



**FORMING ACCESSORIES:  
WALL TIES AND LIGHT  
FORMING HARDWARE**

CONCRETE  
CONSTRUCTION  
PRODUCTS

**PERFORM  
WITH  
PRECISION**





# INNOVATION CENTER

## REAL-WORLD SOLUTIONS INSPIRED BY YOUR VISION

Your vision is to take concrete construction to new heights. We turn that vision into real-world solutions through precision research and development, testing and technology.

Together we are redefining what is possible in the concrete construction industry. Our Innovation Center is comprised of:

- A state of the art chemical lab
- A full-featured mechanical test facility
- Product demonstration areas
- Contemporary training and meeting areas

Bring us your ideas and we will deliver your solution.



800-876-4857

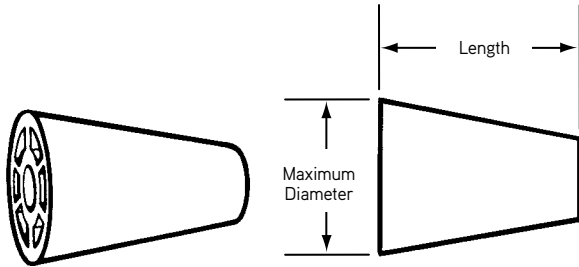


Perform with Precision™



## A2 Plastic Cones

Dayton Superior A2 Plastic Cones can be added to A3, A4 and A44 Snap Ties and A46 and A48 Loop Ties. The cones act as internal spreaders, reduce grout leakage and aid in the breakback operation.



A2 Plastic Cone

A2 Plastic Cone Selection Chart

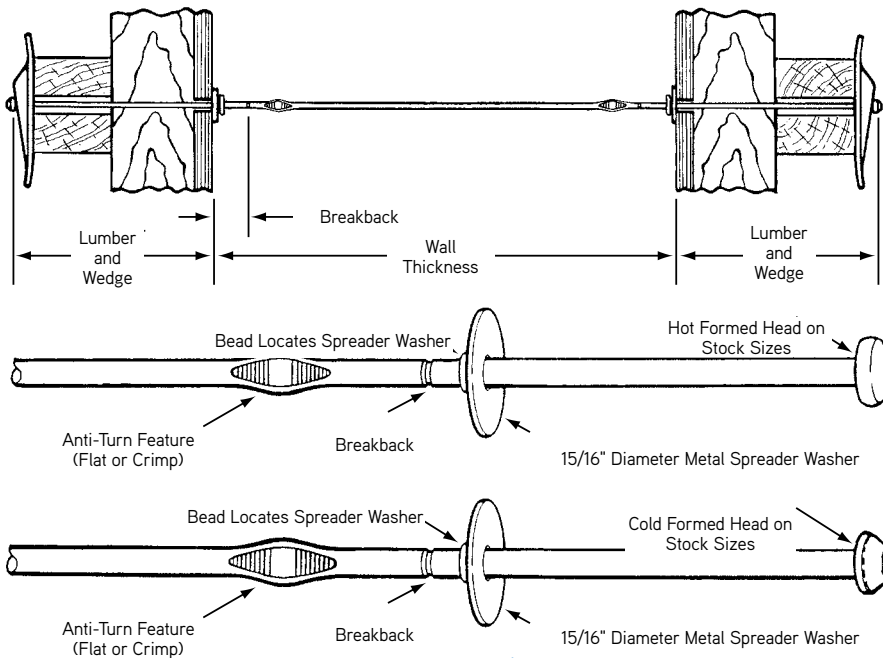
Diameter	Length
3/4"	1", 1-1/2"
1"	1", 1-1/2" 2"
1-1/4"	1-1/2"

A2 Plastic Cones are recommended when specifications require a nominal 1", 1-1/2", 2" or greater breakback. Breakback is approximately 3/16" less than the cone length.

**Note:** Plastic Cones are designed to act as internal form spreaders only. They are not intended to support loads applied by personal fall arrest systems and/or scaffold brackets.

## A3 Standard Snap Tie

Dayton Superior A3 Standard Snap Ties are manufactured with either hot or cold forged integral heads. A3 snap ties have a nominal 1" breakback with 1/4" and 1/2" breakbacks available on special order. Breakbacks over 1" can be provided on special order, but due to the increased concrete bond, Dayton Superior cannot guarantee that the ties will consistently provide proper breakback. Coating the tie ends with wax will aid in breakback operation.



A3 Snap Ties

**2,250 lbs.  
Safe Working Load**

**To Order:**  
Specify: (1) quantity, (2) name, (3) wall thickness, (4) lumber and wedge dimension (allow 1/2" for wedge take up), (5) break back.

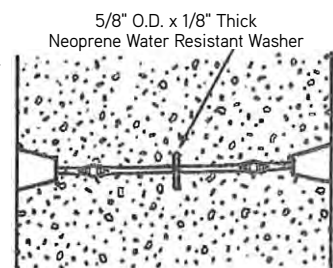
**Example:**  
3,00 pcs. A3 Standard Snap Tie, 18" wall, 8-1/4" L&W, 1" break back.

SWL provides a factor of safety of approximately 2 to 1.

Each A3 snap tie is fabricated with flats or crimps to prevent the snap tie from turning in the concrete during breakback operations. A3 Snap Ties are available with fixed metal spreader washers.

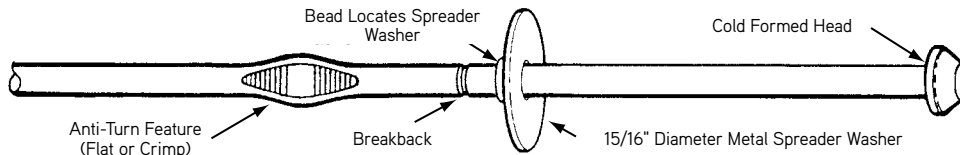
All snap ties can be manufactured with a tight fitting neoprene washer located near the center of the tie. The water resistant snap tie is designed to help eliminate water seepage along the tie by breaking the surface continuity of the wire.

Drill holes in plywood 1/8" larger than the Snap Tie head. Normally, a 5/8" drill bit is sufficient.



## A3 Heavy Snap Tie

Dayton Superior A3 Heavy Snap Ties are used when a higher safe working load is required. The A3 snap tie is manufactured with cold forged integral heads and is equipped with flats or crimps to prevent turning.



**A3 Heavy Snap Tie**

See A3 Snap Tie for additional pertinent information on breakback and fixed metal washers.

**3,350 lbs.  
Safe Working Load**

**To Order:**

Specify: (1) quantity, (2) name, (3) wall thickness, (4) lumber and wedge dimension (allow 1/2" for wedge take up), (5) break back.

**Example:**

3,00 pcs. A3 Heavy Snap Tie, 18" wall, 8-1/4" L&W, 1" break back

SWL provides a factor of safety of approximately 2 to 1.

## A3 Stayform Tie

A3 Stayform Ties are manufactured with a standard forged head on one end and nut and plate on another end. They are used for connecting site-built wood forms to vertical rebar for blind-side wall applications. For use with the A110 Metal Rib.

- Low cost solution for blindside wall application
- A3 Stayform Ties are made with standard 1" breakback
- Ultimate load is 3,750 lbs.
- The largest rebar diameter for A3 Stayform Ties is #8
- Available with plastic cone
- Available in any length from 6" to 48"



## A3B1 Combination Tie

A3B1 Combination Ties are manufactured with a standard forged head on one end and 1/2" coil tie on another. A3B1 Combination Ties are used for connecting site-built wood forms to coil rod for blind-side wall application.

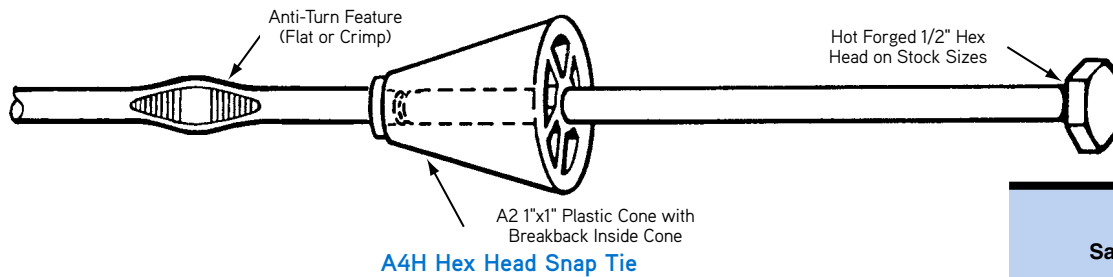
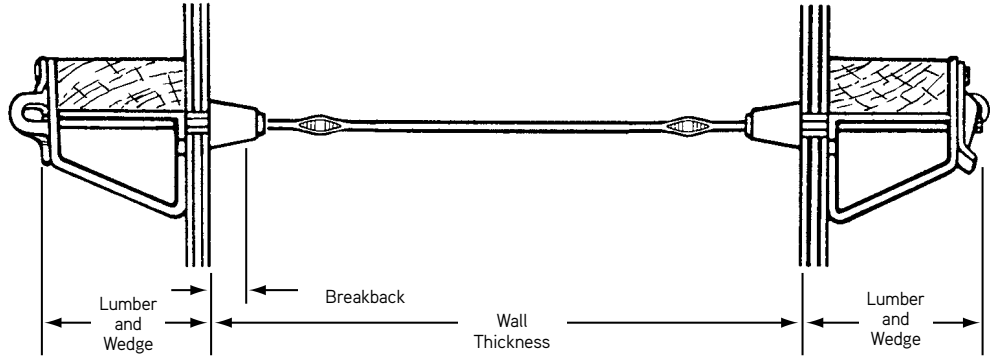
- Low cost solution for blindside wall application
- Available in any length from 7" to 36"
- Ultimate load is 4,500 lbs.
- Available with plastic cone or loose washer



## A4H Hex Head Snap Tie

Dayton Superior A4H Hex Head Snap Ties are manufactured with hot forged integral 1/2" hex shaped heads. The hex head allows short-end snap ties to be broken back with the formwork still in place.

The standard A4H uses 1" x 1" A2 Plastic Cones to provide a nominal 1" breakback. Other size cones are available on special order.



**2,250 lbs.**  
Safe Working Load

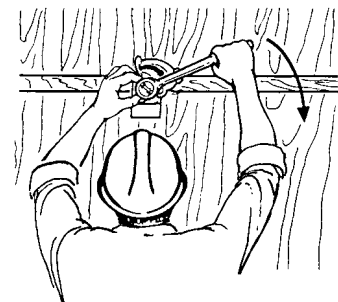
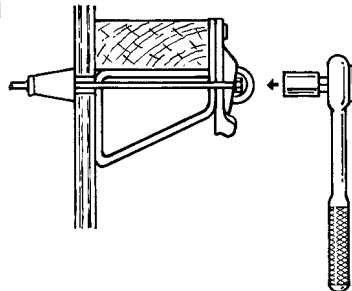
**To Order:**  
Specify: (1) quantity, (2) name, (3) wall thickness, (4) lumber and wedge dimension (allow 1/2" for wedge take up), (5) break back, (6) type of washer or cone.

**Example:**  
2000 pcs. A4-H Hex Head Snap Tie, 12" wall, 4-3/4" L&W, 1" break back with A2 1"x1" Plastic Cones.

SWL provides a factor of safety of approximately 2 to 1.

## How to Break Back A4 Snap Ties

1. Place a 1/2" six-point socket and ratchet over the head of the tie (see A31 Hex Head Snap Tie Socket).
2. Push the bracket eccentric away from the tie head.
3. Standing in front of the tie, hold the socket on the hex head with one hand and turn the ratchet with the other. A 1/4 to 1/2 turn of the ratchet will normally break the tie end.



Light Forming Products

## A5 Threaded PullOut Tie

Dayton Superior A5 Threaded PullOut Tie is manufactured with a standard forged head on one end and 2" of 1/4" - 28 UNF-2A thread on the opposite end. Washers and nut are supplied loose and are placed on the tie after the tie has been installed through the form plywood.

**Note:** The A5 Threaded PullOut Tie needs to be coated with a form release agent or a water resistant grease, before the concrete is placed, to facilitate tie removal.

To remove the A5 tie from the set concrete, one end of the tie must be cut off between the plywood and the wales and then extracted by pulling on the opposite end.

### To Order:

Specify: (1) quantity, (2) name, (3) fixed end = wale and wedge dimension (allow 1/2" for wedge take up), (4) dimension inside to inside of wales, (5) threaded end = wale + 1-1/2", (6) with or without spreader washers.

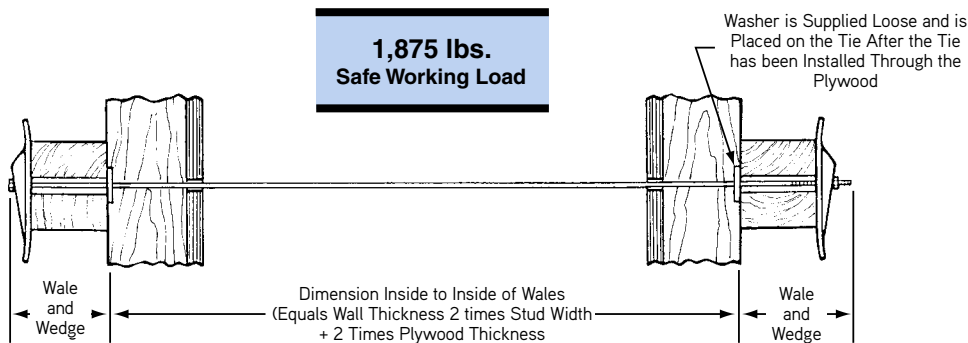
### Example:

2100 pcs. A5 Threaded PullOut Tie, 4" fixed end dimension, 20-1/2" inside to inside of wales, 5" threaded end, with spreader washers.

SWL provides a factor of safety of approximately 2 to 1.

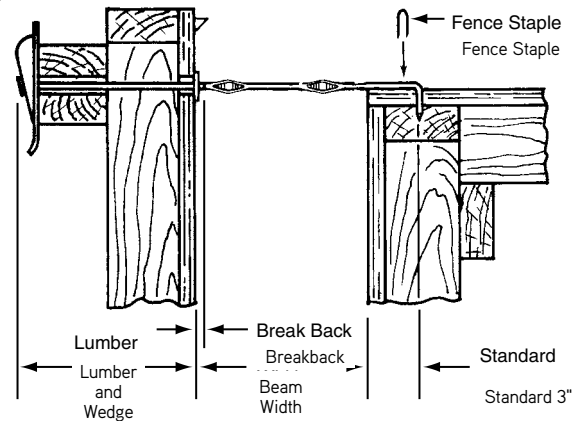
## A6 Spandrel Point Tie

**1,875 lbs.  
Safe Working Load**



Dayton Superior A6 Spandrel Point Tie is available for tying light outside spandrel beam forms. One end is fabricated with a standard end with any style plastic cone or spreader washer. The opposite end is bent 90° with a chisel point that is driven into the deck formwork. Breakback dimension is the same as standard snap ties.

Dayton Superior recommends placing a 1-1/4" fence staple over the tie within 1" of the bend.



**250 lbs.  
Safe Working Load**

### To Order:

Specify: (1) quantity, (2) name, (3) beam thickness, (4) lumber and wedge (5) type of form spreaders and break back.

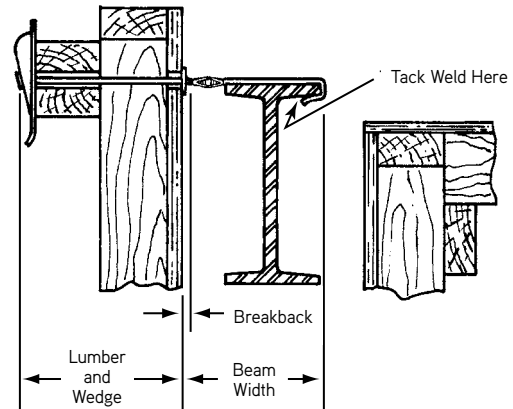
### Example:

400 pcs. A6 Spandrel Point Tie, 12" beam thickness, 8-1/4" L&W, (3" automatically added to beam thickness) with A2 1"x1" Plastic Cones and 1" break back.

SWL provides a factor of safety of approximately 2 to 1.  
Safe Working Load is controlled by wood spreader.

## A7 Spandrel Hook Tie

Dayton Superior A7 Spandrel Hook Tie is available for securing light outside spandrel beam forms to structural steel beams. The A7 is similar to the A3 tie with the exception of the end configuration. The hook-end of the A7 tie fits over the beam flange and is tack welded on the underside of the beam flange. The A7 tie is available with any type of spreader washer or plastic cones.



**To Order:**

Specify: (1) quantity, (2) name, (3) tie length, (4) flange thickness, (5) lumber and wedge, (6) Type of form spreader and break back.

**Example:**

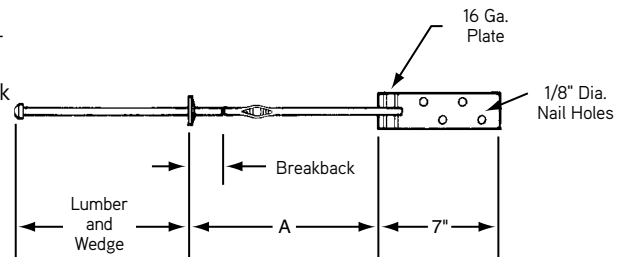
700 pcs. A7 Spandrel Hook Tie, 16" tie length, 1/2" flange, 8-1/4" L&W, with 15/16" dia. Spreader Washers and 1/2" break back.

SWL provides a factor of safety of approximately 2 to 1.

**250 lbs.  
Safe Working Load**

## A7A Spandrel Plate Tie

Dayton Superior A7A Spandrel Plate Tie is used in the same type applications as the A6 Spandrel Point Tie. The A7A tie is fabricated with a 16 gauge steel plate which allows the tie to be nailed directly to the deck formwork with 6d nails. The A7A tie is available with plastic cones or metal spreader washers.



**To Order:**

Specify: (1) quantity, (2) name, (3) "A" dimension, (4) lumber and wedge, (5) type of form spreaders and break back.

**Example:**

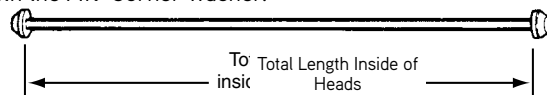
1000 pcs. A7A Spandrel Point Tie, "A" = 12", 8-1/4" L&W with 1"x1" Plastic Cone, 1" break back.

SWL provides a factor of safety of approximately 2 to 1.  
Safe Working Load is controlled by wood spreader.

**250 lbs.  
Safe Working Load**

## A9 Tip-To-Tip Tie

Dayton Superior A9 Tip-To-Tip Tie is a plain rod with headed ends. The A9 tie is usually withdrawn from the concrete or cut off after stripping the formwork. It is also used as an outside corner tie with the A19 Corner Washer.



**To Order:**

Specify: (1) quantity, (2) name, (3) total length inside of heads (allow 1" total length increase for take up of wedges)

**Example:**

5000 pcs. A9 Tip-To-Tip Tie, 37" total length inside of heads.

SWL provides a factor of safety of approximately 2 to 1.

**A9 Tip-To-Tip Tie**

**2,250 lbs.  
Safe Working Load**

## A10 Plate Tie

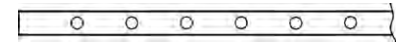
Dayton Superior A10 Plate Tie is a plain rod with headed ends and square washers.



A10 Plate Tie

## A13 Metal Strapping

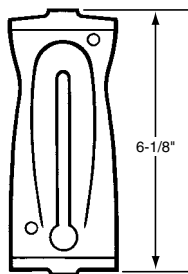
Dayton Superior A13 Metal Strapping is used to fabricate and reinforce unusual forming requirements on the job site. The 300' roll is 3/4" wide 25 gauge steel.



A13 Metal Strapping

## A16 Omni Wedge

Dayton Superior A16 Omni Wedge is a high strength snap tie wedge designed to slip over the head of standard or heavy duty snap ties to provide ample bearing area for proper load distribution into the wales.



A16 Omni Wedge

**To Order:**  
Specify: (1) quantity, (2) name.

**Example:**  
5,000 pcs. A16 Omni Wedge.

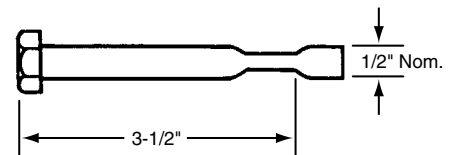
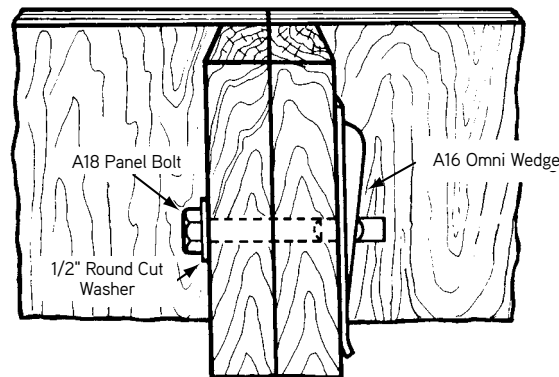
## A16SB Snap Bracket

Dayton Superior A16SB Snap Bracket is fabricated from heavy guage steel and cadmium-based for high corrosion resistance. This versatile bracket can be installed horizontally, vertically, and even inverted with a 2x4 kicker plate. The Snap Bracket uses 4-3/4" L&W Snap Ties, and its sliding wedge has a 5/8" adjustment range to accommodate lumber variation. This bracket can be installed before or after the wales have been positioned.



## A18 Panel Bolt

Dayton Superior A18 Panel Bolt is used in conjunction with the A16 Omni Wedge to fasten adjoining studs. The standard panel bolt accepts two studs dressed to 1-1/2" each as shown in the sketch. Other sizes are available on special order. A round cut washer should be used under the head of the panel bolt to better distribute the loads.



**To Order:**  
Specify: (1) quantity, (2) name, (3) total net lumber thickness.

**Example:**  
5,000 pcs. A18 Panel Bolt, 3" lumber.

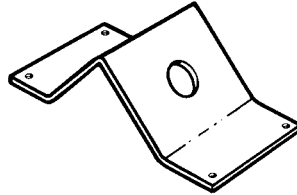


### A19 Corner Washer

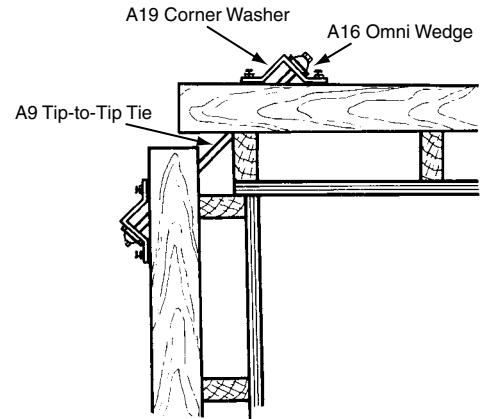
Dayton Superior A19 Corner Washer is fabricated from 3/16" x 3" flat stock bent to form a wedge block. The ample bearing flanges are drilled for nailing to the wales. The A19 Corner Washer accommodates an A9 Tip-To-Tip Tie or a 1/2" B12 Coil Rod.

**To Order:**  
Specify: (1) quantity, (2) name.

**Example:**  
350 pcs. A19 Corner Washer.



A19 Corner Washer



### A21 Strap Ties And Accessories (For Steel Frame Form Panels)

#### A21U Strap Tie

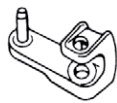
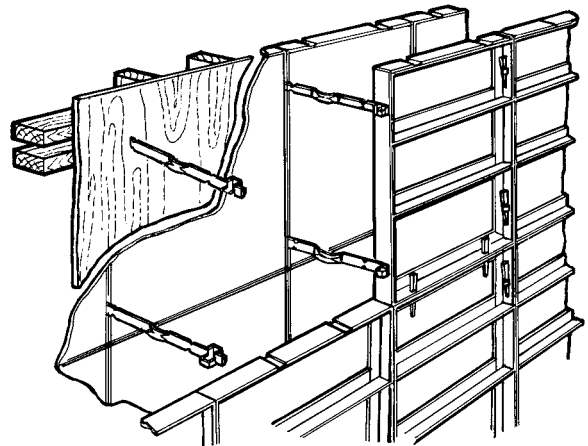
Dayton Superior A21U Strap Tie is used to align, tie and secure steel frame form panels. Ties are available for wall thickness of 6" through 24" in 1/2" increments. Standard breakback for A21U ties is 1/2".

#### A21K Tie Key

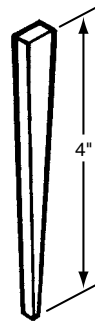
Dayton Superior A21K Tie Key is used to secure the tie to the form. The A21K key is 4" long and tapers from 3/8" to 1/8". Each tie requires four (4) Tie Keys.

#### A21C Clamp

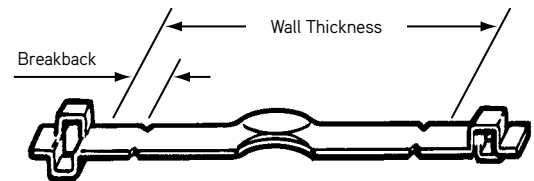
Dayton Superior A21C Clamp is used to connect forms.



A21C Clamp



A21K Tie Key



A21U Strap Tie

**2,250 lbs.**  
Strap Tie Safe Working Load

Light Forming Products

<p><b>To Order A21U:</b> Specify: (1) quantity, (2) name, (3) wall thickness.</p>	<p><b>Example:</b> 2,500 pcs. A21U Strap Tie, 6" wall</p>
<p><b>To Order A21C:</b> Specify: (1) quantity, (2) name.</p>	<p><b>Example:</b> 2,000 pcs. A21C clamp</p>
<p><b>To Order A21K:</b> Note: Available in Full Cartons Only. Each Carton is 50 lbs or approximately 1,000 tie keys Specify: (1) quantity, (2) name.</p>	<p><b>Example:</b> 3 cartons. A21K Tie Key.</p>

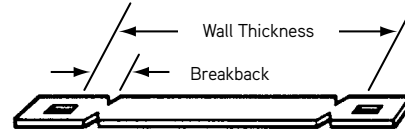
SWL provides a factor of safety of approximately 2 to 1.

## A21F Flat Tie

Dayton Superior A21F Flat Tie is used to tie steel frame form panels together. A21K Tie Keys are inserted through adjoining panels and the tie key slot. A21C Panel Clamps are required at each tie location to prevent lateral form movement. A21F Flat Ties are available from 6" through 24" in 1/2" increments. Standard breakback is 1/2".

**To Order:**  
Specify: (1) quantity, (2) name, (3) wall thickness.

**Example:**  
1,000 pcs. A21F Flat Tie, 16" wall.



A21F Flat Tie

SWL provides a factor of safety of approximately 2 to 1.

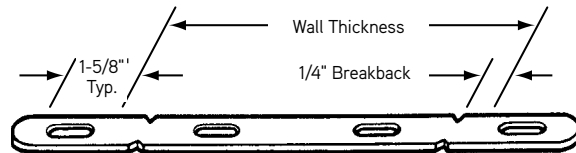
**2,250 lbs.  
Safe Working Load**

## A21X Flat Tie

Dayton Superior A21X Flat Tie is used with the A51 Wedge Bolt to secure and space modular forms. A21X ties are available in 6" up to 84" in 1/2" increments. Standard breakback is 1/4".

**To Order:**  
Specify: (1) quantity, (2) name, (3) wall thickness.

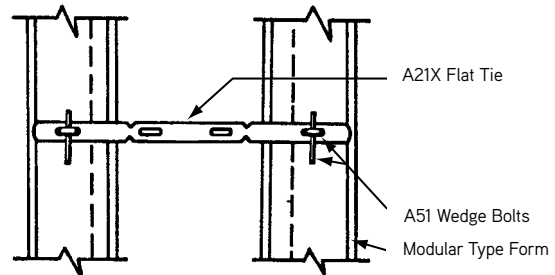
**Example:**  
2,500 pcs. A21X Standard Flat Tie, 12" wall.



A21X Flat Tie

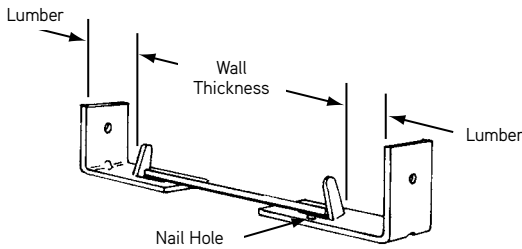
SWL provides a factor of safety of approximately 2 to 1.

**3,500 lbs. Heavy  
3,000 lbs. Standard  
Safe Working Load**

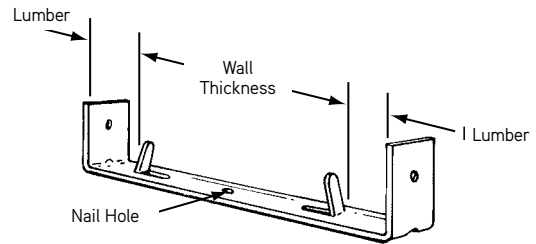


## A22 Spreader Cleats

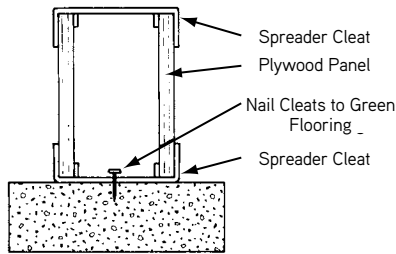
Dayton Superior A22 Spreader Cleats are used to form footers or grade beams up to 32" high. On panels up to 24" high the cleats are spaced at 32" maximum center to center spacing. For panels over 24", and up to 32", the cleats should be spaced at 24" maximum center to center spacing. Two versions of the spreader cleat are available. The stamped metal cleat is available for 5-5/8", 6", 7-5/8", 8", 10" and 12" wall thicknesses with 3/4" or 1-1/8" lumber ends. The other spreader cleat version utilizes two lumber ends attached with a wire strut. This version is available for wall thicknesses over 5" with 3/4", 1-1/8", 1-5/8" and 2-1/4" lumber ends.



A22 Spreader Cleat with Wire Strut



A22 Spreader Cleat-Stamped Metal



**750 lbs.  
Safe Working Load**

**To Order:**

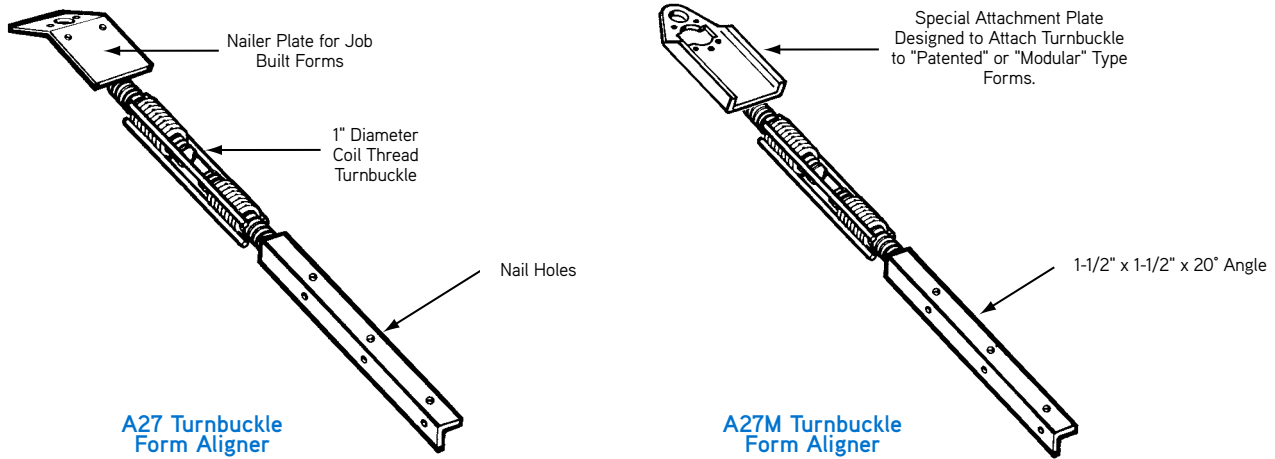
Specify: (1) quantity, (2) name, (3) end dimension, (4) wall thickness.

**Example:**

500 pcs. A22 Spreader Cleat with wire strut, 2-1/4" end & 18" wall thickness.

SWL provides a factor of safety of approximately 2 to 1.

## A27 and A27M Turnbuckle Form Aligners

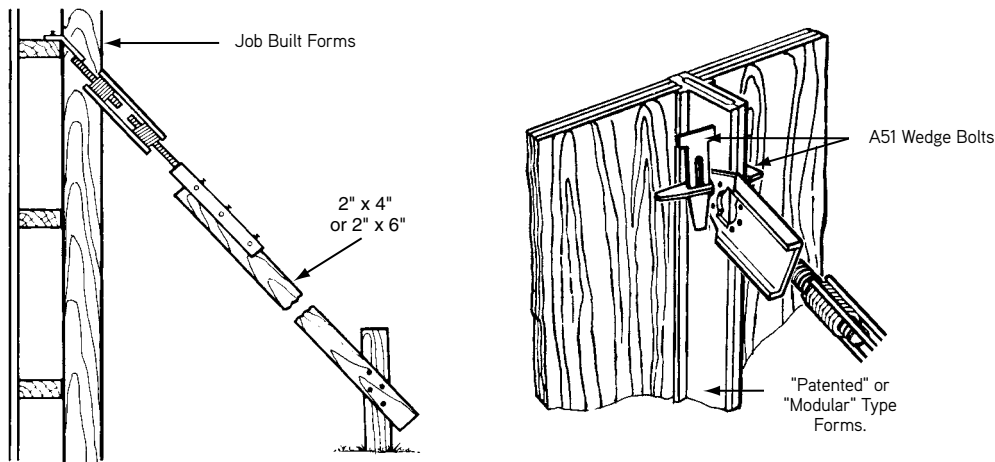


**A27 Turnbuckle Form Aligner**

**A27M Turnbuckle Form Aligner**

Dayton Superior A27 and A27M Turnbuckle Form Aligners are designed to accurately position and plumb vertical forms. The turnbuckle section of the aligner features a 1" diameter self-cleaning coil thread for fast adjustments. Overall length of the aligner is 37" minimum and 40" maximum, offering 3" of effective adjustment.

The A27 aligner has bent nailing plate equipped with nail holes and a 15/16" hole to accept 3/4" or 7/8" steel stakes. The A27M aligner has a special attachment plate that allows direct attachment to modular type forms. Both models are rugged units that offer high reuse and labor savings. The safe working load of the aligners is limited by the lumber, nailing and/or staking methods.



**To Order:**  
Specify: (1) quantity, (2) name.

**Example:**  
116 pcs.  
A27 Turnbuckle Form Aligner.

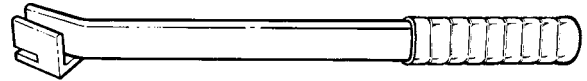


## A29 Snap Tie Wrench

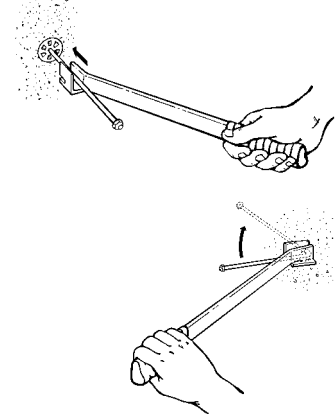
Dayton Superior A29 Snap Tie Wrench is designed to facilitate snap tie breakback.

### Using the A29 Snap Tie Wrench:

1. After the form has been removed slide the wrench up the tie until the front of the wrench contacts the concrete.
2. Keep the wrench tight against the concrete and push the handle towards the concrete, thus bending the tie nearly 90°. Next, rotate the wrench around the centerline of the tie. 1/4 to 1/2 turn is usually sufficient to snap off the tie end.



A29 Snap Tie Wrench



## A31 Wrench Head Snap Tie Socket

A31 is designed to facilitate A4-H Hex Head Snap Tie breakback.



A31 Wrench Head Snap Tie Socket

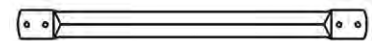
## A40 Cone Removal Wrench

Dayton Superior A40 Cone Removal Wrench is designed to facilitate plastic cone removal.



## A43 Footing Tie

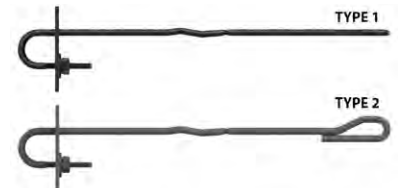
The A43 Footing Tie is used to form footers or grade beams up to 42" wide. Footing Ties provide an economical way to support concrete forms from bowing or collapsing while concrete is being poured. The Safe Working Load is limited to lumber and/or nailing.



A43 Footing Tie

## A46 Stayform Tie

A46 Stayform Ties are manufactured with a standard loop on one end and nut and keeper on another end. For use with A110 Metal Rib.



## A46B1 Combination Tie

A46B1 Combination Ties are manufactured with a standard loop on one end and 1/2" coil tie on another. They are used for connecting Steel-Ply forms to coil rod for blind-side wall application.

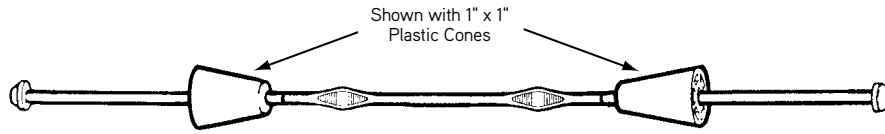


## A46B1 (Special) Combination Tie

A46B1 (Special) Combination Ties are manufactured with a standard loop on one end and 1/2" coil tie on another. They are used for connecting Steel-Ply forms to coil rod for blind-side wall application.



## A44 Stainless Steel Snap Tie



A44 Stainless Steel Snap Tie

**2,150 lbs.**  
Safe Working Load

Dayton Superior A44 Stainless Steel Snap Ties are available for applications that require ties resistant to rusting or other similar corrosion. The A44 tie is available with button style head. Hex head or penta head not available. It has either 15/16" diameter metal spreader washers or standard plastic cones. The tie holes left after breakback may be left open and ungrouted to give an architectural design in the concrete.

**Note:** Due to the ductility of the type 304 stainless steel wire, Dayton Superior can not guarantee that these ties will consistently provide proper breakback. SWL provides a factor of safety of approximately 2 to 1.

**To Order A25:**

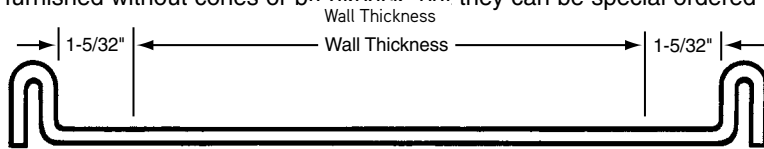
Specify: (1) quantity, (2) name, (3) wall thickness (4) lumber and wedge dimension (allow 1/2" for wedge take up) (5) cone size or with washers (break back).

**Example:**

2,500 pcs. A44 Stainless Steel Snap Ties, 12" wall, 8-1/4" L&W, 1"x1" Plastic Cone.

## A45 Base Tie

Dayton Superior A45 Base Ties are used at the base and/or top of modular type formwork. Standard base ties are furnished without cones or breakback but they can be special ordered with plastic cones and/or breakbacks.



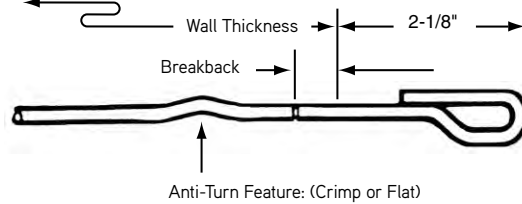
A45 Base Tie

**To Order:**  
Specify: (1) quantity, (2) name, (3) wall dimension.  
**Example:**  
500 pcs. A45 Base Tie for 8" Wall.

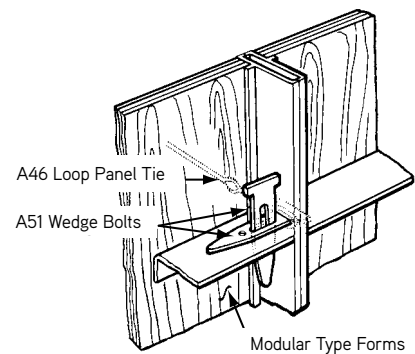
## A46 Loop Panel Tie, Standard and Heavy

Dayton Superior A46 Loop Panel Ties are designed for securing and spacing modular type forms. Standard units are fabricated with 2-1/8" ends and 1" breakback. Other breakbacks are available on special order.

A46 Loop Panel Ties are available with plastic cones and water-resistant washer. The water-resistant washer is designed to help eliminate water seeping along the tie by breaking the surface continuity of the wire.



A46 Loop Panel Tie



When erecting modular type forms, the A46 ties are placed in the slots between the form panels. An A51 Wedge Bolt is placed through the adjoining form and into the loop of each tie. A second Wedge Bolt is then placed through the slot of the first Wedge Bolt to secure the tie and form together.

A46 Stainless Steel Loop Ties are available for applications that require ties resistant to rusting or other similar corrosion. A46 Stainless Steel Loop Ties are available with plastic cone and water resistant washer.

**Note:** Due to the ductility of the type 304 stainless steel wire, Dayton Superior can not guarantee that these ties will consistently provide proper breakback. SWL provides a factor of safety of approximately 2 to 1.

**2,250 lbs. for Standard Ties**  
**2,500 lbs. for Stainless Steel Ties**  
**3,000 lbs. for Heavy Ties**  
**Safe Working Loads**

SWL provides a factor of safety of approximately 2 to 1.

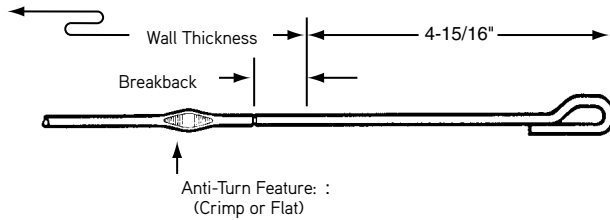
**To Order:**

Specify: (1) quantity, (2) name, (3) standard or heavy, (4) wall thickness, (5) special features desired.

**Example:**

5,000 pcs., A46 Loop Panel Tie, Standard for 12" wall with 1"x1" Plastic Cones.

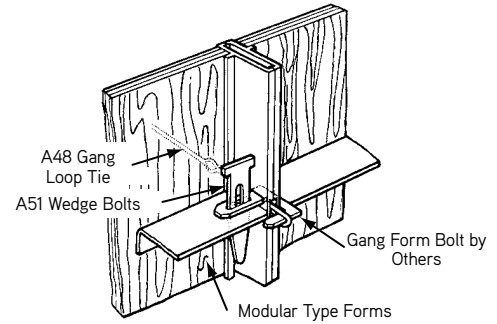
## A48 Gang Loop Tie, Standard and Heavy



**A48 Gang Loop Tie**

Dayton Superior A48 Gang Loop Tie is similar to the A46 tie, but has end dimensions extended to 4-15/16". The longer length allows the tie to be used with gang form bolts (supplied by others) and to be broken back before the form has been stripped. 1" breakback is standard. Other breakbacks, plastic cones and/or water resistant washers are available on special order.

**2,250 lbs. for Standard Ties**  
**3,000 lbs. for Heavy Ties**  
 Safe Working Loads



**To Order:**  
 Specify: (1) quantity, (2) name, (3) standard or heavy, (4) wall thickness, (5) special features desired.

**Example:**  
 5,000 pcs. A48 Gang Loop Tie, Standard for 12" wall with 1"x1" Plastic Cones.

SWL provides a factor of safety of approximately 2 to 1.

## A51 Wedge Bolt

Dayton Superior A51 Wedge Bolt is used with A46 Loop Panel Ties, B21 Plylags, etc., to secure modular type forms.



**A51 Wedge Bolt**

**3,750 lbs.**  
 Safe Working Load

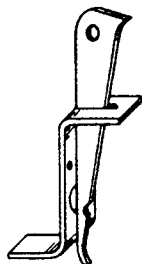
**To Order A25:**  
 Specify: (1) quantity, (2) name.

**Example:**  
 5,000 pcs. A51 Wedge Bolt.

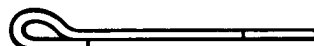
SWL provides a factor of safety of approximately 2 to 1.

## A52 Z Tie Holder and A53 Waler Tie

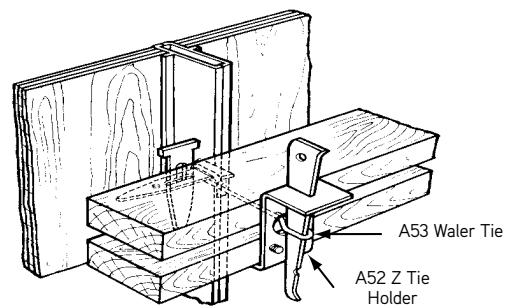
Dayton Superior A52 Z Tie Holder is used in conjunction with the A53 Waler Tie to secure double 2x lumber wales to modular type forms. The A53 Waler Tie is available in two sizes to accommodate 2 x 4 and 2 x 6 lumber.



**A52 Z Tie Holder**



**A53 Waler Tie**



Tie Type	Overall Length	Designed to Fit
A53	6-3/16"	Double 2x4 Wales
A53	8-1/32"	Double 2x6 Wales

For attaching strongbacks see A63 Strongback Tie

**To Order A52 Z:**  
 Specify: (1) quantity, (2) name.

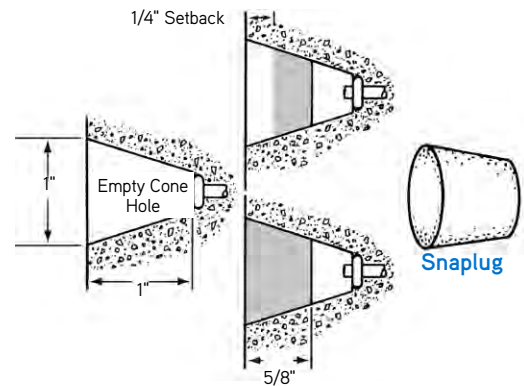
**Example:**  
 500 pcs. A52 Z Tie Holder.

**To Order A53:**  
 Specify: (1) quantity, (2) name, (3) length.

**Example:**  
 500 pcs. A53 Waler Tie, 6-3/16" long.

## A54 Snaplug®

Dayton Superior Snapplugs patch plastic cone tie holes. The Snapplug is easily installed using Snapplug® Bonder. The plug is designed to fit the hole of a 1" x 1" plastic cone and comes in a concrete gray color. Other colors are available on special order. Two styles are available: Flush (PC 304121) and 1/4" Reveal/Setback (PC 304122).



**To Order:**  
Specify: (1) quantity, (2) name.

**Example:**  
5,000 pcs. A54 Snapplugs.

Light Forming Products

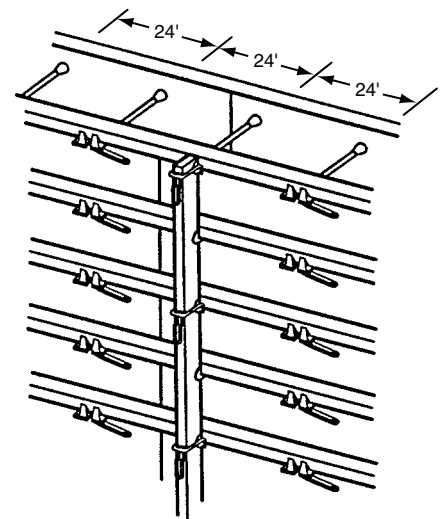
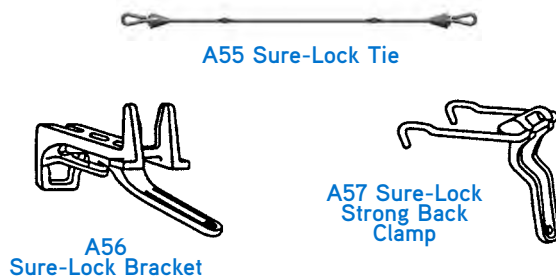
## A55 Sure-Lock Tie, A56 Sure-Lock Bracket, A57 Sure-Lock Strongback Bracket

Dayton Superior Sure-Lock Forming System consists of the A55 Sure-Lock Tie, A56 Sure-Lock Bracket and the A57 Sure-Lock Strongback Bracket. This system is an economical single water forming method based on 2 x 4 lumber and 3/4" plywood. A series of 7/8" diameter holes are required in plywood for A55 loop to pass through.

The A55 Sure-Lock Tie is manufactured with self-centering 1" x 1" plastic cones that provide a nominal 1" breakback. Other breakbacks and water resistant washers are available for the A55 tie on special order.

The A56 Sure-Lock Bracket is a sturdy bracket designed with a rotating arm that captures the loop of the A55 tie and firmly secures the tie and water to the form.

The A57 Sure-Lock Strongback Bracket attaches to the back of the A56 bracket and holds a 2x4 strongback firmly to the form.



<p><b>To Order A55 Sure-Lock Tie:</b> Specify: (1) quantity, (2) name, (3) wall thickness, (4) special features desired.</p>	<p><b>Example:</b> 5,000 pcs. A55 Sure-Lock Ties, 10" wall with waterseal washers.</p>
<p><b>To Order A56 Sure-Lock Bracket:</b> Specify: (1) quantity, (2) name</p>	<p><b>Example:</b> 500 pcs. A56 Sure-Lock Brackets.</p>
<p><b>To Order A57 Sure-Lock Strong Back Clamp:</b> Specify: (1) quantity, (2) name.</p>	<p><b>Example:</b> 200 pcs. A57 Sure-Lock Strong Back Clamps.</p>

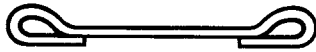
**2,250 lbs.  
Safe Working Load**

SWL provides a factor of safety of approximately 2 to 1.



### A63 Strongback Loop Tie

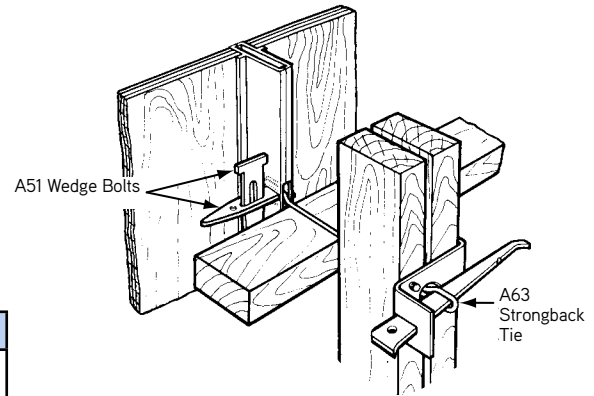
Dayton Superior A63 Strongback Loop Tie is a long-ended loop tie used in conjunction with the A52 Z Tie Holder to securely attach wales and strongbacks to modular forms. A63 ties are available in three sizes to fit various lumber combinations. See chart below.



A63 Strongback Loop Tie

A63 Strongback Loop Tie Selection Chart

Tie Type	Overall Length	Designed to Fit
A63	9-3/4"	2x4 Wales and Double 2x4 Strongbacks
A63	11-5/8"	2x4 Wales and Double 2x6 Strongbacks
A63	13-1/2"	2x6 Wales and Double 2x6 Strongbacks



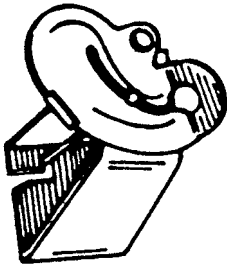
**To Order:**  
Specify: (1) quantity, (2) name, (3) length.

**Example:**  
500 pcs. A63 Strongback Loop Tie, 9-3/4" long.

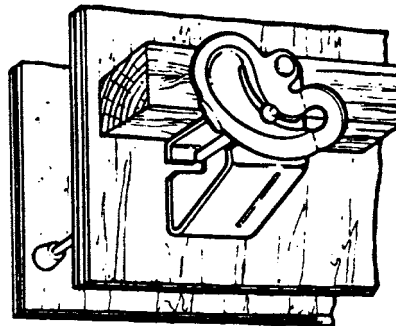
### A81 Jahn® "A" Bracket

Dayton Superior A81 Jahn "A" Bracket is fabricated from high strength steel with a cad plated eccentric and painted body. The 5/8" take-up of the eccentric compensates for minor lumber variations in thickness. The A81 bracket can be utilized to hold a single horizontal wale or a single vertical stud with any type of wall form; round, curved, battered, beam and/or columns

The A81 bracket can be installed before or after the wales have been positioned. The slots in the bracket allow it to slip over the snap tie end without laborious threading through holes. When properly installed, the A81 bracket will not loosen from internal



A81 Jahn "A" Bracket



**To Order:**  
Specify: (1) quantity, (2) name.

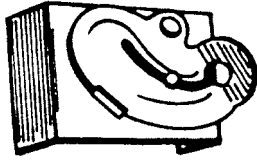
**Example:**  
2,000 pcs. A81 Jahn "A" Bracket.

vibration of the concrete. Pressure from the bracket is against the 2 x 4 instead of the plywood.

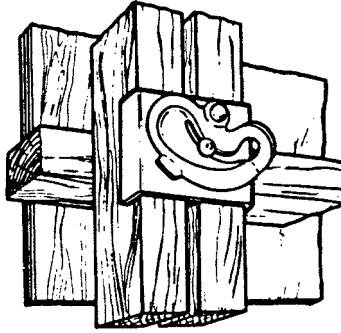
The A81 bracket uses 4-3/4" L&W snap ties, is easy to install and strip, requires no nailing and is very fast. See preparation steps after A89 for bracket spacing and concrete placement rates.

## A82 Jahn® “C” Bracket

Dayton Superior A82 Jahn “C” Bracket is designed for use with single 2 x 4 studs, double 2 x 4 wales and 8-1/4" L&W snap ties to attach vertical strongbacks to the form. The bracket eccentric compensates for lumber size imperfections. The A82 bracket can also be used with double wales to support a horizontal plywood joint. See preparation steps after A89 for bracket spacing and concrete placement rates.



A82 Jahn “C”  
Bracket



**To Order:**

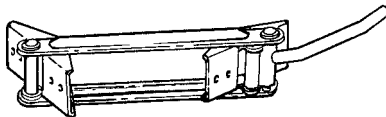
Specify: (1) quantity, (2) name.

**Example:**

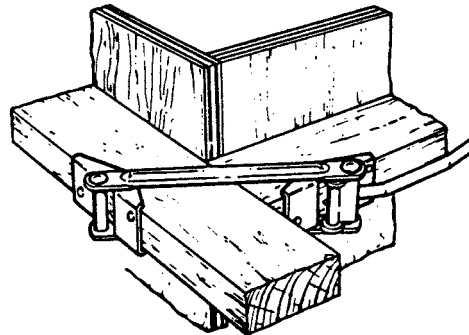
4,950 pcs. A82 Jahn “C” Bracket.

## A83 Jahn® Cornerlock

Dayton Superior A83 Jahn Cornerlock is used at outside corners to secure the 2 x 4 walers. Nail holes are provided for secure attachment and grips on the underside provide a positive non-slip action. The cam action of the locking handle draws the wales together. No special tools are required for installation or stripping.



A83 Jahn Cornerlock



**To Order:**

Specify: (1) quantity, (2) name.

**Example:**

100 pcs. A83 Jahn Cornerlock.

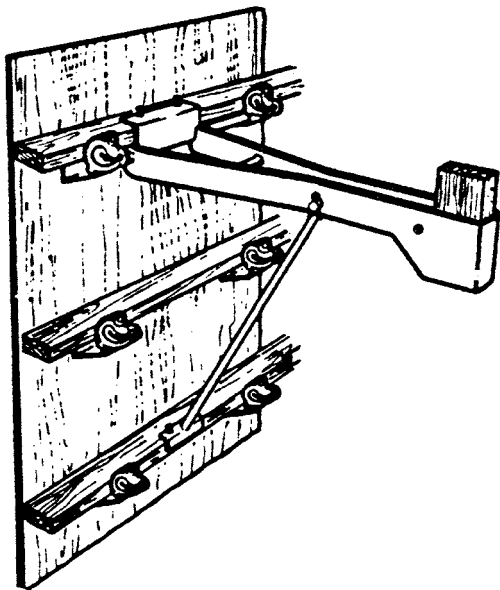
### A89 Jahn® Scaffold Jack

Dayton Superior A89 Jahn Scaffold Jack is an all steel unit designed to fit 24" x 24" and 16" x 24" tie and wale spacing. This jack is equipped with a built-in guard rail receptacle and is designed to hold two 2 x 10 planks for a comfortable work platform.

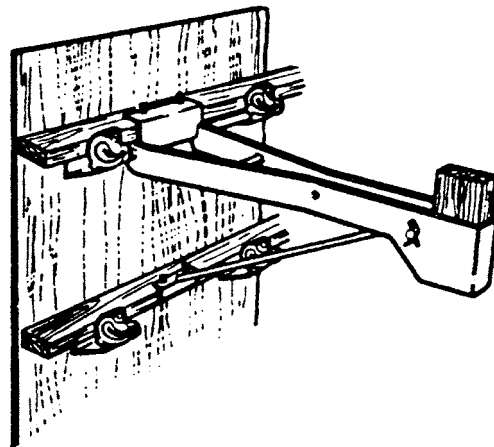
The scaffold jack attaches to two "A" brackets with the horizontal rod and is equipped with nailing holes top and bottom to secure it in place. Maximum spacing for the A89 jack is 8'-0".

The horizontal rod slides easily through the body of the "A" bracket for support, with the long end being installed first. Nail holes are provided for securing the jack to both the top and bottom support walers.

**Warning:** A89 Jahn Scaffold Bracket is designed to support 25 psf walkway loads only, after both sides of the formwork have been installed. Heavy loads placed on a scaffold jack may cause metal snap tie washers to bend or plastic snap tie cones to crush resulting in incorrect wall thickness.



Jack Adjusted for 16" Spacing of Wales



Jack Adjusted for 24" Spacing of Wales

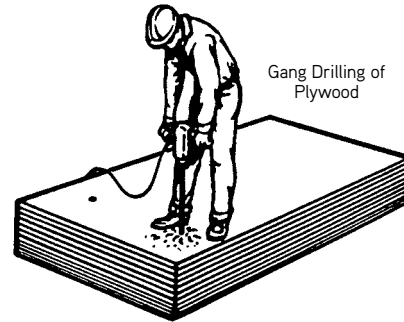
**To Order:**  
Specify: (1) quantity, (2) name.  
**Example:**  
50 pcs. A89 Jahn Scaffold Jack.

## How to Use the Jahn® Forming System

### 1. Preparation

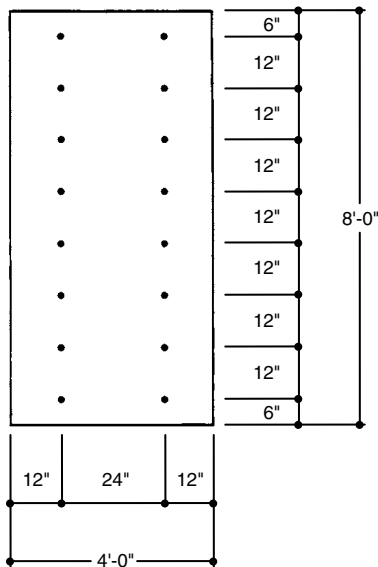
Gang drilling the plywood is the only preparation required. Holes need to be drilled 1/8" larger than the snap tie head. Normally, a 5/8" diameter drill bit will be required.

The 5/8" take-up of the eccentric on the Jahn "A" Bracket allows a snap tie with a L&W dimension of 4-3/4" to be used with 5/8" or 3/4" plywood. The 5/8" take-up on the "C" bracket allows it and 8-1/4" snap ties to be used on 5/8" and 3/4" plywood.

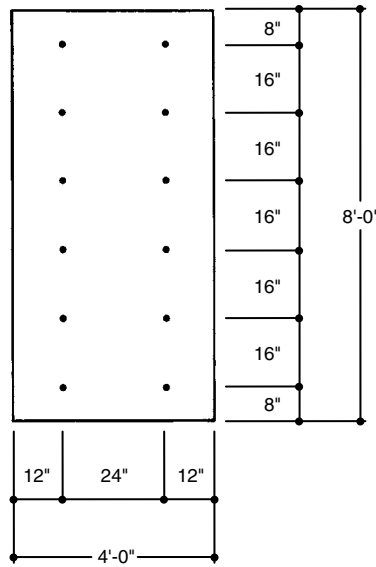


### 2. Snap Tie Spacing and Rate of Placement

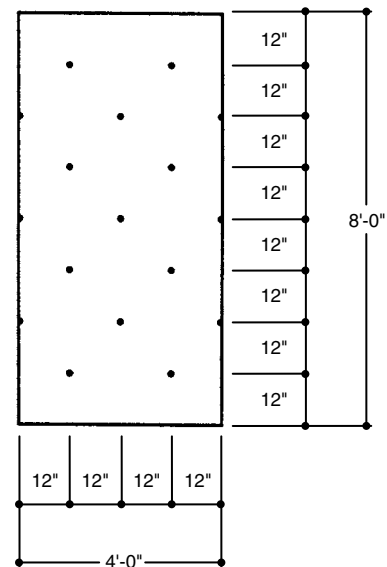
The most common snap tie spacings being used with the Jahn Forming System are shown below. For different rates of pour and/or other tie spacing, contact a Dayton Superior Technical Services Department. Refer to the web site for addresses and phone numbers.



12" vertical x 24" horizontal  
Snap Tie Spacing.  
Recommended rate of  
placement 4.5 ft./hr. at 70°.



16" vertical x 24" horizontal  
Snap Tie spacing.  
Recommended rate of  
placement 2.0 ft./hr. at 70°.



12" vertical x 12" horizontal  
Snap Tie spacing.  
Recommended rate of  
placement 4.5 ft./hr. at 70°.

#### Plywood Used Strong Way (Face Grain Parallel to Spacing)

Notes: The above recommendations are based on the use of 3/4" Plyform Class I, and 2x4 S4S studs (Douglas Fir-Larch, Southern Pine or equal having a minimum allowable fibre stress of 1,200 psi).

Design is based on all formwork members being continuous over four or more supports.

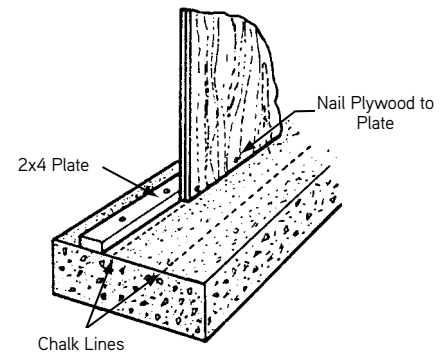
For multi-lift forming, see 12 Joint Cover Details.



### 3. Footing Plates

Good forming practices require that a level footing be used as a starting point for all forming applications.

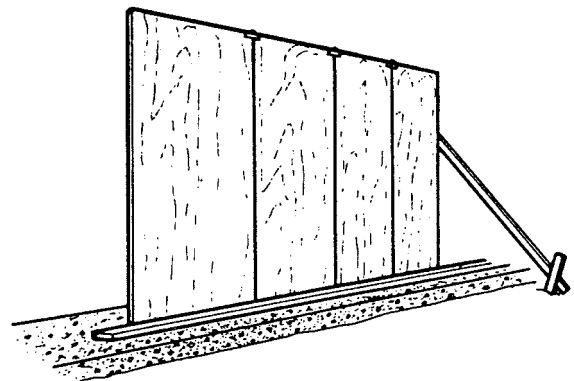
Snap a chalk line in back of the plywood thickness and nail down a 2 x 4 plate.



### 4. Plywood Panel Erection

Erect, plumb, nail to plate and temporarily brace the first sheet of plywood.

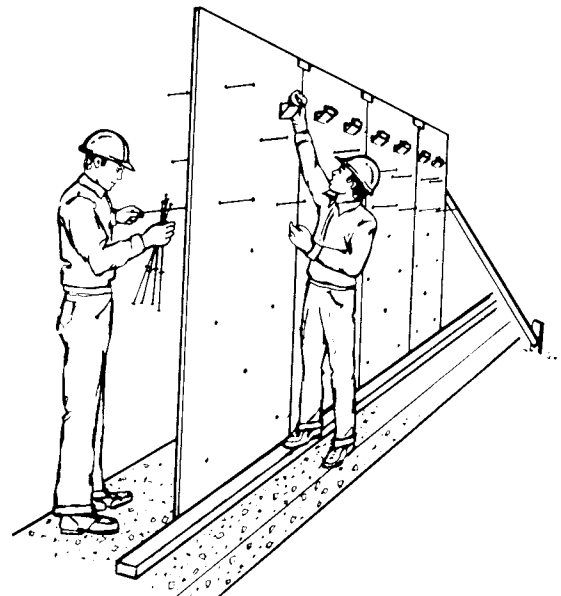
Erect additional sheets of plywood by nailing them to the 2x4 plate and temporary wood cleats at the top corners. Make sure the joints are tight. If panels are to be stacked, ensure that the panel tops are level.



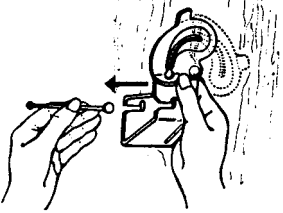
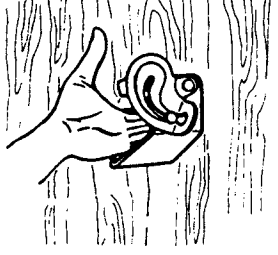
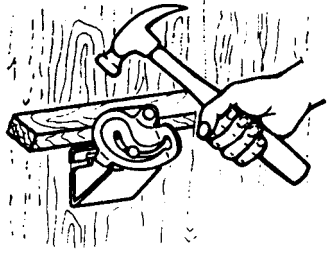
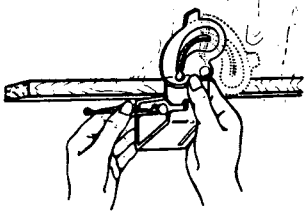
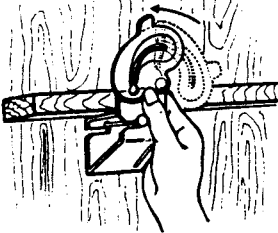
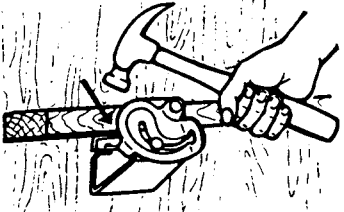
### 5. Installation of Snap Ties and "A" Brackets

Place the ends of the Snap Ties through the holes in the plywood. The 4-3/4" L&W A3 Snap Tie, Standard is recommended for use with the Jahn "A" Brackets, 5/8" or 3/4" plywood and 2x4 wales.

Two workmen can install the snap ties with speed and economy. One inserts the tie through the tie hole and the other attaches the "A" bracket.

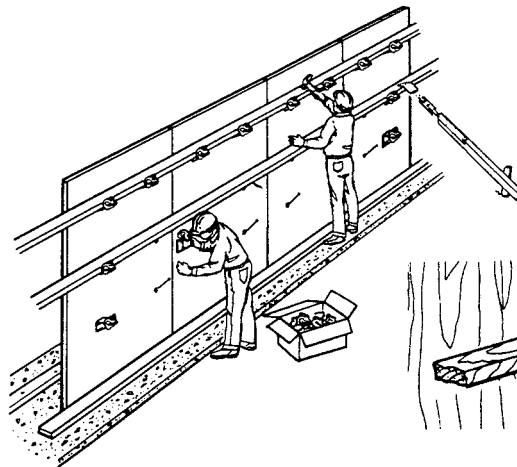
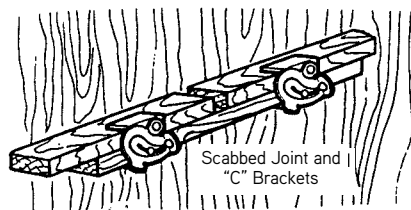


## Proper "A" Bracket Installation

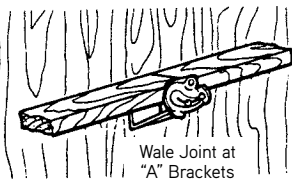
<p><b>Without Water In Place:</b></p>  <p>5A. Place The "A" bracket on the tie end by slipping the tie end into the slots in the bracket body.</p>	 <p>5B. Rotate the eccentric loosely over the tie end.</p>	<p><b>Placing Waler</b></p>  <p>5C. Drop 2x4 waler in place. Seat 2x4 with hammer, if necessary.</p>
<p><b>With Water In Place:</b></p>  <p>5D. Slip the back slot in the bracket body over the tie directly behind the head.</p>	 <p>5F. Push the bracket toward the plywood until the tie head emerges through the front of the bracket.</p>	<p><b>Tightening Waler</b></p>  <p>5G. Rotate the eccentric over the tie head and tighten.</p>

## 6. Installation of Wales

Install the walers into the brackets working from top to bottom of the panel and tightening the eccentric as you go. Waler joints should occur at a bracket or scab should be utilized to reinforce the joint (see sketch).

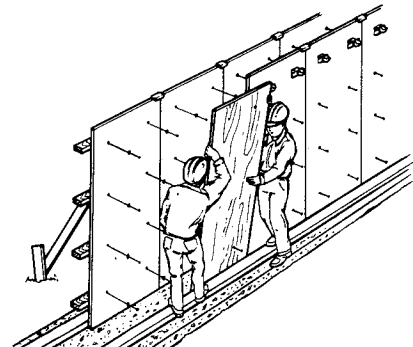


a



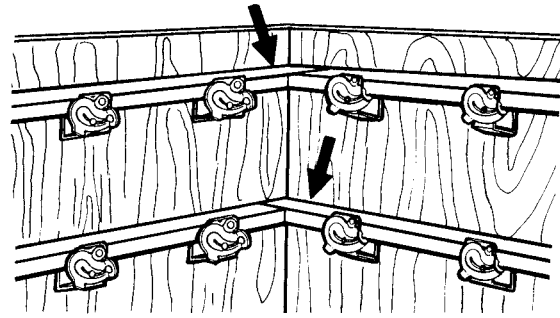
## 7. Inside Wall Panel Erection

The inside panel sequence is the same as the outside panel described above except for the placement of the plywood panels over the tie ends. This can be accomplished by two workmen by starting at the bottom and moving the panel from side to side and up and down to align the snap ties with the holes in the plywood.



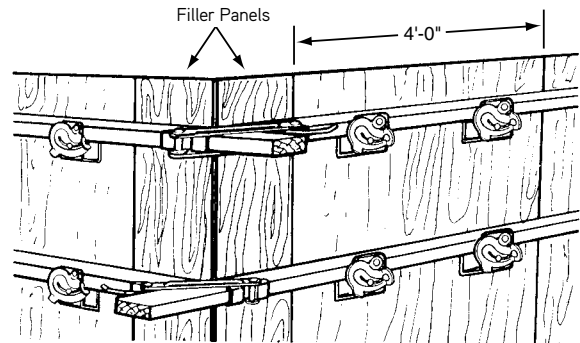
## 8. Inside Corner Forming

No special treatment is required for inside corners other than the alternating of the wales as shown in the sketch. It is advantageous to start the inside corners with full size plywood panels to facilitate forming the outside corners.



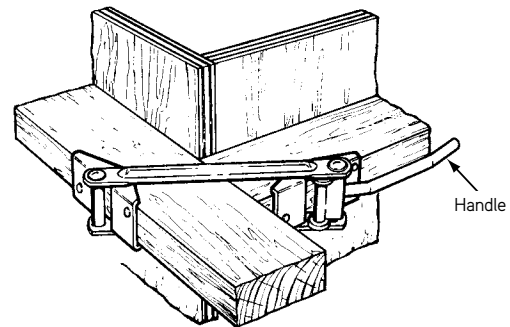
## 9. Outside Corner Forming

Install the first outside panel in line with the first inside panel. Filler panels, the same thickness as the wall plus the plywood thickness, are then used to fill out the exterior corner.



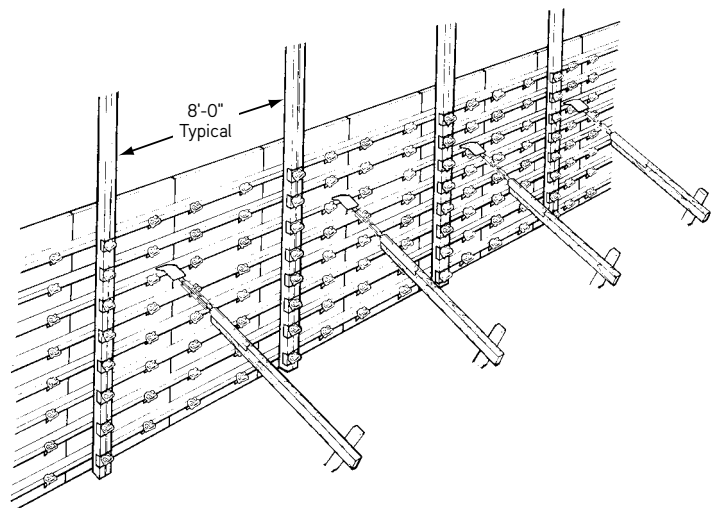
## 10. Installation of A83 Jahn Cornerlock

The A83 cornerlock eliminates costly overlapping and blocking of the wales. Its cam action draws the wales securely together. Place one wale flush at the corner and let the other extend past the flush one. Slip the cornerlock into place with the handle perpendicular to the wale. Nail the cornerlock in place and rotate the handle 90° toward the wale. A snug, tight outside corner is accomplished.



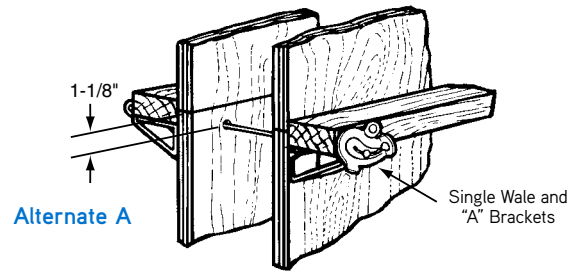
## 11. Installation of Strongbacks

Strongbacks are used to aid in form alignment and to tie stacked panels together. Loose 2x4's are used in conjunction with A82 Jahn "C" Brackets and 8-1/4" L&W snap ties or 4-3/4" L&W snap ties with the A86 Jahn Tie Extenders to strongback the forms. Normal strongback spacing is 8'-0" on center.

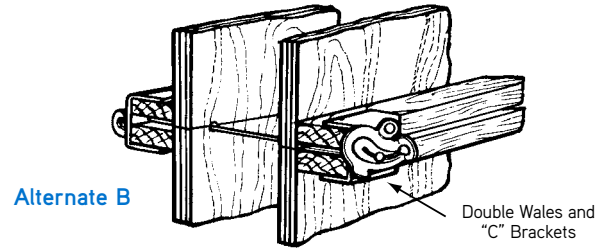


## 12. Joint Cover Details

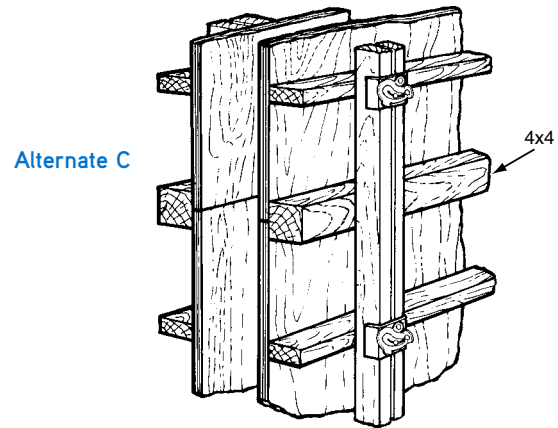
**Alternate A** - Drill 5/8" diameter hole 1-1/8" down from top edge of the lower sheet of plywood. Install snap tie, "A" Brackets and wale and then the upper sheet of plywood. Nail the upper sheet of plywood to the wale.



**Alternate B** - Install snap tie in the joint between the panels. Add double wales and a "C" Bracket.



**Alternate C** - Nail 4x4 wale to lower sheet of plywood, hold the wale in place with strongbacks and add upper sheet of plywood.



## 13. Installation of Second Lift of Plywood

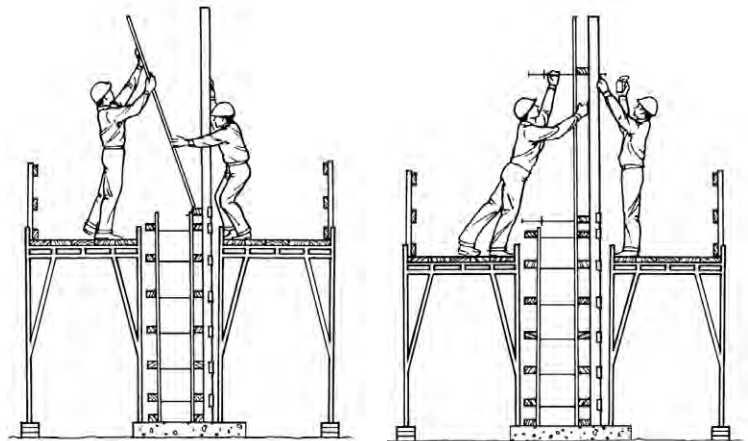
Lift the plywood sheet and place it into position. Hold the sheet in place with a short 2x4 spacing block, snap tie and "C" Bracket placed toward the top of the panel and nail the bottom of the sheet to the joint cover wale.

Set additional panels by nailing them to the joint cover wale and securing them to the previous panel with a small wood cleat.

Install the snap ties, brackets and wales - working bottom to top.

**Note:** Snap ties are not designed to carry scaffold bracket loads.

Note: A89 Jahn Scaffold Bracket is designed to support 25 psf walkway loads, after both sides of the formwork have been installed. Scaffold Brackets should not be used when the bracket is supported by one sided forming, as metal snap tie washers can bend, or plastic snap tie cones can fracture resulting in incorrect wall thickness, personal property damage, personal injury, and/or death.

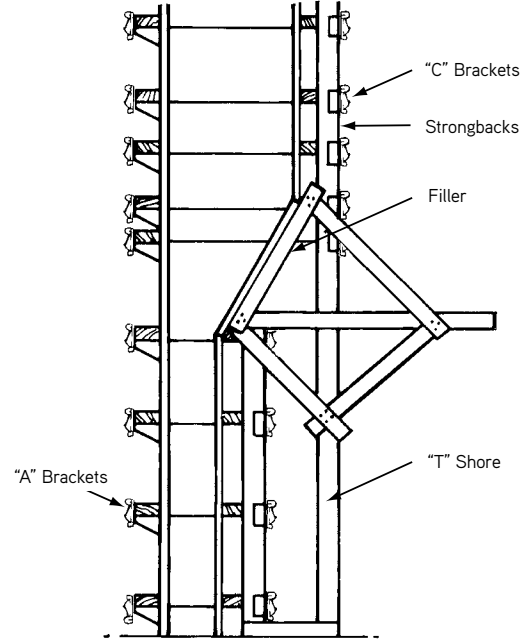
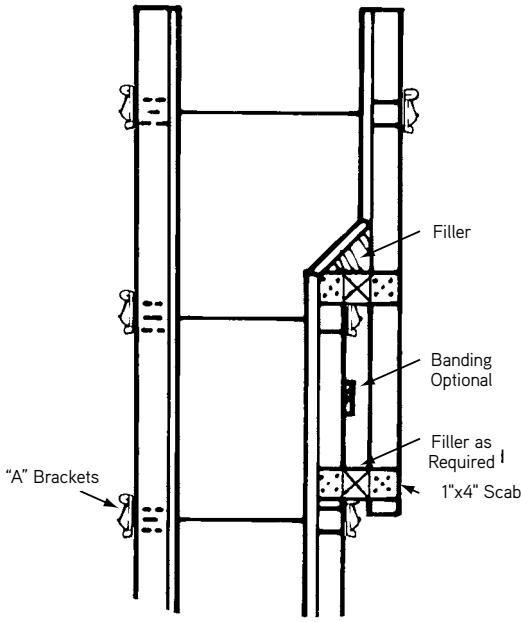




### 14. Haunch or Corbel Forming

A low wall with a light corbel or haunch can be formed using the method illustrated below.

For heavy corbels or haunches forming use vertical strongbacks, T shores and "A" and "C" Brackets.

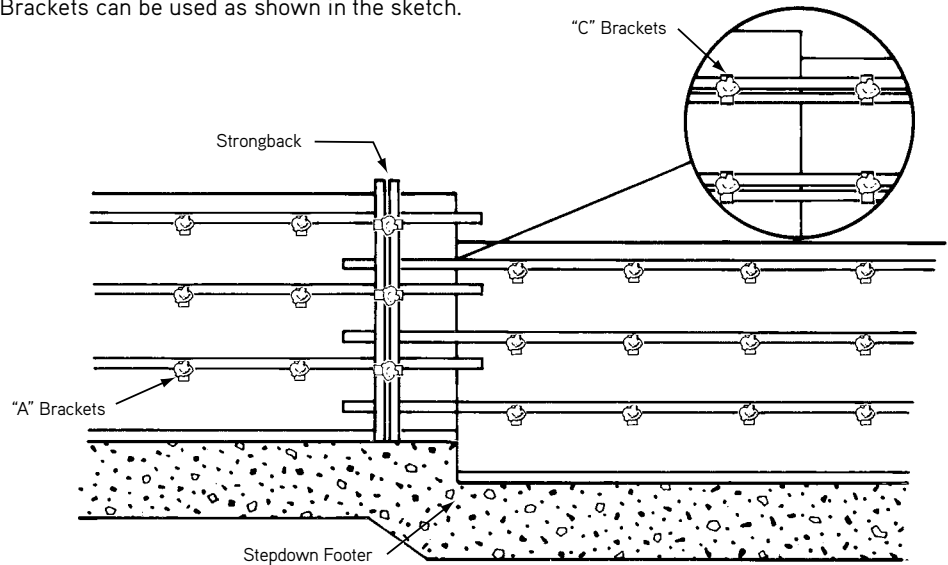


Light Forming Products

### 15. Step Forming

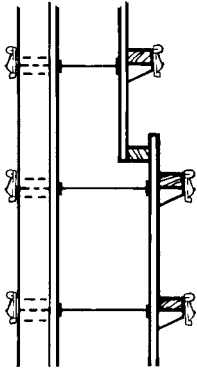
Use of Jahn "C" Brackets and Jahn Tie Extenders to attach strongbacks allows 2x4 wales to run free and holes do not have to line up at stepdowns.

When tie alignment is fairly close, "C" Brackets can be used as shown in the sketch.

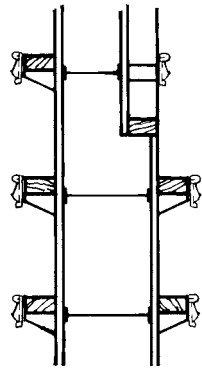


### 16. Brick Ledge Forming

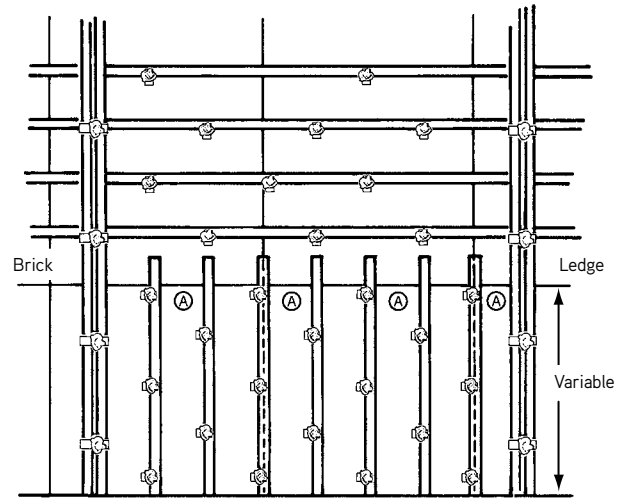
Brick ledges can be quickly formed with 2x4s placed either vertically or horizontally. By adding shims of required thickness to a 2x4, ledges of varying thickness can be formed.



All "A" Brackets

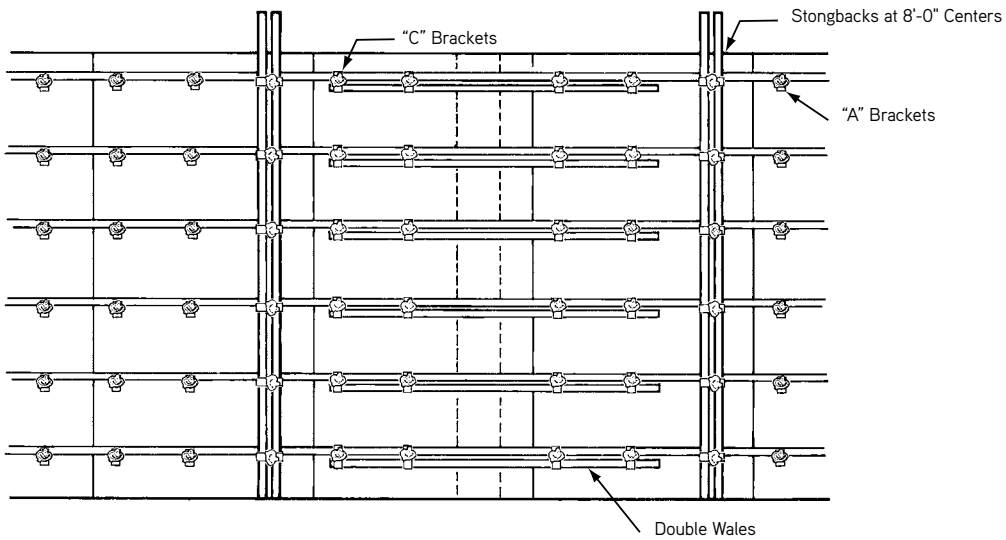
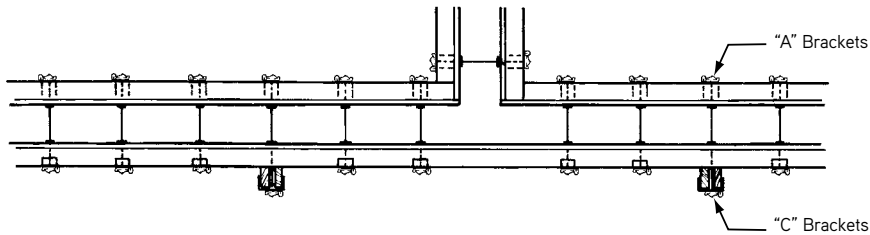


All "A" Brackets



### 17. 3-Way Wall Forming

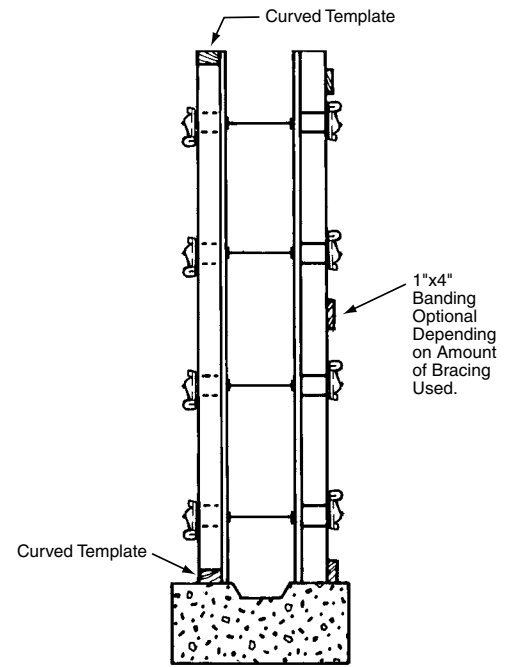
3-way walls can be formed using "A" and "C" Brackets with single and double wales, as shown in the sketches.



## Using Single Vertical Wales for Curved Walls

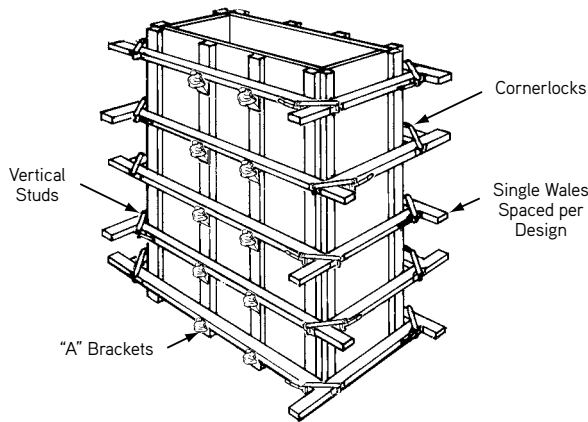
"A" Brackets are always positioned on the left side of the 2x4 so that the eccentric is set in a "vibration-proof" posture. "A" Brackets can be installed after the studs are in place.

Filler strips may be required on the outside face. To eliminate the filler strip requirement, the two sides of the interior panels may be trimmed to take care of the difference in circumference of the inner and outer forms.

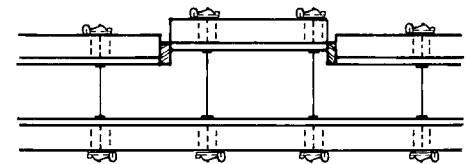


Light Forming Products

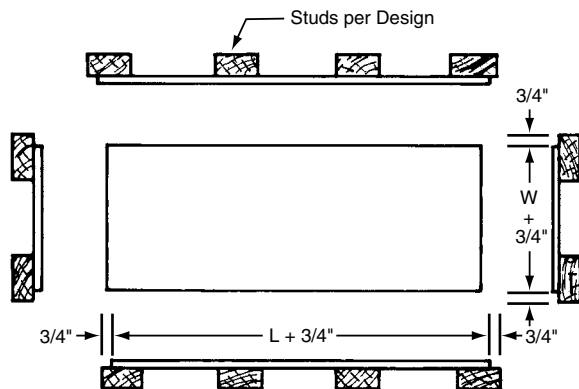
## Column and Pilaster Forming Suggestions



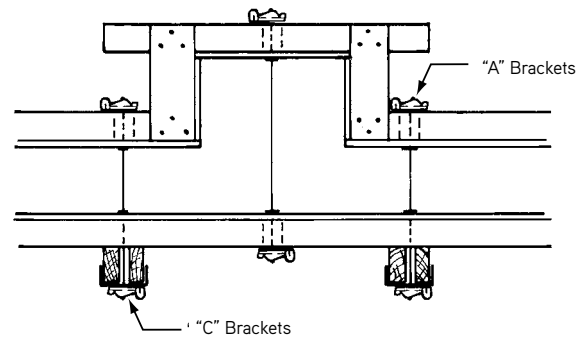
Sketch of Column Form



Detail of Small Pilaster Forming

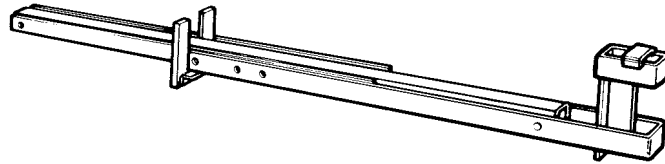


Detail of Column Form



Detail of Large Pilaster Forming

## A90 Scaffold Bracket Jack

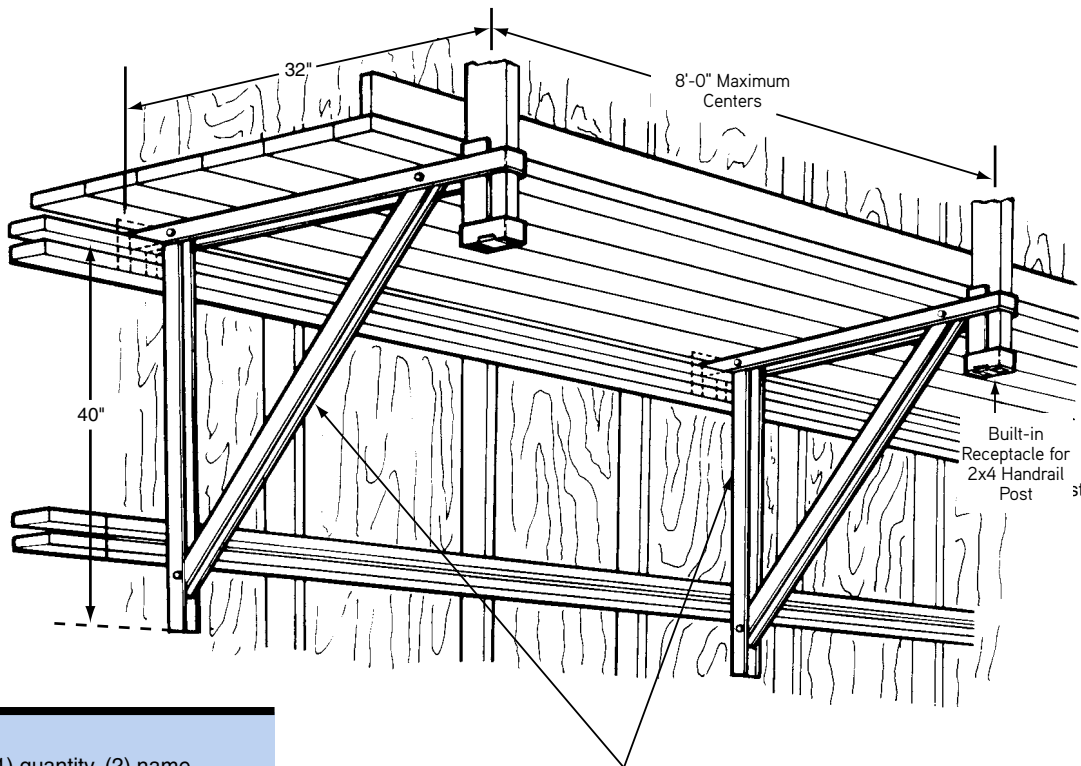


Dayton Superior A90 Scaffold Bracket Jack meets state building codes and OSHA minimum requirements and supports scaffolding on nearly any type of formwork. By changing the position of the pins in the vertical and horizontal members the bracket can be quickly adjusted to fit 2x4, 2x6 or 2x8 wales or positioned flush against a wall.

Attachment can be made to a concrete wall by attaching the bracket to an exposed coil tie, insert or other appropriate device. The bracket has a 1" diameter pipe coupling welded to the vertical leg which can be used in conjunction with a six inch long pipe nipple to attach the bracket to an exposed she-bolt inside rod.

The A90 Scaffold Bracket Jack folds for easy storage and convenient shipping.

Replacement parts for the A90 bracket are available on special order. Contact a Dayton Superior Service Center for cost and availability.



A90 Scaffold Jack

**To Order:**  
Specify: (1) quantity, (2) name.

**Example:**  
250 pcs. A90 Scaffold Bracket Jack.

## A93C Sure Guard® Rail Post System

The Sure Guard Rail Post System meets OSHA safety requirements

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.

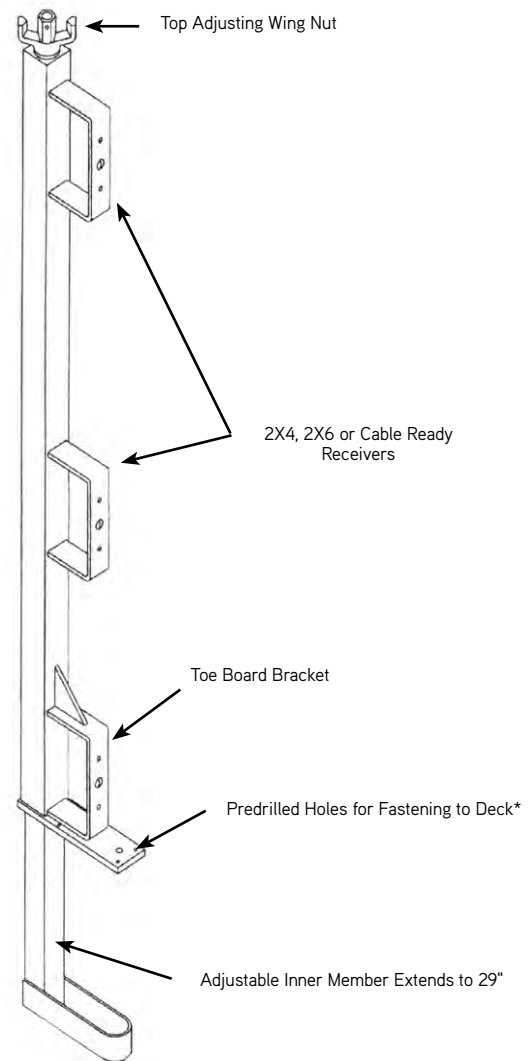
This post can adjust to any floor slab thickness between 4" and 29". A drop pin makes the Sure Guard Rail Post System simple and efficient to use. The 30 lb. Sure Guard Rail Post System is also hot-dipped galvanized for durability and designed to withstand the toughest jobsite conditions.

Note: This item can be rented.

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

**To Order:**  
Specify: (1) quantity, (2) name.

**Example:**  
150 pcs., A93C Sure Guard Rail Post System



**A93C**  
Sure Guard Rail Post System

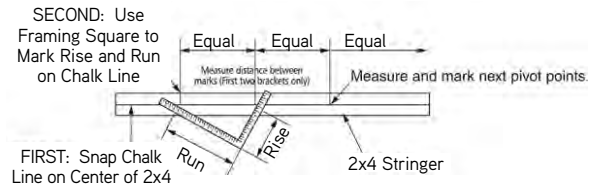
Light Forming Products



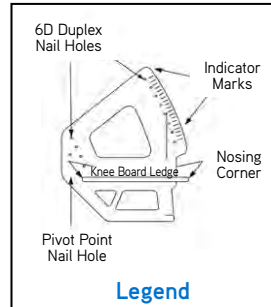
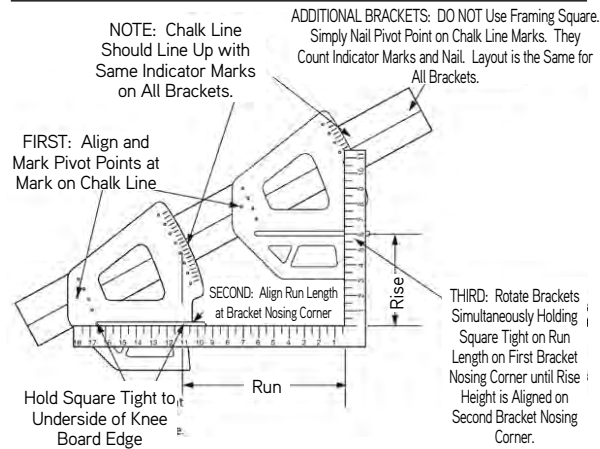
## A100 Speed Step® Bracket

Dayton Superior Speed Step Bracket (A100) is a reusable, high grade composite resin forming bracket designed to simplify layout, set-up and stripping of concrete stair forming. The brackets are nailed to 2 x 4 stringers and adjusted for a 4" to 8" riser and 10" to 20" tread. One size fits all standard stairs.

### Step 1



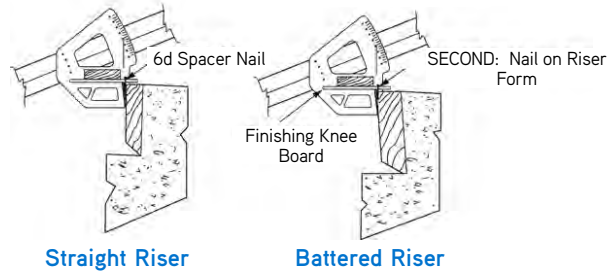
### Step 2



**To Order:**  
Specify: (1) quantity, (2) name.  
**Example:**  
150, A100 Speed Step Brackets

### Step 3

FIRST: Attach Stringer and Brackets to Check Wall



## A110 Dayton Superior Metal Rib

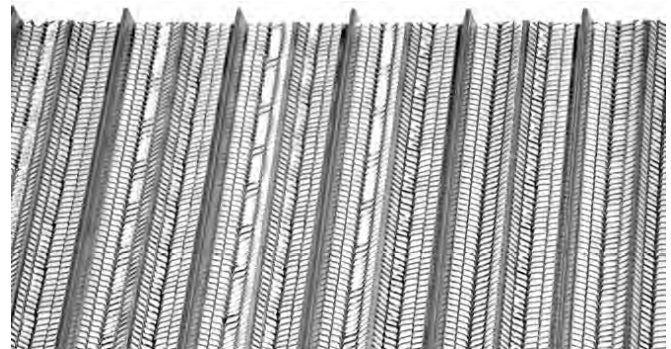
Dayton Superior Metal Rib is the formwork solution for tough forming situations. It can be cut in the field with tin snips, and be bent to form curves. Dayton Superior Metal Rib is versatile enough for any type or size structure.

### Features:

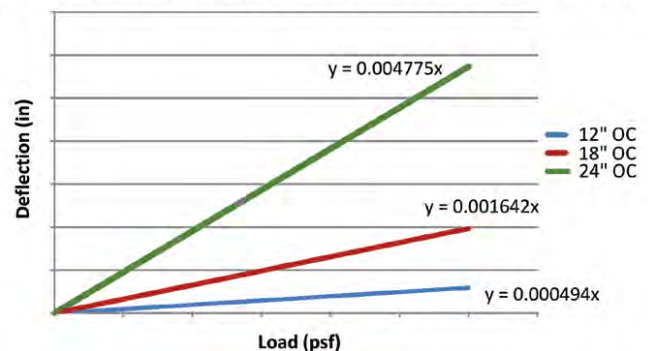
- Lightweight sheets are easily cut and installed in the field, reducing labor costs
- Formwork is left in place, so no stripping of forms required – simply remove bracing
- Easily locate any penetrations in formwork
- Enables the pour to be visually monitored
- No need to clean, reface or oil formwork
- Can be used in applications ranging from pile caps and footings, to blind side walls and tunnels
- Concrete pours in 3 to 4 foot lifts are preferable with this forming system
- Can be used with Symons Steel-Ply (A46 Stayform) or job-built forms (A3 Stayform Tie)

#### Metal Rib Properties

Product Code	139700
Sheet Size	27" x 97"
Surface/sheet	18 sq.ft
Pallet/Ordering	250 sheets/4500 sq.ft
Rib Space	3.80"
Sheet Thickness	26 Ga
Weight per piece	11.90 lb



### DSC A110 Metal Rib Load Versus Deflection



	<div data-bbox="540 199 1448 325" style="background-color: red; color: white; padding: 5px; text-align: center;"> <b>WARNING</b></div> <div data-bbox="540 325 1448 585" style="padding: 5px;"><p style="text-align: center;"><b>Improper Use of Concrete Accessories Can Cause Severe Injury or Death</b></p><p style="text-align: center;">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.</p></div>
---	---

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.**

Give us a call at any of our branch locations, email us at [info@formtechinc.com](mailto:info@formtechinc.com), or click on [formtechinc.com/quote](http://formtechinc.com/quote) to get a quote. Our experienced Form Tech representatives will answer your questions, and help you get your project started with some of the best concrete forming, shoring, and accessory products in the industry, backed by a professional and detail-oriented staff.

---



### Charleston, SC

7377 Peppermill Lane  
North Charleston,  
SC 29418  
843.628.3434



### Detroit, MI

Corporate Headquarters  
975 Ladd Road  
Walled Lake,  
MI 48390  
Branch: 248.344.8260  
Corporate: 248.344.8265

---



### Charleston, WV

161 Industrial Road  
St. Albans,  
WV 25177  
304.722.6804



### Pittsburgh, PA

2850-A Kramer Road  
Gibsonia,  
PA 15044  
412.331.4500

---



### Charlotte, NC

1000 Thomasboro Road  
Charlotte,  
NC 28208  
704.395.9910



### Raleigh, NC

115 Peffinder Lane  
Raleigh,  
NC 27603  
919.833.0911

---



### Cleveland, OH

20801 Miles Road  
North Randall,  
OH 44128  
216.692.0497



TRUSTED FORMWORK & ACCESSORY SPECIALISTS

800-876-4857 | [info@formtechinc.com](mailto:info@formtechinc.com) | [formtechinc.com](http://formtechinc.com)