1" and 1-1/2" heights; and in bright basic, plastic protected, epoxy coated, galvanized and stainless steel protected.





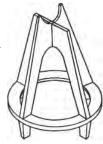


#### Aztec® E-Z Chair® — PEZ \*

The Aztec E-Z Chair is the most popular on the market. It features Standard "Concrete Gray" color (custom colors available-inquire), minimal surface contact and is designed for maximum aggregate flow and concrete consolidation. It provides high load capacity, fits up to #8 rebar, but does not straddle the bottom rebar mat in double mat applications (for straddle applications, see Aztec Tower Chair).

Applications: Single Mat -Rebar or Wire Mesh, Bottom Layer Double Mat Rebar or Wire Mesh, Tilt-Wall, Side-Form Spacer, On-Grade: when used with Sand Plate

Cover Height: From 3/4" to 6" (1/4" increments).



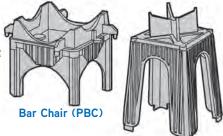
E-Z Chair (PEZ)

### Aztec® Tower Chair - PTC / Bar Chair - PBC \*

The Aztec Tower Chair and Bar Chair both feature Standard "Concrete Gray" color, offer minimal surface contact, and are designed for maximum aggregate flow and concrete consolidation. Both fit up to #8 rebar and the Tower Chair straddles the upper rebar mat in double mat applications.

Applications: Single Mat -Rebar or Wire Mesh, Bottom Layer Double Mat-Rebar or Wire Mesh, Tilt-Wall, Side-Form Spacer, On-Grade: when used with Sand Plate.

Cover Height: From 3/4" to 10" (1/4" increments)



Tower Chair (PFC)

#### Aztec® Straddle Chair — PSC\*

The Aztec Straddle Chair offers a minimal footprint with a staple down option and straddles lower rebar mat. It accommodates #3 to #11 rebar with 2 sizes per chair. The straddle Chair has the same material characteristics as Aztec Tower Chair.

Applications: Single Mat -Rebar or Wire Mesh, Bottom Layer Double Mat-Rebar or Wire Mesh, Tilt-Wall, Side-

Form Spacer, On-Grade: when used with Sand Plate

Cover Height: From 3" to 7-3/4"



Straddle Chair (PSC)

#### Aztec® Castle Chair — PCC\*

The Aztec Castle Chair is the most stable on-grade chair available. It features a heavy-duty, smooth bottom, stackable design, ideal for use on insulating foam or vapor barriers. It fits up to #8 rebar and supports 500 lbs. + loads. Each chair comes in two height combinations reducing inventory.

Application: On-Grade, Single Mat - Rebar or Wire Mesh, Bottom Layer Double Mat-Rebar or Wire Mesh, Precast/Tilt-Wall, Insulated "Sandwich" Panels.

Cover Height: From 1-1/2" to 6-1/4" (1/4" increments)

Castle Chair Round Base 1-1/2" to 4-1/4" tall, Castle Chair Square Base 4-1/2" to 6-1/4" tall.

\*Meets all requirements and qualifies as a CRSI Class 1 Bar Support.



4

Castle Chair (PCC)
Square Base



### Aztec® StrongBack Slab / Beam Bolster — PSBB \*

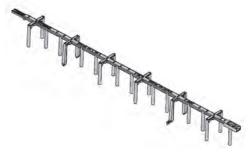
The Aztec StrongBack Slab / Beam Bolster is high load strength and impact resistant, it qualifies for use as a Beam Bolster with 2-1/2" leg spacing, and can be used individually or locked together to create any length. The Strongback Slab is manufactured in 30" lengths in standard boxes. Special packaging available in 5' or 10' sections, bundled and palletized.

Application: Elevated Slab, Tilt Wall, Precast, Post-Tension, Parking Garage

Decks, Side-Form Spacer

Cover Height: From 3/4" to 3" (1/4" Increments)

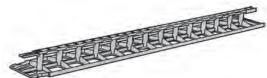
Meets all requirements and qualifies as a CRSI Class 1 Bar Support.



StrongBack Slab Beam Bolster (PSBB)

### Aztec® StrongBack SBU Slab Bolster Upper — PSBU \*

The Aztec StrongBack Slab Bolster Upperis designed for use with Epoxy-Coated/FRP/Stainless Steel/Galvanized rebar and is intended for use in corrosive environments, it is as strong as metal SBU. The Strong Back Slab Bolster Upper spans corrugations in elevated deck applications, is suitable for use on Vapor Barriers or Insulating Foam, no overlap required, manufactured in 30" lengths in standard boxes. special packaging available in 5' or 10' sections, bundled and palletized.



StrongBack SBU Slab Bolster Upper (PSUB)

Application: Supports top layer in Double Mat application, Rebar or Wire Mesh, Slabs, Heavy Duty On-Grade, Corrugated Decking, Side-Form Spacer-below-grade applications only, Precast

Cover Height: From 1" to 3-1/4" (1/4" increments)





### **T41 Ground Release Lifting Insert**

Dayton Superior's T41 Ground Release Lifting Insert is a 4 ton insert designed to accommodate the T43R Lifting Hardware shown below. The insert is complete with plastic void and wire or plastic protected base.



#### T43L Ground Release Lifting Hardware

Dayton Superior's T43L Ground Release Lifting Hardware is designed to lift and place tilt-up wall panels quickly and efficiently. The unit offers high safe working loads, ease of operation and a positive ground release.

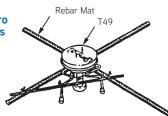


### T49 Gyro Tilt Plus® Insert

Dayton Superior's T49 Gyro Tilt Plus Insert is a 4 ton insert designed to accommodate the T50 Gyro Tilt Plus Hardware shown below. The insert is complete with plastic void and plastic protected wire base.



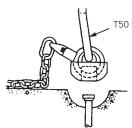
T49 Gyro Tilt Plus Insert



### T50 Gyro Tilt Plus® Hardware

Dayton Superior's T50 Gyro Tilt Plus Hardware is designed to lift and place tilt-up wall panels quickly and efficiently. The system is easy to use, quick and has a positive ground release.





### **T110 Superior Lift System**

The Dayton Superior T110 Superior Lift Insert consists of a forged foot anchor, 4-leg wire base and plastic void former. The insert is positioned with the void direction toward the top of the panel and then is tied in place to the rebar cage. The T120 Superior Lifting Hardware allows quick attachment to the insert and remote ground release after panel has been erected and braced. The T110 Superior Lift Inserts are shipped assembled, ready to go and are sized 1/8" less than the panel thickness.

T110 Superior Lift System



### T275 Tilt-Up Anchor

The Dayton Superior T275 Tilt-Up Anchor consists of a dual forged foot anchor assembled with a plastic recess plug and two plastic supports. The insert is a directional insert used parallel to the height of the panel. The T275 inserts are shipped assembled, ready to install and sized to the panel thickness. It is installed in concrete tilt-up panels and used for lifting applications.

T275 Tilt-Up Anchor





### **T120 Superior Lift Hardware**

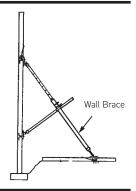
The Dayton Superior T120 Superior Lift Hardware is designed to easily attach to the insert by engaging the curved clutch handle into the opening in the anchor. The ball of the hardware is designed to readily align itself to the pull of the rigging. Once engaged and under load, it can not be disengaged by remote ground release until the load has been removed in lowering the rigging. The T120 is used for both face and edge lift system conditions.



#### **Wall Brace**

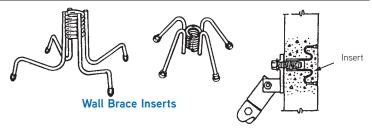
Dayton Superior's Wall Braces are all steel, heavy duty wall braces designed to quickly and easily align and brace tilt-up wall panels. Wall braces are available in several models that span brace lengths of 5'-0" to 62'-0" with ultimate load rating 2,025 to 36,000 lbs.





#### **Brace Insert**

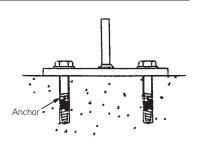
Dayton Superior's Brace Inserts are available in several versions. They are designed to be cast-in-place in the concrete panel and used to anchor tilt-up wall braces during the construction sequence.



#### **T13 Coil Anchor**

Dayton Superior's T13 Coil Anchor is a drill-in anchor designed for use in the floor slabs of tilt-up buildings to attach and anchor wall braces during panel erection or to secure emergency lift plates.





#### T12 and T26 Swivel Lift Plate

Dayton Superior's T12 and T26 Swivel Lift Plates are designed for use with 3/4" through 1-1/2" lifting bolts to attach to coil lift inserts cast in a tilt-up wall panel.





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**T8 Lifting Angle, T27 Edge Lifting Plate**Dayton Superior's T8 Lifting Angle and T27 Edge Lifting Plate are designed for use with 3/4" or 1" tandem lifting inserts to lift and position tilt-up panels.





T27 Edge Lifting Plate





#### **Helical Ground Anchors**

The Helical Ground Anchor (HGA) is part of a total bracing system designed for rapid installation and the ability to immediately load the helical ground anchor for unsurpassed speed and efficiency on any tilt-up or pre-cast project.



#### **HGA Extension**

Certain sites where the foundation soils are lower strength may require the use of an HGA Extension. This shaft is the same section (1½" square bar) but is 4' in length and has a 10" helical plate set at 10" from the top of the extension.



#### **Transition Brace Connector**

The Transition Brace Connector (TBA) connects the brace to the HGA. It leads to quicker installation and better alignment of the brace center-line to the HGA center-line.



T14 Pipe Brace

### **T24 Adjustable STBC Connector**

The Adjustable STBC Connector features 3 hole adjustments and offers quicker installation and better alignment of brace to HGA without removing the foot plate from the brace.



#### Twin STBC Connector

The Twin STBC Connector quickly connects the braces to the HGA. Twin STBC Safe Working Load is a total of 15,000 lbs. with 2:1 Safety Factor (Safe Working Load per side is 7,500 lbs)



Twin STBC Connector



### P50 Swift Lift® Universal Lifting Eye and P51 Swift Lift® Lifting Eye

Swift Lift lifting eyes are used with the Swift Lift anchors shown below to strip, transport and erect precast concrete elements. The P50 units are available in 1, 2, 4, 8 and 20-ton safe working load capacities. The P51 units are available in 2T, 4T and 8T units only.

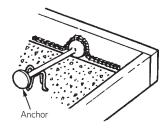


### P52 Swift Lift® Anchor and P53 Swift Lift® Eye Anchor

Swift Lift anchors may be used with either of the above Swift Lift lifting eyes. Swift Lift anchors are available in various lengths and capacities to meet the requirements and needs of the precast industry.



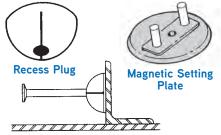




### P56PL Swift Lift® Recess Plug and P69M Swift Lift® Magnetic Setting Plate

Use Swift Lift Recess Plugs to securely hold Swift Lift anchors in place during placement of the concrete. The plugs also form a void around the anchor's head, which allows for easy attachment of the lifting hardware.

The P69M Magnetic Setting Plate offers the precaster a fast and secure method of attaching Swift Lift anchors to the side or bottom of steel forms.



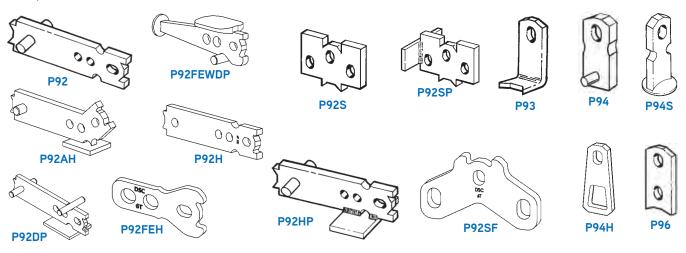
#### P91S and P91NC Fleet-Lift™ Hardware

Dayton Superior's Fleet-Lift Hardware is used with Fleet-Lift Anchors to face-lift or edge-lift precast concrete elements. Units are designed to connect and disconnect quickly and to rotate for easy alignment.



#### Fleet-Lift Anchors

Fleet-Lift anchors are available in 1, 2, 3, 4, 6, 8, 10, and 12-ton capacities and are used with the above hardware to strip, transport and erect precast concrete elements.



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#### P92FE and P92FEW Fleet-Lift Forged Erection Anchors

The Fleet-Lift Forged Erection Anchor is specifically designed to provide greater lifting capacities for horizontal to vertical edge lifts. They are available in 3T, 6T and 10T SWLs. The anchors are forged to provide 20% greater safe working loads. This anchor utilizes the Fleet-Lift lifting hardware and the P99 Recess Plugs. Available in plain or hot-dipped galvanized finishes.





P92FE

P92FEW

### P99 Fleet-Lift™ Recess Plug and P100M Fleet-Lift™ Magnetic Plate

Fleet-Lift Recess Plugs are designed to hold Fleet-Lift anchors securely in place during the placement of the concrete. They also form a void around the anchor head, which allows for easy attachment of the lifting hardware.

A fast and secure method of attaching Fleet-Lift anchors to steel forms is available with the P100-M Magnetic Plate.







Cast Iron

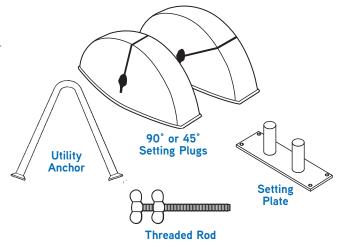
Magnetic Setting Plug

### P75 Utility Anchor, P75H Utility Anchor Heavy, P76 Utility Anchor Setting Plug

The Dayton Superior Utility Anchors are designed to economically simplify the stripping, transporting and installation of underground or other types of utility precast concrete elements. As special lifting hardware is not required for use with these utility anchors, they offer not only economic advantages, but versatility and ease of use.

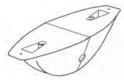
The P75 units are available in several safe working load capacities, up to 10,000 lbs SWL in tension. The P75H anchor has a safe working load of 24,000 lbs in tension.

Reusable setting plugs, used with either 3/8" coil threaded rods or setting plates, are available to set anchors in place in the forms.



### P76D 7.5 T Disposable Void Former

The Dayton Superior P76D 7.5 T Disposable Void Former was created to allow a large enough void to utilize Crosby Hooks for lifting precast products. The 7.5T Disposable Void Former is a 2 part recess plug fabricated from high density polyethylene plastic. The two-piece design snaps together around the head of the anchor to securely grasp the anchor. The tight fit eliminates the concrete entering into the void. The design secures the anchor in proper position and maintains 1/2" clearance between top edge of the anchor and the top surface of the concrete. The tabs on the ends of the void former provide a convenient method to nail the assemble to a form. The Void Former is removed and discarded after usage.



P76D 7.5T Disposable Void Former

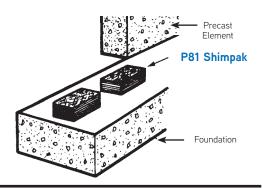
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### P80 / P81 Shimpak

Dayton Superior's shimming material is an engineered multipolymer plastic which provides an optimum combination of physical properties for a shim in applications where high compressive strength and load bearing is important. It facilitates the placement of architectural members.

Popular sizes are  $4" \times 6"$  and  $4" \times 4"$  paks which are 1-1/16" thick. Shimpaks are made up of shims in the following thickness sequence; one 1/16th, three 1/4ths and two 1/8ths.

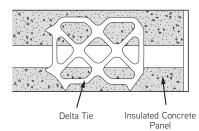


#### P24 Delta Tie Insulated Concrete Panel Tie

Dayton Superior offers a unique composite panel tie for use in connecting the exterior and interior wythes of precast concrete insulated "sandwich" panels. The use of the P24 Delta Tie offers quick and easy tie installation resulting in stiffer panels, increased load bearing and material, labor and transportation cost savings.

Larger P24XL also available.





#### P38 Corewall® Slotted Insert II

The Corewall Slotted Insert II is the next generation product in the Corewall legacy. The design has been updated to create a higher load capacity and greater ease of installation. With six different product options and two different finishes, the Corewall Slotted Insert II will meet any application. This Product is an addition to the Corewall Slotted Inserts which have been specified and used by precasters for over 20 years. The existing styles of Corewall Inserts remain available.



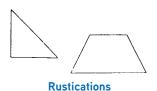
**Corewall Insert** 

#### Formliner and Rustication

Over 120 formliner patterns are available in several different materials and thicknesses, each providing a distinct surface treatment. Dayton Superior's rustications are available in various shapes, materials and sizes to meet the needs of the precaster.





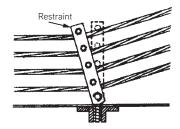




#### **Prestress Strand Restraint Devices**

Dayton Superior's has a large comprehensive line of prestress strand "hold down" units that have been thoroughly tested and broadly accepted as the Standard of the Precast/Prestressed Concrete Industry. They are fabricated without welds, using only positive mechanical connections between the various components of each device.





#### P12G Welded Wire Girder

Welded Wire Girder is used as a shear connection for insulated sandwich panels. Welded Wire Girder not only connects the concrete widths through the insulation material, but has the resiliency to expand and contract with the independent thermal-induced movement of the outer width Available in plain or hot dip galvanized finishes.



#### P12 Dur-O-Web® Shear™ Reinforcement

Dur-O-Web is a prefabricated structural web reinforcement assembly that replaces conventional stirrups in prestressed tees. It allows the spacing of the smooth, round vertical and horizontal wires to vary, meeting various design requirements.



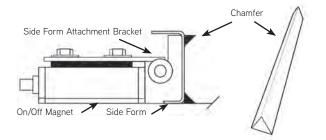
#### Steel Forms for Precast

Dayton Superior's offers precasters in various types and sizes of steel forms as may be required. For medium barriers, utility poles, pile forms, girder forms and double tee forms.



#### **Magnets**

Dayton Superior offers a complete line of integrated magnetic components designed to help save time and money in precast forming applications. The Dayton Superior Magnetic Precast Forming System includes On/Off Magnets, Loaf Magnet, Button Magnets, Chamfer and Reveals, Embedment and Insert Magnets, Manhole Step Magnets and Custom Magnets for any application.

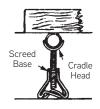




#### Standard Screed Base

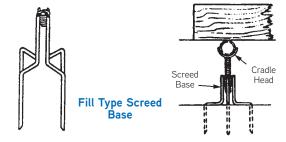
Dayton Superior's has a variety of screed bases available to meet the requirements of flat slab work. Adjustable, free-fit, sub-grade, etc., are used with the cradle heads, below, to support the screed rails.





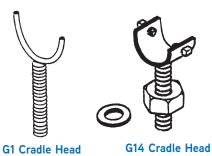
### Fill Type Screed Base

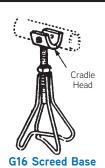
Dayton Superior's Fill Type Screed Bases are similar to the standard bases described above, but are designed to be pushed into the fill instead of free-standing like the standard bases above.



#### Cradle Head

Dayton Superior's Cradle Heads are used in conjunction with the various screed bases to support the screed rails. Various styles and sizes are available to fit the job requirements.

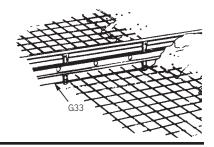




**G33 Screed Key Joint** 

Dayton Superior's G33 Screed Key Joint is an economical replacement for bulkhead slab forms. Available in 10' lengths for 4", 5", 6", 8" and 10" thick slabs.

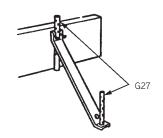




#### **G27 Round Stake**

Dayton Superior's G27 Round Stakes are manufactured from high quality steel and feature a machined point and a spiral pattern of nailing holes. Available in 3/4", 7/8" and 1" diameters in 12", 18", 24", 30", 36", 42" and 48" lengths.

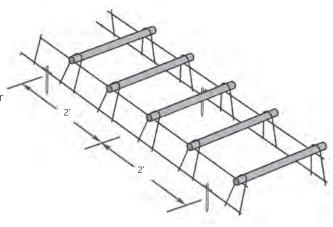






#### **Welded Dowel Assemblies**

Dayton Superior understands that adequate load transfer is a necessity for well engineered highway, airport, and industrial slabs. This load transfer is typically provided by dowel bars or dowels being placed across transverse joints to provide vertical support and transfer loads across joints. Dowel bars reduce the potential for faulting, pumping, and corner breaks in jointed concrete pavements. In order for the dowel to correctly perform, it is critical that it is properly aligned. Dayton Superior understands that the best way to achieve this alignment is to provide an assembly which will properly position the dowels. The paving industry calls this the "welded dowel assembly" and Dayton Superior is proud to be the largest manufacturer of this system in the United States. Welded dowel assemblies are typically used for transverse joints in Department of Transportation, airport, and commercial applications and can be manufactured for various slab thicknesses, dowel sizes, coatings, and spacing requirements.



#### **Dowel Baskets (Without Dowels)**

Dayton Superior's Dowel Baskets are used for expansion and contraction joints in 6" to 9" concrete slabs. Dowel Baskets and their accessories are available in several styles to meet individual project specifications.

\* Meets all requirements and qualifies as a CRSI Class 1 Bar Support.



### Tie Bar Assembly

Tie bar assembly is a basket supporting and positioning rebar dowels of various sizes as specified by the owner of the paving. It is commonly used for longitudinal joints in both DOT and commercial applications. Available in plain or epoxy coated.



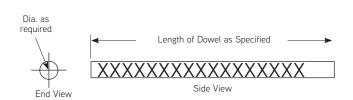
#### **Dowel Bar**

Dowel bars available in many different diameters and lengths. Specify plain, painted or epoxy. Other options include: patched ends, tectyl bond-breaker, fully or 3/5 painted, square, or round.



#### Tie Bar

Tie bars available in many different diameters and lengths. Straight or bent.





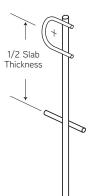
#### **Basket Stake**

Welded hook type stakes are available to anchor dowel baskets. The stakes are fabricated in 6" through 21" lengths and .306" and 1/2" diameters.



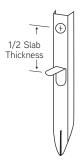
#### **PS Stake**

PS Stakes are available to hold dowel bars or tie bars in 6" through 18" thick slabs. They are fabricated in #1/0 gauge wire for 1/2", 5/8", 1", Thickness 1-1/4", and 1-1/2" bar diameters.



#### **MS Stake**

MS Stakes are available to hold dowel bars or tie bars in 6"-21" thick slabs. They are fabricated in 16 and 18 gauge metal for 1/2", 5/8", and 3/4" bar diameters.

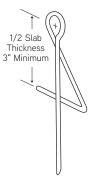


#### **Channel Stake**

Channel Stakes are available to support metal keyways in longitudinal and transverse joints of concrete slabs. They are fabricated in 14 and 16 gauge metal and 15" through 24" lengths.

#### **FS Stake**

FS Stakes are available to hold dowel bars or tie bars in 6" through 21" thick slabs. They are fabricated in 5 gauge wire for 1/2" through 1-1/2" bar diameters.



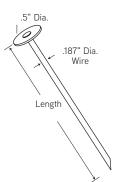
#### **Mat Stake**

Mat Stakes are fabricated in 9", 12", 18", and 24" lengths.



### Fabric Stake

Fabric Stakes are available to anchor geotextile fabrics. They are fabricated in 18" lengths.

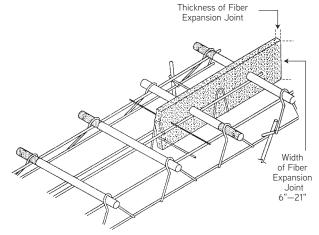




### Highway Fiber Expansion Joint™

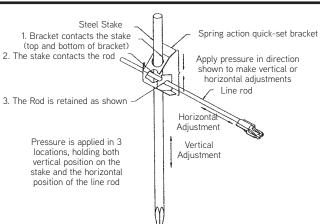
Highway fiber expansion joint is an environmentally safe, compressible material used as a filler strip in expansion and contraction joints. It is suitable for use in a wide variety of concrete construction projects, including roadways, airport runways, loading facilities, parking lots, and curbs.

Meets ASTM-1751.



### **Highway String Line Guide Systems**

The Highway String Line Guide System is intended to be an aid or guide to users of automated paving equipment.



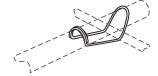
### **Basket Clip**

Basket clips are available in wrap-around and nail-down styles to fasten baskets with nails in lieu of basket stakes.



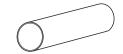
### **Dowel Bar Clip**

Dowel bar clips are available for tying or clipping dowels to wire baskets (without dowels). They are fabricated for 3/4" through 1-5/8" diameter dowels.



#### **Dowel Tube - Plastic**

Plastic dowel tubes are used for the end-of-day pour applications, eliminating the need for drilling into the slab.



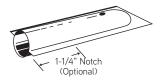
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### **Dowel Cap**

Metal and plastic dowel caps are available to allow movement of dowels in expansion joints. Crimp type metal dowel caps are fabricated in 5/8" through 1-1/4" diameters and 5" length. Welded type metal dowel caps are fabricated in 3/8" through 2" diameters and 5" and 6" lengths. Flanges on the welded type caps must be notched back when installing caps on dowels in baskets. Plastic dowel caps are fabricated in 1/2" through 1-7/8" diameters and 4" length.









Welded Type I.D. = Nominal Dia. + 1/8"

Plastic Caps I.D. = Nominal Dia. + 1/32"

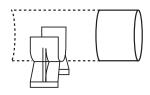
#### **Grout Retention Ring**

Grout retention rings are available for 5/8", 3/4", 1", 1-1/4", and 1-1/2" diameter dowels. They retain anchoring material and improve dowel support.



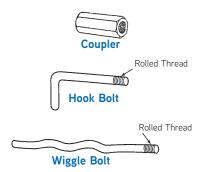
### **Snap-On Dowel Chair and Cap**

Plastic dowel chairs are available for support of 1/2" through 1-1/2" diameter dowels used in retrofit applications.



### **Longitudinal Joint Tie**

Bolts and couplers are available as longitudinal joint ties in 5/8" and 3/4" diameters. Bolts are fabricated in hook or wiggle configurations.

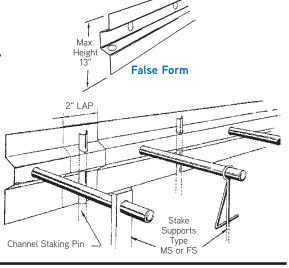




### Metal Keyway — Center Strip

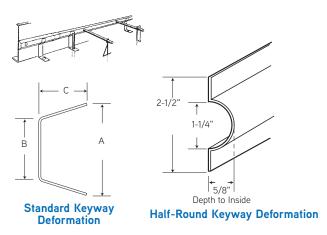
Metal keyways are available to form keyways along longitudinal and transverse joints in concrete slabs. The false form, K30, is fabricated in 16 and 18 gauge metal for 7-1/2" to 12" slabs.

The general center strip, K33, is fabricated in 18 and 20 gauge metal for 4-1/2" to 10" slabs.



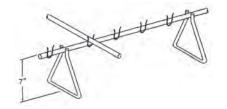
### Metal Keyway — Recess Form

Recess form keyways are available for longitudinal joints in 6" to 10" thick concrete slabs. They are fabricated in standard keyway deformation, K34, or half-round deformation, K35, in 24, 18, or 16 gauge metal.



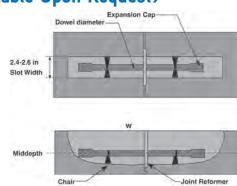
### Transverse Bar Assembly (TBA)

Eliminates wire tying to longitudinal bar for CRCP replacement. Transverse reinforcement hooks directly to longitudinal bar. Snaps quickly to track. Saves labor, as a six person crew can typically lay one lane mile per 8 hour shift. Accurate position of clips creates uniform separation for continuous bar placement. Custom manufactured to specs in both uncoated or epoxy coated.



### Dowel Bar Retrofit System (Complete Brochure Available Upon Request)

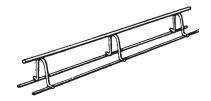
The Dowel Bar Retrofit System (DBRS) is a rehabilitation technique for increasing the load transfer capability of existing jointed portland cement concrete (PCC) pavement. This is accomplished by placing dowel bars across existing joints and/or cracks that exhibit poor load transfer.





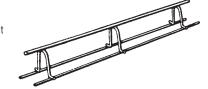
### **Continuous Mesh Support**

Continuous mesh supports are manufactured in 5' 0" lengths and 3", 4", 5", 6", and 7" heights.



### Continuous High Chair Upper (CHCU)

These continuous supports are available in 2" through 25" heights. They are fabricated in Bright Basic Wire (CHCU-3) or Epoxy-coated Wire. Per 100 Ft. or Per 100 Pcs.



### Snap-On Paving Chair (#3, #4)

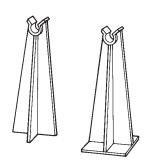
Plastic, snap-on paving chairs are available for #3 and #4 Rebar. They are manufactured in 1" through 6" heights and are also available with a square base.

### Snap-On Paving Chair (#4, #5, #6)

Plastic, snap-on paving chairs are available for #4, #5, and #6 Rebar. They are manufactured in 1" through 7" heights and are also available with a square base.

### Snap-On Power Chair

Snap-on power chairs are available to support #3 Rebar at heights from 1" through 6". They are manufactured from glass-reinforced resin for high heat resistance and high strength and have an optional square base.



### **Continuous Support**

Continuous supports are available for wire mesh support in 2" through 16" heights.



3" to 8" Heights Have Two Linear Wires



A2	2	Bridge Overhang Bracket	14	D101A	15
A3	2	Bridge Overhang Bracket For Dee		D102	15
A4	2	C1B		D102A	15
A16	2	C1C		D103	
A21		C2		D103A	
A27		C3		D104	
A46		C13		D104A	
A48		C13A		D158	
A55		C14		D250	
A56		C24			
				D410	
A56A		C24 45°		Dayton Bar	
A57		C25		DBRS	
A57A		C25 45°		Delta Tie Insulated Concrete Panel Tie	
A81		C41		Disposable Void Former	
A82		C41 45°		Dowel Bar	
A90		C49		Dowel Bar Clip	
A93	4	C49D		Dowel Bar Retrofit System	33
A95	11	C49W	14	Dowel Baskets (Without Dowels)	29
A100	11	C52P	14	Dowel Cap	32
Adjustable Coil Bolt	6	C60	12, 13	Dowel-In	
Adjustable Half Hanger		C60 45°	13	Dowel Tube - Plastic	
Adjustable STBC Connector		C62 45°		D/R Cast Nut Washer	
Adjustable Weld Angle Bracket		C89		D/R Euro Thread Bar	
Aztec		Cast Hex Nut		D/R Hex Coupler	
B1		Castle Chair		D/R Steel Hex Nut	
B2					
		Channel Saddle Hanger		D/R Swivel Wing Nut	
B3		Channel Stake		D/R Thread Bar	
B11		CHCU		D/R Wing Nut	
B12		Coil Anchor		Ductile Embed	
B12A		Coil Bolt		Dur-O-Web® Shear™ Reinforcement	
B12AC	5	Coil Half Hanger	9	Edge Lifting Plate	
B12ACN	5	Coil Hanger, Saddle Type	9	End Anchor	15
B12AD	5	Coil Loop Insert	10	Expanded Coil Insert	10
B12ASN	5	Coil Nut	6	E-Z Chair	18
B12ASW	5	Coil Rod	5	F1	
B12AW		Coil Rod Hanger		F2	
B12AWN		Coil Tie		Fabric Stake	
B13		Continuous Bar Support		Fill Type Screed Base	
B14		Continuous High Chair		Flared Coil Loop Insert	
B14A		Continuous High Chair Upper		Flat Tie	
B18				Flat Washer	
B27		Continuous Mesh Support			
	_	Continuous Support		Fleet-Lift Anchors	
B31		Corewall Slotted Insert II		Fleet-Lift Forged Erection Anchor	
B32		Cradle Head		Fleet-Lift Hardware	
B33		CRCP replacement		Fleet-Lift Magnetic Plate	
B39		D1		Fleet-Lift Recess Plug	
B42	7	D2	6	Form Anchorage	
B43	8	D6	11	Form Hanger	9
Bar Chair	17, 18	D9	7	Formliner	26
Bar Lock Couplers	16	D9A	7	FS Stake	30
Bar Support — Metal		D12	11	G1	28
Bar Support — Plastic		D12A	11	G2	
Bar Supports		D18		G14	
Basket Clip		D22		G16	
Basket Stake		D24		G27	
Batter Washer		D30		G33	
		D30A			
Beam Bolster				Gang Loop Panel Tie	
Brace Insert		D40		Ground Release Lifting Hardware	
Bracing Products		D48		Ground Release Lifting Insert	
Bridge Deck Forming	12	D101	15	Grout Retention Ring	32

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Guard Rail Speed Bracket Assembly	14	P92HP	24	Straddle Chair
Gyro Tilt Plus Hardware		P92S	24	StrongBack SBU Slal
Gyro Tilt Plus Insert		P92SF	24	StrongBack Slab / Be
Handle Coil Nut		P92SP	24	Superior Lift Hardwa
Heavy Duty Bridge Overhang Bracket		P93	24	Superior Lift System
Heavy Forming Accessories		P94	24	Sure Guard Rail Post
He-Bolt		P94H	24	Sure-Lock Bracket
Helical Ground Anchors		P94S	24	Sure-Lock Strongbac
HGA		P96	24	Sure-Lock Tie
HGA Extension		P99		Sure-Snap Hex Head
Highway Fiber Expansion Joint™		P100M		Swift Lift Anchor
Highway String Line Guide Systems		Paving		Swift Lift Eye Anchor
Individual High Chair		Paving Stakes		Swift Lift Lifting Eye
Inserts		Paving Systems		Swift Lift Magnetic Se
Inside Tie Rod		PBC		Swift Lift Recess Plug
Jahn "A" Bracket		PC110		Swift Lift Universal Li
Jahn "C" Bracket Joist Chair		PCCPencil Rod		Swivel Lift Plate
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K30		PEZ		T12
K33		Plastic Cone Snap Tie		T13
K34		Plate Saddle Hanger		T24
K35		Precast Products		T26
Lifting Angle		Pres-Steel Half Hanger		T27
Light Forming Accessories		Pres-Steel Hanger		T41
Load Transfer Products		Prestress Strand Restraint Devices	27	T43L
Longitudinal Joint Tie		PSC		T49
Loop Ferrule Insert	10	PS Stake	30	T50
Loop Panel Tie	3	PTC	18	T110
Magnets	27	Rebar Safety Caps	11	T120
Mat Stake	30	Rebar Splicing	15	T275
Metal Keyway - Center Strip	33	Rebar Supports	34	Taper-Lock
Metal Keyway - Recess Form	33	Recess Form	33	Taper Tie
MS Stake		Retention Ring		TBA
Nut Washer	11	Rock Anchor	8	Thin Slab Ferrule Inse
Omni Wedge		Rod Clamp		Thread Bar She-Bolt
P12		Round Stake		Thread Bar Taper Tie
P24		Rustication		Tie Bar
P38		Saddle Hanger		Tie Bar Assembly
P50		Safety		Tilt-Up Anchor
P51		Scaffold Bracket		Tilt-Up Products
P52		Screeding Products		Tower Chair
P53		Screed Key Joint		Transition Brace Con
P56PL		Screw Anchor		Transverse Bar Asse
P69M		Screw Anchor Bolt		Turnbuckle Form Alig
P75		She-Bolt		Twin STBC
P75H		Shimpak		Utility Anchor
P76		Slab Bolster		Utility Anchor Heavy
P76D 7.5 T		Sleeve-Lock Grout Sleeve		Utility Anchor Setting
P80				
		Snap-On Dowel Chair and Cap		Wall Brace
P81		Snap-On Paving Chair		Wedge Hanger
P91NC		Snap-On Power Chair		Welded Dowel Assem
P91S		Snap Tie		Wing Nut
P92		Speed Step Bracket		
P92AH		Speedy Bracket		
P92DP		Splicer		
P92F		Stakes		
P92FEH		Standard Screed Base		
P92FEW		STBC		
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# **AWARNING**

### Improper Use of Concrete Accessories Can Cause Severe Injury or Death

Read, understand and follow the information and instructions in this publication before using any of the Dayton Superior concrete accessories displayed herein. When in doubt about the proper use or installation of any Dayton Superior concrete accessory, immediately contact the nearest Dayton Superior Service Center or Technical Service Department for clarification. See back cover for your nearest location.

Dayton Superior products are intended for use by trained, qualified and experienced workers only. Misuse or lack of supervision and/or inspection can contribute to serious accidents or deaths. Any application other than those shown in this publication should be carefully tested before use. The user of Dayton Superior products must evaluate the product application, determine the safe working load and control all field conditions to prevent applications of loads in excess of a product's safe working load. Safety factors shown in this publication are approximate minimum values. The data used to develop safe working loads for products displayed in this publication are a combination of actual testing and/or other industry sources. Recommended safe working loads given for the products in this publication must never be exceeded.

#### Worn Working Parts

For safety, concrete accessories must be properly used and maintained. Concrete accessories shown in this publication may be subject to wear, overloading, corrosion, deformation, intentional alteration and other factors that may affect the device's performance. All reusable accessories must be inspected regularly by the user to determine if they may be used at the rated safe working load or should be removed from service. The frequency of inspections depends upon factors such as (but not limited to) the amount of use, period of service and environment. It is the responsibility of the user to schedule accessory hardware inspections for wear and remove the hardware from service when wear is noted.

#### **Shop or Field Modification**

Welding can compromise a product's safe working load value and cause hazardous situations. Knowledge of materials, heat treating and welding procedures is necessary for proper welding. Consult a local welding supply dealer for assistance in determining required welding procedures. Since Dayton Superior cannot control workmanship or conditions in which modifications are done, Dayton Superior cannot be responsible for any product altered in the field.

### Interchangeability

Many concrete accessory products that Dayton Superior manufactures are designed as part of a system. Dayton Superior strongly discourages efforts to interchange products supplied by other manufacturers with components supplied by Dayton Superior. When used properly, and in accordance with published instructions, Dayton Superior products have proven to be among the best designed and safest in the industry. Used improperly or with incompatible components supplied by other manufacturers, Dayton Superior products or systems may be rendered unsafe.

#### Installation

#### **WARNING**

- 1. Dayton Superior Corporation products shall be installed and used only as indicated on the Dayton Superior Corporation installation guidelines and training materials
- 2. Dayton Superior Corporation products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specific load ratings.
- 3. All instructions are to be completely followed to ensure proper and safe installation and performance
- 4. Any improper misuse, misapplication, installation, or other failure to follow Dayton Superior Corporation's instruction may cause product malfunction, property damage, serious bodily injury and death.

#### THE CUSTOMER IS RESPONSIBLE FOR THE FOLLOWING:

- 1. Conformance to all governing codes
- 2. Use of appropriate industry standard hardware
- 3. The integrity of structures to which the products are attached, including their capability to safely accept the loads imposed, as evaluated by a qualified engineer.

#### SAFETY INSTRUCTIONS:

All governing codes and regulations and those required by the job site must be observed. Always use appropriate safety equipment

### **Design Changes**

Dayton Superior reserves the right to change product designs, rated loads and product dimensions at any time without prior notice.

Note: See Safety Notes and Safety Factor Information.

