



## SECTION 7

### INSULATION PINS

FOR INQUIRIES, TO PLACE ORDERS,  
SERVICE AND TECHNICAL SUPPORT CONTACT  
ANY OF THE FOLLOWING:

OFFICE: 1-800-462-9353  
713-939-8903

EMAIL: [INFO@SUNBELTSTUDWELDING.COM](mailto:INFO@SUNBELTSTUDWELDING.COM)



**website** [www.sunbeltstudwelding.com](http://www.sunbeltstudwelding.com) **email** [info@sunbeltstudwelding.com](mailto:info@sunbeltstudwelding.com)  
6381 Windfern Road, Houston, TX 77040 **telephone** 1.800.462.9353 - Houston 713.939.8903 **fax** 713.939.9013

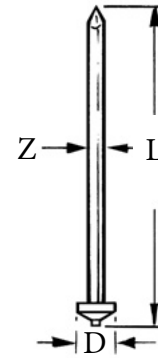
# Insulation Pins

## CWP - CD WELD PINS - TECHNICAL DETAILS

Weld pins are commonly used to attach blanket insulation to ducts, ovens, boilers and hot/cold equipment. The pins are welded in place, the insulation impaled over the pin and then self locking washers are installed over the pin to secure the insulation.

The CD process is used to weld CD type studs to sheet metal and plate.

For application, dimensional and technical assistance, contact Sunbelt Stud Welding.



Stud Specifications							
10 Gauge				12 Gauge			
Stud Diameter	Flange Diameter	Standard Lengths	Pounds Per 1,000 Pieces	Stud Diameter	Flange Diameter	Standard Lengths	Pounds Per 1,000 Pieces
Z	D	L		Z	D	L	
10 Gauge 0.135	0.220	1.0	5	12 Gauge 0.105	0.175	0.75	2
		1.5	7			1.0	3
		2.0	8			1.25	4
		2.5	11			1.5	5
		3.0	13			2.0	6
		3.5	15			2.5	7
		4.0	17			3.0	8
		4.5	18			3.5	9
		5.0	21			4.0	11
		5.5	22			4.5	12
		6.0	25			5.0	13
		6.5	26			5.5	14
		7.0	29			6.0	15
		8.0	33			6.5	16
		9.0	37			7.0	17
		10.0	41			8.0	20
						9.0	24

To order or specify give: Stud Code, Z x L, Material and Quantity

Example: CWP, 10 Ga. X 4, Mild Steel, 5000 pcs.

**Materials:** Low carbon steel (copper plated), stainless steel 18-8 and aluminum are standard. Other materials are available upon request. Material is annealed as required.

**Plating:** Galvanized Weld Pins and other coatings are available.

**Accessories:** See the Accessories section for details. P/N's CDB-013, CDB-013A, CDBN-013, CDBS-013, CIP-014-075 and CDB-010, CDB-010A, CDBN-010, CDBS-010, CIP-010-075

**Self Locking Washers:** See Technical Details in this section.



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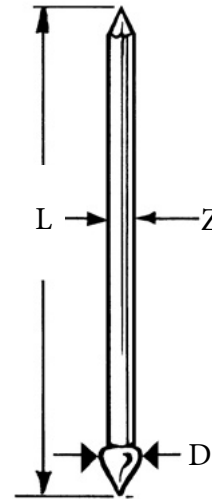
# Insulation Pins

## CPT - "SURE-FIRE" CD POWER TIP WELD PINS - TECHNICAL DETAILS

Weld pins are commonly used to attach blanket insulation to ducts, ovens, boilers and hot / cold equipment. The pins are welded in place, the insulation impaled over the pin and then self locking washers are installed over the pin to secure the insulation.

The CD Stud Welding process is used to weld CPT's to sheet metal and plate.

For application, dimensional and technical assistance, contact Sunbelt Stud Welding.



Stud Specifications							
10 Gauge				12 Gauge			
Stud Diameter	Base	Standard Lengths	Pounds Per 1,000 Pieces	Stud Diameter	Base Diameter	Standard Lengths	Pounds Per 1,000 Pieces
Z	D	L		Z	D	L	
10 Gauge 0.135	0.220	2.5	11	12 Gauge 0.105	0.220	2.5	6
		3.0	14			3.0	8
		3.5	16			3.5	10
		4.0	18			4.0	11
		4.5	20			4.5	12
		5.0	21			5.0	13
		5.5	22			5.5	14
		6.0	26			6.0	15
		7.0	29			7.0	18
		8.0	34			8.0	20

To order or specify give: Stud Code, Z x L, Material and Quantity

Example: CPT, 12 Ga. X 3", Mild Steel, 6000 pcs.

**Materials:** Low carbon steel (copper plated) and stainless steel are standard. Other materials are available upon request. Material is annealed as required.

**Plating:** Galvanized Weld Pins and other coatings are available.

**Accessories:** See the Accessories section for details. P/N's CDB-013, CDB-013A, CDBN-013, CDBS-013, CIP-014-075 and CDB-010, CDB-010A, CDBN-010, CDBS-010, CIP-010-075

**Self Locking Washers:** See Technical Details in this section.



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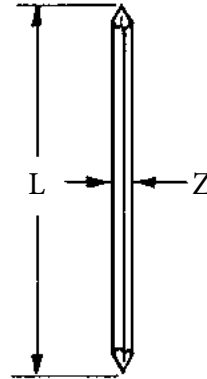
# Insulation Pins

## DPW – DOUBLE POINTED WELD PINS – TECHNICAL DETAILS

Weld pins are commonly used to attach blanket insulation to ducts, ovens, boilers and hot / cold equipment. The pins are welded in place, the insulation impaled over the pin and then self locking washers are installed over the pin to secure the insulation.

The Arc Stud Welding process is used to weld DPW's to sheet metal and plate.

For application, dimensional and technical assistance, contact Sunbelt Stud Welding.



Stud Specifications				Standard Accessories		
Stud Diameter	Standard Lengths	Pounds Per 1,000 Pieces	Ferrule	Foot	Grip	Chuck
Z	L		P/N	P/N	P/N	P/N
10 Gauge 0.135	1.5	7	F014-F	B-1N	GC-019	CN-013
	2.0	9				
	2.5	11				
	3.0	13				
	3.5	15				
	4.0	17				
	4.5	19				
	5.0	21				
	5.5	23				
	6.0	25				
	6.5	27				
	7.0	29				
	7.5	31				
	8.0	33				

To order or specify give: Stud Code, Z x L, Material and Quantity

Example: DPW, 10 Ga. X 3.5", Mild Steel, 2500 pcs.

**Materials:** Low carbon steel (copper plated), stainless steel 18-8 and aluminum are standard. Other materials are available upon request. Material is annealed as required.

**Plating:** Galvanized Weld Pins and other coatings are available.

**Self Locking Washers:** See TECHNICAL DETAILS in this section.



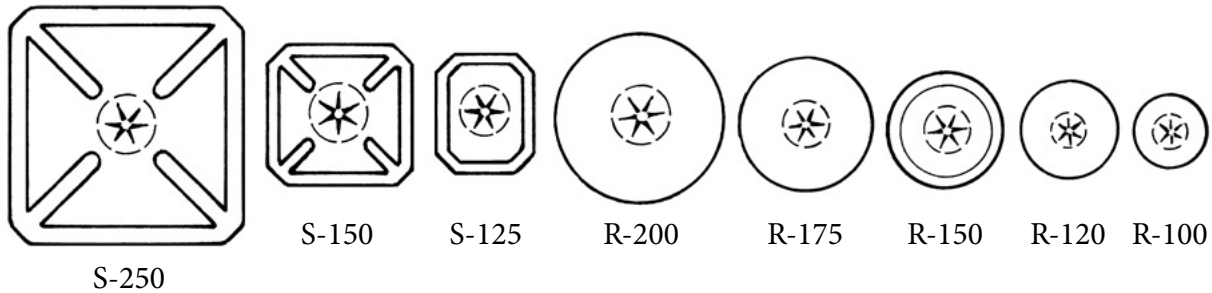
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# Insulation Pins

## WAS & WAR – SELF LOCKING WASHERS “SPEED CLIPS” – TECHNICAL DETAILS

After weld pins are welded in place and insulation is impaled over the weld pins, the Self Locking Washers are installed onto the weld pins to retain the insulation.

For application, dimensional and technical assistance, contact Sunbelt Stud Welding.



Washer Specifications							
Type / Code	Size	Hole Gauge	Material	Edge	Thickness	Pounds per 1000 pieces	Box Quantity
Square							
WAS-250	2.5 x 2.5	10 Gauge	Mild Steel (Galvanized) Stainless and Aluminum	Beveled	0.016	28	1000
WAS-150	1.5 x 1.5	12 Gauge		Beveled		10	
WAS-125	1 x 1.25	or 14 Gauge		Beveled		6	
Round							
WAR-200	2.00	10 Gauge 12 Gauge or 14 Gauge	Mild Steel (Galvanized) Stainless and Aluminum	Beveled	0.016	14	1000
WAR-175	1.75			Flat		12	
WAR-150	1.50			Beveled		9	
WAR-120	1.20			Beveled		6	
WAR-100	1.00			Beveled		4	

To order or specify give: Product Code, Hole Gauge, Material and Quantity

Example: WAS-150, 10Ga., Mild Steel, 9000 pcs.

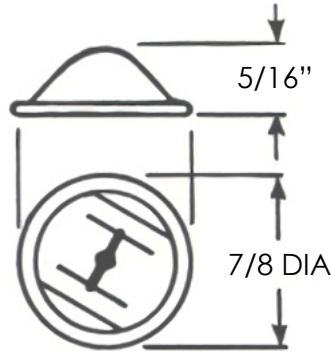


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# Insulation Pins

## MISCELLANEOUS INSULATION WASHERS

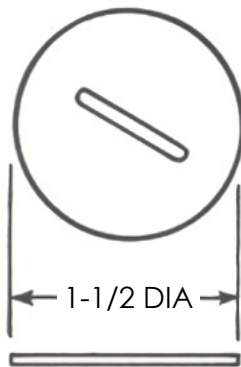
### INSULATION WASHERS: CAPPED SPEED WASHER – WCN CSW



<b>Application</b>	Designed to permanently lock on to 12 GA weld pins or insul-anchors where appearance is a major factor, or where no sharp points or edges are permissible on the surface.
<b>Material</b>	Decorative Domed Cap - Aluminum Self-Locking Insert - Hardened Steel
<b>Color</b>	Plain (bright aluminum) or painted white. Other painted colors are available by special order.

To order or specify give: **Product Code, Size, Color and Quantity**  
Example: WCN CSW, 12 GA., Plain, 9000 pcs.

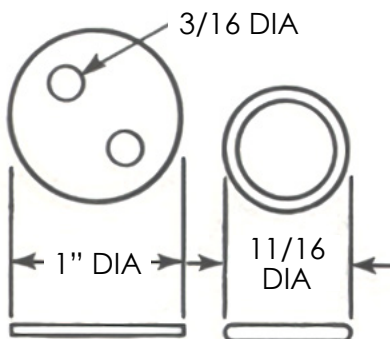
### INSULATION WASHERS: PRONG WASHER – WCN P150



<b>Application</b>	Designed to be used with Sunbelt Stud Welding Prong Insul-Anchors. Slide over prong and bend prong tabs down in opposite directions.
<b>Material</b>	Mild Steel - Galvanized and Aluminum. Stainless Steel is available by special order.
<b>Slot Size</b>	3/32" x 13"/16"

To order or specify give: **Product Code, Material and Quantity**  
Example: WCN P150, Mild Steel, 9000 pcs.

### INSULATION WASHERS: LACING WASHER & RING – LA L100 OR LA RING



<b>Application</b>	Designed to be used with lacing wire to wrap insulation around irregular shapes.
<b>Material</b>	Washer - Aluminum or Stainless Steel Ring - Zinc alloy, bright zinc plated
<b>NO-AB</b>	Washers are available stamped NO AB to indicate non-asbestos material

To order or specify give: **Product Code, Material (Washer) and Quantity**  
Example: LA L100 or LA RING, Aluminum, 9000 pcs.

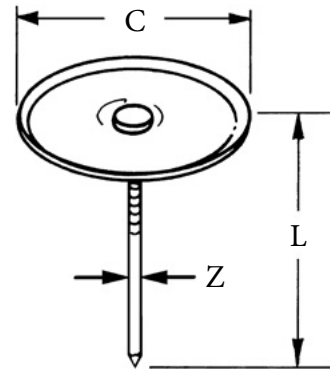
# Insulation Pins

## CHP - CD CUPPED HEAD WELD PINS - TECHNICAL DETAILS

Weld pins are commonly used to attach blanket insulation to ducts, ovens, boilers and hot / cold equipment. The insulation material is placed on the surface, the Cupped Head Pin pushed through the insulation and then welded to the base metal.

The CD Stud Welding process is best suited for welding CHP's to sheet metal and plate.

For application, dimensional and technical assistance, contact Sunbelt Stud Welding.



Stud Specifications							
Standard Cupped Head Pins				Mini Cupped Head Pins			
Stud Diameter	Cup Head Diameter	Standard Lengths	Pounds Per 1,000 Pieces	Stud Diameter	Cup Head Diameter	Standard Lengths	Pounds Per 1,000 Pieces
Z	C	L		D	C	L	
12 Gauge 0.105	1.500	0.375	9	12 Gauge 0.105	1.188	0.375	6
		0.500	10			0.500	7
		0.625	11			0.625	8
		0.750	11			0.750	8
		0.875	11			0.875	8
		1.000	11			1.000	8
		1.125	12			1.125	9
		1.250	12			1.250	9
		1.375	12			1.375	9
		1.500	12			1.500	9
		1.625	12			1.625	9
		1.750	13			1.750	9
		1.875	13			1.875	10
		2.000	13			2.000	10
		2.125	14			2.125	11
		2.250	14			2.250	11
		2.500	14			2.500	11
		2.626	15			2.626	12
		2.875	15			2.875	12
		3.000	16			3.000	13
		3.125	16			3.125	13
		3.500	17			3.500	14
		4.000	18			4.000	15
		4.125	18			4.125	15
		4.500	19			4.500	16
		5.000	20			5.000	17
		5.500	21			5.500	18
		6.000	23			6.000	19

To order or specify give: Stud Code, C x L, Material and Quantity

Example: CHP, 1.5 x 2.125", 3000 pcs.

**Materials:** Low carbon steel

**Plating:** The washer and pin are galvanized

**Paper Washers:** Sold separately either in bulk or installed on the CHP

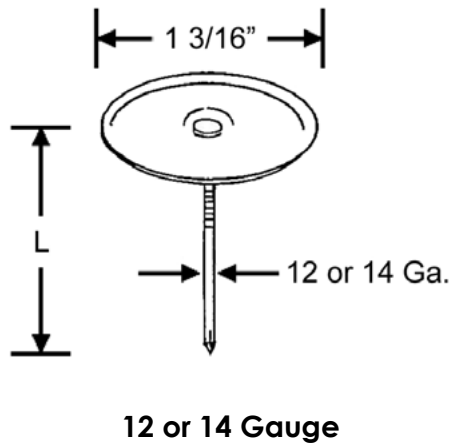
**Accessories:** See the Accessories section for details - 1 piece Chuck P/N 039-613 and multi part Chuck P/N 035-301



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# Insulation Pins

## QUILTING PINS



MATERIAL	Stainless Steel
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Gauge	Length
14 Ga.	2-1/2"
14 Ga.	3-1/2"
14 Ga.	4-1/2"
12 Ga.	2"
12 Ga.	2-1/2"
12 Ga.	4"
12 Ga.	4-1/2"

To order or specify give: Stud Code, Fastener Size and Quantity  
Example: QP-12-2500 (for 12 ga. 2-1/2"), 500 pcs.



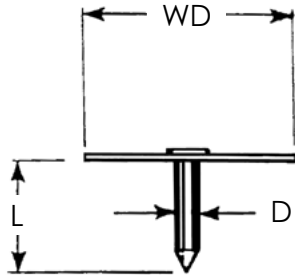
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# Insulation Pins

## DUCT LINER PINS

### CS-10 Cupped Head Weld Pin



<b>MATERIAL</b>	Low Carbon Steel
<b>PLATING</b>	The Washer and Pin are Galvanized

Fastener Size	Quantity	Recommended for:
1/2"	5M	1/2" Insulation - All Densities
3/4"	5M	3/4" Insulation - 1-1/2 lb. Densities
1"	5M	1" Insulation - 3 lb. Densities
1-1/8"	3M	1-1/8" Insulation - 4 to 6 lb. Densities
1-1/2"	3M	1-1/2" Insulation - 1-1/2 lb. Densities
2"	3M	2" Insulation - 1-1/2 & 2 lb. Densities

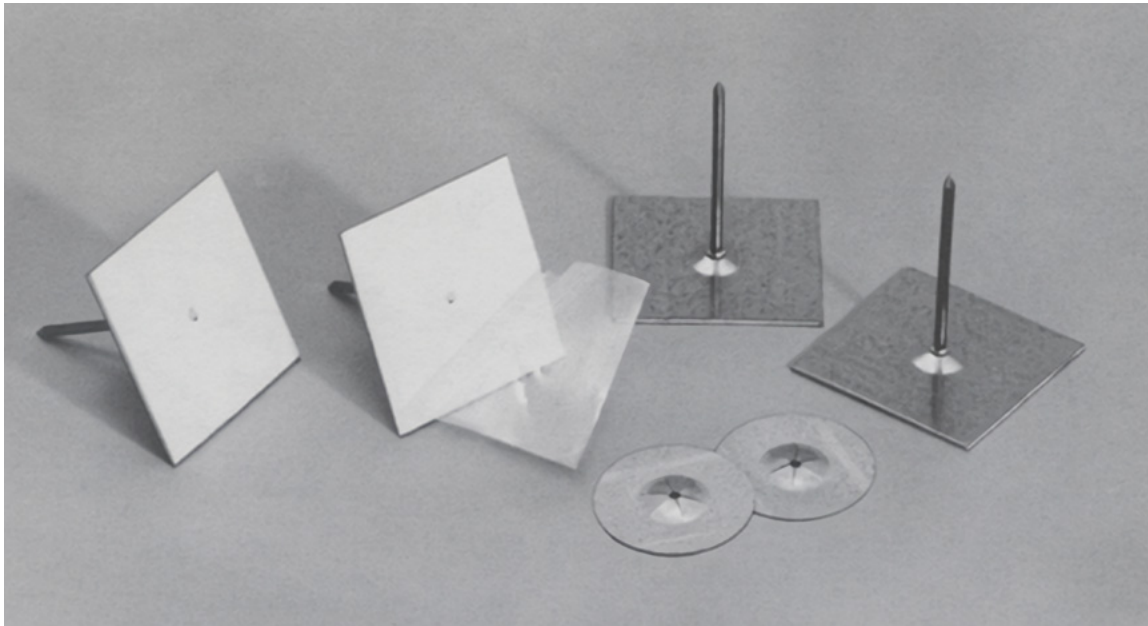
To order or specify give: Stud Code, Fastener Size and Quantity  
Example: CHP CS-10-0750 (for 3/4"), 3000 pcs.



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# Insulation Pins

## SELF-STICK INSUL-ANCHORS



### INSTANT ANCHOR PLACEMENT

Sunbelt Self-Stick Insul-Anchors simplify the permanent installation of insulation to non-porous construction surfaces and non-weldable materials. They can be applied quickly and easily, simply peel off the release backing, press in place, and then hang the insulation. There are no messy adhesives, or time-delay for adhesive curing.

Sunbelt Self-Stick Insul Anchors are available with a 2" x 2" solid plate and 12 Ga. Spindle of varying lengths to meet your requirements. The spindles on short anchors are softened for ease of clipping or bending.

To complete the insulation fastening operation, Sunbelt Self-Stick Insul-Anchors are used in conjunction with Sunbelt Self-Locking Washers.

For more information concerning the application of Sunbelt Self-Stick Insul-Anchors, see the next page and also the page titled Guidelines for Self-Stick Insul-Anchors. For more information concerning self-locking washers, refer to the Washers, Caps and Nuts section of this catalog.



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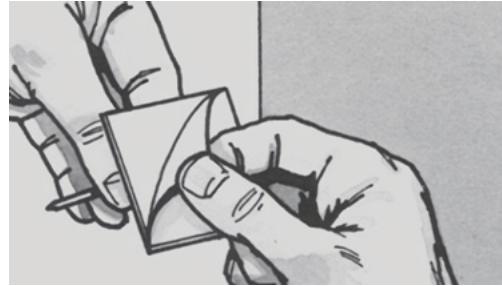
# Insulation Pins

## APPLICATION OF SELF-STICK INSUL-ANCHORS



### 1. WIPE SURFACE CLEAN

Anchor must be applied to a clean, dry and non-porous surface.



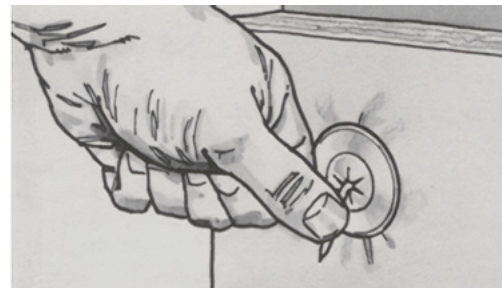
### 2. PEEL OFF RELEASE BACKING

Double faced foam tape is 1/32 inch thick, with a 1 year active shelf life.



### 3. STICK ANCHOR IN PLACE

Select location before contact with surface. Press firmly.



### 4. HANG INSULATION AND SECURE WITH WASHER

Recommended loading 3 lbs. per anchor. (.75 lbs/sq. inch maximum)

# Insulation Pins

## GUIDELINES FOR SELF-STICK INSUL-ANCHORS

1. Must be applied to a clean, non-porous surface, that is free of all oil, film, dust, rust, etc.
2. Not recommended on painted surfaces or ceilings of metal buildings.
3. Best results are obtained when ambient temperature is above 40° F at time of application.
4. Temperature range for the foam tape is from -20° to + 180° F.
5. Loading should not exceed 3 lbs. per anchor. (.75lb./sq. Inch)
6. Must be applied with firm (20 pounds) pressure all around base. Do not twist during application. Do not remove release (backing) paper until ready to use.
7. Insulation may be applied 1/2 hour after bond is made.
8. Not recommended for use on single skin roofdecks.

## Important Notice to Purchaser

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, expressed or implied.

Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage direct or consequential, arising out of the use of or the inability to use the product.

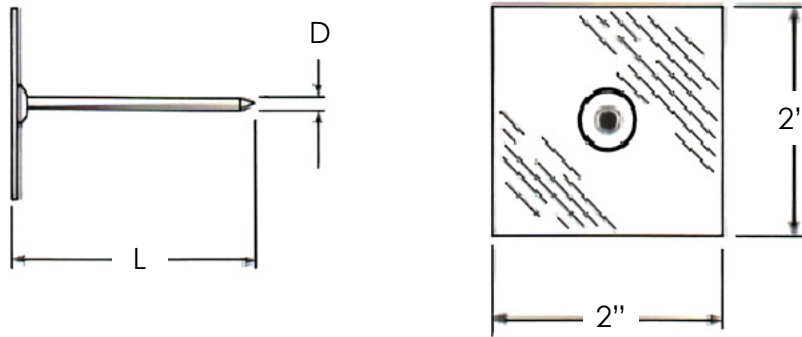
Before using, user shall determine the suitability of the product for his intended use, and user assumes all risk and liability whatsoever in connection therewith.

No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.



# Insulation Pins

## SELF-STICK



<b>Size</b>	<b>D</b>	12 GA (.105") is standard. Other sizes available by special order only.
<b>Length</b>	<b>L</b>	1", 1-5/8", 2", 2-1/2", 3-1/2", 4-1/2", 5-1/2", 6-1/2", 8" and 9" are standard. Other lengths are available by special order.

	<b>Plate</b>	<b>Pin</b>
<b>Material</b>	Low Carbon Steel	Low Carbon Steel
<b>Plating</b>	Galvanized is standard	Galvanized coating is standard

<b>Other Materials</b>	Also available by special order in all Stainless Steel or all Aluminum. Note: Aluminum pins are provided on shorter length Insul-Anchors for ease of bending.
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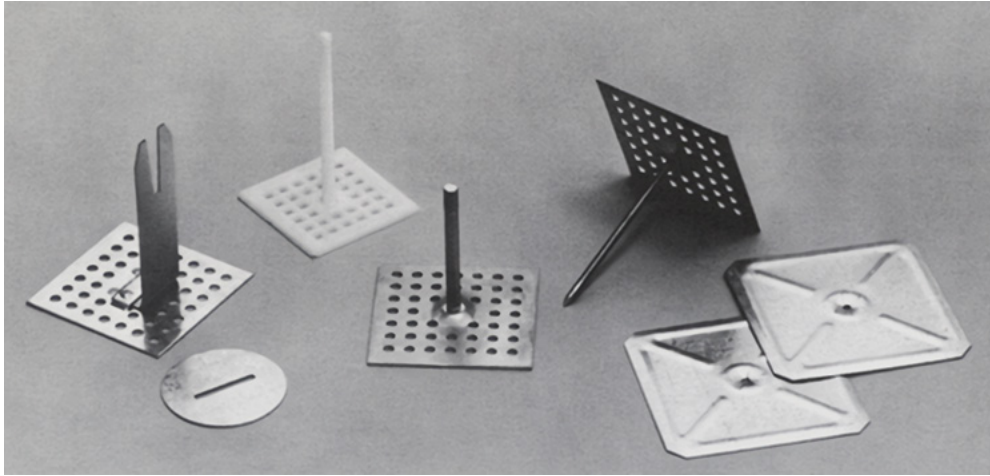
<b>Washers</b>	Self-locking washers are available in a variety of sizes, shapes and materials.
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To order or specify give: Product Code, Length, Fastener Size, Material: (if other than standard) and Quantity  
Example: IA SS, 2", 12 GA, Low Carbon Steel, 3000 pcs.



# Insulation Pins

## SPINDLE, PRONG & NYLON INSUL-ANCHORS



Sunbelt Spindle, Prong and Nylon Insul-Anchors simplify the permanent installation of insulation to porous construction surfaces and non-weldable materials. They can be applied quickly and easily using only a putty knife or caulking gun and Sunbelt General Purpose Adhesive.

Sunbelt General Purpose Adhesive is available in quart or gallon cans. The coverage is approximately 800 to 1,000 standard anchors with 2" x 2" plates per gallon. For more information see the Adhesives section of this catalog.

To complete the insulation fastening operation, Sunbelt Spindle and Nylon Insul-Anchors are used in conjunction with Sunbelt Self-Locking washers (see Washers, Caps and Nuts section). The spindles on short anchors are softened for ease of clipping or bending. The Sunbelt Prong Insul-anchors are used in conjunction with the Sunbelt Prong Washer.

Sunbelt Spindle Insul-Anchors are also available with a curved plate for attaching to corrugated panels. See the reverse side of this page for more information regarding the application of Insul-Anchors.



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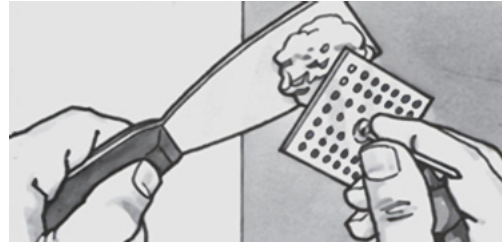
# Insulation Pins

## APPLICATION OF SPINDLE, PRONG & NYLON INSUL-ANCHORS



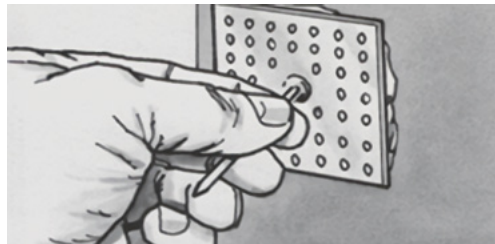
### 1. WIPE SURFACE CLEAN

Anchor must be applied to a clean, dry and non-painted surface.



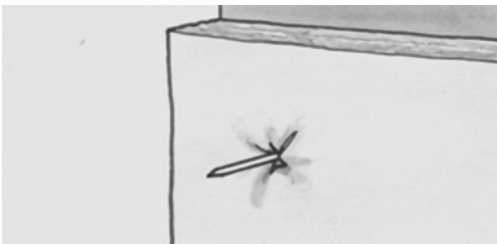
### 2. APPLY ADHESIVE TO ANCHOR

Spread a dab of General Purpose Adhesive IHA-170 onto the perforated base with putty knife.



### 3. STICK ANCHOR IN PLACE

Press anchor into position with twisting motion to spread adhesive evenly.  
(Adhesive should protrude through perforations and beyond base edges.)



### 5. HANG INSULATION

(Allow adhesive to dry thoroughly before hanging insulation: 24-48 hours.)

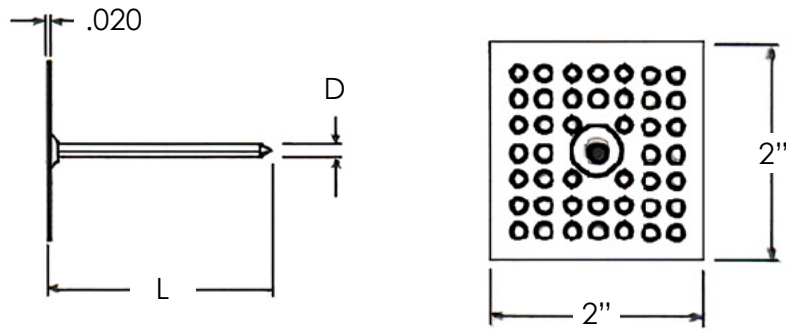


### 6. SECURE WITH WASHER

Secure insulation in place with a self-locking washer.  
(Bend over or clip off the spindle.)

# Insulation Pins

## SPINDLE



<b>Size</b>	<b>D</b>	12 GA (.105") is standard. Other sizes available by special order only.
<b>Length</b>	<b>L</b>	1", 1-5/8", 2", 2-1/2", 3-1/2", 4-1/2", 5-1/2", 6-1/2", 8" and 9" are standard. Other lengths are available by special order.

	<b>Plate</b>	<b>Pin</b>
<b>Material</b>	Low Carbon Steel	Low Carbon Steel
<b>Plating</b>	Galvanized is standard	Galvanized coating is standard

<b>Other Materials</b>	Also available by special order in all Stainless Steel or all Aluminum.
------------------------	---

Note: Aluminum pins are provided on shorter length Insul-Anchors for ease of bending.

<b>Washers</b>	Self-locking washers are available in a variety of sizes, shapes and materials.
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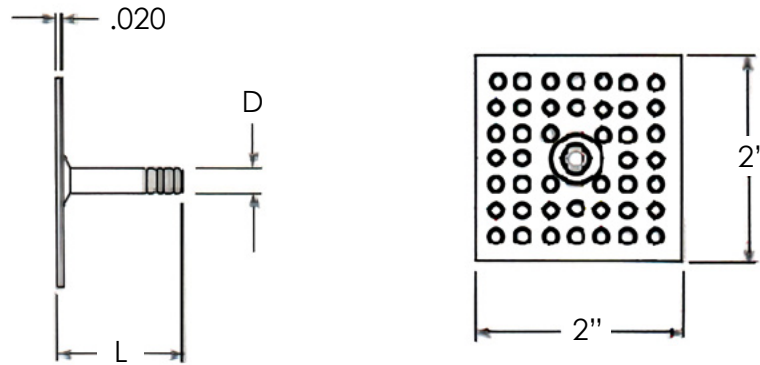
To order or specify give: **Product Code, Length, Fastener Size, Material: (if other than standard) and Quantity**  
**Example: IA SP, 2", 12 GA, Low Carbon Steel, 3000 pcs.**





# Insulation Pins

## ANNULAR RING ANCHOR-BOLT



<b>Size</b>	<b>D</b>	3/16 Nominal Actual Ring Diameter is .175"
<b>Length</b>	<b>L</b>	7/8", 1-7/8", 2-7/8" and 3-7/8" are standard. Other lengths are available by special order.

	<b>Plate</b>	<b>Pin</b>
<b>Material</b>	Low Carbon Steel	Low Carbon Steel
<b>Plating</b>	Galvanized is standard	Copper Plating is standard

<b>Other Materials</b>	Also available by special order only.
------------------------	---------------------------------------

<b>Retaining Cap</b>	The cap for use with this anchor bolt is the WCN AR CAP part number 052-297.
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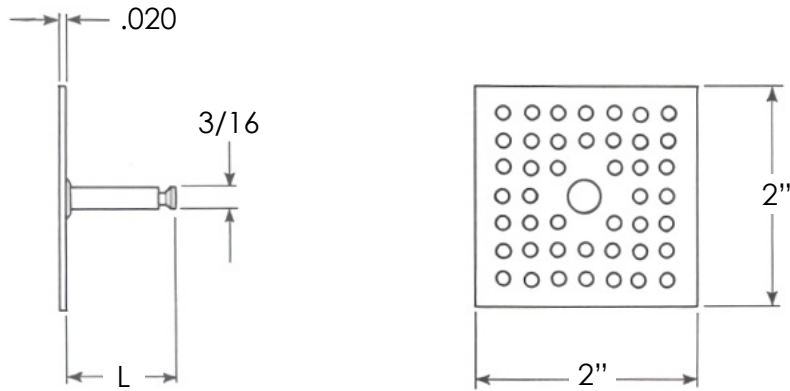
To order or specify give: Product Code, Size, Length, Material: (if other than standard) and Quantity  
Example: 1A AB-AR, 3/16, 7/8", Low Carbon Steel, 3000 pcs.



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# Insulation Pins

## NOTCHED END ANCHOR-BOLT



<b>Length</b>	<b>L</b>	7/8", 1-3/8", 1-7/8", 2-7/8", 3-7/8" are standard. Other lengths are available by special order.
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	<b>Plate</b>	<b>Prong</b>
<b>Material</b>	Low Carbon Steel	Low Carbon Steel
<b>Plating</b>	Galvanized is standard	Copper Plating is standard

<b>Other Materials</b>	Also available by special order only.
------------------------	---------------------------------------

<b>Washers</b>	The washer for use with this anchor-bolt is the WCN NE KHS key hole slotted washer part no. 033-1000-45.
----------------	--

To order or specify give: Stud Code, Length, Material: (if other than standard) and Quantity  
 Example: IA AB-NE, 1-3/8", Low Carbon Steel, 3000 pcs.

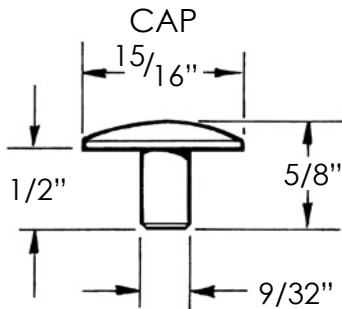


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# Insulation Pins

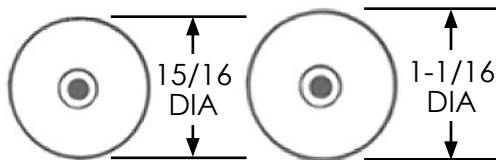
## NAVY STUDS - WASHER, CAPS & NUTS

### ANNULAR RING CAP - TAR (FOR ANNULAR RING STUDS)

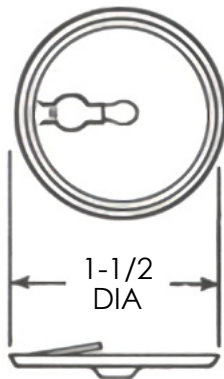


<b>Application</b>	Designed to permanently lock on to Navy annular ring studs
<b>Material</b>	Mild Steel / Zinc Plated, 304 Stainless Steel, 316 Stainless Steel & Aluminum
<b>Size</b>	For 1/8" or 3/16" diameter studs - 304 and 316 Stainless Steel have a 1-1/16" head diameter - 316 Stainless Steel, Aluminum and Mild Steel / Zinc Plated have a 15/16" head diameter

To order or specify give: **Product Code, Size, Material and Quantity**  
**Example: TAR, 1/8" diameter, 304 Stainless Steel, 5000 pcs.**



## KEY HOLE SLOTTED WASHER (FOR 3/16 DIAMETER NOTCHED END STUDS)



<b>Application</b>	Designed to lock on to Navy notched end studs.
<b>Material</b>	Mild Steel - Cadmium Plated Mild Steel - Galvanized

To order or specify give: **Product Code, Material and Quantity**  
**Example: WCN NE KHS, Mild Steel - Cadmium Plated, 3000 pcs.**



# Insulation Pins

## FLAT WASHERS & HEX NUTS (FOR ALL THREADED STUDS)

**Note:** Most standard hex nuts, flat washers, and lock washers are available in a variety of sizes and materials for threaded mil-spec.

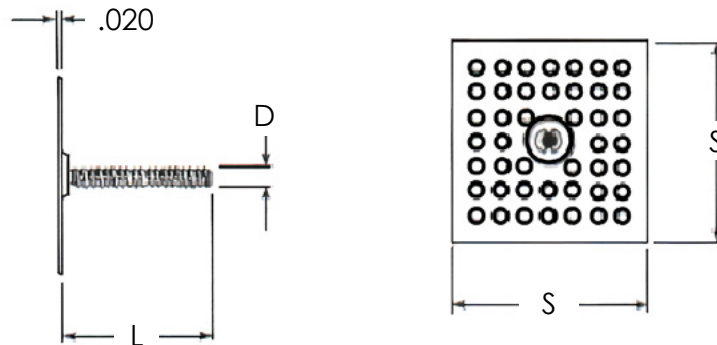
Navy studs such as pitch diameter, shoulder, reduced base and collar.



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# Insulation Pins

## THREADED ANCHOR-BOLT



<b>Bolt</b>	<b>D</b>	#10-24 is standard. Other sizes available by special order only.
<b>Length</b>	<b>L</b>	1/4" to 3" long in 1/4" increments are standard.
<b>Plate Size</b>	<b>S</b>	1" Square, 1-1/2" Square, 2" Square and 2-3/4" Square are standard

	<b>Plate</b>	<b>Bolt</b>
<b>Material</b>	Low Carbon Steel	Low Carbon Steel
<b>Plating</b>	Zinc with yellow chromate	Zinc with yellow chromate

<b>Other Materials</b>	Available by special order only.
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<b>Hardware</b>	Hex nuts, flat washers and lock washers are available in a variety of materials.
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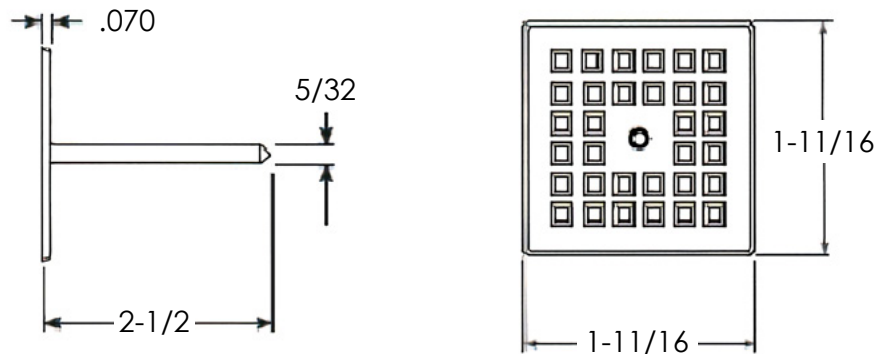
To order or specify give: Product Code, Bolt Size, Length, Plate Size, Material and Quantity  
 Example: IA AB-THD, #10-24, 1-1/4", 2 Square", Low Carbon Steel, 3000 pcs.



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# Insulation Pins

## NYLON



### Features

- Can be used for insulation up to 2" thick
- Has a base area 14% larger than similar nylon anchors with a round base
- Has 21% more perforated area for glue extrusion than similar nylon anchors
- These perforations have a beveled lock-tight design (See illustration below)
- Uses 30% less adhesive than metal insul-anchors with a 2" x 2" square base
- Will not conduct heat or cold
- Lighter in weight than metal anchors for ease of handling

#### Material

This is a one-piece insulation anchor of molded nylon.

#### Washers

The self locking washer for use with this insulation anchor is the WCN KI20 BY 5/32-NY part number 031-0804-13. These washers are packed with anchors.

**To order or specify give: Product Code and Quantity**

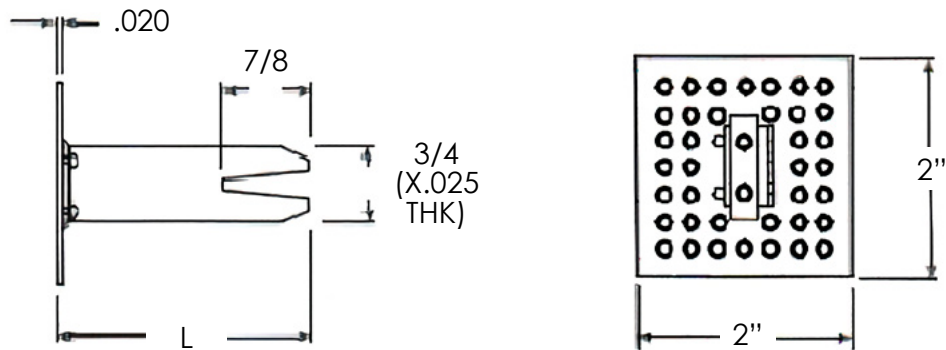
**Example: IA NY, 3000 pcs.**



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# Insulation Pins

## PRONG



<b>Length</b>	L	1-7/8", 2-3/8", 2-7/8" 3-7/8", 4-7/8", 6-7/8" are standard. Other lengths are available by special order.
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	Plate	Prong
<b>Material</b>	Low Carbon Steel	Low Carbon Steel
<b>Plating</b>	Galvanized is standard	Galvanized is standard

<b>Other Materials</b>	Available by special order only.
------------------------	----------------------------------

<b>Washers</b>	The washer for use with this insul-anchor is the WCN PI50 FY slotted part number 041-568.
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To order or specify give: **Stud Code, Length, Material and Quantity**  
**Example: IA PG, 1-7/8", Low Carbon Steel, 2500 pcs.**



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# Insulation Pins

## TUFF-BOND ADHESIVE FOR INSULATION HANGERS

### Special Characteristics:

- Non-Slip Formula – Immediate Grab
- Performs in Temperatures up to 250°
- Provides Excellent Water/Mildew Resistance



### Description:

INSULATION HANGER ADHESIVE TB-170 is a high-strength, heavy-bodied, neoprene rubber adhesive, specifically formulated for adhering anchors for hanging insulation. IHA-170 is also recommended for use as a general-purpose construction adhesive in applications requiring a high-strength bond or in applications subjected to high temperatures.

### Uses:

Surfaces should be clean, dry and free of oil, grease, frost or any other foreign matter, which will impair adhesion. Painted surfaces should be roughened. Clean all metal surfaces with I, I, I – Trichloroethane, acetone or other degreaser, exercising safe practices as recommended by the manufacturer. Some protective coatings are not compatible for TB-170; therefore, make a test bond before proceeding with application. Store adhesive at room temperature for at least 24 hours prior to use.

### Application:

Do not apply at temperatures below 30°. Prepare and install one anchor at a time. Apply a dab (the size of a small walnut) of TB -170 to the anchor base with a putty knife immediately (max. open time is 10 minutes). Press anchor in place with a slight twisting motion. For proper adhesion, insure that the film of adhesive covering the anchor base (after the anchor has been firmly pressed into place) is approximately 1/16" thick and protruding through the perforated base plate. Application will be dry within approximately 24-72 hours, depending on atmospheric conditions. Do not apply load until application is completely dry.

### Note:

When installing metal or ceramic wall fixtures or tile, butter the back with TB -170 and immediately press in place with a slight twisting motion. Allow to dry 24-72 hours before subjecting to use.

### Coverage & Clean Up:

Covers approximately 500-1,000 anchors per gallon, depending on size. Clean tools and adhesive smears with Toluol, exercising safe practices recommended by manufacturer.





# Insulation Pins

## TUFF-BOND ADHESIVE: PHYSICAL PROPERTIES & TECHNICAL INFORMATION

Packaging Information		
Size	Packed	Weight
Quart	12 per carton	29 lbs. per carton
1 Gallon	4 per carton	37 lbs. per carton

Physical Properties & Technical Information	
<b>Base:</b> Neoprene	<b>Flash Point:</b> 45° (ASTM D 3278)
<b>Solvent:</b> Toluene	<b>Water Resistance:</b> Excellent
<b>Color:</b> Dark Green	<b>Mildew Resistance:</b> Won't support fungus growth
<b>Consistency:</b> Heavy mastic. Do not thin.	<b>Application Temp:</b> 30°F to 120°F
<b>Solids Content:</b> 33% ± .3 lbs.	<b>Service Temp:</b> -30°F to 250°F
<b>Open Time:</b> Up to 10 minutes	<b>Storage:</b> Room temp. w/cross ventilation. OSHA Class 1B Liquid. Store as per 29 CFR 1910.106
<b>Dry Time:</b> 24-72 hours	<b>Shelf Life:</b> 12 Months
<b>Coverage:</b> 500-1000 Anchors per Gallon	<b>Photochemically Reactive</b>
<b>Thermal Shock Resistance:</b> Excellent	<b>Flammability (wet stage):</b> Extremely flammable. DOT: Adhesive, Flammable Liquid, UN 1133 OSHA Class 1B Liquid

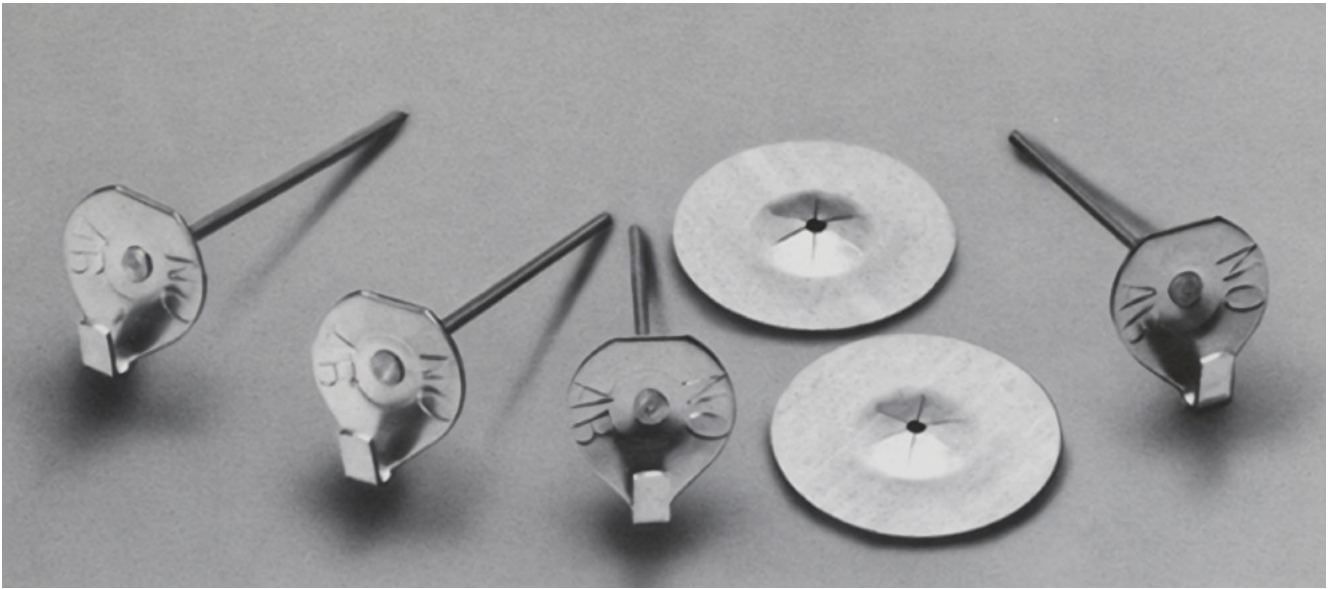
Cautionary Information
<b>DANGER! FLAMMABLE - VAPOR HARMFUL - CONTAINS TOLUENE</b>
<b>Precautionary measures: Keep away from heat, sparks and flames.</b>
<p>Prior to use and until all vapors (odors) are gone: do not smoke; do not use electric switches; do not generate static sparks; extinguish all flames and pilot lights; and turn off all electric and gas appliances, motors and other sources of ignition. Vapors are heavier than air and may travel to areas away from the work site. Prevent build-up of vapors – open all windows and doors – use only with cross ventilation.</p> <p>To avoid breathing vapors, open windows and doors or use other means to ensure fresh air during application and drying. If you experience eye watering, headaches or dizziness, increase fresh air or wear respiratory protection (NIOSH/MSHA TC 23C or equivalent) or leave the area. AVOID contact with skin or eyes. DO NOT take internally.</p> <p><b>STORAGE/HANDLING:</b> Keep containers closed when not removing adhesive. Do not reuse container or transfer adhesive to another container.</p> <p><b>FIRST AID:</b> Inhalation Overexposure – If dizziness or nausea occurs, remove person to fresh air and seek medical attention. Swallowing – If swallowed, do not induce vomiting. Call Poison Control Center, hospital Emergency Room or Physician immediately. Eye Contact – Flush eyes immediately and thoroughly with large amounts of water. If irritation persists, see a physician. Skin Contact – Wash skin thoroughly with warm water and soap.</p> <p><b>NOTICE:</b> Reports have associated repeated and prolonged occupational over-exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling may be harmful/fatal.</p> <p><b>FOLLOW ALL PRECAUTIONS IN THE WORK AREA AND ALL ADJACENT AREAS.</b></p> <p><b>BE SURE THAT ALL PERSONS UNDERSTAND AND FOLLOW ALL PRECAUTIONS.</b></p>



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# Insulation Pins

## SERIES 74 LACING-ANCHORS



Sunbelt Series 74 Lacing Anchor and Self-Locking Washer System simplifies the installation of removable blankets. The Series 74 Lacing Anchors are economical and applied in seconds without tools. They provide secure lacing without damage to removable insulation blankets.

Sunbelt Series 74 Lacing Anchors are available in cadmium plated mild steel or stainless steel with 12 ga. or 14 ga. Spindles in standard and custom lengths.

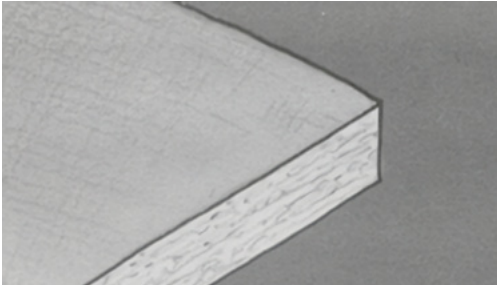
All Sunbelt Series 74 Lacing Anchors are stamped "NO AB", to indicate no asbestos, at no additional cost.



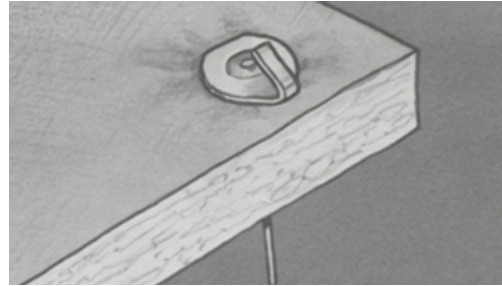
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# Insulation Pins

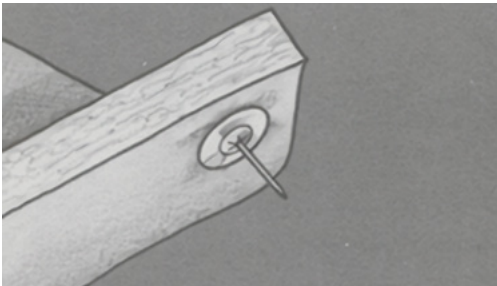
## APPLICATION OF LACING-ANCHORS



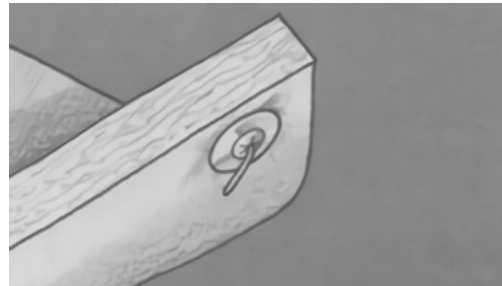
**1. PREPARE INSULATION BLANKET**



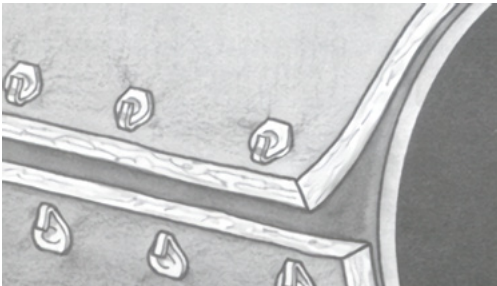
**2. PRESS ANCHOR THRU BLANKET**



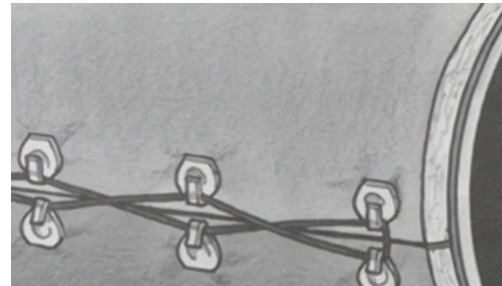
**3. SECURE LACING-ANCHOR WITH SELF-LOCKING WASHER**



**4. BEND OR CLIP OFF SPINDLE**



**5. APPLY INSULATION BLANKET - PRESS ANCHOR THRU BLANKET**

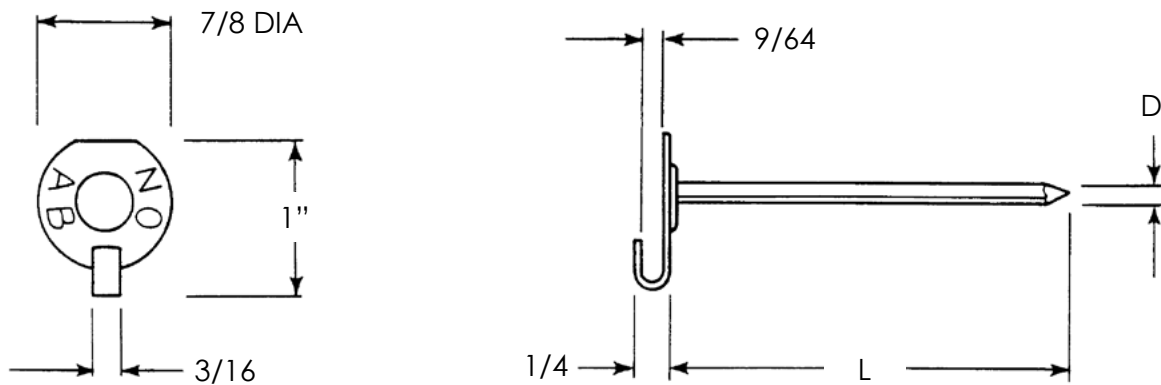


**6. SECURE BLANKET BY LACING THRU HOOKS WITH LACING WIRE**



# Insulation Pins

## SERIES 74 LACING-ANCHORS



<b>Size</b>	<b>D</b>	12 GA and 14 GA are standard. Other sizes available by special order only.
<b>Length</b>	<b>L</b>	2-1/2" and 4-1/2" are standard. Other lengths are available by special order only.

<b>Material</b>	<b>Low Carbon Steel</b>	<b>Stainless</b>
<b>Plating</b>	Cadmium plating is standard	Does not apply to Stainless

<b>Other Materials</b>	Available by special order only
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<b>Washers</b>	Self-locking washers are available in a variety of sizes, shapes and materials.
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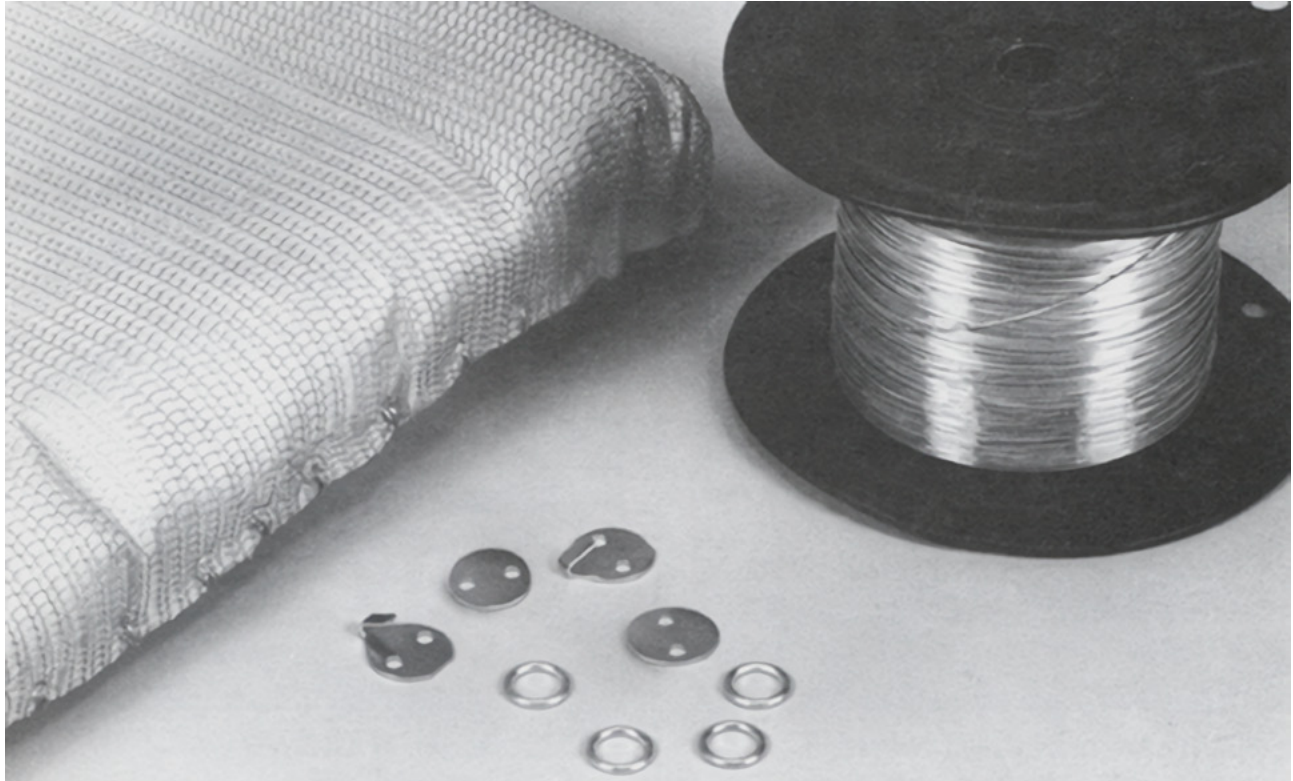
To order or specify give: **Product Code, Length, Size, Material and Quantity**  
**Example: LA 74, 2-1/2", 12 GA, Low Carbon Steel, 2500 pcs.**



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# Insulation Pins

## LACING HOOK, LACING WASHER & LACING RING



Sunbelt Series 80 Lacing Hook and Two-Hole Washer System provides an even lower cost and the same easy-to-lace design. The tie wire application provides more blanket flexibility with equally secure performance. The Sunbelt Series 80 Lacing Hook is similar in function and appearance to the Series 74 Lacing System. The Series 80 Lacing Hook is stocked in mild steel, cadmium plated and stainless steel.

All Sunbelt Series 80 Lacing Hooks are stamped "NO AB" to indicate no asbestos at no additional cost. The Sunbelt L100 Lacing Washer can also be used with a Lacing ring and a second L100 lacing washer, which are fastened to the insulation blanket with a tie wire. One advantage with the lacing system is the positive detention of the lacing wire. The insulation blanket can be loosened for access or repositioning, without having to worry about the lacing wire falling away from the hooks. It is also advantageous in maintaining the position of the lacing wire when insulating complex shapes. All L100 Lacing Washers are stamped "NO AB" to indicate no asbestos, at no additional cost.



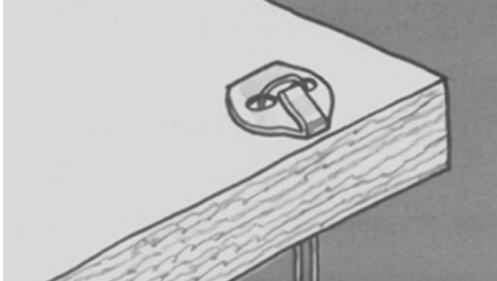
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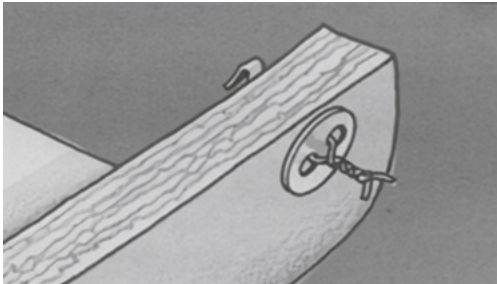
# Insulation Pins

## APPLICATION OF LACING HOOK, LACING WASHER & LACING RING

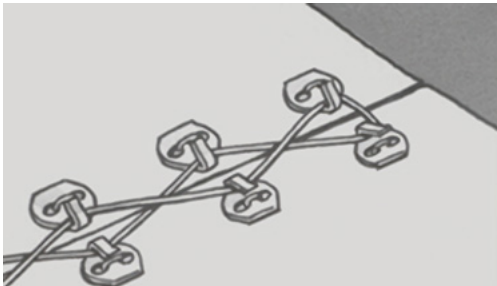
### SERIES 80 LACING HOOK SYSTEMS



**1. INSTALL LACING HOOK WITH TIE WIRE**

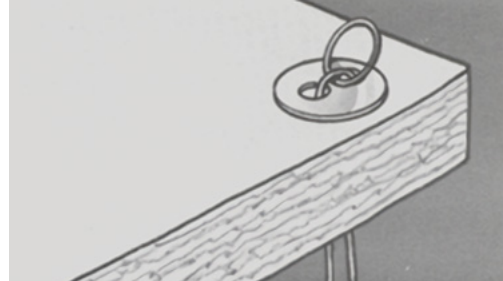


**2. SECURE WITH LACING WASHER**

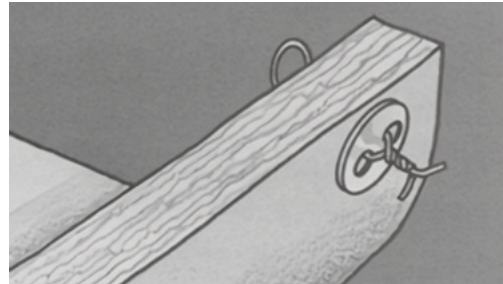


**3. SECURE INSULATION BY LACING THRU HOOKS**

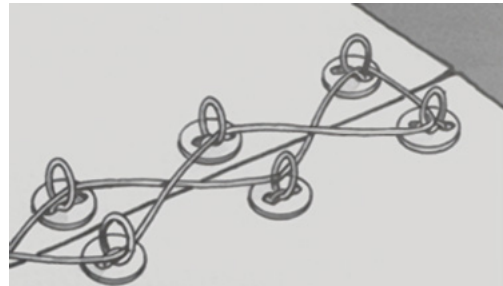
### LACING RING SYSTEM



**1. INSTALL LACING WASHER & LACING RING WITH TIE WIRE**



**2. SECURE WITH LACING WASHER**

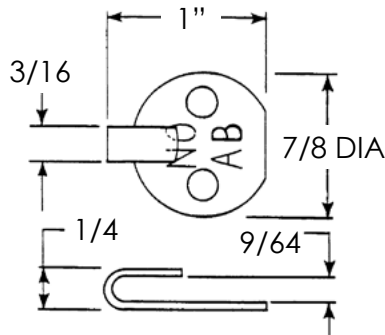


**3. SECURE INSULATION BY LACING THRU RINGS**

# Insulation Pins

## SERIES 80 LACING HOOK, L 100 WASHER & RING

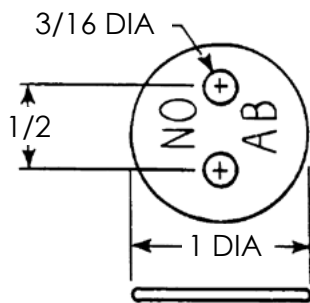
### SERIES 80 LACING HOOK



<b>Size</b>	One size shown
<b>Material</b>	Mild Steel: Cadmium plated or Stainless Steel
<b>NO-AB</b>	Furnished stamp NO AB to indicate non-asbestos material

To order or specify give: Product Code, Material and Quantity  
Example: LA HOOK 80, Mild Steel, 2500 pcs.

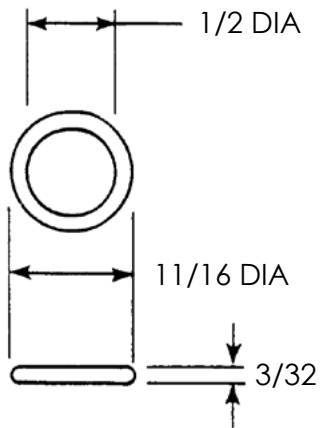
### L100 LACING WASHER



<b>Size</b>	One size shown
<b>Material</b>	Aluminum or Stainless Steel
<b>NO-AB</b>	Furnished stamp NO AB to indicate non-asbestos material

To order or specify give: Product Code, Material and Quantity  
Example: LA L100, Aluminum, 2500 pcs.

### LACING RING



<b>Size</b>	One size shown
<b>Material</b>	Zinc Alloy - bright Zinc plated or Stainless Steel

To order or specify give: Product Code and Quantity  
Example: LA RING, 2500 pcs.



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