



ROBBINS Lightning, Inc.

ENGINEERING MANUAL

Post Office Box 440

124 East Second Street

Maryville, Missouri 64468 U.S.A.

Phone: (660) 582-3156

Fax: (660) 582-3039

Toll-free: (800) 426-3792

www.robbslightning.com

CHEM LINK Brands

Telephone: 800-826-1681

Fax: 269-679-4448

353 E Lyon Street

Schoolcraft, MI 49087

www.chemlink.com

Last Revision: 05/19/14

Document No. L1270

Product Description

M-1® is a moisture curing, polyether adhesive sealant designed for applications in damp, dry, or cold climates. **M-1®** is solvent free and contains no isocyanates. **M-1®** will not shrink upon curing, will not discolor when exposed to UV light, and can not "out-gas", or bubble on damp surfaces as urethane sealants often do. **M-1®** is capable of joint movement in excess of 25% in both compression and extension. **M-1®** can be used effectively in many difficult construction site conditions such as wet or dry climates and at temperatures as low as 32°F (0°C).

Applicable Performance Standards

- ASTM C920, Type S, Grade NS, Class 25
Uses NT, T₁, M, G, A & O
- Federal Specification TT-S-00230-C Type II, Class B
- Corps of Engineers CRD-C-541, Type II, Class B
- Canadian Standards Board CAN 19, 13-M82

Regulatory Compliance

- Conforms to OTC Rule for Sealants and Caulks
- Meets requirements of California Regs: CARB, BAAQMD and SCAQMD
- Conforms to California Proposition 65
- Conforms to USDA Requirements for Non-food Contact

Green Standards:

- LEED 2.2 for New Construction and Major Renovations: Low Emitting Materials (Section 4.1) 1 Point
- NAHB Model Green Home Building Guidelines: 5 Global Impact Points
- VOC Content: less than 20 grams / liter ASTM D2369 EPA Method 24 (tested at 240°F / 115°C)



Advantages

- Solvent free, 100% solids will not shrink
- Non-slump, applies vertically and overhead
- 20 minute skin over
- No outgassing on damp surfaces
- Good color stability, will not suntan
- Paintable within 24 hours (See limitations)
- Gun grade, no special tools or mixing required
- Application at temperatures as low as 32°F (0°C)

Colors

White	Gray	Limestone
Black	Tan	

* Color matching is available in batch quantity only

Packaging

- **5 oz Squeeze Tube (148 ml)**
36 tubes/carton, 40 cartons/pallet
- **10.1 oz (300 ml)**
24 cartridges/carton, 45 cartons/pallet
- **20 oz (600 ml)**
12 sausages/carton, 40 cartons/pallet
- **28 oz (825 ml)**
12 cartridges/carton, 40 cartons/pallet
White only - Other colors available by special order
- **2 and 5 gallon pails or 50 gallon drums**
available by special order

Joint Preparation

Joint surfaces should be clean, dry and free from all contamination including: dirt, oils, grease, tar, wax, rust and any other substance that may inhibit the sealant's performance.

Joint Design

Install all joint applications per ASTM and SWRI recommendations and guidelines. Joints shall be designed with a depth to width ratio of 1:2 (joint depth one-half the width). Control the depth of the sealant by using a polyethylene backer rod that is 25% larger than the joint opening at standard temperature. To prevent three-point adhesion use a backer rod or bond breaker tape to ensure proper joint movement and a long lasting weatherproof seal. Where the joint configuration will not permit a backer rod, CHEM LINK recommends that an alternative bond breaker be used.

Joint Width Inches (mm)	Joint Depth Inches (mm)
1/4 - 1/2 (6-13)	1/4 (6)
1/2 - 3/4 (13-19)	1/4 - 3/8 (6-10)
3/4 - 1 (19-25)	3/8 - 1/2 (10-13)

CHEM LINK recommends an appropriate substrate primer to be used on high moving joints or dissimilar substrates which require increased adhesion properties.

Compatible Substrates*
EPDM and SBS Mod Bit
Aluminum and Galvanized Metal
Stainless Steel
Engineered Plastics, PVC
Glass
Fiberglass FRP
Wood
Block and Brick
EPS Foam
Concrete and Stone

Typical Physical Properties

Gun Grade	Zero Slump	
Viscosity	1,200,000 cp +/- 400,000 cp	Brookfield RVF TF Spindle, 4 RPM, 73°F (23°C)
Density	11.8 +/- 0.2 lbs per gallon	ASTM D1475
Tack Free Time	20 min +/- 10 min	45 +/- 5 % R.H.
Elongation at Break	290%	ASTM D412
Hardness Shore A	45	ASTM C661
Tensile Strength	330 psi	ASTM D412
Shear Strength	380 psi	ASTM D1002
Low temp. flex	Pass -10°F (-23°C) 1/4 inch mandrel	ASTM D816
Shrinkage	No visible shrinkage after 14 days	
Service Temperature	-40°F to 200°F (-40°C to 93°C)	

Basic Uses

Expansion joints
Pre-cast concrete
Block and Masonry
Window and door frames
Siding
Parapets
Cove Joints
Transportation
Weather Sealing

**Test and evaluate to ensure adequate adhesion.*

Application Guidelines:

Concrete

Prior to application remove any residual contamination by mechanical abrasion, sand blasting or power washing. On green concrete, remove all release agents, friable and loose concrete. Dry all visible and standing water prior to applying **M-1**[®]. Install an appropriate backer rod to avoid three-point bonding.

Metal

Prepare all metal to ensure maximum adhesion. Remove all rust, scale and residue by wire brushing to a bright metal sheen. Remove films, loose or inappropriate coatings and oils with an appropriate solvent such as alcohol.*

**CHEM LINK recommends that coated substrates be tested for adhesion prior to starting a project. Please contact Technical Services for specific application guidelines and recommendations.*

Wood

Wood should be clean, sound and dry prior to sealant application. Allow treated wood to weather for six months prior to application. Remove all coatings and paint (or test for compatibility) to ensure proper bonding. Do not use on fire retardant lumber.

Priming

In most instances **M-1**[®] will not require a primer. However, certain applications or substrates may require a primer to ensure a long lasting bond and weatherproof seal. It is the applicator's responsibility to determine the need for a primer. CHEM LINK recommends a primer be used for any application where prolonged immersion is anticipated.

Clean-Up

Wet sealant can be removed using a solvent such as alcohol. Cured **M-1**[®] can be removed by abrading or scraping the substrate.

Storage

Store original, unopened containers in a cool, dry area. Protect unopened containers from water, heat and direct sunlight. Elevated temperatures will reduce shelf life. **M-1**[®] will not freeze.

Shelf Life

Twelve months from date of manufacture when stored at 70°F / 21°C with 50% relative humidity. High temperature and high relative humidity may significantly reduce shelf life.

Pails have a shelf life of six months.

Application Instructions

Remove all dirt, oil, loose paint, frost and other contamination from all working surfaces with alcohol DO NOT USE petroleum solvents such as mineral spirits or xylene. Maintain **M-1**[®] at room temperature before applying to ensure easy gunning and tooling. Test and evaluate to ensure adequate adhesion. Carefully gun the sealant with a smooth, continuous bead. If tooling is needed, do so within fifteen minutes of application.

Caution

Avoid prolonged contact with skin. Uncured adhesive irritates eyes. In case of contact with eyes immediately flush with water. Call a physician. Please refer to the SDS for first aid information.

See www.chemlink.com for most current SDS .
KEEP OUT OF REACH OF CHILDREN.

Limitations

- Horizontal applications will require tooling.
- In areas where prolonged chemical exposure is anticipated, contact Technical Services for recommendations.
- Allow treated wood to "cure" for six months prior to application per APA guidelines.
- Do not use in areas subject to continuous immersion.
- Do not store in elevated temperatures.
- Allow asphalt to cure a minimum of six months before applying **M-1**[®]
- Remove all coatings and sealers before application.
- Please contact customer service for application guidelines with temperatures below 32°F (0°C).
- Test and evaluate all paints before application. Polyurethane and oil based paints may dry slowly.
- Do not use on TPO without CHEM LINK TPO primer.
- Does not bond to Kynar 500[®] PVDF coated metals.





NOTES:



Contractor Hot Line

800-826-1681

www.chemlink.com



All properties described in this document are derived from testing conducted in laboratory conditions. Properties and performance will vary depending on environmental conditions and application technique. Test and evaluate to determine appropriate usage. Visit www.chemlink.com for the Safety Data Sheet, Technical Data Guides and full warranty for this product.

LIMITED WARRANTY: **CHEM LINK** warrants this product's performance, provided it is properly stored and applied within 1 year. If this **CHEM LINK** material is proved to be defective, return remaining product and purchase receipt for refund or replacement of product exclusive of labor or cost of labor. This is the sole and exclusive remedy for defects or failure of this product. User must read and follow the direction of the current Technical Data Guide and SDS prior to product use. User determines suitability of product for intended use and assumes all risks. Manufacturer shall not be liable for damages (including consequential or incidental damages) in excess of the purchase price, except where such exclusion or limitation is prohibited by state law. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESS OR IMPLIED INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; except for the above express warranty given by manufacturer, the product is sold with all faults. **CHEM LINK** SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. This warranty gives you specific legal rights, and you may also have other rights in the U.S. which vary from state to state. For warranty claim information, call 800-826-1681.

CHEM LINK Brands

Telephone: 800-826-1681

Fax: 269-679-4448

353 E Lyon Street

Schoolcraft, MI 49087

www.chemlink.com

Last Revision: 05/19/14

Document No. L1260

Product Description

DuraLink is an extremely elastic moisture curing sealant designed for use in metal architecture, curtain wall construction and joints subject to movement. **DuraLink's** adhesion to difficult surfaces permits its use on anodized metal and coatings such as Kynar 500® PVDF. **DuraLink** will not stain absorbent stone substrates like limestone or marble. **DuraLink's** unique polyether chemistry eliminates out-gassing on green concrete and protects against "sun tanning" or discoloration when exposed to ultraviolet light.

Applicable Performance Standards

- ASTM C920, Type S, Grade NS, Class 50, Uses NT, T₂, M, G, A & O
- Federal Specification TT-S-00230-C Type II, Class A
- Corps of Engineers CRD-C-541, Type II, Class A
- Canadian Standards Board CAN 19, 13-M82
- SWR Institute Validated (Sealant Waterproofing and Restoration)
- AAMA 802.3-08 Type II, AAMA 803.3-08 Type I, and AAMA 805.2-08 Group C

Regulatory Compliance

- Conforms to OTC Rule for Sealants
- Meets requirements of California Regs: CARB, BAAQMD and SCAQMD
- Conforms to California Proposition 65
- Conforms to USDA Requirements for Non-food Contact

Green Standards:

- LEED 2.2 for New Construction and Major Renovations: Low Emitting Materials (Section 4.1) 1 Point
- NAHB Model Green Home Building Guidelines: 5 Global Impact Points
- VOC Content: less than 19 grams / liter ASTM D2369 EPA Method 24 (tested at 240°F / 115°C)



Advantages

- Bonds to Kynar 500® PVDF coated metal
- Solvent free, 100% solids will not shrink
- Non-slump, applies vertically and overhead
- 30 minute skin over
- No outgassing on damp surfaces
- Color stability, will not suntan
- Paintable within 24 hours (See limitations)
- +/- 50% joint movement

Colors

Medium Bronze	Dark Bronze	Black
Forest Green	Stone	Gray
Terra Cotta	Aluminum	Limestone
Tan	Almond	Weathered Wood
White		

* Color matching is available in batch quantity only

Packaging

- **10.1 oz (300 ml)**
24 cartridges/carton, 45 cartons/pallet
- **20 oz (600 ml)**
12 sausages/carton, 40 cartons/pallet
- **2 and 5 gallon pails or 50 gallon drums**
available by special order

Joint Preparation

Joint surfaces should be clean, dry and free from all contamination including: dirt, oils, grease, tar, wax, rust and any other substance that may inhibit the sealant's performance.

Joint Design

Install all joint applications per ASTM and SWRI recommendations and guidelines. Joints shall be designed with a depth to width ratio of 1:2 (joint depth one-half the width). Control the depth of the sealant by using a polyethylene backer rod that is 25% larger than the joint opening at standard temperature. To prevent three-point adhesion use a backer rod or bond breaker tape to ensure proper joint movement and a long lasting weatherproof seal. Where the joint configuration will not permit a backer rod, CHEM LINK recommends that an alternative bond breaker be used.

Joint Width Inches (mm)	Joint Depth Inches (mm)
1/4 - 1/2 (6-13)	1/4 (6)
1/2 - 3/4 (13-19)	1/4 - 3/8 (6-10)
3/4 - 1 (19-25)	3/8 - 1/2 (10-13)
1 - 2 (25-50)	1/2 (13)

CHEM LINK recommends an appropriate substrate primer to be used on high moving joints or dissimilar substrates which require increased adhesion properties.

Compatible Substrates*	
Kynar 500® PVDF Coated Metal	Brick, Concrete and Stone
Galvanized Metal	EPDM and SBS Mod Bit
Aluminum	EPS Foam
Engineered Plastics, PVC	B.U.R (Built up Roofing)
Glass	Fiberglass FRP

**Test and evaluate to ensure adequate adhesion.*

Typical Physical Properties

Gun Grade	Zero Slump	
Viscosity	750,000 cp +/- 150,000 cp	Brookfield RVF TF Spindle, 4 RPM, 73°F (23°C)
Density	11.0 +/- 0.2 lbs per gallon	ASTM D1475
Tack Free Time	40 +/- 20 min	45 +/- 5% R.H.
Elongation at Break	700%	ASTM D412
Peel Strength	25 - 30 psi	ASTM C794
Tensile Strength	150 - 200 psi	ASTM D412
Hardness Shore A	20 - 23	ASTM C661
Lap Shear Strength	150 - 175 psi	ASTM D1002
Low temp. flex	Pass -10°F (-23°C) 1/4 inch mandrel	ASTM D816
Shrinkage	No visible shrinkage after 14 days	
Service Temperature	-40°F to 200°F (-40°C to 93°C)	
Weathering	No cracking or chalking, slight matte finish after 2000 hours QUV "A" bulb. Durometer gain of 5 points	

Basic Uses

Window and door frames	Siding
Pre-cast concrete	Weather Sealing
Block and Masonry	Cove Joints
Curtain Walls	Parapets
Expansion joints	Transportation

Application Guidelines:

Concrete

Prior to application remove any residual contamination by mechanical abrasion, sand blasting or power washing. On green concrete, remove all release agents, friable and loose concrete. Dry all visible and standing water prior to applying **DuraLink**. Install an appropriate backer rod to avoid three-point bonding.

Metal

Prepare all metal to ensure maximum adhesion. Remove all rust, scale and residue by wire brushing to a bright metal sheen. Remove films, loose or inappropriate coatings and oils with an appropriate solvent such as alcohol.*

**CHEM LINK recommends that coated substrates be tested for adhesion prior to starting a project. Please contact Technical Services for specific application guidelines and recommendations.*

Wood

Wood should be clean, sound and dry prior to sealant application. Allow treated wood to weather for six months prior to application. Remove all coatings and paint (or test for compatibility) to ensure proper bonding. Do not use on fire retardant lumber.

Priming

In most instances **DuraLink** will not require a primer. However, certain applications or substrates may require a primer to ensure a long lasting bond and weatherproof seal. It is the applicator's responsibility to determine the need for a primer. CHEM LINK recommends a primer be used for any application where prolonged immersion is anticipated.

Clean-Up

Wet sealant can be removed using a solvent such as alcohol. Cured **DuraLink** can be removed by abrading or scraping the substrate.

Storage

Store original, unopened containers in a cool, dry area. Protect unopened containers from water, heat and direct sunlight. Elevated temperatures will reduce shelf life. **DuraLink** will not freeze.

Shelf Life

Twelve months from date of manufacture when stored at 70°F / 21°C with 50% relative humidity. High temperature and high relative humidity may significantly reduce shelf life.

Pails have a shelf life of six months.

Application Instructions

Remove all dirt, oil, loose paint, frost and other contamination from all working surfaces with alcohol DO NOT USE petroleum solvents such as mineral spirits or xylene. Maintain **DuraLink** at room temperature before applying to ensure easy gunning and tooling. Test and evaluate to ensure adequate adhesion. Carefully gun the sealant with a smooth, continuous bead. If tooling is needed, do so within fifteen minutes of application.

Caution

Avoid prolonged contact with skin. Uncured adhesive irritates eyes. In case of contact with eyes immediately flush with water. Call a physician. Please refer to the SDS for first aid information.

See www.chemlink.com for most current SDS .

KEEP OUT OF REACH OF CHILDREN.

Limitations

- In areas where prolonged chemical exposure is anticipated, contact Technical Services for recommendations.
- Allow treated wood to "cure" for six months prior to application per APA guidelines.
- Do not use in areas subject to continuous immersion.
- Do not store in elevated temperatures.
- Remove all coatings and sealers before application.
- Please contact customer service for application guidelines with temperatures below 32°F (0°C).
- Test and evaluate all paints before application. Polyurethane and oil based paints may dry slowly.
- Do not use on TPO without CHEM LINK TPO primer.





NOTES:



Contractor Hot Line

800-826-1681

www.chemlink.com



All properties described in this document are derived from testing conducted in laboratory conditions. Properties and performance will vary depending on environmental conditions and application technique. Test and evaluate to determine appropriate usage. Visit www.chemlink.com for the Safety Data Sheet, Technical Data Guides and full warranty for this product.

LIMITED WARRANTY: **CHEM LINK** warrants this product's performance, provided it is properly stored and applied within 1 year. If this **CHEM LINK** material is proved to be defective, return remaining product and purchase receipt for refund or replacement of product exclusive of labor or cost of labor. This is the sole and exclusive remedy for defects or failure of this product. User must read and follow the direction of the current Technical Data Guide and SDS prior to product use. User determines suitability of product for intended use and assumes all risks. Manufacturer shall not be liable for damages (including consequential or incidental damages) in excess of the purchase price, except where such exclusion or limitation is prohibited by state law. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESS OR IMPLIED INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; except for the above express warranty given by manufacturer, the product is sold with all faults. **CHEM LINK** SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. This warranty gives you specific legal rights, and you may also have other rights in the U.S. which vary from state to state. For warranty claim information, call 800-826-1681.

Material Info

Cadmium Plating Information

Cadmium plated parts have a minimum of 0.0003" plating thickness. Cadmium plating conforms to UL standards for connecting dissimilar materials. Cadmium connections to copper, aluminum, stainless steel, magnesium, lead, wrought iron, galvalum, zinc and zinc plated steel all have an electrochemical potential under 0.60 V to minimize corrosion due to electrochemical action.

Cadmium Plated Bimetallic Connectors

Cadmium is an acceptable bimetallic connector for connecting aluminum to copper or copper to aluminum. All of our copper and bronze parts can be cadmium plated.

Tin Plating Information

Our tinned copper parts are hot dipped and have a minimum thickness of 0.0001". Tinned copper parts conform to UL 96 requirements for use in corrosive environments.

Lead Plating Information

Our lead dipped or plated parts have a minimum of 0.0001" thick lead coating.

Stainless Steel Fasteners

Our fasteners are standard 18-8 stainless steel fasteners and are dimensioned per ASME B18.2.1. Our tek screws are 400 series, magnetizable stainless steel. Manufacturer torque suggestions are found in the table at the right.

Suggested Maximum Bolt Torque Values		
Bolt Size	Stainless	Silicon Bronze
1/4-20	75.2 in/lbs	68.8 in/lbs
15/16-18	132	123
3/8-16	236	219
7/17-14	376	349
1/2-13	43 ft/lbs	40 ft/lbs
9/16-12	56	53
5/8-11	92	86

Copper

Our copper parts are made from electrical grade copper. All copper parts can be custom plated with cadmium, nickel, lead, or tin.

Aluminum

Our aluminum parts are made from electrical grade aluminum.

Copper Alloys

We use three bronze or brass alloys for our cast copper parts. We use 85 red brass for our ground rod clamps, 131 bronze for part No. 47 and No. 44, and 81 red brass for all other cast copper parts. All bronze or brass parts can be custom plated with cadmium, nickel, lead or tin.

Aluminum Alloys

We use two aluminum alloys for our cast aluminum parts. We use 356 aluminum for part No. A47 and No. A44 and 319 aluminum for all other cast aluminum parts.

Stainless Steel Alloy

We use 304 stainless steel (18/8) in all our stainless steel parts.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



ALUMINUM CONDUCTORS (For Main Conductor Use)

ALL ITEMS



STANDARD OF THE INDUSTRY FOR
STRUCTURES 75' HIGH OR LESS

Cat. No. A1 – 26 strands of 14 gauge bare aluminum wire in basket weave configuration, 1/2" diameter, 106,800 circular mil cross section, (#1/0 AWG). Weight of aluminum – 102 pounds per 1,000' minimum.



Available on 250' and 500' spools.

OTHER SMOOTH WEAVE OR BASKET WEAVE ALUMINUM CABLES AVAILABLE ON 250' AND 500' SPOOLS

Cat. No. A2 – 28 strands of 14 gauge bare aluminum wire, 9/16" diameter, 115,000 circular mil cross section. Weight of aluminum – 112 pounds per 1,000' minimum.



Cat. No. A3 – 24 strands of 14 gauge bare aluminum wire, 1/2" diameter, 98,600 circular mil cross section. Weight of aluminum – 95 pounds per 1,000' minimum.



STANDARD OF THE INDUSTRY FOR
STRUCTURES OVER 75' HIGH

Cat. No. A604 – 31 strands of 0.0783" diameter bare aluminum wire in basket weave configuration, 9/16" diameter, 192,000 circular mil cross section (#4/0 AWG). Weight of aluminum – 191 pounds per 1,000' minimum.



Available on 250' and 500' spools.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

COPPER CONDUCTORS (For Main Conductor Use)

ALL ITEMS



STANDARD OF THE INDUSTRY FOR
STRUCTURES 75' HIGH OR LESS

Cat. No. 1 – 32 strands of 17 gauge bare copper wire in basket weave configuration, 7/16" diameter, 65,500 circular mil cross section. Weight of copper – 201 pounds per 1,000' minimum.

Available on 250' and 500' spools.

OTHER BASKET WEAVE COPPER CABLES AVAILABLE ON 500' SPOOLS

Cat. No. 2 – 34 strands of 17 gauge bare copper wire, 7/16" diameter, 69,600 circular mil cross section. Weight of copper – 214 pounds per 1,000' minimum.

Cat. No. 3 – 36 strands of 17 gauge bare copper wire, 7/16" diameter, 73,700 circular mil cross section. Weight of copper – 227 pounds per 1,000' minimum.

Cat. No. 6 – 30 strands of 17 gauge bare copper wire, 7/16" diameter, 61,400 circular mil cross section. Weight of copper – 188 pounds per 1,000' minimum.

TINNED COPPER CONDUCTOR (For Use on White or Light Colored Buildings)

Cat. No. 1T – 32 strands of 17 gauge tinned copper wire in basket weave configuration, 7/16" diameter, 65,500 circular mil cross section. Weight – 202 pounds per 1,000' minimum.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



COPPER CONDUCTORS (For Main Conductor Use)

ALL ITEMS



STANDARD OF THE INDUSTRY FOR
STRUCTURES OVER 75' HIGH

Cat. No. 604 — 28 strands of 14 gauge (.064) bare copper wire in rope lay configuration, 7/16" diameter, 115,000 circular mil cross section. Weight of copper — 375 pounds per 1,000'.

Available on 250' spools.

OTHER ROPE LAY COPPER CABLES — AVAILABLE ON 250' SPOOLS

Cat. No. 601 — 25 strands of .065 diam. bare copper wire in rope lay configuration, 7/16" diameter, 105,500 circular mil cross section (#1/0 AWG). Weight of copper — 334 pounds per 1,000'. *(Not for use on structures over 75'.)*

Cat. No. 602 — 28 strands of .0689 diam. bare copper wire in rope lay configuration, 7/16" diameter, 132,900 circular mil cross section (#2/0 AWG). Weight of copper — 420 pounds per 1,000'.

TINNED COPPER CONDUCTORS (For Use on White or Light Colored Buildings)

Cat. No. 602T — 19 strands of .072 diam. tinned copper wire in rope lay configuration, 7/16" diameter, 132,900 circular mil cross section (#2/0 AWG). Weight of copper — 421 pounds per 1,000'.

Cat. No. 604T — 28 strands of 14 gauge tinned copper wire in rope lay configuration, 7/16" diameter, 115,000 circular mil cross section. Weight of copper — 376 pounds per 1,000'.



ROBBINS LIGHTNING, INC.


124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



COPPER AND ALUMINUM CONDUCTORS

(For Special Purpose Systems of Lightning Protection and Grounding)



Cat. No. 605— 37 strands of 0.0756" bare copper wire in concentric configuration, 1/2" diameter, 211,500 circular mil cross section, (#4/0 AWG) - Weight of copper - 653 pounds per 1,000'. 



Cat. No. 605T— 37 strands of 0.0756" tinned copper wire in concentric configuration, 1/2" diameter, 211,500 circular mil cross section, (#4/0 AWG) - Weight of copper - 657 pounds per 1,000'.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



ALUMINUM CONDUCTORS (For Secondary Bonding Use)

ALL ITEMS



Cat. No. A10 – 14 strands of 14 gauge aluminum wire in smooth weave configuration, 5/16" diameter, 57,000 circular mil cross section, (exceeds #4 AWG). Weight of aluminum – 58 pounds per 1,000'.



Cat. No. A11 – 22 strands of 14 gauge aluminum wire in smooth weave configuration, 7/16" diameter, 90,000 circular mil cross section, (exceeds #2 AWG). Weight of aluminum – 90 pounds per 1,000'.

Cat. No. A11A – 11 strands of 14 gauge aluminum wire in smooth weave configuration, 1/4" diameter, 45,000 circular mil cross section, (#4 AWG). Weight of aluminum – 47 pounds per 1,000'.

All Secondary Conductors available in 25',
50', 100' or 500' coils or spools.

Cat. No. A11C – Aluminum #4 AWG bare wire, soft drawn, 41,500 circular mil cross section. Weight of aluminum – 40 pounds per 1,000'.

Cat. No. A11D – Aluminum #2 AWG bare wire, soft drawn, 66,400 circular mil cross section. Weight of aluminum – 60 pounds per 1,000'.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

COPPER CONDUCTORS (For Secondary Bonding Use)

ALL ITEMS



Cat. No. 10 – 14 strands of 17 gauge bare copper wire in smooth weave configuration, 1/4" diameter, 28,600 circular mil cross section (#6 AWG). Weight of copper – 90 pounds per 1,000'.

Cat. No. 11 – 22 strands of 17 gauge bare copper wire in smooth weave configuration, 5/16" diameter, 45,000 circular mil cross section (#4 AWG). Weight of copper – 141 pounds per 1,000'.

Cat. No. 11A – 11 strands of 14 gauge bare copper wire in smooth weave configuration, 5/16" diameter, 45,000 circular mil cross section (#4 AWG). Weight of copper – 140 pounds per 1,000'.

Cat. No. 10C – Copper #6 AWG bare wire, soft drawn, 26,000 circular mil cross section. Weight of copper – 80 pounds per 1,000'.

Cat. No. 11C – Copper #4 AWG bare wire, soft drawn, 41,500 circular mil cross section. Weight of copper – 127 pounds per 1,000'.



TINNED COPPER CONDUCTORS (For Secondary Bonding Use)

Cat. No. 10T – 14 strands of 17 gauge tinned copper wire in smooth weave configuration, 1/4" diameter, 28,600 circular mil cross section (#6 AWG). Weight of cable – 92 pounds per 1,000'.

Cat. No. 11AT – 11 strands of 14 gauge tinned copper wire in smooth weave configuration, 5/16" diameter, 45,000 circular mil cross section (#4 AWG). Weight of cable – 142 pounds per 1,000'.

Cat. No. 11DT – Tinned copper #2 AWG soft drawn wire, 66,400 circular mil cross section. Weight of wire – 206 pounds per 1,000'.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



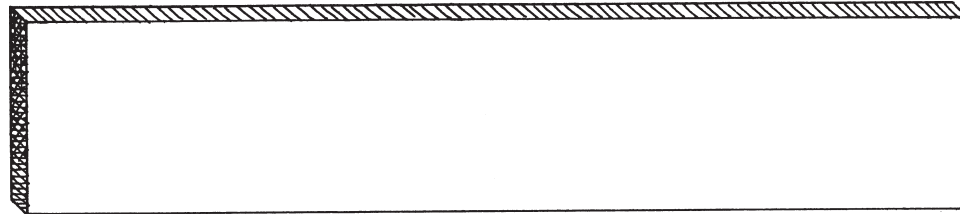
ALUMINUM FLAT CONDUCTORS (For Main and Secondary Use)

ALL ITEMS



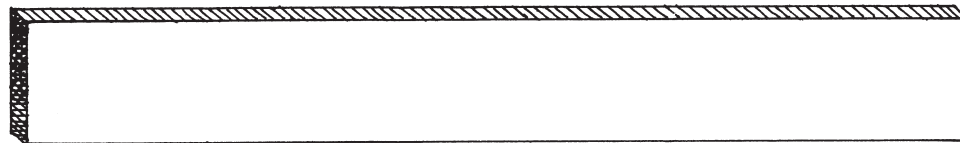
FOR MAIN CONDUCTORS ON STRUCTURES
LESS THAN 75' HIGH

Cat. No. A16 – Flat, bare aluminum strip conductor, 1" wide by 12 gauge thick, soft drawn for easy forming. Approx. 94,000 circular mil cross section. Weight of aluminum – 96 pounds per 1,000'.



FOR SECONDARY CONDUCTOR USE

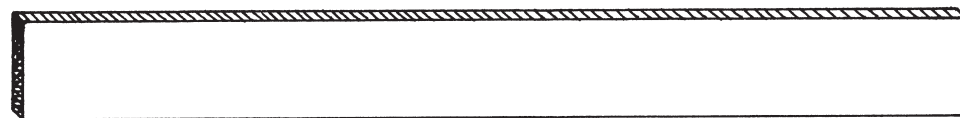
Cat. No. A14 – Flat, bare aluminum strip conductor, 5/8" wide by .053 thick, soft drawn for easy forming. Approx. 45,000 circular mil cross section. Weight of aluminum – 38 pounds per 1,000'.



COPPER FLAT CONDUCTORS

FOR SECONDARY CONDUCTOR USE

Cat. No. 14 – Flat, bare copper strip conductor, 1/2" wide by .032 thick, soft drawn for easy forming. Approx. 32,000 circular mil cross section. Weight of copper – 100 pounds per 1,000'.



Flat conductors available in 25', 50', 100' or 500' coils.



ROBBINS LIGHTNING, INC.

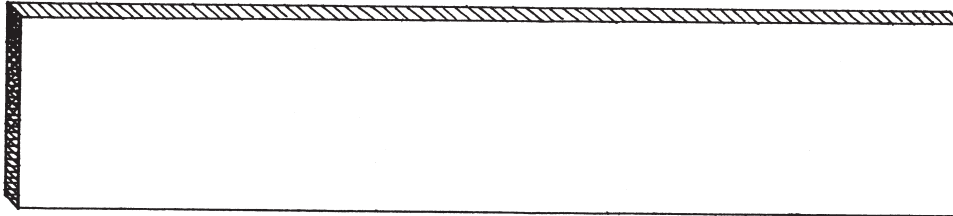
124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

TINNED COPPER FLAT CONDUCTORS (For Main and Secondary Use)

ALL ITEMS



FOR MAIN CONDUCTORS ON STRUCTURES
LESS THAN 75' HIGH



Cat. No. 17—Tinned flat copper strip conductor, 1" wide by 14 gauge thick, soft drawn for easy forming. Approx. 73,000 circular mil cross section. Weight of copper — 254 pounds per 1,000'.

Flat conductors available in 25', 50', 100' or 500' coils.

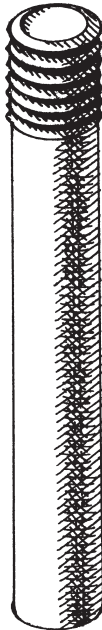
ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



COPPER ROD CONDUCTORS (For Main Conductor Use)

ALL ITEMS



Cat. No. 12 – Solid copper rod, 1/2" diameter, hard drawn. May be substituted for stranded cable where needed to prevent mechanical damage or to bridge open spaces. Weight – 761 pounds per 1,000'.

← **Class II**

Available in lengths 144" or shorter – each end threaded 1/2" – 13 NC for coupling.

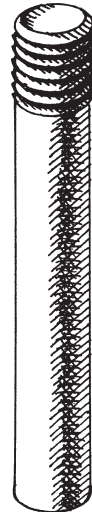
Class I →

Cat. No. 13 – Solid copper rod, 3/8" diameter, hard drawn. May be substituted for stranded cable where needed to prevent mechanical damage or to bridge open spaces. Weight – 428 pounds per 1,000'.

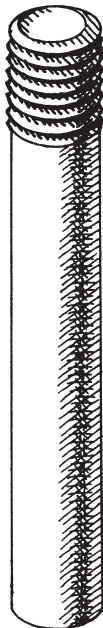
Available in lengths 144" or shorter – each end threaded 3/8" – 16 NC for coupling.

3/8" = 12' Lengths

1/2" = 7' Lengths



ALUMINUM ROD CONDUCTORS (For Main Conductor Use)



Cat. No. A12 – Solid aluminum rod, 1/2" diameter, hard drawn. May be substituted for stranded cable where needed to prevent mechanical damage or to bridge open spaces. Weight – 240 pounds per 1,000'.

← **Class I**

Available in lengths 84" or shorter – each end threaded 1/2" – 13 NC for coupling.

Class II →

Cat. No. A13 – Solid aluminum rod, 5/8" diameter, hard drawn. May be substituted for stranded cable where needed to prevent mechanical damage or to bridge open spaces. Weight – 135 pounds per 1,000'.

Available in lengths 144" or shorter – each end threaded 3/8" – 16 NC for coupling.



ROBBINS LIGHTNING, INC.

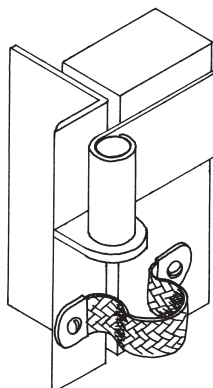
124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

EXTRA FLEXIBLE BRAID CONDUCTORS

(For use in Bonding and Grounding of Moving or Vibrating Machinery, Equipment, Doors, Platforms and Cover Plates.)

Multiple stranded conductors allow maximum flexibility and extended life over standard cables.

Flexible braid conductors are available in cut lengths with one-hole flat lug on each end. Standard lengths shown – other lengths available on request.



Typical use
on door hinge

Cat. No. 607 – Tinned copper flexible strap of 1/8" thick by 15/16" wide multi-strand braid (#2 AWG) with flat lug on each end. Holes to fit 1/4" diameter bolt or screw, 10" on centers. 3.4 oz.

Cat. No. 607A – Tinned copper flexible strap of 1/8" thick by 15/16" wide multi-strand braid (#2 AWG) with flat lug on each end. Holes to fit 1/4" diameter bolt or screw, 12" on centers. 3.8 oz.

Cat. No. 607B – Tinned copper flexible strap of 1/8" thick by 15/16" wide multi-strand braid (#2 AWG) with flat lug on each end. Holes to fit 1/4" diameter bolt or screw, 16" on centers. 5 oz.

Cat. No. 607C – Tinned copper flexible strap of 1/8" thick by 15/16" wide multi-strand braid (#2 AWG) with flat lug on each end. Holes to fit 1/4" diameter bolt or screw, 24" on centers. 7.5 oz.



EXTRA FLEXIBLE BRAID CONDUCTORS (Bulk Coils or Reels)

(For use in Bonding and Grounding of Moving or Vibrating Machinery, Equipment, Doors, Platforms and Cover Plates.)

Multiple stranded conductors allow maximum flexibility and extended life over standard cables. Flexible braid conductors are available in bulk coils up to 500' long or in cut lengths.



Cat. No. 840 – Tinned copper flexible multi-strand braid, 1/8" thick by 1-1/4" wide (#1/0 AWG). Weight of copper – 355 pounds per 1,000'.

Cat. No. 842 – Tinned copper flexible multi-strand braid, 1/8" thick by 15/16" wide (#2 AWG). Weight of copper – 220 pounds per 1,000'.

Cat. No. 844 – Tinned copper flexible multi-strand braid, 3/32" thick by 1" wide (#4 AWG). Weight of copper – 130 pounds per 1,000'.

Cat. No. 846 – Tinned copper flexible multi-strand braid, 3/32" thick by 1/2" wide (#6 AWG). Weight of copper – 80 pounds per 1,000'.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



COPPER BUS BAR

RAW BAR

High conductivity copper bus bar — hard drawn for use with minimum support — may be formed cold or with little heat — available in standard mil lengths of 12 feet or less. Copper conductivity 100%. 2 mounting holes std.

Cat. No. 608 — 1/16" thick, 1" wide - 3.9 oz./ft.

Cat. No. 609 — 1/8" thick, 1" wide - 7.8 oz./ft.

Cat. No. 609A — 1/8" thick, 3/4" wide - 5.8 oz./ft.

Cat. No. 609B — 1/8" thick, 1-1/2" wide - 11.6 oz./ft.

Cat. No. 609C — 1/8" thick, 2" wide - 15.5 oz./ft.

Cat. No. 610 — 1/4" thick, 1" wide - 15.5 oz./ft.

Cat. No. 610A — 1/4" thick, 3/4" wide - 11.6 oz./ft.

Cat. No. 610B — 1/4" thick, 1-1/2" wide - 1 lb. - 7 oz./ft.

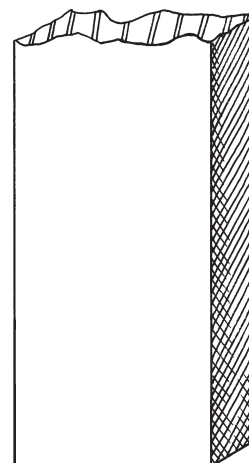
Cat. No. 610C — 1/4" thick, 2" wide - 1 lb. - 15 oz./ft.

Cat. No. 610D — 1/4" thick, 3" wide - 2 lbs. - 15 oz./ft.

Cat. No. 610E — 1/4" thick, 4" wide - 3 lbs. - 14 oz./ft.

Cat. No. 610F — 1/4" thick, 6" wide - 5 lbs. - 13 oz./ft.

Cat. No. 610G — 1/4" thick, 8" wide - 7 lbs. - 12 oz./ft.



STANDARD DRILL

2 Holes for 3/8" clearance - Up to 24" long

3 Holes for 3/8" clearance - Up to 36" long

4 Holes for 3/8" clearance - Up to 48" long

COPPER BUS BAR W/MOUNTING KIT

Cat. No. CB-A-12 — 1/4" x 1" x 12" - 1 lb. - 8 oz.

Cat. No. CB-A-24 — 1/4" x 1" x 24" - 2 lbs. - 7 oz.

Cat. No. CB-A-36 — 1/4" x 1" x 36" - 3 lbs. - 7 oz.

Cat. No. CB-A-48 — 1/4" x 1" x 48" - 4 lbs. - 6 oz.

Cat. No. CB-C-12 — 1/4" x 2" x 12" - 2 lbs. - 7 oz.

Cat. No. CB-C-24 — 1/4" x 2" x 24" - 4 lbs. - 6 oz.

Cat. No. CB-C-36 — 1/4" x 2" x 36" - 6 lbs. - 5 oz.

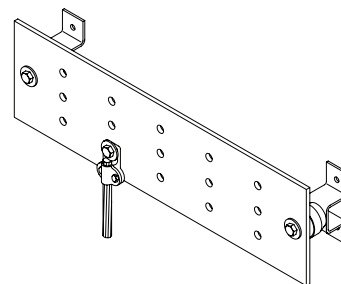
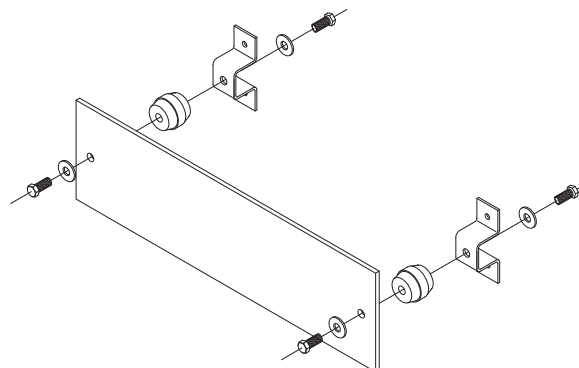
Cat. No. CB-C-48 — 1/4" x 2" x 48" - 8 lbs. - 4 oz.

Cat. No. CB-E-12 — 1/4" x 4" x 12" - 4 lbs. - 6 oz.

Cat. No. CB-E-24 — 1/4" x 4" x 24" - 8 lbs. - 4 oz.

Cat. No. CB-E-36 — 1/4" x 4" x 36" - 12 lbs. - 2 oz.

Cat. No. CB-E-48 — 1/4" x 4" x 48" - 16 lbs.



Shown with optional
mounting holes and lug.

NOTE: Special ground bars can be fabricated from standard bus bar stock with any combination of holes drilled or drilled and tapped.

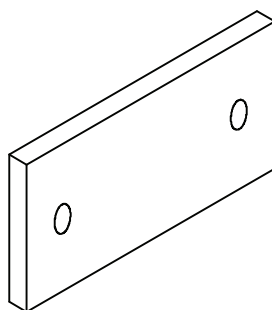
ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

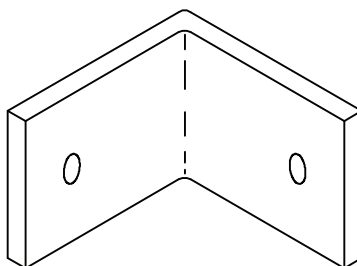


BUS BAR SPLICERS

ALL ITEMS



Cat. No. 610C SPLICER — Copper bus bar measuring $1/4"$ x $2"$ x $4"$ with a mounting hole measuring $3/8"$ - 6.4 oz.



Cat. No. 610C CORNER — Copper bus bar measuring $1/4"$ x $2"$ x $5-1/2"$ with a mounting hole measuring $3/8"$ - 8.8 oz.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



BUS BAR ACCESSORIES

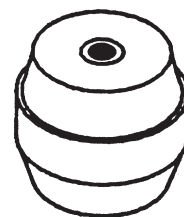
STAND-OFF INSULATORS

Insulator of reinforced polyester for use in mounting bus bar away from wall to allow clamping or bolting of lugs and terminals to bar — $3/8$ " threaded inserts — maximum stand-off 4" recommended.

Cat. No. 619 — 1-1/2" high, 1-3/4" diameter - 3.8 oz.

Cat. No. 619A — 2" high, 1-3/4" diameter - 5.8 oz.

Other sizes available upon request.



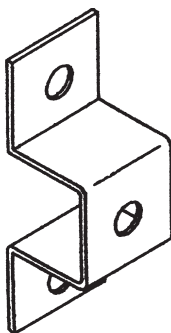
STAND-OFF BRACKETS

Bracket made of $1/8$ " thick by 1" wide stainless steel stock for mounting bus bar away from wall to allow clamping or bolting of lugs and terminals to bar — $3/8$ " holes for mounting with screws or masonry anchors. Stand-off distance 1-1/2" — ears 1" wide. May be used alone or with insulator.

Cat. No. 469 - 2.9 oz.

Cat. No. 469-4 - 3.4 oz.

Same as above except 4" across top, for mounting 4" wide bus bar.

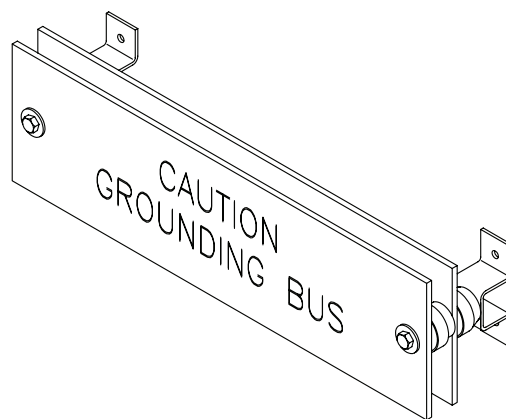


Other sizes available on special order.

BUS NAME PLATES

Clear acrylic nameplate for mounting on bus bars. Specify size and message when ordering.

Cat. No. COV



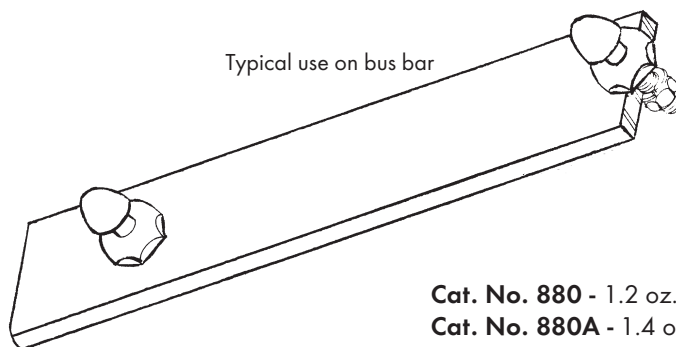
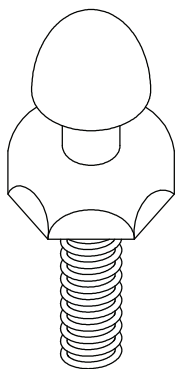
ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

BUS BAR ACCESSORIES

GROUNDING STUD

Machined brass stud for use in static ground receptacle or as grounding point on copper bus bar — standard 1/2" knob for spring clip or battery type clip — threaded 5/16" NC — furnished plain as shown (No. 880) or with 5/16" nut and lock washer (No. 880A).

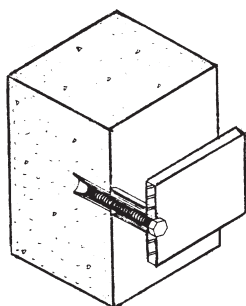
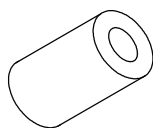


Cat. No. 880 - 1.2 oz.

Cat. No. 880A - 1.4 oz.

FIBER SPACER

Bus bar spacer of impact resistant, non-conductive fiber — for use in holding bar away from wall to allow clamping or bolting of lugs and terminals to bar — 3/8" ID and 3/4" OD — for use on bus bar to 1-1/2" wide — maximum stand-off 2" recommended.



Typical use as
bus bar spacer

Cat. No. 617 — 1/2" long - 0.1 oz.

Cat. No. 617A — 3/4" long - 0.15 oz.

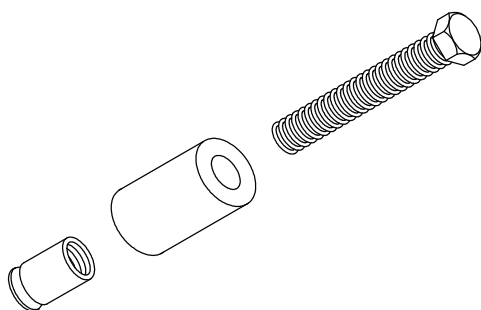
Cat. No. 617B — 1" long - 0.21 oz.

Cat. No. 617C — 1-1/2" long - 0.3 oz.

Cat. No. 617D — 2" long - 0.4 oz.

ANCHOR SPACER ASSEMBLY

Assembly for mounting bus bar consists of No. 617 series fiber spacer, No. 86 lead anchor and proper length of 1/4" diameter screw.



Cat. No. 618 — 1/2" spacer, 1-1/4" screw - 0.87 oz.

Cat. No. 618A — 3/4" spacer, 1-1/2" screw - 0.97 oz.

Cat. No. 618B — 1" spacer, 1-3/4" screw - 1.1 oz.

Cat. No. 618C — 1-1/2" spacer, 2-1/4" screw - 1.3 oz.

Cat. No. 618D — 2" spacer, 2-3/4" screw - 1.5 oz.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



ALUMINUM POINTS — STANDARD

ALL ITEMS



Aluminum points made from solid rod, drawn to a sharp point, threaded to fit bases. Specify thread size when ordering. Shipped with 1/2" threads for use on Class I systems, or 5/8" threads for use on Class II systems.

Standard sizes available from stock:

Cat. No. A25	– 1/2" diameter x 10" long - 2.7 oz.
Cat. No. A24	– 1/2" diameter x 12" long - 3.3 oz.
Cat. No. A23	– 1/2" diameter x 15" long - 4.2 oz.
Cat. No. A22	– 1/2" diameter x 18" long - 5.1 oz.
Cat. No. A21A	– 1/2" diameter x 24" long - 7 oz.
Cat. No. A20A	– 1/2" diameter x 30" long - 8.8 oz.
Cat. No. A19A36	– 1/2" diameter x 36" long - 10.6 oz.
Cat. No. A19A48	– 1/2" diameter x 48" long - 14.3 oz.
Cat. No. A19A60	– 1/2" diameter x 60" long - 1 lbs. - 2 oz.

Cat. No. A25B	– 5/8" diameter x 10" long - 4.8 oz.
Cat. No. A24B	– 5/8" diameter x 12" long - 5.7 oz.
Cat. No. A23B	– 5/8" diameter x 15" long - 7.1 oz.
Cat. No. A22B	– 5/8" diameter x 18" long - 8.6 oz.
Cat. No. A21C	– 5/8" diameter x 24" long - 11.4 oz.
Cat. No. A20C	– 5/8" diameter x 30" long - 14.3 oz.
Cat. No. A19C36	– 5/8" diameter x 36" long - 1 lb. - 1 oz.
Cat. No. A19C48	– 5/8" diameter x 48" long - 1 lb. - 7 oz.
Cat. No. A19C60	– 5/8" diameter x 60" long - 1 lb. - 13 oz.



Points also available with blunt tips.
(Add -BT to part numbers shown.)
Add 0.4 oz. for 1/2"
Add 0.5 oz. for 5/8"

SPECIAL POINT INFORMATION

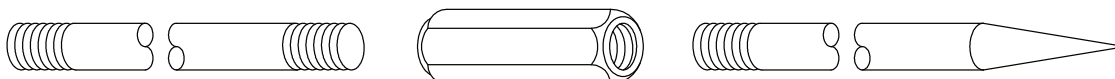
The above listed points are carried in stock for immediate shipment — other points of special lengths and diameters are available, including 3/4" and 1" diameters.

Lengths over 144" are made by coupling an extension rod to points listed above. Extension rods available in 1/2", 5/8", 3/4" and 1" diameters and lengths up to 144".

Extension Rod

Coupling
No. A203-2F2F

Point



NOTE: Spring Point Assemblies also available — see page 17.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



COPPER POINTS — STANDARD

ALL ITEMS



Bare copper points made from solid rod, drawn to a sharp point, and threaded to fit bases. Standard threads on 5/8" diameter points are 1/2", 5/8" threads available on special order. Also available in nickel plated (up to 72")

- add "NP" to catalog number when ordering.

Standard sizes available from stock:



Cat. No. 25A	— 3/8" diameter x 10" long - 5.4 oz.
Cat. No. 24A	— 3/8" diameter x 12" long - 6.6 oz.
Cat. No. 23A	— 3/8" diameter x 15" long - 8.3 oz.
Cat. No. 22A	— 3/8" diameter x 18" long - 10 oz.
Cat. No. 21B	— 3/8" diameter x 24" long - 13.4 oz.
Cat. No. 20B	— 3/8" diameter x 30" long - 1 lb. - 1 oz.
Cat. No. 19B36	— 3/8" diameter x 36" long - 1 lb. - 4 oz.
Cat. No. 19B48	— 3/8" diameter x 48" long - 1 lb. - 11 oz.
Cat. No. 19B60	— 3/8" diameter x 60" long - 2 lbs. - 2 oz.
Cat. No. 25	— 1/2" diameter x 10" long - 9 oz.
Cat. No. 24	— 1/2" diameter x 12" long - 11 oz.
Cat. No. 23	— 1/2" diameter x 15" long - 14 oz.
Cat. No. 22	— 1/2" diameter x 18" long - 1 lb. - 1 oz.
Cat. No. 21A	— 1/2" diameter x 24" long - 1 lb. - 7 oz.
Cat. No. 20A	— 1/2" diameter x 30" long - 1 lb. - 13 oz.
Cat. No. 19A36	— 1/2" diameter x 36" long - 2 lbs. - 3 oz.
Cat. No. 19A48	— 1/2" diameter x 48" long - 3 lbs.
Cat. No. 19A60	— 1/2" diameter x 60" long - 3 lbs. - 6 oz.
Cat. No. 25B	— 5/8" diameter x 10" long - 13.4 oz.
Cat. No. 24B	— 5/8" diameter x 12" long - 1 lb. - 1 oz.
Cat. No. 23B	— 5/8" diameter x 15" long - 1 lb. - 5 oz.
Cat. No. 22B	— 5/8" diameter x 18" long - 1 lb. - 10 oz.
Cat. No. 21C	— 5/8" diameter x 24" long - 2 lbs. - 4 oz.
Cat. No. 20C	— 5/8" diameter x 30" long - 2 lbs. - 13 oz.
Cat. No. 19C36	— 5/8" diameter x 36" long - 3 lbs. - 5 oz.
Cat. No. 19C48	— 5/8" diameter x 48" long - 4 lbs. - 10 oz.
Cat. No. 19C60	— 5/8" diameter x 60" long - 5 lbs. - 13 oz.

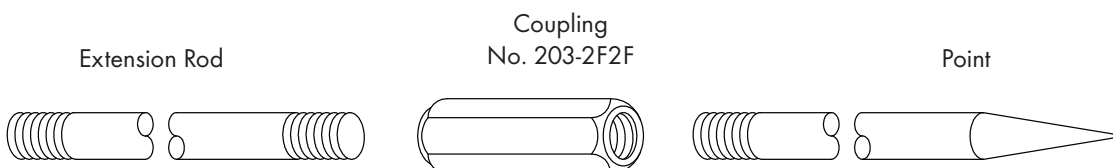


Points also available with blunt tips.
(Add -BT to part numbers shown.)
Add 0.4 oz. for 3/8"
Add 0.5 oz. for 1/2"
Add 0.7 oz. for 5/8"

SPECIAL POINT INFORMATION

The above listed points are carried in stock for immediate shipment — other points of special lengths and diameters are available, including 3/4" and 1" diameters.

Lengths over 144" are made by coupling an extension rod to points listed above. Extension rods available in 1/2", 5/8", 3/4" and 1" diameters and lengths up to 144".



NOTE: Spring Point Assemblies also available — see page 17.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

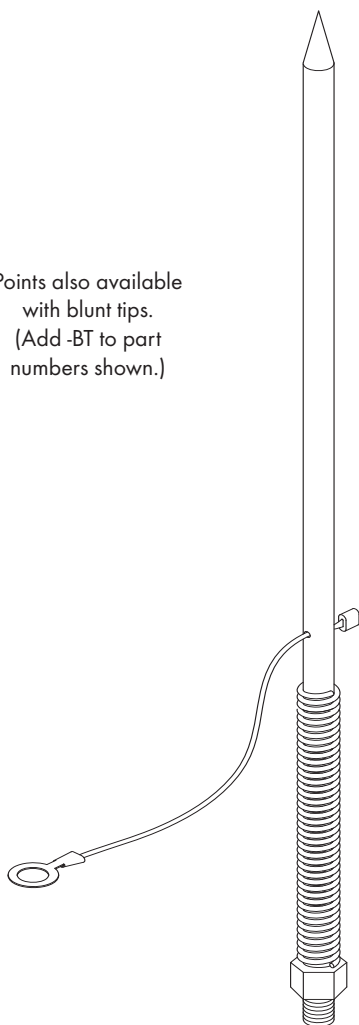


SPRING-TYPE POINT



Special purpose spring-type point for use where window washing or other movable equipment may require temporary movement of point. May be used with any type of point base. Spring point assembly consists of bare copper or aluminum with a heavy stainless steel spring that allows 90° tilt in any direction. Stainless steel retainer cable attaches to point base with lug for 1/4" bolt. Length indicated below is overall height. Nickel plated copper points are available upon request. Add -NP to part number when ordering.

Points also available
with blunt tips.
(Add -BT to part
numbers shown.)



Copper

Cat. No. 24-SP – 1/2" diam. x 12" long - 13.8 oz.
Cat. No. 23-SP – 1/2" diam. x 15" long - 1 lb. - 3 oz.
Cat. No. 22-SP – 1/2" diam. x 18" long - 1 lb. - 6 oz.
Cat. No. 21A-SP – 1/2" diam. x 24" long - 1 lb. - 12 oz.

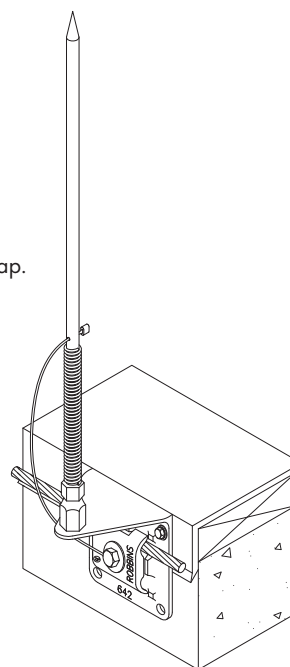
Cat. No. 24B-SP – 5/8" diam. x 12" long - 1 lb. - 2 oz.
Cat. No. 23B-SP – 5/8" diam. x 15" long - 1 lb. - 8 oz.
Cat. No. 22B-SP – 5/8" diam. x 18" long - 1 lb. - 12 oz.
Cat. No. 21C-SP – 5/8" diam. x 24" long - 2 lbs. - 6 oz.

Aluminum

Cat. No. A24-SP – 1/2" diam. x 12" long - 7.4 oz.
Cat. No. A23-SP – 1/2" diam. x 15" long - 8.2 oz.
Cat. No. A22-SP – 1/2" diam. x 18" long - 9.2 oz.
Cat. No. A21A-SP – 1/2" diam. x 24" long - 11 oz.

Cat. No. A24B-SP – 5/8" diam. x 12" long - 8.2 oz.
Cat. No. A23B-SP – 5/8" diam. x 15" long - 10 oz.
Cat. No. A22B-SP – 5/8" diam. x 18" long - 11.8 oz.
Cat. No. A21C-SP – 5/8" diam. x 24" long - 15.4 oz.

Typical use on
parapet wall cap.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

CHIMNEY AIR TERMINALS

ALL ITEMS



Chimney air terminals consist of a bare, solid copper or aluminum point with heavy cast bronze or aluminum base, which come in two types — straight or combination. For use with main sized cables.

Note: Codes require copper points used on chimneys to be lead covered to protect against corrosion for a distance of 2 feet below top of chimney. For chimneys with flue size over 24" stainless steel is required. For chimney's with flue size 24" or less, lead-dipped point may be used.



Copper — Lead Dipped

Cat. No. 38A-42 — 1/2" diam. x 4' long with No. 42 Base - 3 lbs. - 5 oz.

Cat. No. 38A-42AN — 1/2" diam. x 4' long with No. 42AN Base - 3 lbs. - 9 oz.

Cat. No. 39A-42 — 1/2" diam. x 3' long with No. 42 Base - 2 lbs. - 9 oz.

Cat. No. 39A-42AN — 1/2" diam. x 3' long with No. 42AN Base - 2 lbs. - 13 oz.

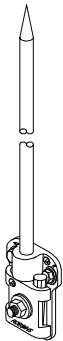
Cat. No. 38B-42 — 3/8" diam. x 4' long with No. 42 Base - 2 lbs. - 1 oz.

Cat. No. 38B-42AN — 3/8" diam. x 4' long with No. 42AN Base - 2 lbs. - 4 oz.

Cat. No. 39B-42 — 3/8" diam. x 3' long with No. 42 Base - 1 lb. - 10 oz.

Cat. No. 39B-42AN — 3/8" diam. x 3' long with No. 42AN Base - 1 lb. - 13 oz.

With No. 42 Copper or
No. A42L Aluminum



Aluminum

Cat. No. A38A-A42L — 1/2" diam. x 4' long with No. A42L Base - 1 lb. - 3 oz.

Cat. No. A38A-A42AN — 1/2" diam. x 4' long with No. A42AN Base - 1 lb. - 2 oz.

Cat. No. A39A-A42L — 1/2" diam. x 3' long with No. A42L Base - 14.9 oz.

Cat. No. A39A-A42AN — 1/2" diam. x 3' long with No. A42AN Base - 14 oz.

With No. 42AN Copper
or No. A42AN Aluminum

Points also available
with blunt tips.
(Add -BT to part
numbers shown.)

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



STANDARD CONCEALED POINTS



Concealed Point Assembly of bare copper or aluminum. Consists of 10" point length with balance threaded for roof insert. Nuts and washers draw tight to prevent leak. Base No. 42AN for horizontal and vertical direction of cable run. Available in nickel plated copper on request (Add -NP to copper part numbers shown). For use with main sized cables.

Copper

Cat. No. 34-18 – 1/2" diameter x 18" long - 1 lb. - 10 oz.

Cat. No. 34-24 – 1/2" diameter x 24" long - 1 lb. - 14 oz.

Cat. No. 34-30 – 1/2" diameter x 30" long - 2 lbs. - 3 oz.

Cat. No. 34A-18 – 3/8" diameter x 18" long - 1 lb. - 3 oz.

Cat. No. 34A-24 – 3/8" diameter x 24" long - 1 lb. - 5 oz.

Cat. No. 34A-30 – 3/8" diameter x 30" long - 1 lb. - 9 oz.

Cat. No. 34B-18 – 5/8" diameter x 18" long - 2 lbs. - 8 oz.

Cat. No. 34B-24 – 5/8" diameter x 24" long - 3 lbs. - 2 oz.

Cat. No. 34B-30 – 5/8" diameter x 30" long - 3 lbs. - 12 oz.

Aluminum

Cat. No. A34-18 – 1/2" diameter x 18" long - 9.4 oz.

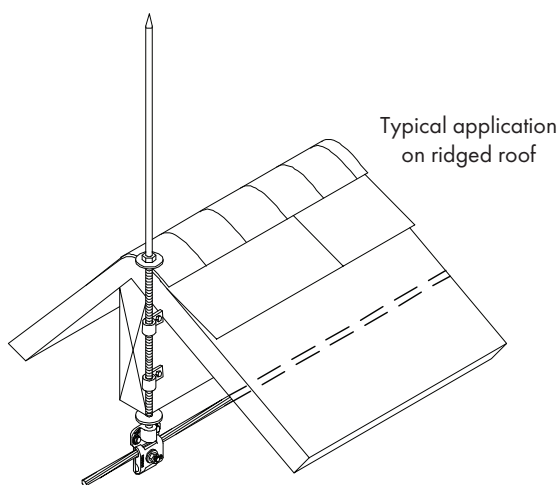
Cat. No. A34-24 – 1/2" diameter x 24" long - 11 oz.

Cat. No. A34-30 – 1/2" diameter x 30" long - 12.6 oz.

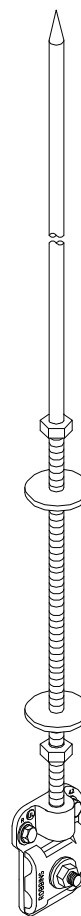
Cat. No. A34B-18 – 5/8" diameter x 18" long - 14.7 oz.

Cat. No. A34B-24 – 5/8" diameter x 24" long - 1 lb. - 2 oz.

Cat. No. A34B-30 – 5/8" diameter x 30" long - 1 lb. - 4 oz.



Typical application
on ridged roof



Points also available
with blunt tips.
(Add -BT to part
numbers shown.)



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

SPECIAL POINTS

TAPERED GOVERNMENT POINT

Cast bronze or aluminum point with full length taper – 1/2" male thread to fit all point bases – available in bronze finish (No. 26), nickel plated bronze (No. 26A) or aluminum (No. A26) – length from hub – 16".

Cat. No. 26 – Copper - 1 lb.

Cat. No. 26A – Copper - 1 lb.

Cat. No. A26 – Aluminum - 5 oz.



TUBULAR POINT WITH DOWEL ADAPTER

Tubular copper or aluminum point with dowel adapter securely clamped to lower end with male thread for all point bases – copper points bright nickel tipped. For Class I only.

Copper - 5/8" diameter x 0.032" thick

Cat. No. 27 – 12" long - 6.3 oz.

Cat. No. 27A – 15" long - 7.2 oz.

Cat. No. 27B – 18" long - 8.1 oz.

Cat. No. 27C – 24" long - 10 oz.



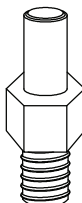
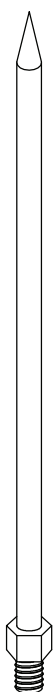
Aluminum - 0.84" diameter x 0.109" thick

Cat. No. A27 – 12" long - 5.5 oz.

Cat. No. A27A – 15" long - 6.6 oz.

Cat. No. A27B – 18" long - 7.1 oz.

Cat. No. A27C – 24" long - 10.1 oz.

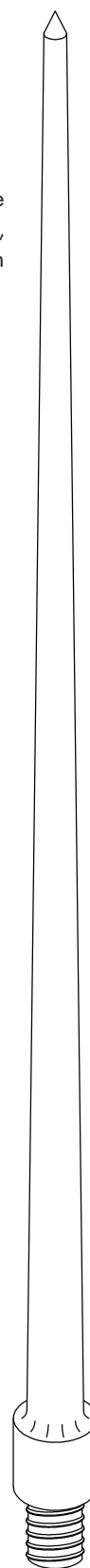


DOWEL ADAPTER

Brass or aluminum dowel adapter for use with tubular points – 1/2" male thread.

Cat. No. 720 – Copper - 2.6 oz.

Cat. No. A720 – Aluminum - 0.8 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



SPECIAL POINTS

TUBULAR POINT WITH TEE POINT BASE

Tubular copper or aluminum point with tee point base securely clamped to lower end with crimp fitting for cable attachments — copper points bright nickel tipped.



Copper - 5/8" diameter x 0.032" thick

Cat. No. 19 — 36" - 1 lb.

Cat. No. 20 — 30" - 13.6 oz.

Cat. No. 21 — 24" - 11.3 oz.

Aluminum - 0.84" diameter x 0.109" thick

Cat. No. A19 — 36" - 5.7 oz.

Cat. No. A20 — 30" - 5 oz.

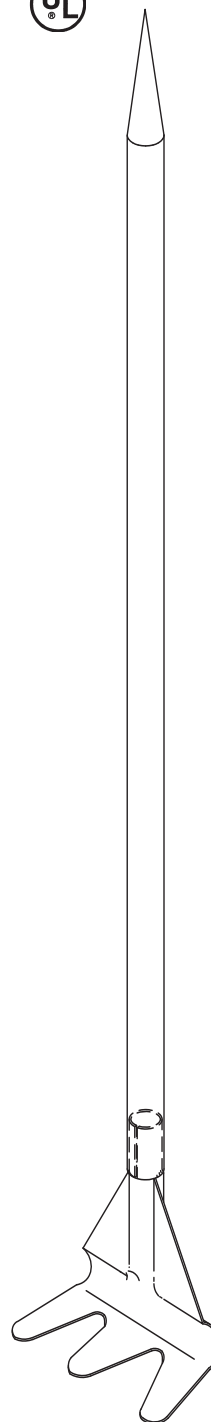
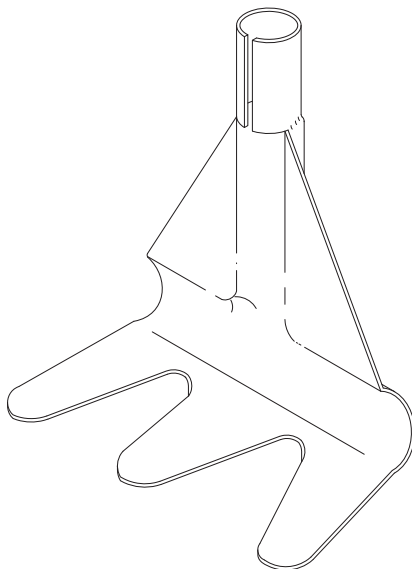
Cat. No. A21 — 24" - 4.3 oz.

TUBULAR POINT BASE

Stamped copper or aluminum point base for use with tubular points. Copper base 0.064" thick - aluminum base - 0.100" thick. Overall dimensions - 2 - 1/4" x 3"

Cat. No. 202 — Copper - 2 oz.

Cat. No. A202 — Aluminum - 1.3 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

SPECIAL PURPOSE POINTS

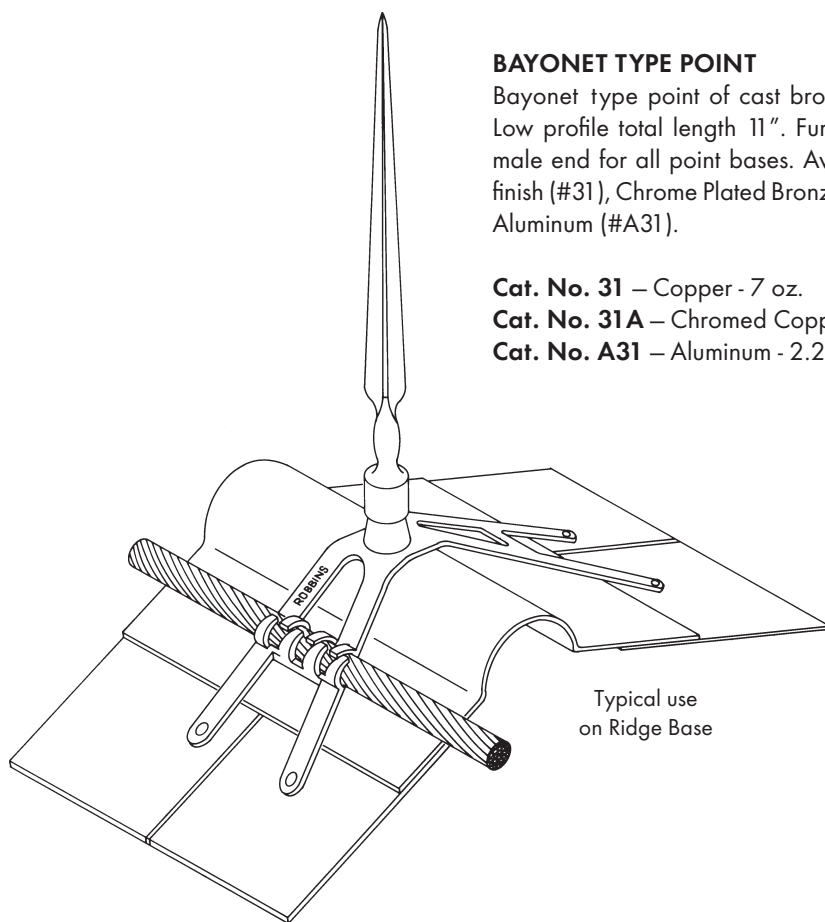
BAYONET TYPE POINT

Bayonet type point of cast bronze or aluminum. Low profile total length 11". Furnished with 1/2" male end for all point bases. Available in Bronze finish (#31), Chrome Plated Bronze (#31A), or Satin Aluminum (#A31).

Cat. No. 31 – Copper - 7 oz.

Cat. No. 31A – Chromed Copper - 7 oz.

Cat. No. A31 – Aluminum - 2.2 oz.



Typical use
on Ridge Base

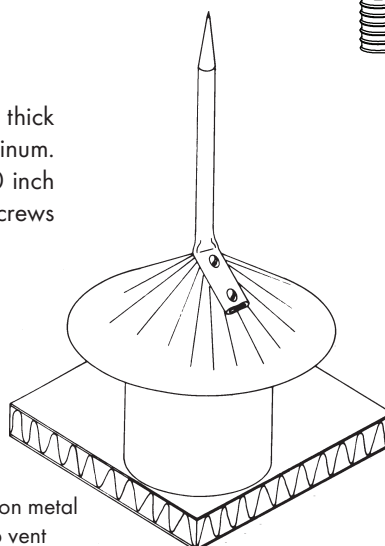
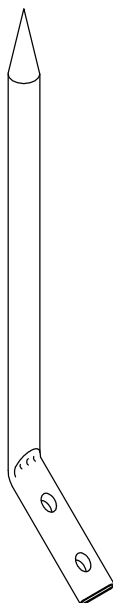


TUBULAR VENT POINT

Tubular Vent Point of 5/8" diameter x 0.032" thick copper or 0.84" diameter x 0.109" thick aluminum. Provides 3 square inch contact surface and 10 inch point length. Fasten to metal surface with metal screws or bolts and nuts.

Cat. No. 37 – Copper - 4.4 oz.

Cat. No. A37 – Aluminum - 2 oz.



Typical use on metal
cone top vent

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



ALL THREAD ROD AND POINT EXTENSION ROD

ALL ITEMS



ALL THREAD ROD

All thread rod with standard N.C. threads.
Available in lengths up to 144". Standard sizes 12", 18", 24", 36".

Copper

Cat. No. 220 – 3/8" dia. 0.57 oz./in.

Cat. No. 221 – 1/2" dia. 1 oz./in.

Cat. No. 222 – 5/8" dia. 1.6 oz./in.

Aluminum

Cat. No. A221 – 1/2" dia. 0.3 oz./in.

Cat. No. A222 – 5/8" dia. 0.48 oz./in.

Stainless Steel

Cat. No. 220SS – 3/8" dia. 0.5 oz./in.

Cat. No. 221SS – 1/2" dia. 0.89 oz./in.



POINT EXTENSION ROD

Solid copper or aluminum rod for extending length of points – standard N.C. thread both ends – available in lengths to 144". May also be substituted for stranded cable to prevent mechanical damage or to bridge open spaces.

Specify exact length required, such as Cat. No. 212 (1/2" x 48").

Copper

Cat. No. 212 – 1/2" dia. 1 oz./in.

Cat. No. 213 – 3/8" dia. 0.57 oz./in.

Cat. No. 214 – 5/8" dia. 1.6 oz./in.

Aluminum

Cat. No. A212 – 1/2" dia. 0.3 oz./in.

Cat. No. A214 – 5/8" dia. 0.48 oz./in.



SAFETY BALLS

Machined brass or aluminum safety tip, 1-1/2" diameter, with internal threads - to be used on copper or aluminum extension rods in place of standard sharp points where safety to workers or pedestrians is a concern.

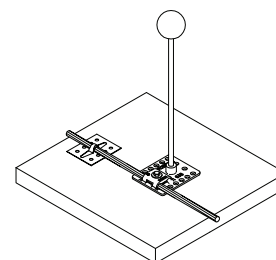
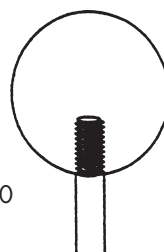
Cat. No. 110F – Copper - 2.2 oz.

Cat. No. A110F – Aluminum - 0.8 oz.

Cat. No. 110 – Copper - 7.7 oz.

Cat. No. A110 – Aluminum - 2.4 oz.

NO. 110



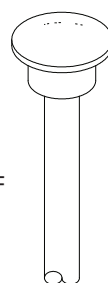
Specify diameter of threads – 3/8", 1/2" or 5/8".

SAFETY SLEEVE WITH SET SCREW

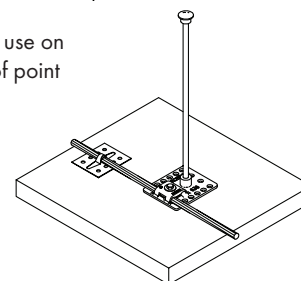
Cat. No. 110C – Copper - 4 oz.

Cat. No. A110C – Aluminum - 1.5 oz.

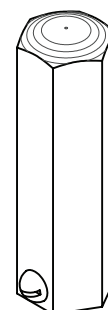
NO. 110F



Typical use on midroof point



Specify diameter of point.



NO. 110C

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



COUPLINGS AND ADAPTERS FOR POINTS

ALL ITEMS



ROD COUPLINGS

Couplings made of brass or aluminum hex rod for extending point lengths and adapting points to various special purpose bases. Overall length 1-1/2".

Copper

- Cat. No. 203-2F2F** – 1/2" Female to 1/2" Female 2.2 oz.
- Cat. No. 203-3F3F** – 3/8" Female to 3/8" Female 2.9 oz.
- Cat. No. 203-2F3F** – 1/2" Female to 3/8" Female 2.6 oz.
- Cat. No. 203-5F5F** – 5/8" Female to 5/8" Female 1.8 oz.
- Cat. No. 203-2F5F** – 1/2" Female to 5/8" Female 2.1 oz.

- Cat. No. 203-2F2M** – 1/2" Female to 1/2" Male 2.1 oz.
- Cat. No. 203-3F3M** – 3/8" Female to 3/8" Male 1.8 oz.
- Cat. No. 203-2F3M** – 1/2" Female to 3/8" Male 2.1 oz.
- Cat. No. 203-3F2M** – 3/8" Female to 1/2" Male 2.2 oz.
- Cat. No. 203-5F5M** – 5/8" Female to 5/8" Male 2.4 oz.
- Cat. No. 203-2F5M** – 1/2" Female to 5/8" Male 2.2 oz.
- Cat. No. 203-5F2M** – 5/8" Female to 1/2" Male 2.2 oz.

- Cat. No. 203-2M2M** – 1/2" Male to 1/2" Male 1.8 oz.
- Cat. No. 203-3M3M** – 3/8" Male to 3/8" Male 1.2 oz.
- Cat. No. 203-2M3M** – 1/2" Male to 3/8" Male 1.4 oz.
- Cat. No. 203-5M5M** – 5/8" Male to 5/8" Male 2.2 oz.
- Cat. No. 203-2M5M** – 1/2" Male to 5/8" Male 2.1 oz.

Aluminum

- Cat. No. A203-2F2F** – 1/2" Female to 1/2" Female 0.8 oz.
- Cat. No. A203-5F5F** – 5/8" Female to 5/8" Female 0.6 oz.
- Cat. No. A203-2F5F** – 1/2" Female to 5/8" Female 0.6 oz.

- Cat. No. A203-2F2M** – 1/2" Female to 1/2" Male 0.6 oz.
- Cat. No. A203-5F5M** – 5/8" Female to 5/8" Male 0.8 oz.
- Cat. No. A203-2F5M** – 1/2" Female to 5/8" Male 0.8 oz.
- Cat. No. A203-5F2M** – 5/8" Female to 1/2" Male 0.6 oz.

- Cat. No. A203-2M2M** – 1/2" Male to 1/2" Male 0.8 oz.
- Cat. No. A203-5M5M** – 5/8" Male to 5/8" Male 1 oz.
- Cat. No. A203-2M5M** – 1/2" Male to 5/8" Male 1 oz.



Male to Male



Female to Male



Female to Female

BASE CENTER SET

Machined brass or aluminum fittings for use on all strap type point bases or for adapting points to metal surface up to 1/8" thick. Nut drilled and tapped with 3/8", 1/2" or 5/8" NC thread – bolt has 1/2" or 5/8" NC thread.

NOTE: When ordering aluminum base center set, No. A143L stainless steel lockwasher should also be ordered for tightening.

Copper

- Cat. No. 803-2** – 1/2" nut - 1.4 oz.
- Cat. No. 803-3** – 3/8" nut - 1.6 oz.
- Cat. No. 803-5** – 5/8" nut - 1.4 oz.

- Cat. No. 804-2** – 1/2" bolt - 0.8 oz.
- Cat. No. 804-5** – 5/8" bolt - 0.7 oz.

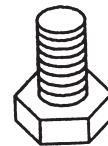
Aluminum

- Cat. No. A803-2** – 1/2" nut - 0.4 oz.
- Cat. No. A803-5** – 5/8" nut - 0.4 oz.

- Cat. No. A804-2** – 1/2" bolt - 0.21 oz.
- Cat. No. A804-5** – 5/8" bolt - 0.15 oz.



Nut



Bolt

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



DOUBLE SWIVEL ADAPTERS

ALL ITEMS



Double swivel adapters for use with standard points and bases to alter direction of point – each end threaded or drilled and tapped for desired use. Overall dimensions - 3-1/4" long x 1" diameter.

HEAVY CAST SWIVEL

Copper

- Cat. No. 836-2F2F – 1/2" Female to 1/2" Female - 8.3 oz.
- Cat. No. 836-2F2M – 1/2" Female to 1/2" Male - 10.2 oz.
- Cat. No. 836-2F3F – 1/2" Female to 3/8" Female - 8.5 oz.
- Cat. No. 836-2M3F – 1/2" Male to 3/8" Female - 10.4 oz.
- Cat. No. 836-3F3F – 3/8" Female to 3/8" Female - 8.6 oz.
- Cat. No. 836-3F3M – 3/8" Female to 3/8" Male - 9.8 oz.
- Cat. No. 836-2F5F – 1/2" Female to 5/8" Female - 8.1 oz.
- Cat. No. 836-2M5F – 1/2" Male to 5/8" Female - 10.2 oz.
- Cat. No. 836-5F5F – 5/8" Female to 5/8" Female - 8 oz.
- Cat. No. 836-5F5M – 5/8" Female to 5/8" Male - 10 oz.

Aluminum

- Cat. No. A836-2F2F – 1/2" Female to 1/2" Female - 3 oz.
- Cat. No. A836-2F2M – 1/2" Female to 1/2" Male - 3.7 oz.
- Cat. No. A836-5F5F – 5/8" Female to 5/8" Female - 3 oz.
- Cat. No. A836-5F5M – 5/8" Female to 5/8" Male - 4 oz.
- Cat. No. A836-2F5F – 1/2" Female to 5/8" Female - 3 oz.
- Cat. No. A836-2M5F – 1/2" Male to 5/8" Female - 3.9 oz.

MACHINED SWIVEL MADE OF HEX BRASS OR ALUMINUM

Copper

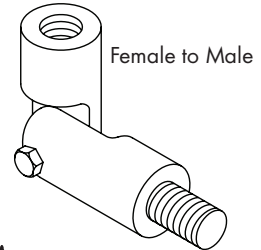
- Cat. No. 837-2F2F – 1/2" Female to 1/2" Female - 5.4 oz.
- Cat. No. 837-2F2M – 1/2" Female to 1/2" Male - 5.3 oz.
- Cat. No. 837-2F3F – 1/2" Female to 3/8" Female - 5.4 oz.
- Cat. No. 837-2M3F – 1/2" Male to 3/8" Female - 5.6 oz.
- Cat. No. 837-3F3F – 3/8" Female to 3/8" Female - 5.8 oz.
- Cat. No. 837-3F3M – 3/8" Female to 3/8" Male - 5.3 oz.
- Cat. No. 837-2F5F – 1/2" Female to 5/8" Female 5 oz.
- Cat. No. 837-2M5F – 1/2" Male to 5/8" Female 5.3 oz.
- Cat. No. 837-5F5F – 5/8" Female to 5/8" Female 4.8 oz.
- Cat. No. 837-5F5M – 5/8" Female to 5/8" Male 5.6 oz.

Aluminum

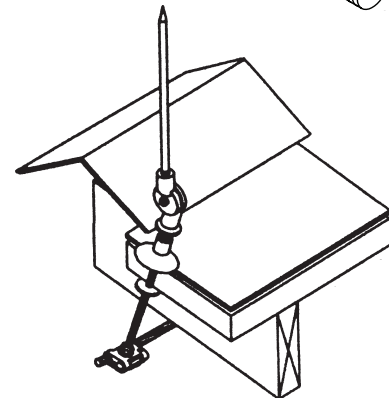
- Cat. No. A837-2F2F – 1/2" Female to 1/2" Female - 2.1 oz.
- Cat. No. A837-2F2M – 1/2" Female to 1/2" Male - 2.1 oz.
- Cat. No. A837-2F5F – 1/2" Female to 5/8" Female - 2.1 oz.
- Cat. No. A837-2M5F – 1/2" Male to 5/8" Female - 1.8 oz.
- Cat. No. A837-5F5F – 5/8" Female to 5/8" Female - 2.2 oz.
- Cat. No. A837-5F5M – 5/8" Female to 5/8" Male - 2.1 oz.



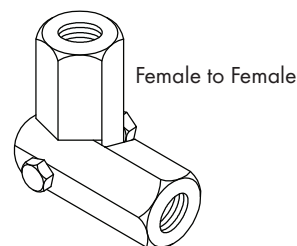
Female to Female



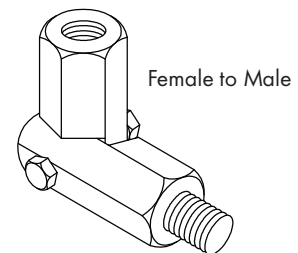
Female to Male



Typical use on sloping surface point



Female to Female



Female to Male

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



STRAIGHT POINT BASE



Heavy cast bronze or aluminum straight point base for use when cable extends in line with point. One end drilled and tapped to receive point - one end to receive cable. Two 1/4" set screws for pressure on cable. Available in No. 42 small size for copper cables No. 1, No. 2 and No. 6 with points 3/8" and 1/2" diameter. Large size No. 42L and No. A42L for main sized cables with points 3/8", 1/2" or 5/8" diameter. 42 series dimensions - 3-1/4" x 3/4". 42L series dimensions - 5" x 1".

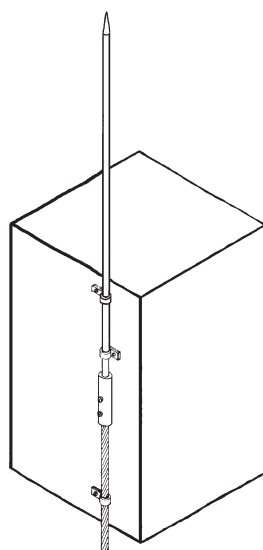
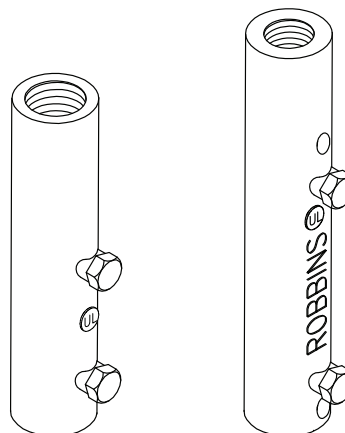
Specify diameter of point - 3/8", 1/2" or 5/8".

Cat. No. 42 - Copper - 5.8 oz.

Cat. No. 42L - Copper - 10.4 oz.

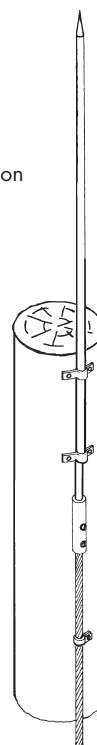
Cat. No. A42 - Aluminum - 3.5 oz. (only for A3 cable)

Cat. No. A42L - Aluminum - 4 oz.



Typical use
on chimney or
metal housing

Typical use on
pole top



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



SIDE MOUNT POINT BASE

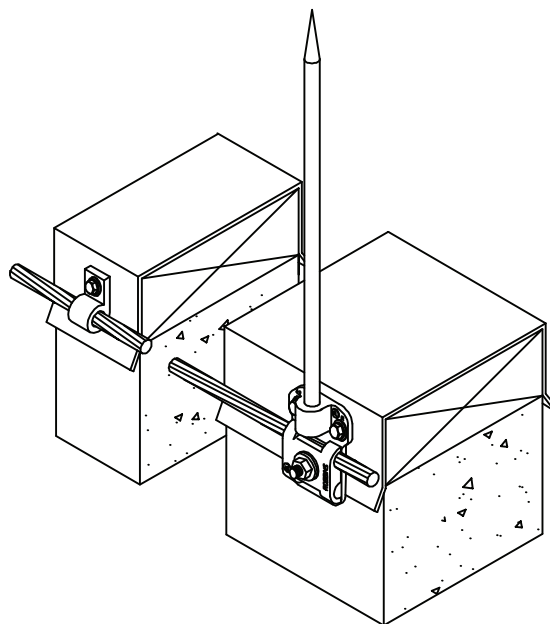
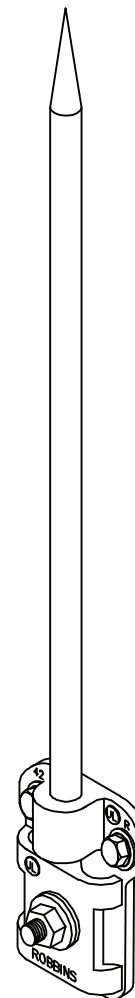
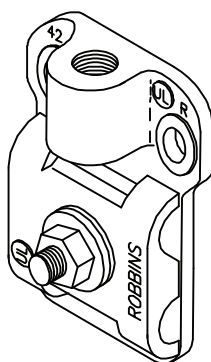


Heavy cast bronze or aluminum slide mount point base for use on vertical and/or horizontal cable run. Point base can be threaded for 3/8", 1/2", or 5/8" point. Bolt tension cable holder with 1-1/2" contact. Two anchor holes for fasteners. For main sized cables through No. 605. Overall dimensions - 2-5/8" x 1-13/16".

Specify diameter of point – 3/8", 1/2", or 5/8".

Cat. No. 42AN – Copper vertical side mount - 12.9 oz.

Cat. No. A42AN – Aluminum vertical side mount - 4.6 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



TEE POINT BASE

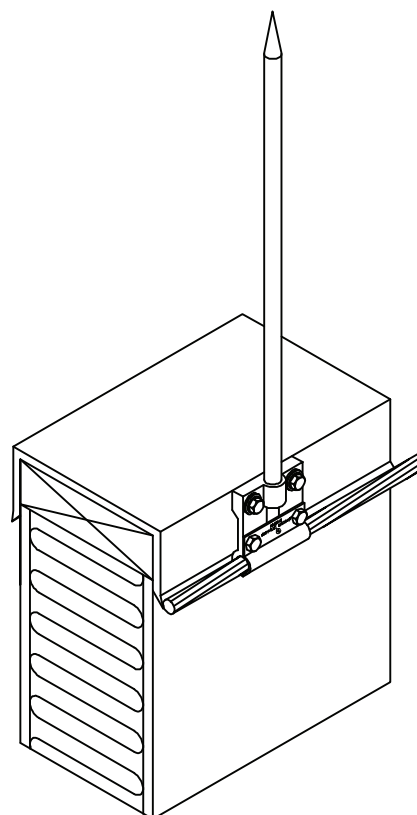
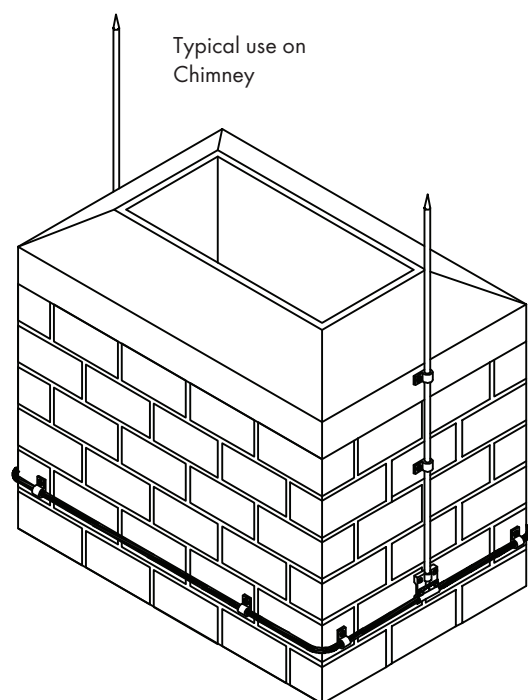
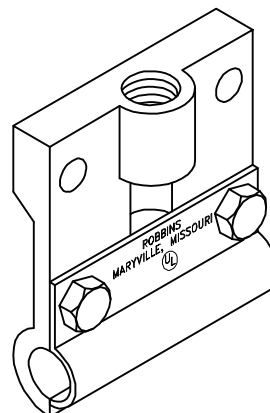


Heavy cast bronze or aluminum tee point base for use when cable run is perpendicular to point position. Top end is threaded to receive point. Two anchor holes for fasteners. Bolt tension cable holder with 2 - 1/2" contact for main sized cables through No. 605. Overall dimensions - 2-1/2" x 2 - 3/4".

Specify diameter of point – 3/8", 1/2" or 5/8".

Cat. No. 42H – Copper - 11.1 oz.

Cat. No. A42H – Aluminum - 4.2 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CAST RIDGE OR FLAT POINT BASE



Heavy cast bronze or aluminum point base for use on ridge, flat or sloping roof – shipped flat but may be formed to fit roof – four anchor holes for nail or screw – bolt tension cable holder with 2-1/2 inch contact for main sized cables through No. 605. Overall dimensions of 44 - 3-1/4" x 10-1/4". Overall dimensions of 44L - 3-3/4" x 13 - 1/4".

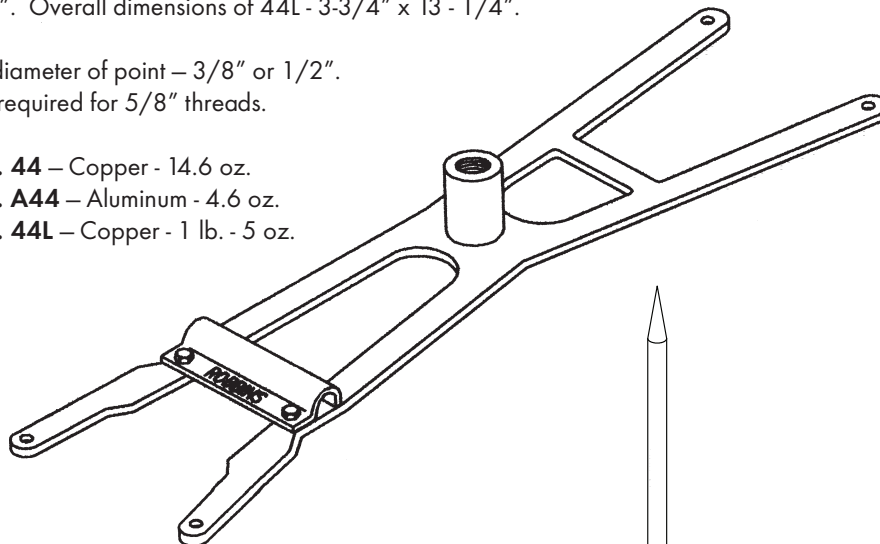
Specify diameter of point – 3/8" or 1/2".

Adapter required for 5/8" threads.

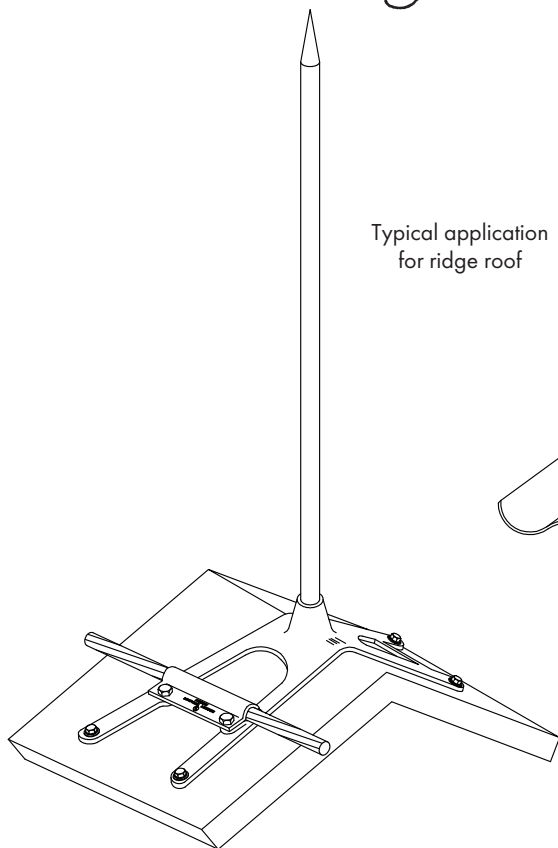
Cat. No. 44 – Copper - 14.6 oz.

Cat. No. A44 – Aluminum - 4.6 oz.

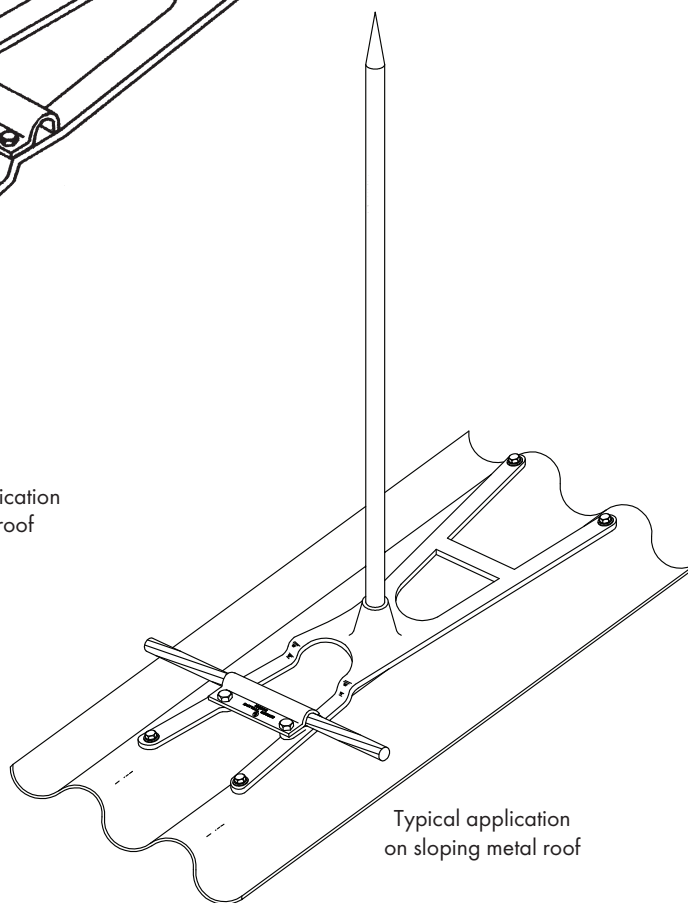
Cat. No. 44L – Copper - 1 lb. - 5 oz.



Typical application
for ridge roof



Typical application
on sloping metal roof



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



STRAP RIDGE POINT BASE



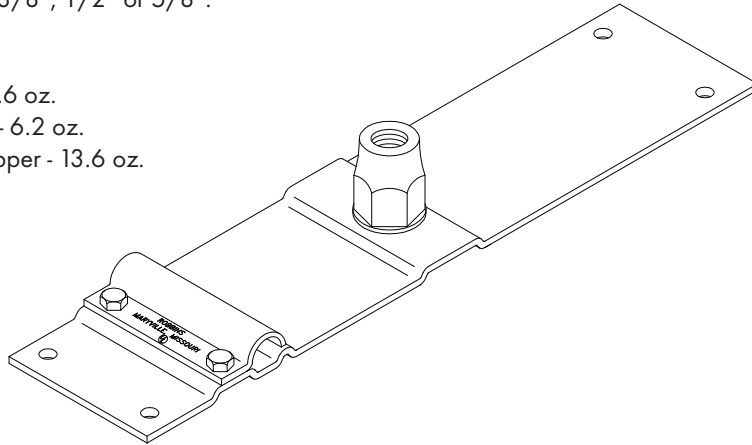
Strap copper or aluminum point base for use on ridge, flat or sloping roof – shipped flat but may be formed to fit roof – copper base 0.064" thick, aluminum base 0.100" thick – 2-1/2" wide, 12" long – four anchor holes for nails or screws – bolt tension cable holder with 2-1/2" contact for main sized cables through No. 605.

Specify diameter of point – 3/8", 1/2" or 5/8".

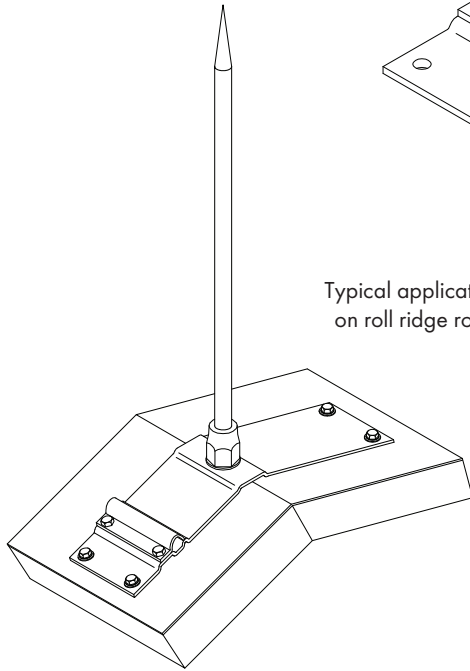
Cat. No. 45 – Copper - 13.6 oz.

Cat. No. A45 – Aluminum - 6.2 oz.

Cat. No. 45T – Tinned Copper - 13.6 oz.



Typical application
on roll ridge roof

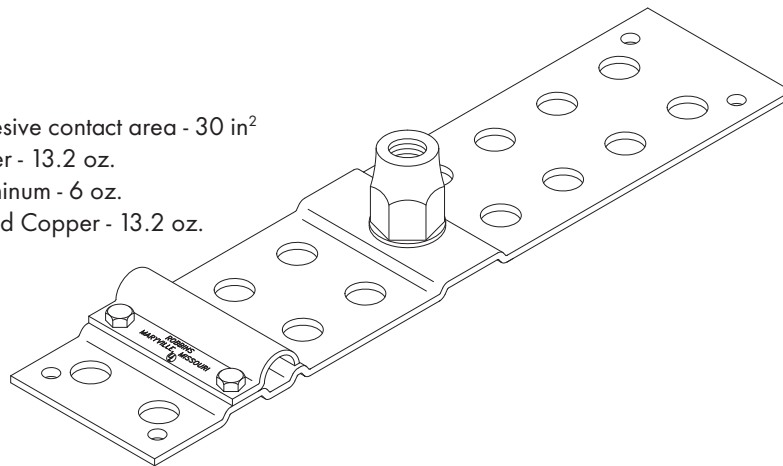


Adhesive Type – Adhesive contact area - 30 in²

Cat. No. 45A – Copper - 13.2 oz.

Cat. No. A45A – Aluminum - 6 oz.

Cat. No. 45AT – Tinned Copper - 13.2 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



STRAP RIDGE POINT BASE



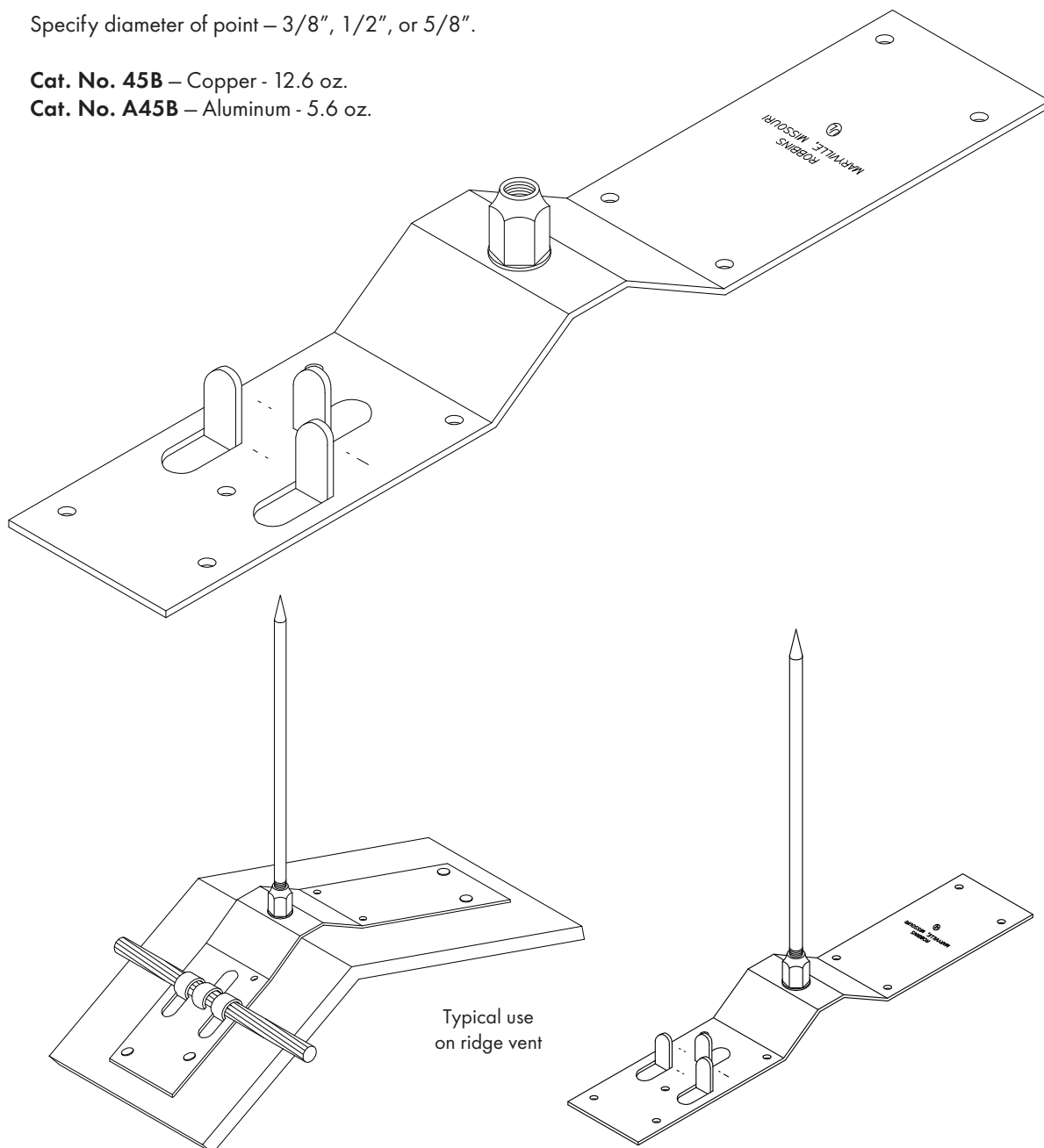
FOR CLASS I
STRUCTURES
ONLY

Copper or aluminum strap point base for use on ridge, flat or sloping roof – shipped formed for roll ridge but may be formed easily to fit roof – copper base 0.064" thick, aluminum base 0.100" thick – 2-1/2" wide, 12" long – four anchor holes for nails or screws – crimp type cable holder with 2" contact for cables. For main sized cables.

Specify diameter of point – 3/8", 1/2", or 5/8".

Cat. No. 45B – Copper - 12.6 oz.

Cat. No. A45B – Aluminum - 5.6 oz.



Typical use
on ridge vent

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CONCEALED RIDGE POINT BASE



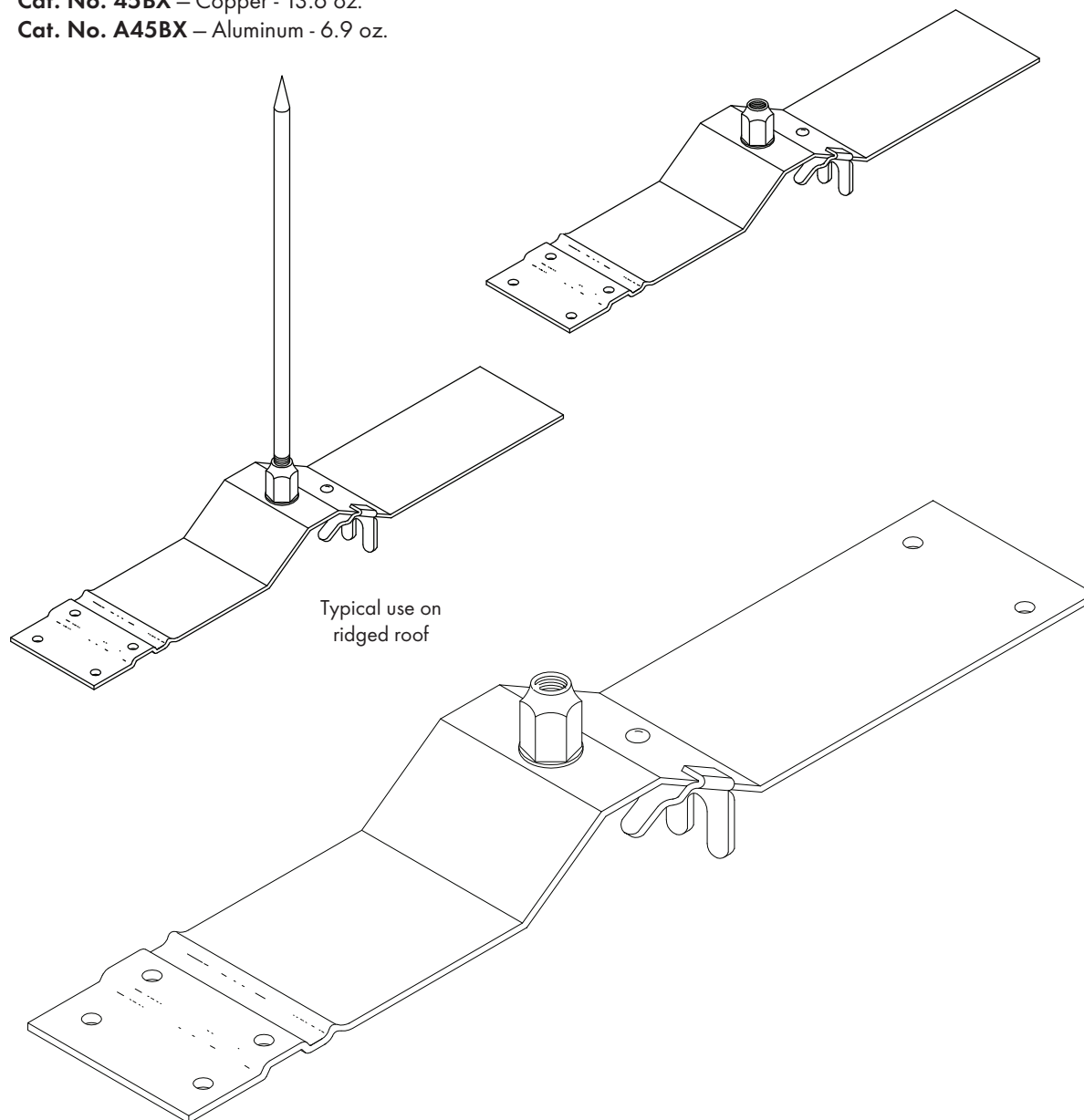
FOR CLASS I
STRUCTURES
ONLY

Copper or aluminum strap type point base with compression cable holder under center – for installation on ridge where cable is run exactly at ridge under asphalt or wood roof shingles – copper 0.064" thick, aluminum 0.100" thick – base 2-1/2" wide, 12" long with cable holder contact 2-1/2" long. For main sized cables.

Specify diameter of point – 3/8", 1/2", or 5/8".

Cat. No. 45BX – Copper - 13.6 oz.

Cat. No. A45BX – Aluminum - 6.9 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



STANDING SEAM POINT BASE

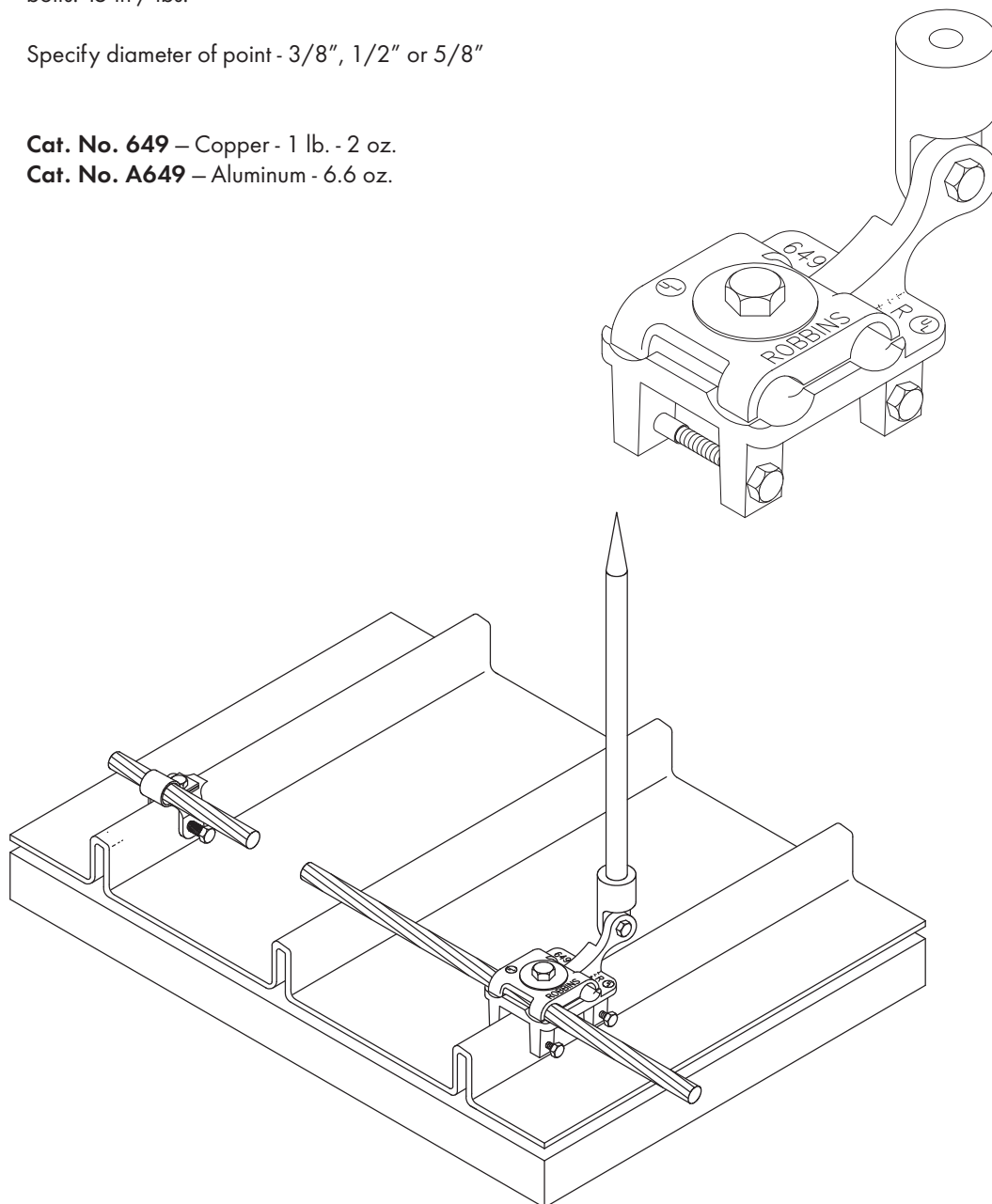


Heavy cast bronze or aluminum base for use on standing seam roof. Will accept seam width up to 3/4". Adjustable for cable run in either direction. Rubber caps included on bolts to prevent damage to roof. Swivel adapter adjusts to alter direction of point for sloping roofs. Bolt tension cable holder with 1-1/2" contact for main sized cables through No. 605. Overall dimensions - 3-1/2" x 2" x 3-3/4". Maximum recommended torque on mounting bolts: 15 in / lbs.

Specify diameter of point - 3/8", 1/2" or 5/8"

Cat. No. 649 – Copper - 1 lb. - 2 oz.

Cat. No. A649 – Aluminum - 6.6 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



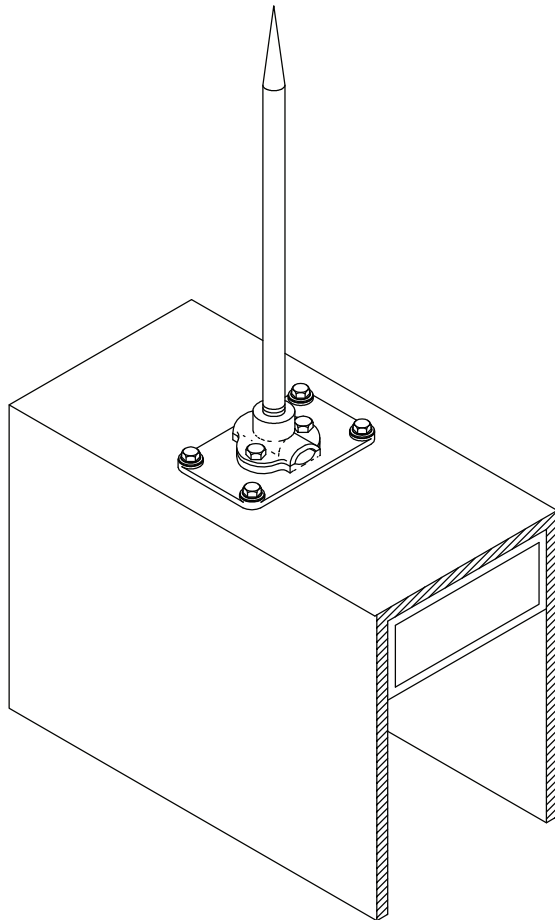
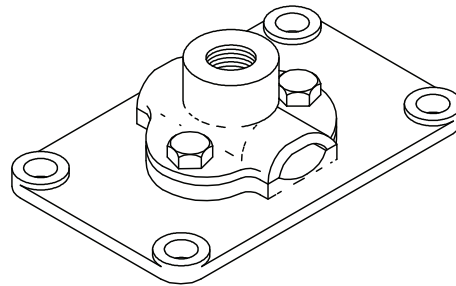
TOP MOUNT POINT BASE



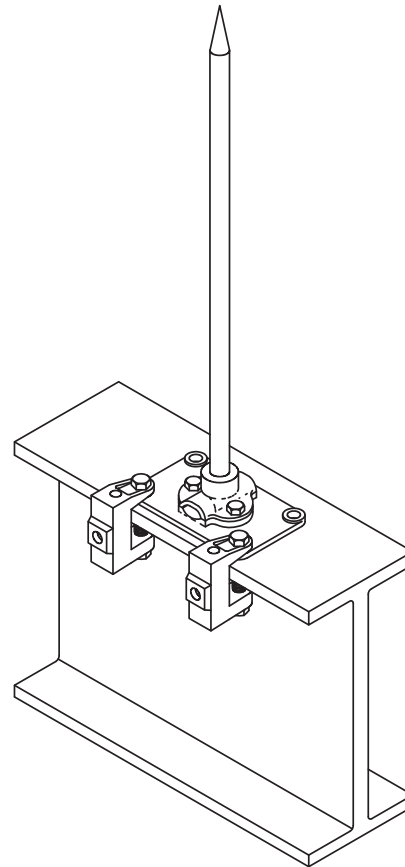
Heavy cast bronze or aluminum metal point base — over 8 square inches of contact surface — 1-1/2" cable contact. May be fastened to flat surfaces with metal screws, wood screws, bolts and nuts or may be brazed. For main sized cable through No. 605. Overall dimensions - 2-1/4" x 4".

Specify diameter of point — 3/8" or 1/2".
Adapter required for 5/8" threads.

Cat. No. 656P — Copper - 11.6 oz.
Cat. No. A656P — Aluminum - 4 oz.



Typical use on
metal surface



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



SIDE RIDGE POINT BASE

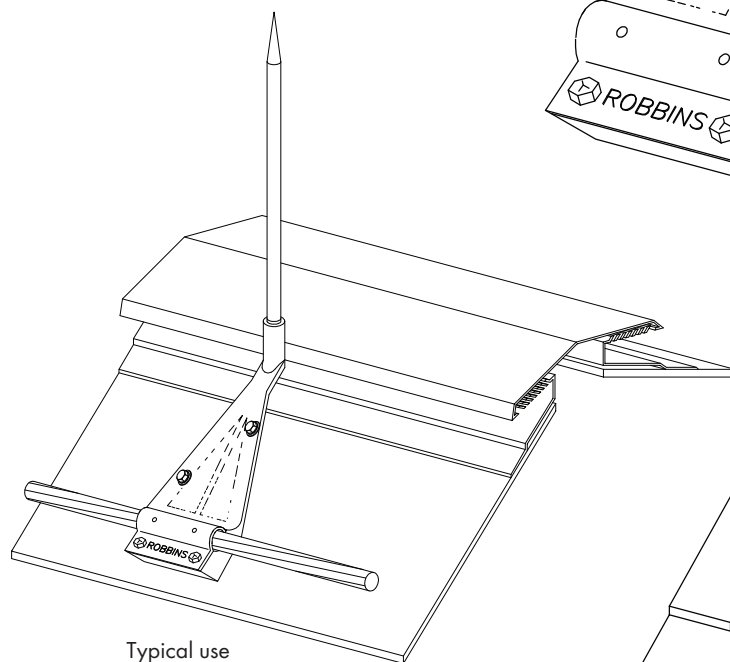
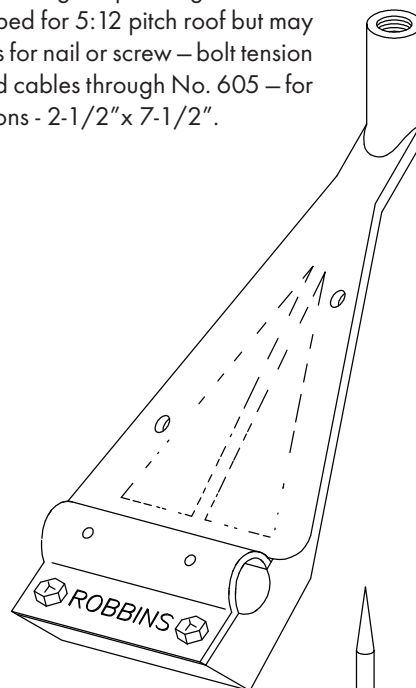


Heavy cast bronze or aluminum side ridge point base for use on back side of roof to hide mounting from view. May be set below ridge cap or ridge vent with point extending 10" minimum above ridge. Shipped for 5:12 pitch roof but may be formed for other roof pitch – two anchor holes for nail or screw – bolt tension cable holder with 2-1/2" contact – for main sized cables through No. 605 – for points 3/8" or 1/2" diameter. Overall dimensions - 2-1/2" x 7-1/2".

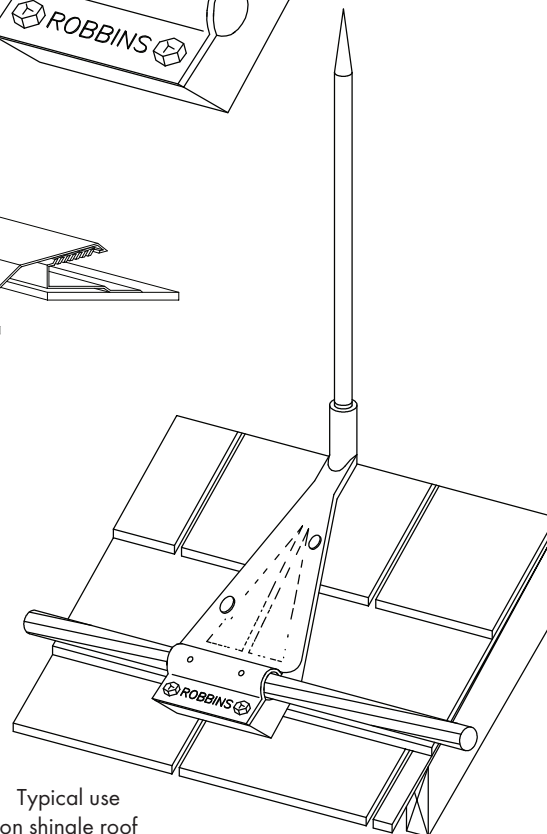
Specify diameter of point – 3/8" or 1/2".
Adapter required for 5/8" threads.

Cat. No. 47 – Copper - 11.4 oz.

Cat. No. A47 – Aluminum - 3.7 oz.



Typical use
on vent ridge



Typical use
on shingle roof



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

TILE ROOF POINT BASE AND CABLE FASTNER

ALL ITEMS



TILE ROOF POINT BASE

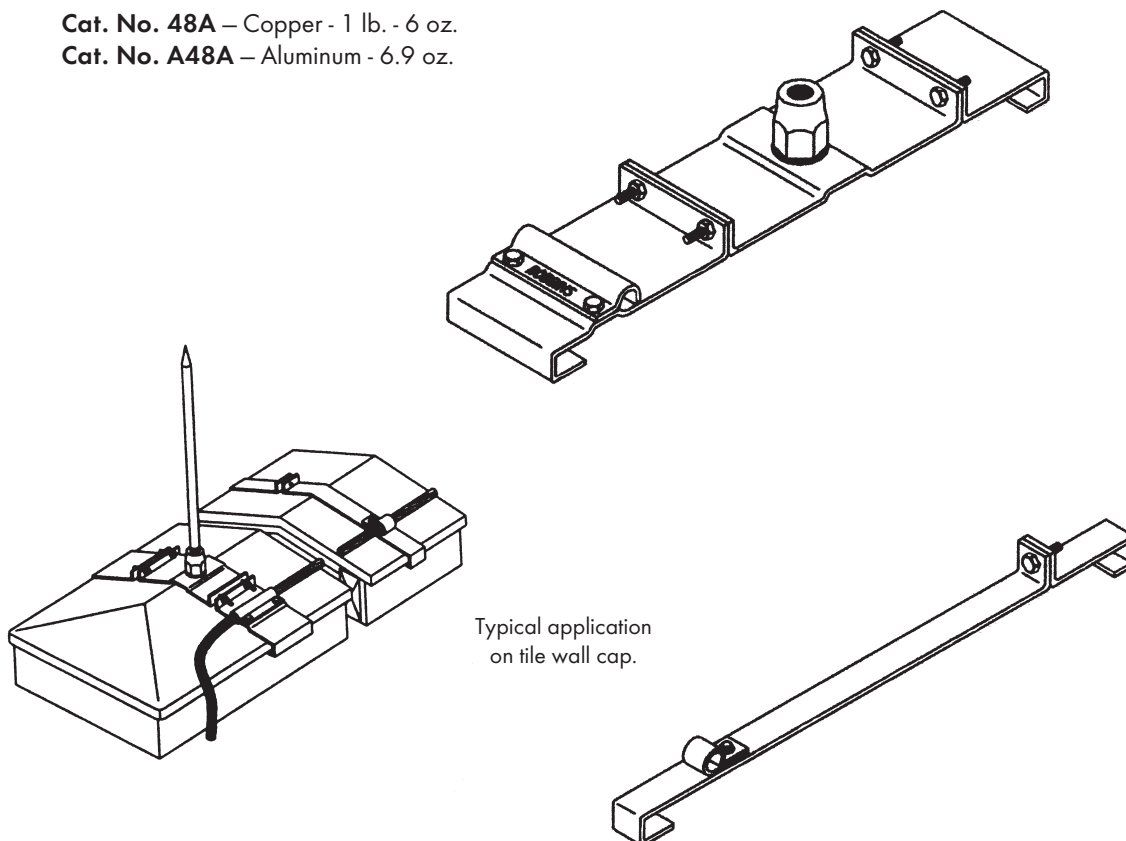
Copper or aluminum strap point base for "no hole" installation on Spanish tile ridge cap or glazed tile wall cap – 2-1/2" wide with two 1" bolts to draw tight to tile – cable contact 2-1/2" for main sized cables through No. 605. Overall dimensions - 2-1/2" x 11-1/2".

Standard length for 12" tile – longer span length available upon request.

Specify diameter of point – 3/8", 1/2", 5/8".

Cat. No. 48A – Copper - 1 lb. - 6 oz.

Cat. No. A48A – Aluminum - 6.9 oz.



TILE ROOF CABLE HOLDER

Copper or aluminum strap cable holder for "no hole" installation on Spanish tile ridge cap or glazed tile wall cap – 5/8" wide with 1" bolt to draw tight to tile. Includes No. 72 loop.

For main and secondary sized cables through No. 604. Overall dimensions - 5/8" x 11-1/2".

Standard length for 12" tile – longer span length available upon request.

Cat. No. 76X – Copper - 3.2 oz.

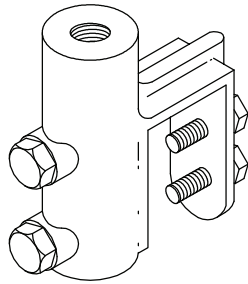
Cat. No. A76X – Aluminum - 1.2 oz.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



FLUE LINER/V.T.R. POINT BASE



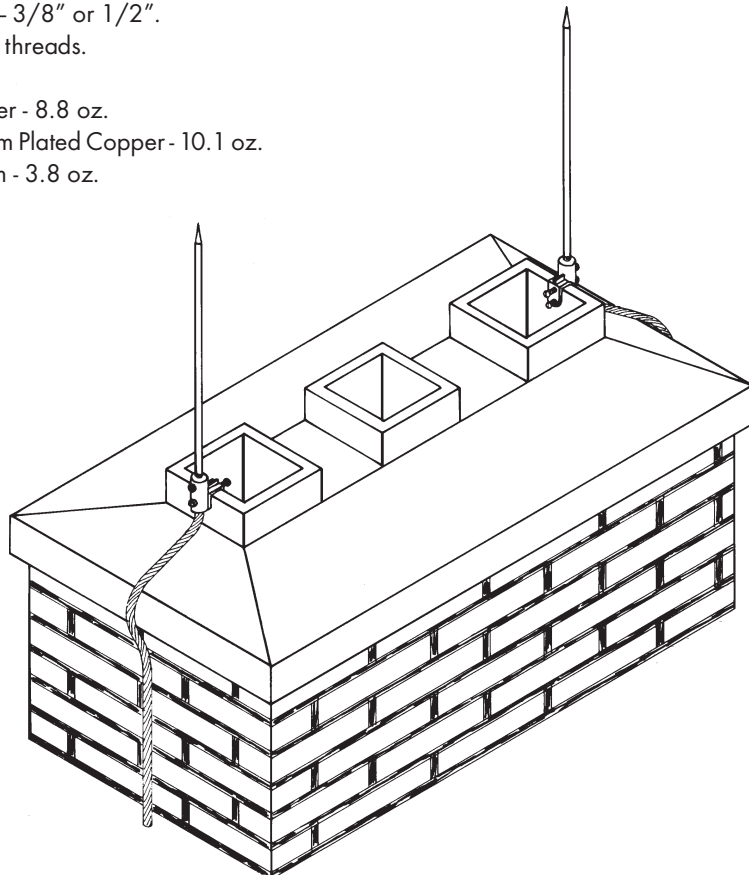
Heavy cast bronze or aluminum point base for use on rim of clay tile or glazed tile flue liner. Draws tight with two 1/4" set screws on tile thickness to 1-1/4" — cable contact 1-1/2" with two 1/4" set screws for pressure. For main sized cables through No. 605 and for points 3/8" and 1/2" in diameter. Copper bases can be cadmium plated to prevent corrosion from flue gases. Overall dimensions - 3" x 3" x 1". Maximum recommended torque on mounting bolts 25in/lbs.

Specify diameter of point — 3/8" or 1/2".
Adapter required for 5/8" threads.

Cat. No. 49 —Bare Copper - 8.8 oz.

Cat. No. 49BM — Cadmium Plated Copper - 10.1 oz.

Cat. No. A49 — Aluminum - 3.8 oz.



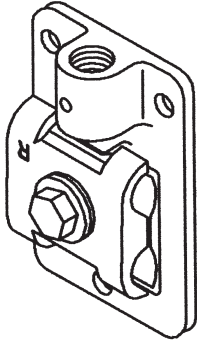
Typical use on
flue liner tile

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



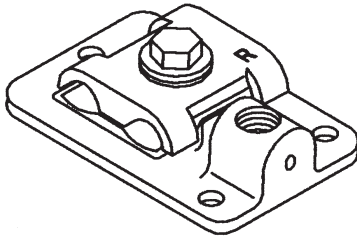
COMBINATION POINT BASE



Heavy cast bronze or aluminum combination point base for side mount or top mount applications. Point base can be threaded for 3/8", 1/2" or 5/8" point. Bolt tension cable holder with 1-1/2" contact. Three anchor holes for fasteners. For main sized cables through No. 605. Over 8 in² surface area contact. Overall dimensions - 3-1/2" x 2-3/8".

Specify diameter of point - 3/8", 1/2" or 5/8".

No. 637A or A637A



No. 637B or A637B

Copper

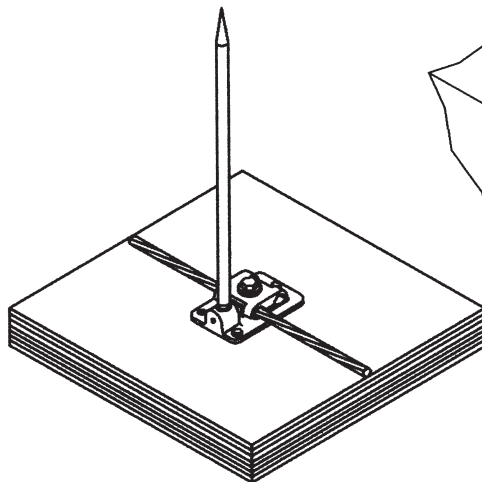
Cat. No. 637A – Vertical side mount - 13.4 oz.

Cat. No. 637B – Horizontal top mount - 13.4 oz.

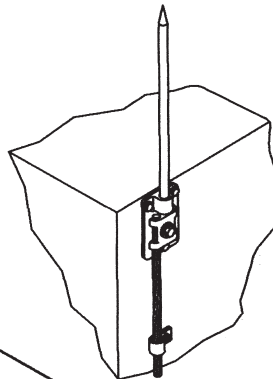
Aluminum

Cat. No. A637A – Vertical side mount - 4.8 oz.

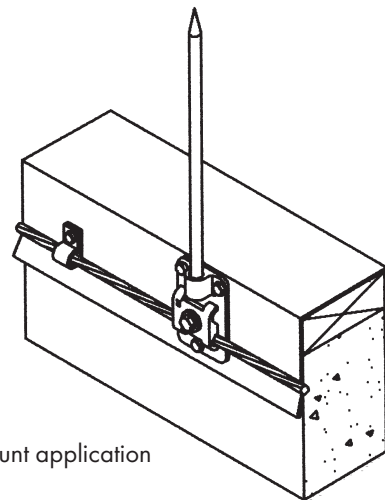
Cat. No. A637B – Horizontal top mount - 4.8 oz.



Top mount application



Side mount application
with vertical cable run



Side mount application

ROBBINS LIGHTNING, INC.

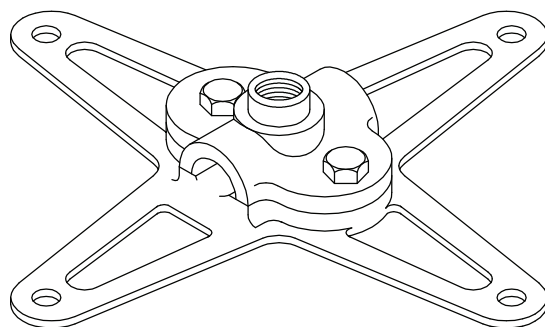
124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



FLAT SURFACE POINT BASE



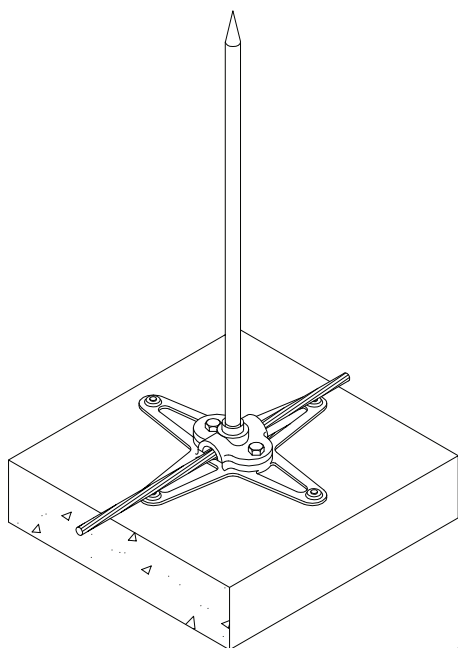
Heavy cast bronze or aluminum flat surface point base for mounting on masonry, wood or metal — four anchor holes for nails or screws — two holes only required on masonry — 1-1/2" bolt tension cable contact for main sized cables through No. 605. Overall dimensions - 6-1/4" x 6-1/4".



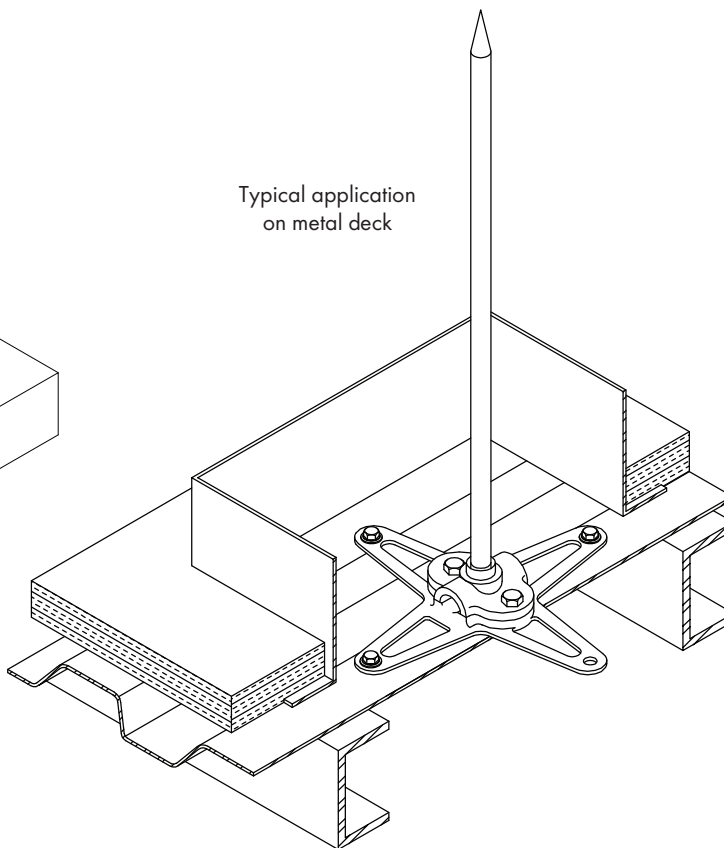
Specify diameter of point — 3/8" or 1/2".
Adapter required for 5/8" threads.

Cat. No. 120 — Copper - 11.4 oz.

Cat. No. A120 — Aluminum - 3.7 oz.



Typical application
on masonry wall



Typical application
on metal deck



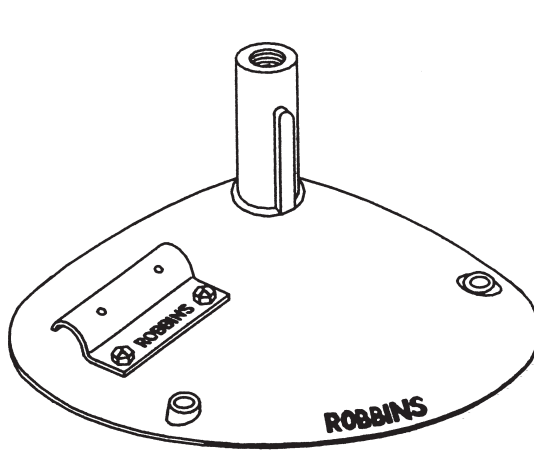
ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

CONE VENT POINT BASE



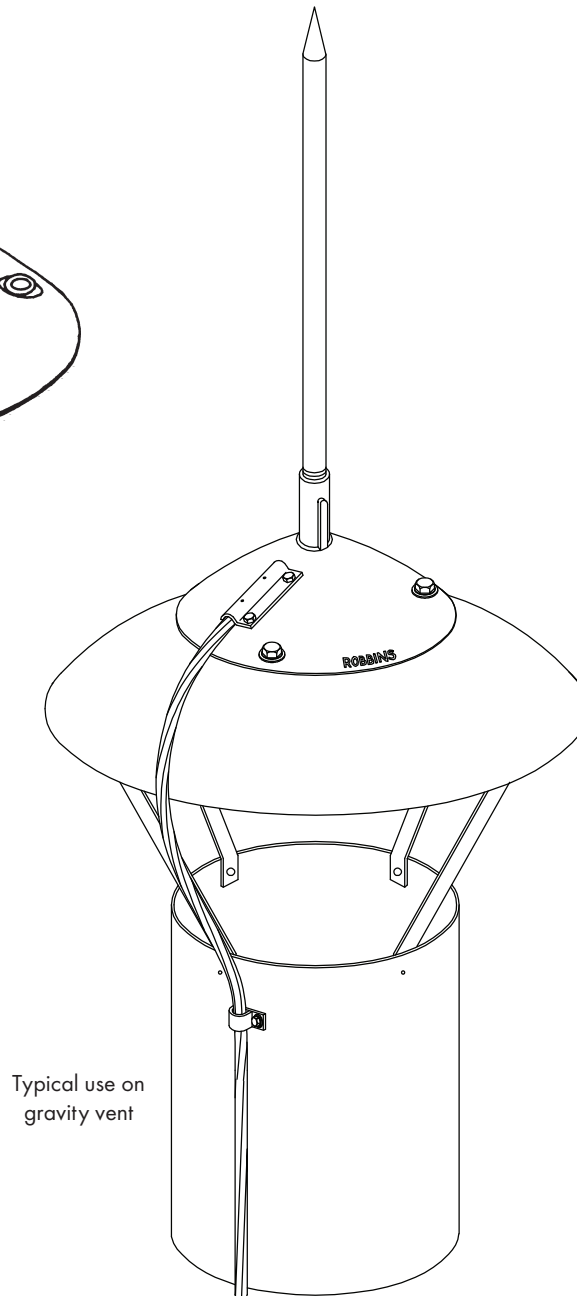
Heavy cast bronze or aluminum point base for use on metal vent with cone shaped top—three anchor holes for metal screws or bolts—top threaded to receive 3/8" or 1/2" point—2-1/2" bolt tension cable contact for main sized cables through No. 605. Overall dimensions - 3" x 5" diameter.



Specify diameter of point—3/8" or 1/2".
Adapter required for 5/8" threads.

Cat. No. 624—Copper - 1 lb. - 3 oz.

Cat. No. A624—Aluminum - 5.8 oz.



Typical use on
gravity vent

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



SPECIAL GOVERNMENT AIR TERMINAL BASE, SUPPORT AND CABLE HOLDER

ALL ITEMS



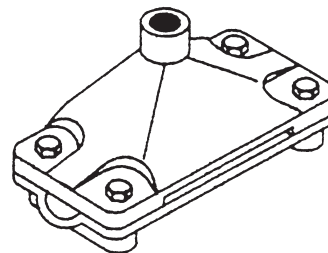
POINT BASE

Heavy cast bronze or aluminum point base to fit securely on galvanized "V" iron support — four bolts for tension on cable and support — for main sized cables through No. 605. Note: Copper is not UL approved for use on galvanized steel. Overall dimensions - 2" x 5" x 3".

Specify diameter of point — 3/8", 1/2" or 5/8".

Cat. No. 625 — Copper - 2 lbs. - 10 oz.

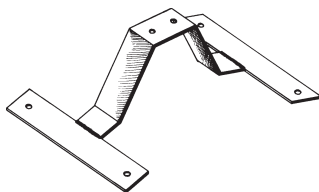
Cat. No. A625 — Aluminum - 13.6 oz.



BASE SUPPORT

Heavy galvanized steel point base support to stand off ridge — made of 3/16" thick, 2-1/2" wide steel — holes in feet for 3/8" lag screws or bolts.

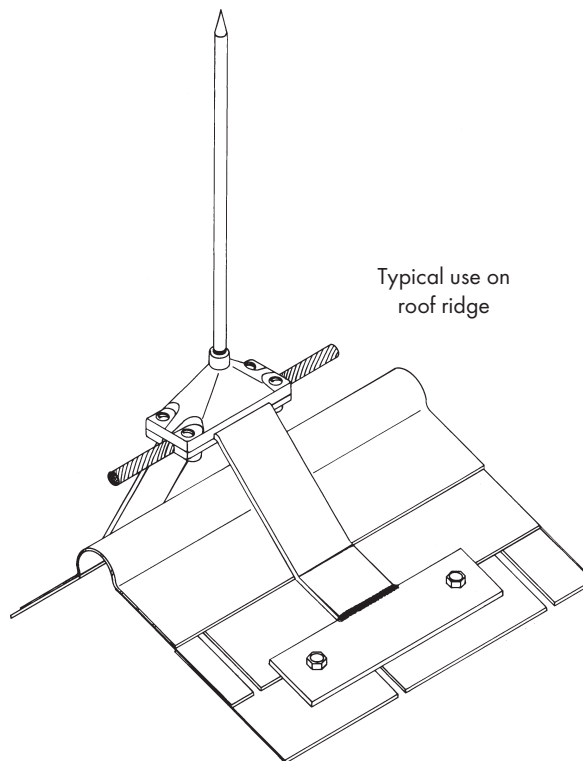
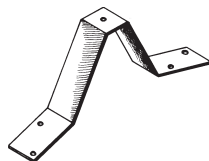
Cat. No. 612 - 6 lbs.



CABLE HOLDER SUPPORT

Heavy galvanized steel cable holder support to stand off ridge — made of 3/16" thick, 2-1/2" wide steel — holes in feet for 3/8" lag screw or bolt — center hole for cable clamp No. 74B or No. A74B.

Cat. No. 614 - 5 lbs.



Typical use on
roof ridge

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



PIPE AND HANDRAIL POINT BASE



Heavy cast bronze or aluminum clamp-type point base for use on pipes and handrails — draws tight under bolt tension — may be used with or without cable run on pipes with sidewall thickness 0.064 in. minimum — 1-1/2" contact along axis of pipe — for use with main sized cables through No. 604. Overall dimensions - 631A 2-1/2" x 1-3/4" - 631B 4-1/4" x 1-1/2" - 631C 5-1/2" x 1-1/2".

Copper

Cat. No. 631A — for 3/4" to 1-1/2" OD pipes - 11.2 oz.

Cat. No. 631B — for 1-3/4" to 2-1/2" OD pipes - 1 lb. - 3 oz.

Cat. No. 631C — for 2-1/2" to 4-1/2" OD pipes - 1 lb. - 4 oz.

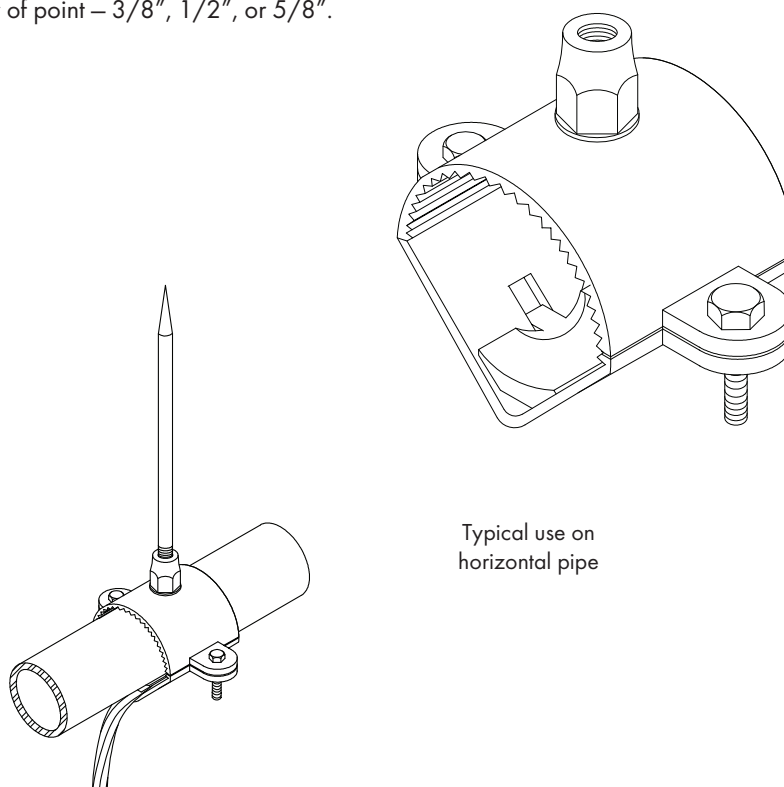
Aluminum

Cat. No. A631A — for 3/4" to 1-1/2" OD pipes - 4 oz.

Cat. No. A631B — for 1-3/4" to 2-1/2" OD pipes - 6.6 oz.

Cat. No. A631C — for 2-1/2" to 4-1/2" OD pipes - 7.2 oz.

Specify diameter of point — 3/8", 1/2", or 5/8".



Typical use on
horizontal pipe

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



ADJUSTABLE POINT BASE

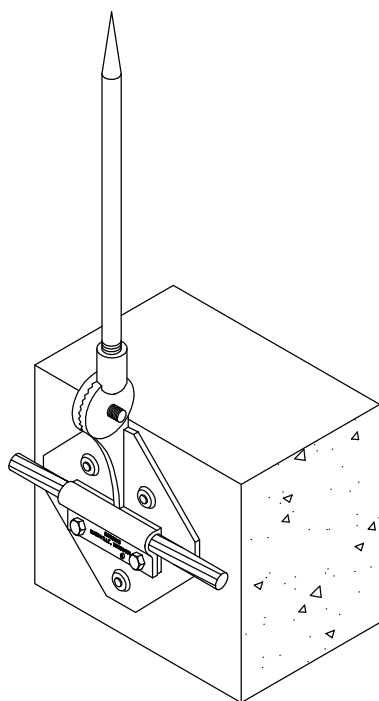
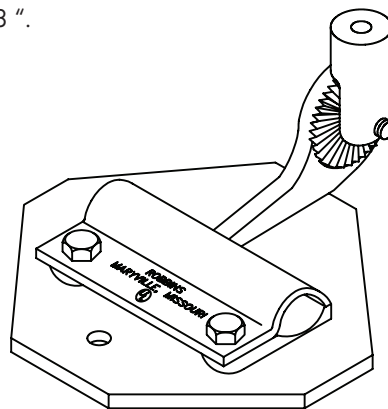


Heavy cast bronze or aluminum adjustable point base — for horizontal, vertical or pitched roof mounting — three 5/16" mounting holes for 1/4" anchors — any combination of two will provide support in masonry or metal — cable contact 2-1/2" for main sized cables through No. 605. Overall dimensions - 3-1/2" x 3-1/2" x 2-3/4".

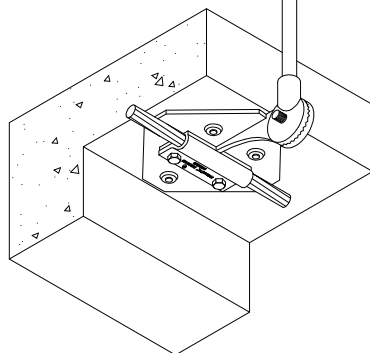
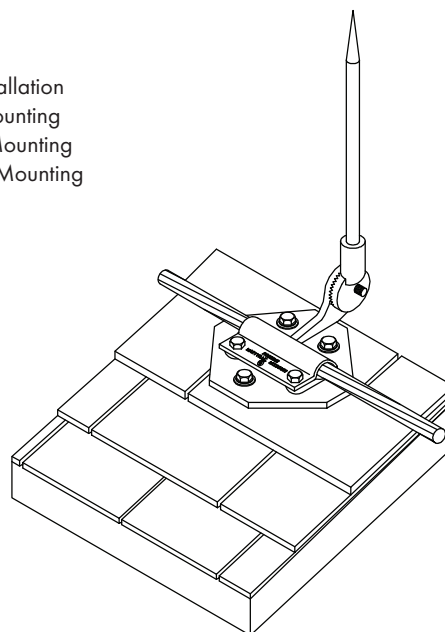
Specify diameter of point — 3/8", 1/2", or 5/8 ".

Cat. No. 636 — Copper - 1 lb. - 4 oz.

Cat. No. A636 — Aluminum - 6.6 oz.



Typical Installation
Vertical Mounting
Underside Mounting
Pitched Roof Mounting



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CAST ADHESIVE POINT BASE

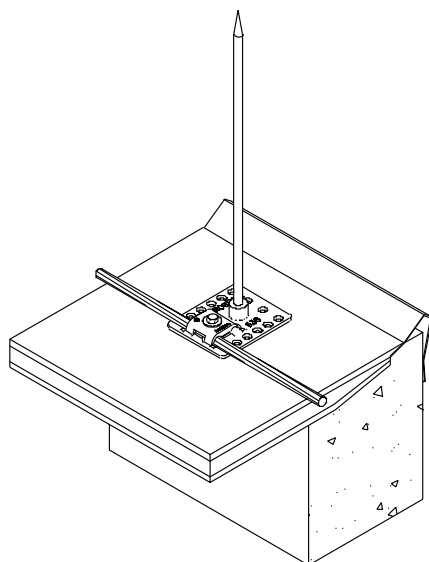
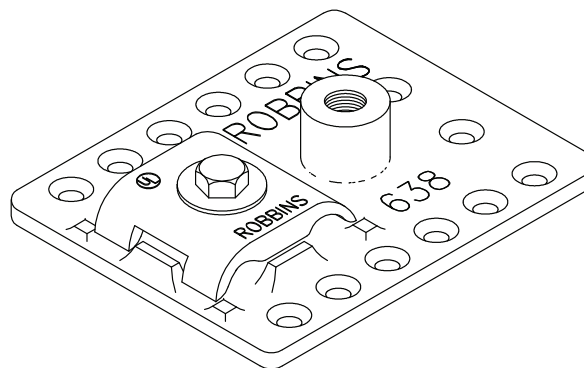


Heavy cast bronze or aluminum adhesive point base for mounting on flat or gently sloping roofs – used where no holes can be made in mounting surface, such as built-up tar and gravel or membrane roofing. Cable contact 1-1/2" for main sized cables through No. 605 – base should be set with application of hot roof pitch or compatible adhesive compound. Overall dimensions - 3-1/2" x 4-1/4". Overall adhesive contact area - 14.875 in².

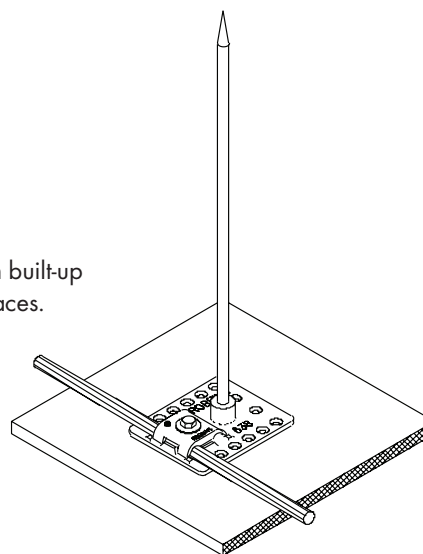
Specify diameter of point –
3/8", 1/2", or 5/8".

Cat. No. 638N – Copper - 1 lb. - 4 oz.

Cat. No. A638N – Aluminum - 6.4 oz.



Typical applications on built-up
tar and gravel surfaces.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CAST ADHESIVE POINT BASE WITH CAST SWIVEL

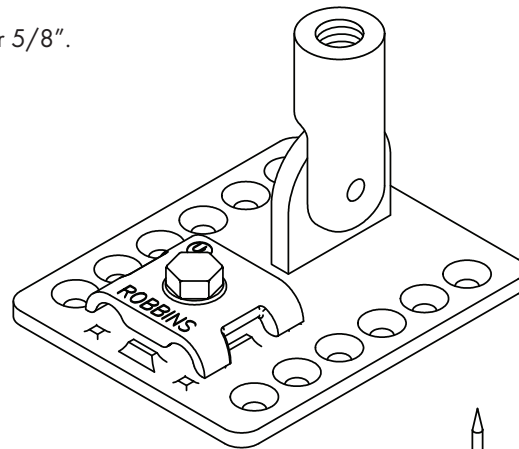


Heavy cast bronze or aluminum adhesive point base for mounting on flat or gently sloping roofs — used where no holes can be made in mounting surface, such as built-up tar and gravel or membrane roofing — adjustable point holder. Cable contact 1-1/2" for main sized cables through No. 605. Base should be set with application of hot roof pitch or compatible adhesive compound. Overall dimensions - 3-1/2" x 4-5/16" x 2-3/4". Overall adhesive contact area - 15.1 in².

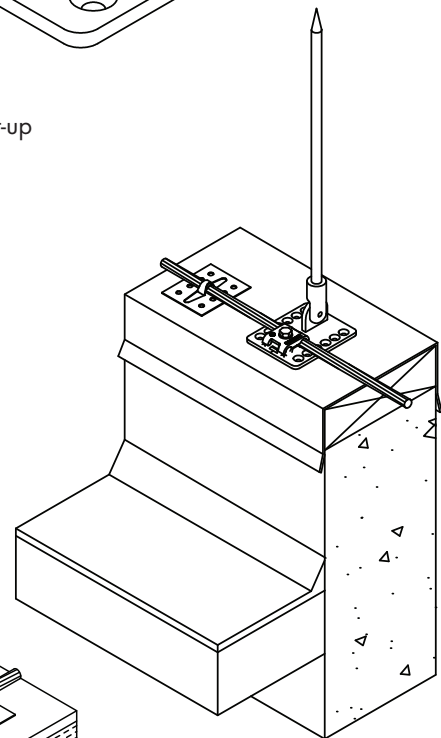
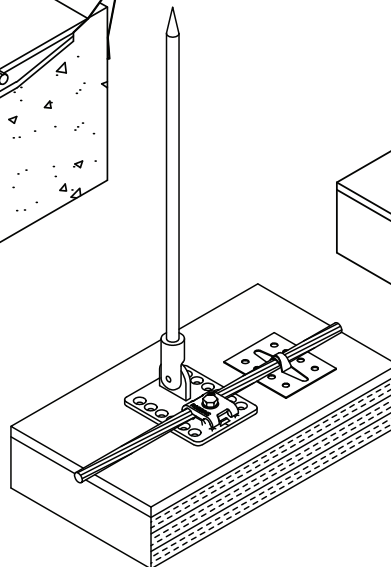
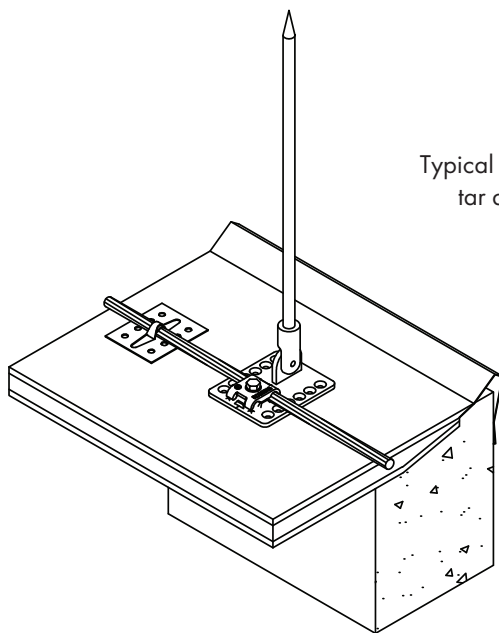
Specify diameter of point — 3/8", 1/2", or 5/8".

Cat. No. 638 — Copper - 1 lb. - 13 oz.

Cat. No. A638 — Aluminum - 8 oz.



Typical applications on built-up
tar and gravel surfaces.

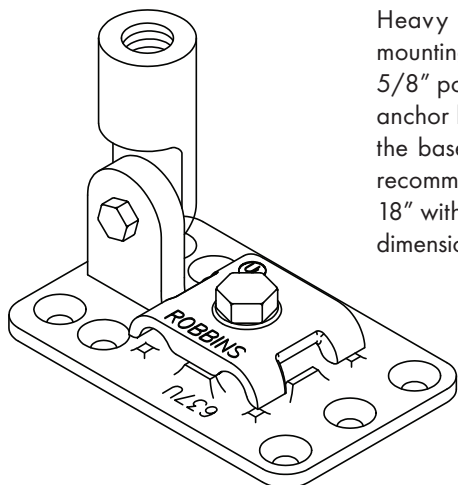


ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



UNIVERSAL POINT BASE

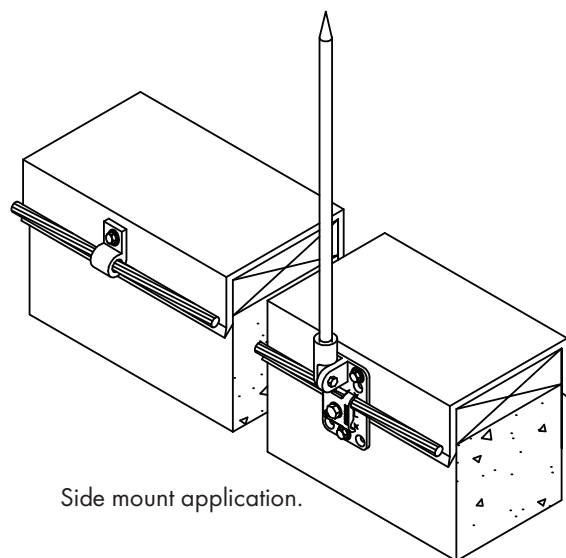


Heavy cast bronze or aluminum combination point base for all mounting applications. Swivel can be threaded for 3/8", 1/2" or 5/8" point. Bolt tension cable holder with 1-1/2" contact and three anchor holes for fasteners. When used in an adhesive application, the base should be set with compatible adhesive compound. We recommend using additional bracing when using points taller than 18" with this base. For main sized cables through No. 605. Overall dimensions - 2-5/16" x 3-5/8". Overall adhesive contact area - 8.3 in².

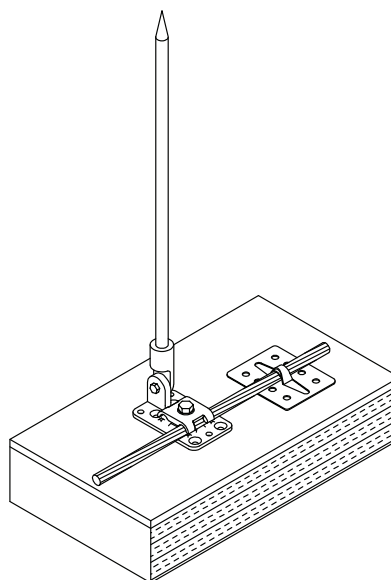
Specify diameter of point – 3/8", 1/2", or 5/8".

Cat. No. 637U – Copper - 1 lb. - 3 oz.

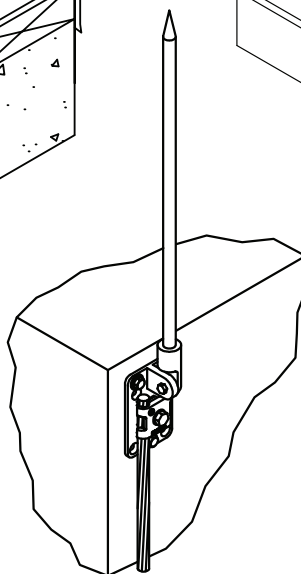
Cat. No. A637U – Aluminum - 7 oz.



Side mount application.



Adhesive Application



Side mount application
with vertical cable run.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



PEEL AND STICK POINT BASE

ALL ITEMS



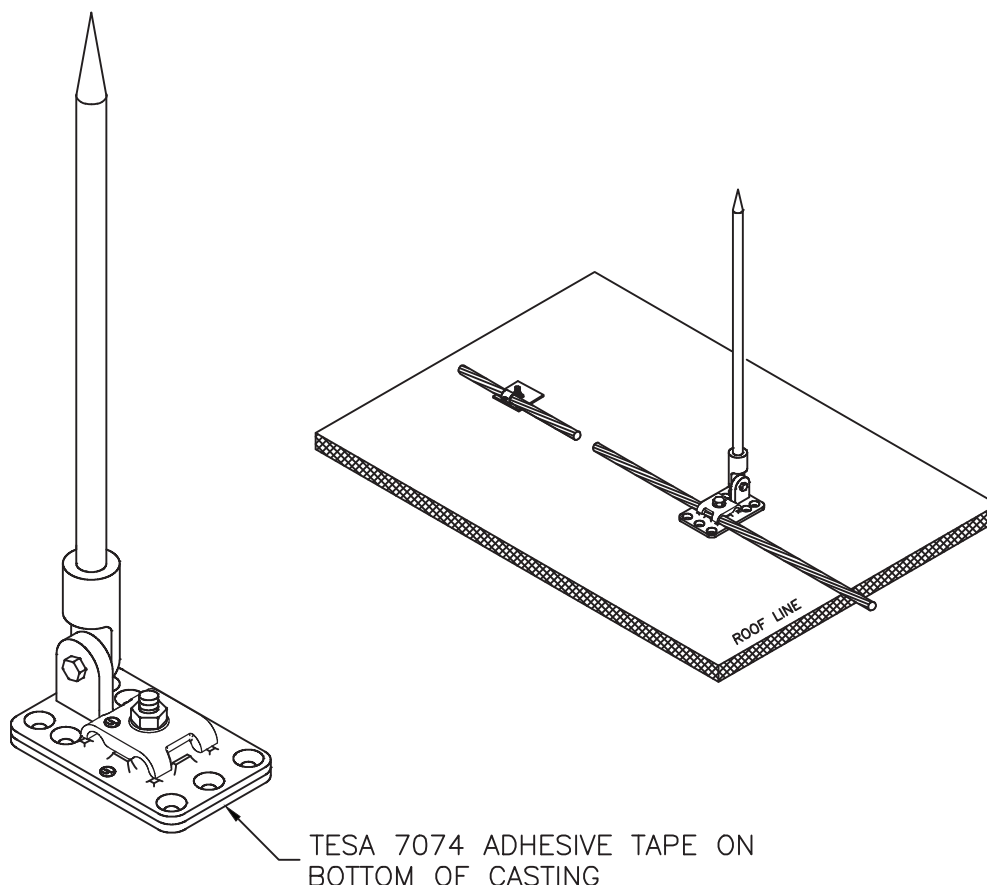
UL Conforms: Peel and stick bronze or aluminum cable holder for use on metal materials - strap cable holder for cables 3/8" through 5/8" diameter. For main and secondary cables and wires.

PEEL AND STICK UNIVERSAL POINT BASE

Adhesive bronze or aluminum universal point base for use on standing seams, metal roofs, etc., where no penetration of metal is desired or permitted. Swivel can be threaded for 3/8", 1/2", or 5/8" point. Bolt tension cable holder with 1-1/2" contact. We recommend using additional bracing when using points taller than 18" with this base. For main sized cables through No. 605. Overall dimensions - 3-5/16" x 4-5/8". Consists of No. 637U or No. A637U point base. No. A Base 2" aluminum Plate, or Base - 2" Copper Plate and TESA 7074 adhesive. (TESA ACXplus 7074 product information is located in the front of the catalog.)

Cat. No. 637UPS – Copper - 1 lb. - 3 oz.

Cat. No. A637UPS – Aluminum - 7 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

STAMPED ADHESIVE POINT BASE

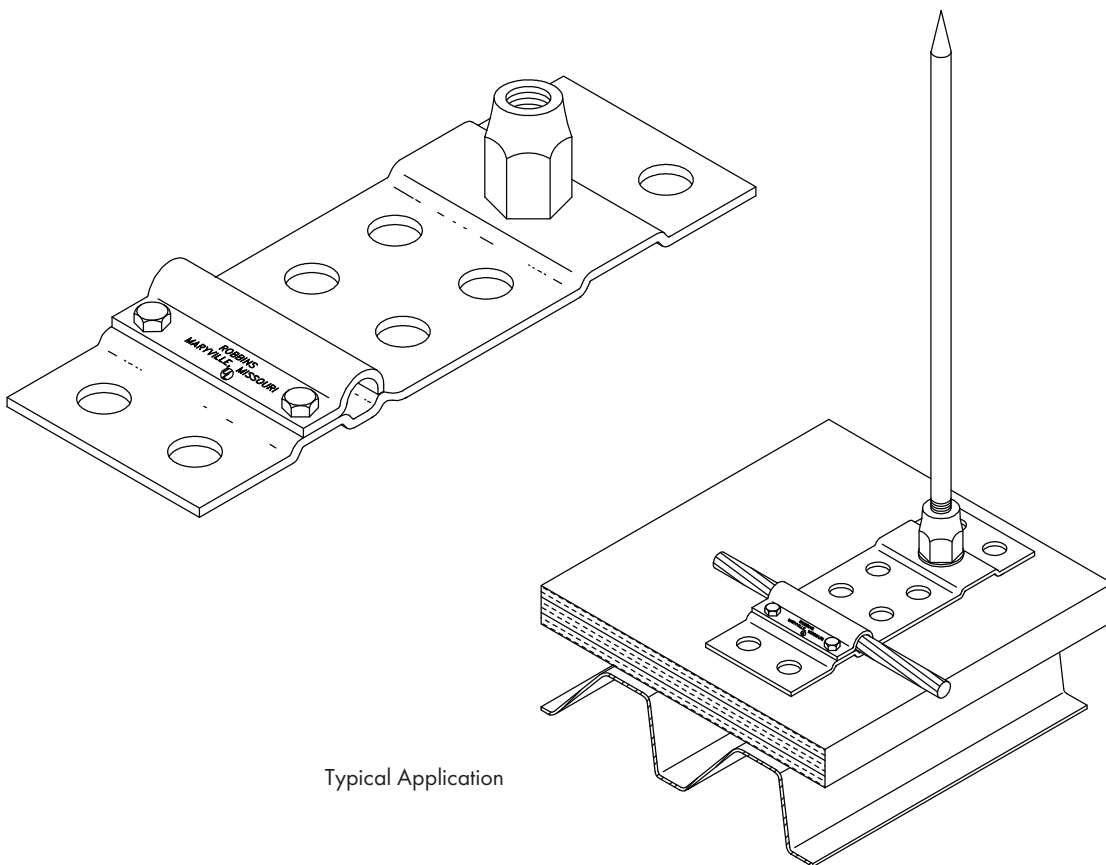


Bare copper or aluminum strap point base for adhesive mounting where no holes can be made in mounting surface such as membrane roofing – copper base 0.064" thick, aluminum base 0.100" thick – bolt tension cable holder with 2-1/2" cable contact for main sized cables through No. 605. Base should be set with application of hot roof pitch or adhesive compatible with roofing material. Overall dimensions - 2-1/2" x 9". Overall adhesive contact area - 22.5 in².

Specify diameter of point – 3/8", 1/2", 5/8".

Cat. No. 646A – Copper - 10.2 oz.

Cat. No. A646A – Aluminum - 4.6 oz.



Typical Application

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



METAL MOUNT POINT BASE



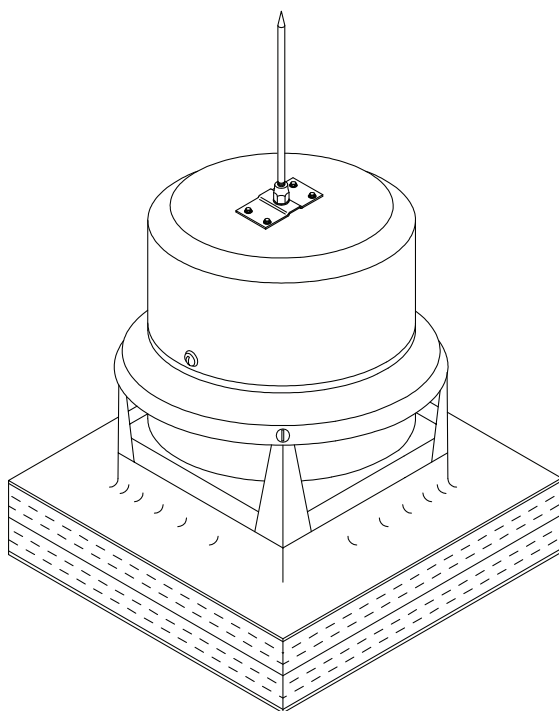
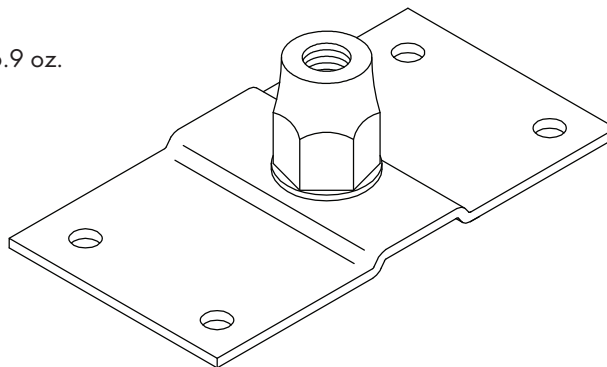
Bare copper, tinned copper, or aluminum strap point base for use on metal surface 3/16" thick or more where bottom of metal object uses bonding plate. May be used on metal fans, vents, hoods, evaporative coolers and like equipment less than 3/16" thick, but cable connection is required. Shipped flat but may be formed for sloping metal. Base contact surface exceeds 8 square inches. Copper base 0.064" thick; Aluminum base 0.100" thick – 2-1/2" wide, 5-1/2" long – four holes for sheet metal screws.

Specify diameter of point – 3/8", 1/2", or 5/8".

Cat. No. 645 – Copper - 6.9 oz.

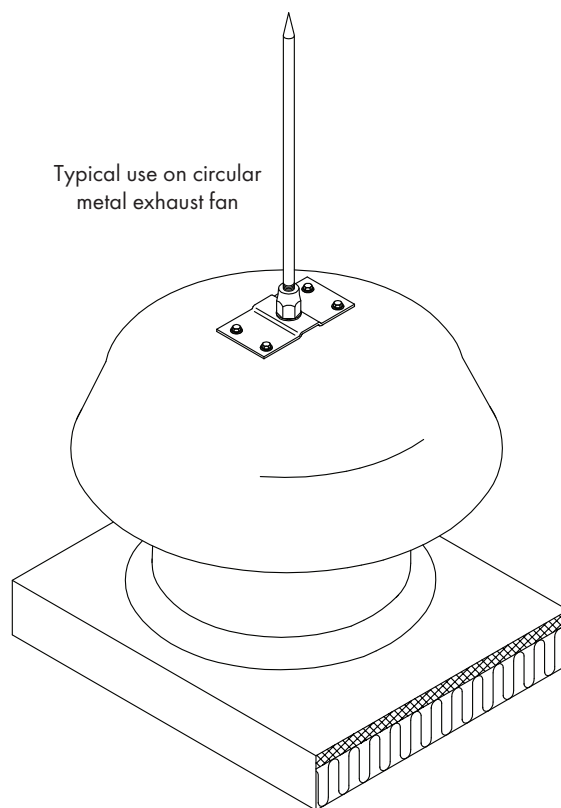
Cat. No. 645T – Tinned Copper - 6.9 oz.

Cat. No. A645 – Aluminum - 3 oz.



Typical use on metal exhaust fan

Typical use on circular
metal exhaust fan



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



NARROW WALL POINT BASE

ALL ITEMS



Bare copper, tinned copper, or aluminum strap point base for use on narrow masonry or metal capped wall or roof equipment – shipped flat but may be formed to fit various wall designs – Copper base 0.064" thick; Aluminum base 0.100" thick – four anchor holes for nails or screws, two anchor holes for bolts – bolt tension cable holder with 2-1/2" contact for main sized cables through No. 605.

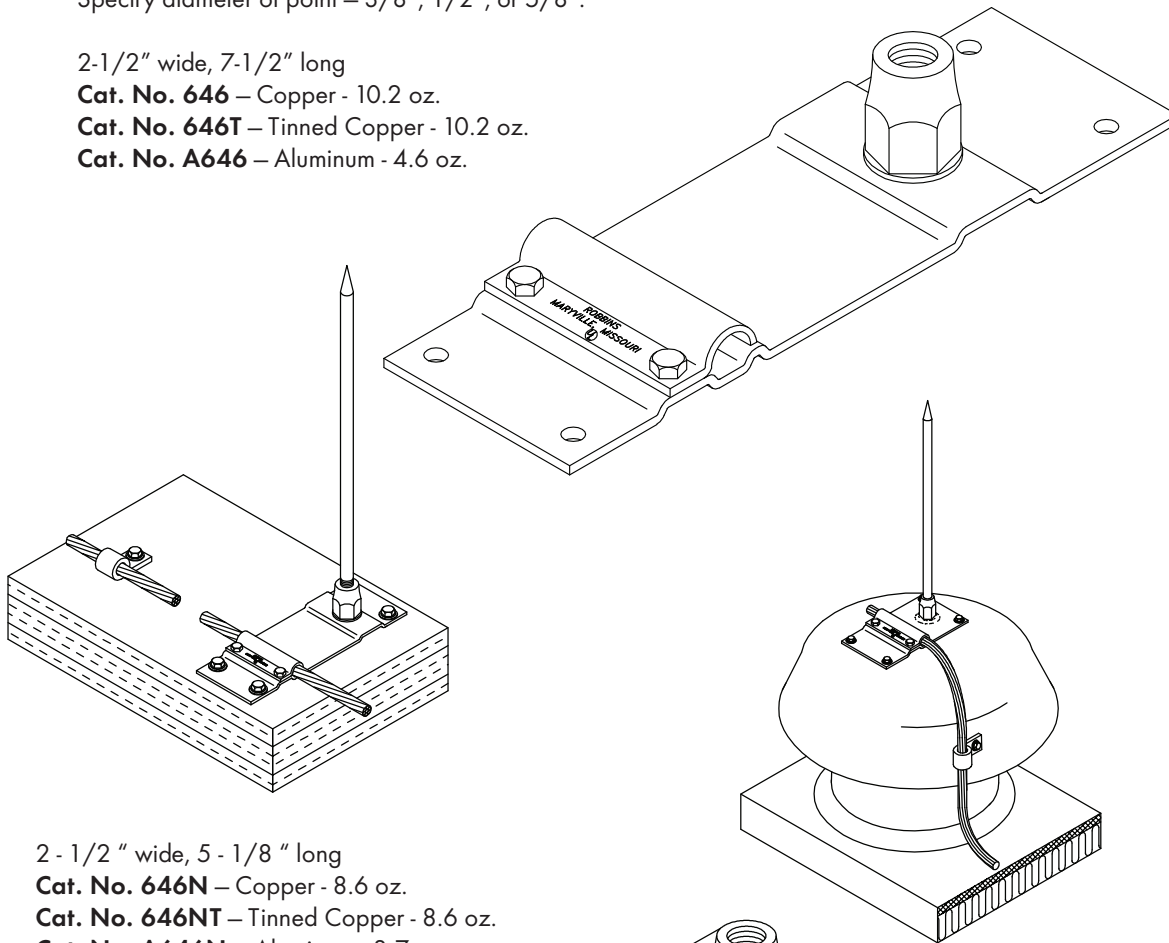
Specify diameter of point – 3/8", 1/2", or 5/8".

2-1/2" wide, 7-1/2" long

Cat. No. 646 – Copper - 10.2 oz.

Cat. No. 646T – Tinned Copper - 10.2 oz.

Cat. No. A646 – Aluminum - 4.6 oz.



2 - 1/2 " wide, 5 - 1/8 " long

Cat. No. 646N – Copper - 8.6 oz.

Cat. No. 646NT – Tinned Copper - 8.6 oz.

Cat. No. A646N – Aluminum - 3.7 oz.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



OFFSET WALL POINT BASE

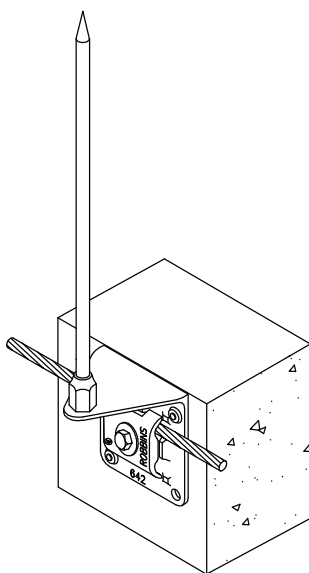
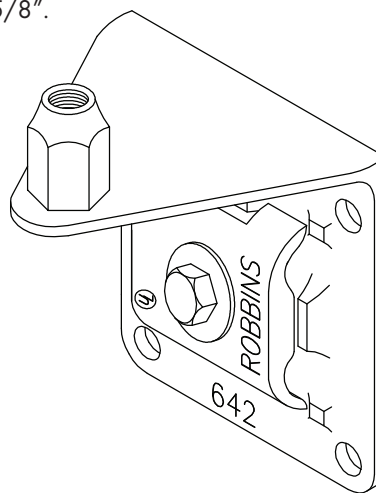


Heavy cast bronze or aluminum offset wall point base – point adapter offset 2" from mounting surface – four 5/16" mounting holes for 1/4" anchors – any combination of two will provide support in masonry or metal – cable contact 1-1/2" for main sized cables through No. 605. Overall dimensions - 2-3/4" x 2-3/4" x 4-1/2".

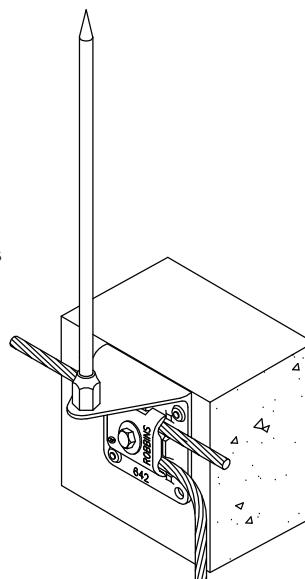
Specify diameter of point – 3/8", 1/2", or 5/8".

Cat. No. 642 – Copper - 1 lb. - 2 oz.

Cat. No. A642 – Aluminum - 6 oz.



Typical applications
on masonry wall



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



SPECIAL PURPOSE POINT BASE AND CABLE HOLDER

ALL ITEMS



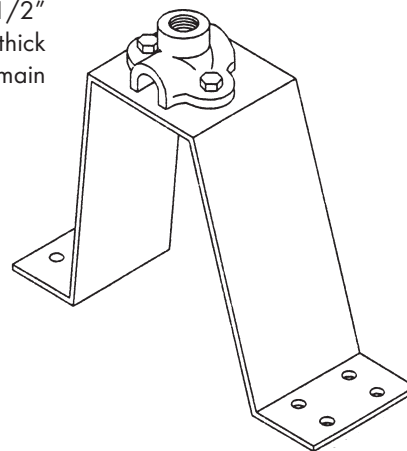
RIDGE POINT BASE

Ridge point base, used to hold point away from roof – made of 2-1/2" wide strip – copper base 0.064" thick, aluminum base 0.100" thick – 1-1/2" cable contact – may be formed to fit slope of roof. For main sized cables.

Specify diameter of point – 3/8" or 1/2".
Adapter required for 5/8" threads.

Cat. No. 613B – Copper - 1 lb. - 3 oz.

Cat. No. A613B – Aluminum - 8.6 oz.

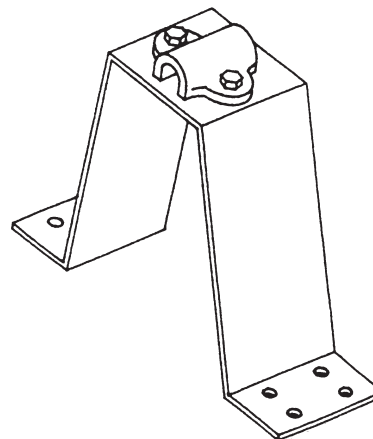


RIDGE CABLE HOLDER

Ridge cable support, made of 2-1/2" wide copper or aluminum strip – 1-1/2" cable contact – for use in holding cable away from roof – may be formed to fit slope of roof. For main sized cables.

Cat. No. 614C – Copper - 1 lb. - 1 oz.

Cat. No. A614C – Aluminum - 8.5 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



FIBERGLASS MAST POLE



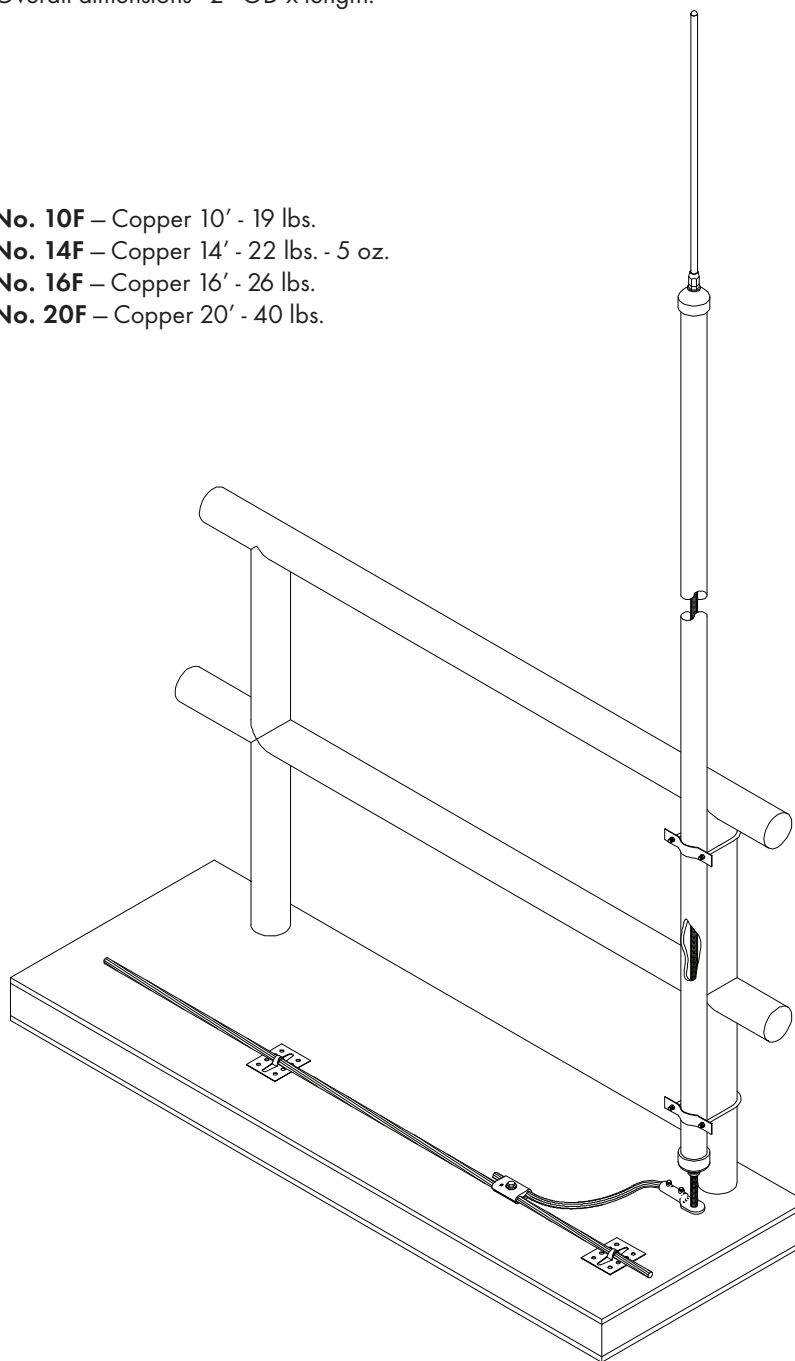
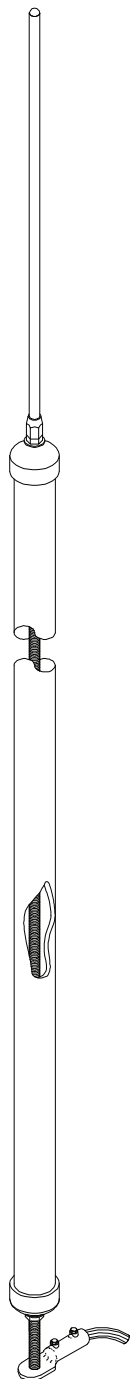
Heavy mast pole assembly consisting of a length of fiberglass mast pole, threaded rod, pipe caps, exothermically cable tap to the bottom of the threaded rod, and a 24" lightning rod. For main sized cables through No. 605. Overall dimensions - 2" OD x length.

Cat. No. 10F – Copper 10' - 19 lbs.

Cat. No. 14F – Copper 14' - 22 lbs. - 5 oz.

Cat. No. 16F – Copper 16' - 26 lbs.

Cat. No. 20F – Copper 20' - 40 lbs.



ROBBINS LIGHTNING, INC.

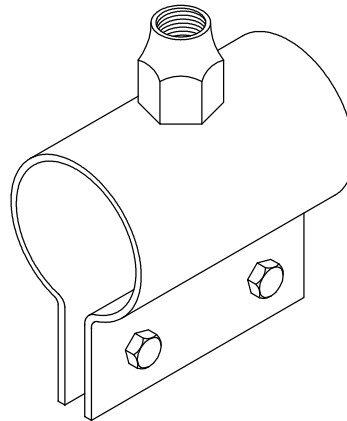
124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

PIPE AND HANDRAIL POINT BASE



Tinned copper or aluminum strap point base for use on pipe or handrail where cable run is not required — draws tight to pipe under bolt tension — bronze or aluminum point holder will accept 3/8", 1/2" or 5/8" points — base has 2-1/2" contact along axis of pipe — available in all pipe sizes upon request. Used on hand rails that are at least 0.064" thick or greater. Minimum contact area - 13 in².

Specify diameter of point —
3/8", 1/2", or 5/8".



Copper

Cat. No. 672A — for 1.660" O.D. Pipe - 8.9 oz.

Cat. No. 672B — for 1.90" O.D. Pipe - 9.2 oz.

Cat. No. 672C — for 2.375" O.D. Pipe - 9.6 oz.

Cat. No. 672D — for 2.875" O.D. Pipe - 10.1 oz.

Cat. No. 672E — for 4.5" O.D. Pipe - 11.6 oz.

Aluminum

Cat. No. A672A — for 1.660" O.D. Pipe - 4.4 oz.

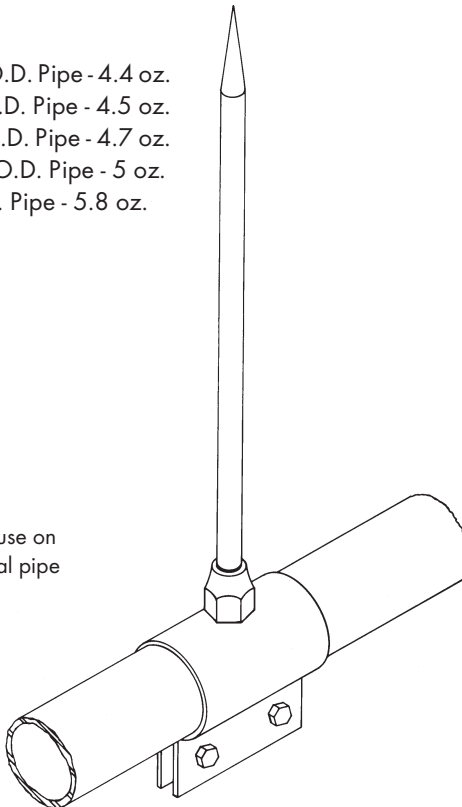
Cat. No. A672B — for 1.90" O.D. Pipe - 4.5 oz.

Cat. No. A672C — for 2.375" O.D. Pipe - 4.7 oz.

Cat. No. A672D — for 2.875" O.D. Pipe - 5 oz.

Cat. No. A672E — for 4.5" O.D. Pipe - 5.8 oz.

Typical use on
horizontal pipe



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



TOP MOUNT POINT BASE



Heavy cast bronze or aluminum point base for mounting on narrow precast masonry wall, on metal roof surface or flat handrail. Provided with two anchors for masonry or metal – bolt tension cable holder with 2-1/4" contact for main sized cables through No. 605. Overall dimensions - 2-1/4" x 2-1/4" x 1-3/4".

Specify diameter of point – 3/8" or 1/2".
Adapter required for 5/8" threads.

Copper

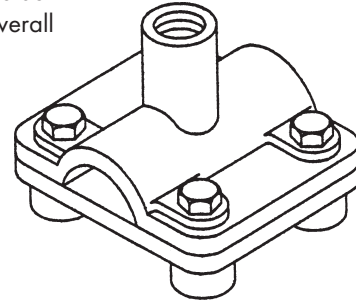
Cat. No. 687 – with No. 86 masonry anchors - 14.2 oz.

Cat. No. 687A – with 1/4" bolts and nuts for metal - 13.2 oz.

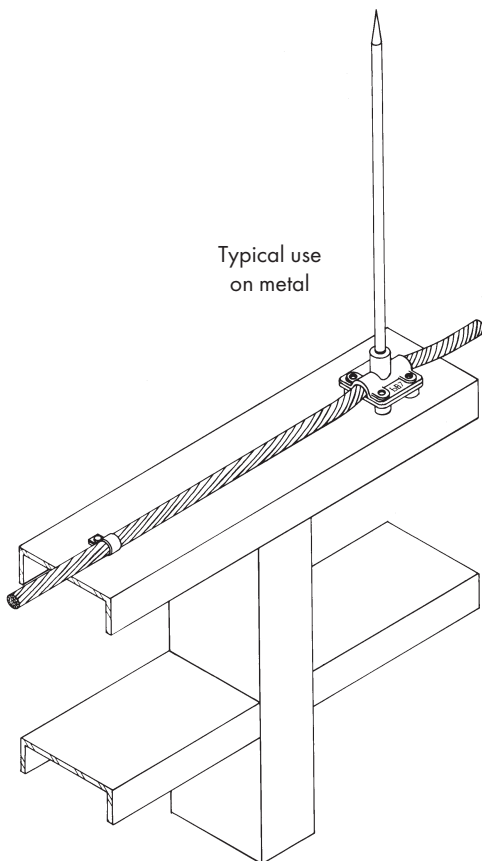
Aluminum

Cat. No. A687 – with No. 86 masonry anchors - 6.4 oz.

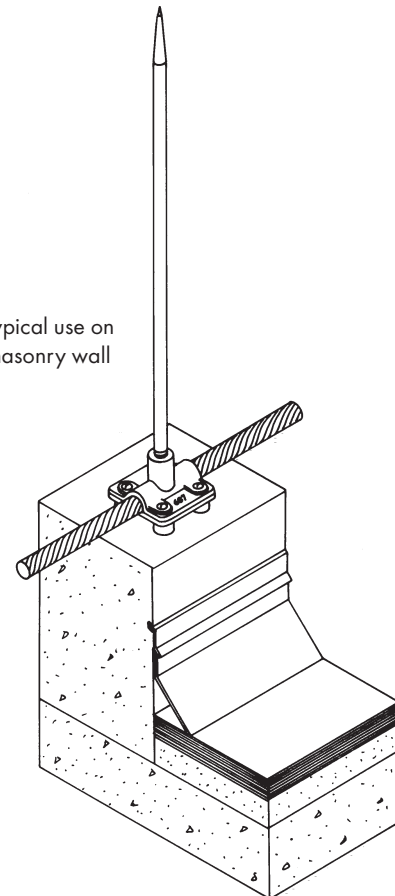
Cat. No. A687A – with 1/4" bolts and nuts for metal - 5.4 oz.



Typical use
on metal



Typical use on
masonry wall



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



METAL OR OUTLET POINT BASE

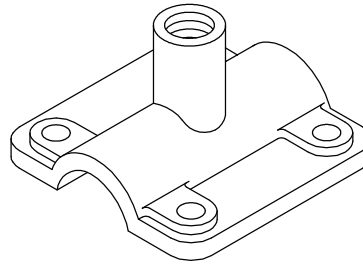


Heavy cast bronze or aluminum point base to mount directly on steel beam or on top wall terminal outlet No. 643 and No. A643 – over 3 square inches of surface contact – four holes for mounting with 1/4" diameter screws. Overall dimensions - 2-1/4" x 2-1/4" x 1".

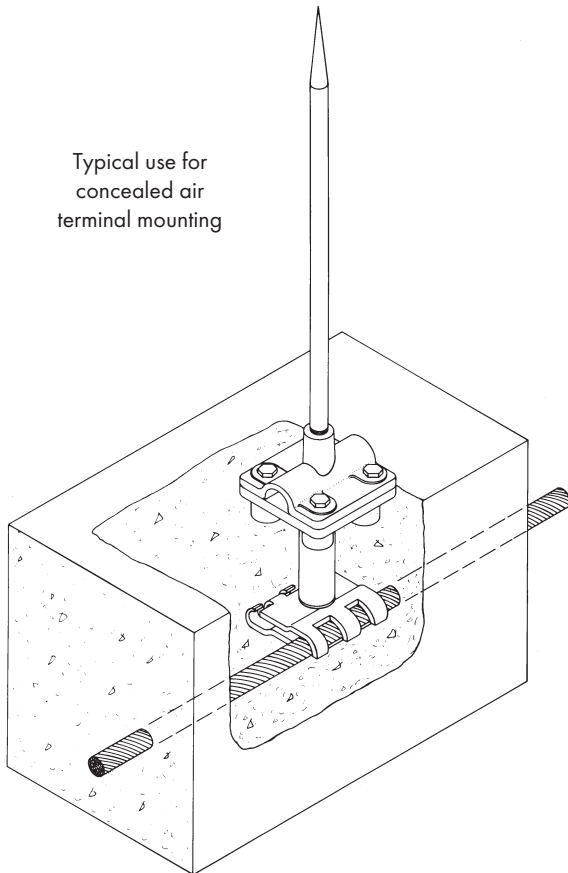
Specify diameter of point – 3/8" or 1/2".
Adapter required for 5/8" threads.

Cat. No. 688 – Copper - 7 oz.

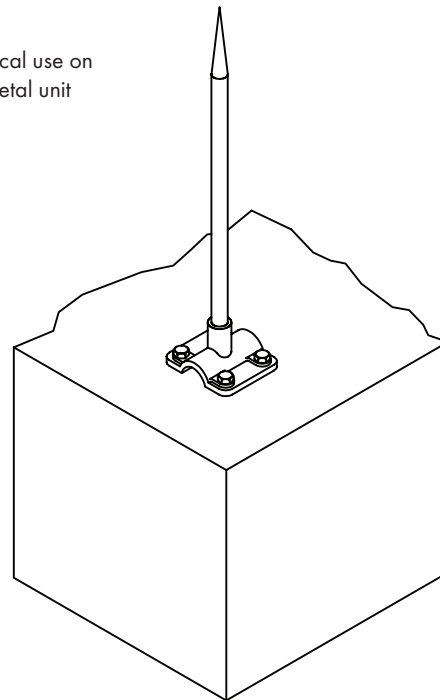
Cat. No. A688 – Aluminum - 2.2 oz.



Typical use for
concealed air
terminal mounting



Typical use on
metal unit



ROBBINS LIGHTNING, INC.

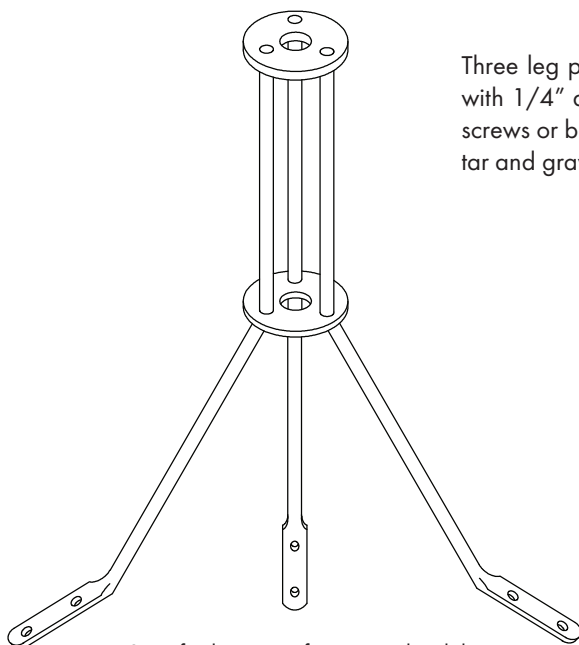
124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



TRIPOD POINT BRACE

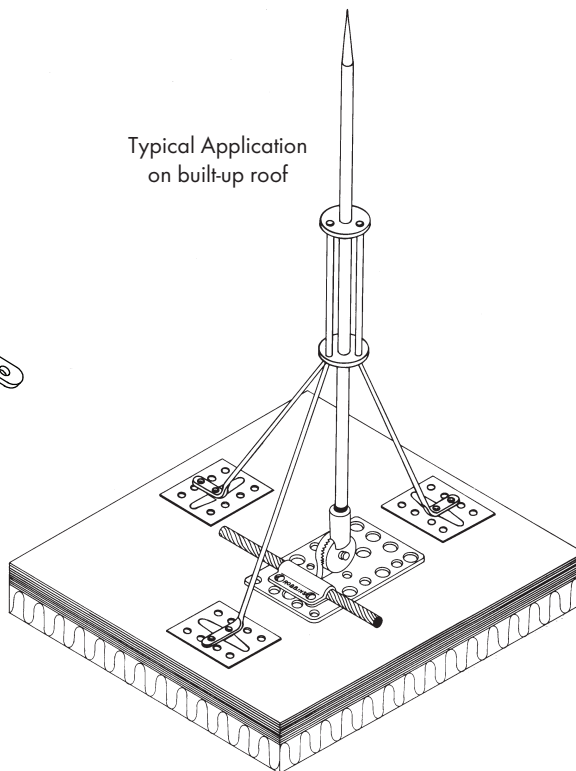


Three leg point brace made of galvanized steel or bare copper with 1/4" diameter legs and heavy washers. For use with nails, screws or bolts. Available with adhesive shoes for use on built-up tar and gravel or membrane roofing.

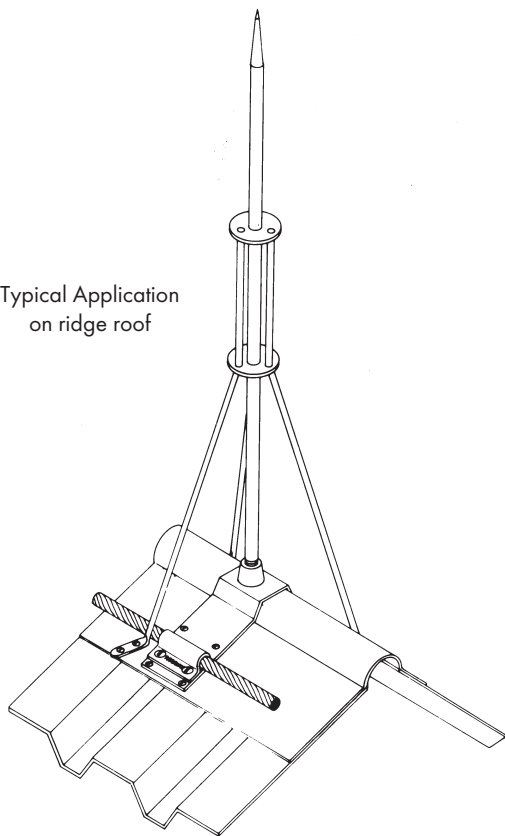


Specify diameter of point used with brace –
3/8", 1/2" or 5/8".

Typical Application
on built-up roof



Typical Application
on ridge roof



Cat. No. 43-18G – Galvanized, 18" long - 11.5 oz.

Cat. No. 43-18C – Copper, 18" long - 14.2 oz.

Cat. No. 43-24G – Galvanized, 24" long - 1lb. - 2 oz.

Cat. No. 43-24C – Copper, 24" long - 1lb. - 3 oz.

Cat. No. 43-36G – Galvanized, 36" long - 1lb. - 10 oz.

Cat. No. 43-36C – Copper, 36" long - 1lb. - 12 oz.

Cat. No. 43-42G – Galvanized, 42" long - 1lb. - 14 oz.

Cat. No. 43-42C – Copper, 42" long - 2 lbs.

Cat. No. 43-48G – Galvanized, 48" long - 2 lbs.

Cat. No. 43-48C – Copper, 48" long - 2 lbs. - 5 oz.

NOTE: Add suffix "A" after above Catalog Numbers when adhesive shoes are needed. Add 1 oz. for copper, 0.3 oz. for galvanized braces.

Longer braces available on request.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



PIPE CLAMP POINT HOLDER



Heavy cast bronze or aluminum pipe clamp point holder for supporting points on pipe masts, obstruction lights, etc. - 1-1/2" surface contact along axis of pipe. Overall dimensions - 63A-PH 2-1/2" x 1-3/4" - 63B-PH 4-1/4" x 1-1/2" - 63C-PH 5-1/2" x 1-1/2".

Copper

Cat. No. 63A-PH - For 3/4" to 1-1/2" OD pipe - 9 oz.

Cat. No. 63B-PH - For 1-3/4" to 2-1/2" OD pipe - 1 lb.

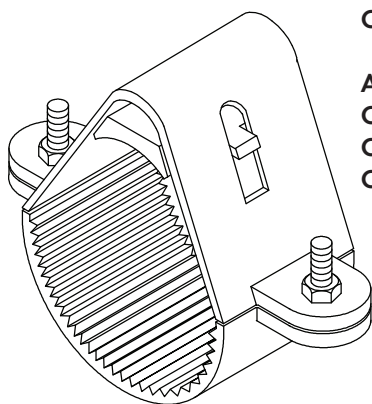
Cat. No. 63C-PH - For 2-1/2" to 4-1/2" OD pipe - 1 lb. - 1 oz.

Aluminum

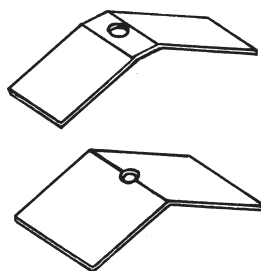
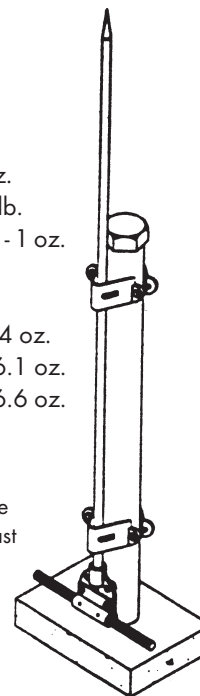
Cat. No. A63A-PH - For 3/4" to 1-1/2" OD pipe - 3.4 oz.

Cat. No. A63B-PH - For 1-3/4" to 2-1/2" OD pipe - 6.1 oz.

Cat. No. A63C-PH - For 2-1/2" to 4-1/2" OD pipe - 6.6 oz.



Typical use
on pipe mast



CONCEALED POINT FLASHING SADDLE

Cat. No. 121FS - Copper - 6.1 oz.

Cat. No. 121FS-G - Galvanized - 3.4 oz.

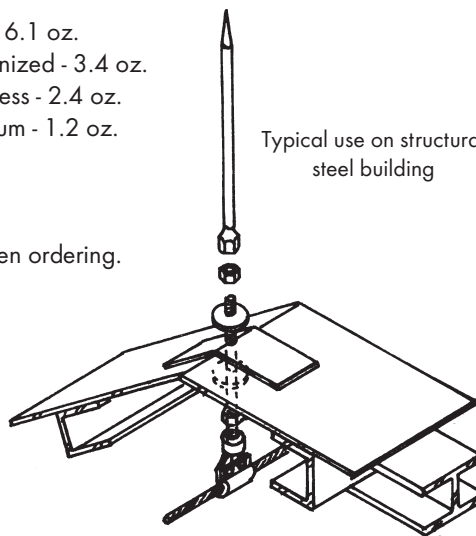
Cat. No. 121FS-SS - Stainless - 2.4 oz.

Cat. No. A121FS - Aluminum - 1.2 oz.

NOTE: Dimensions for flashing saddle must be specified when ordering.

Standard Size is 3" x 10"

Typical use on structural
steel building



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



STAND-OFF POINT HOLDER

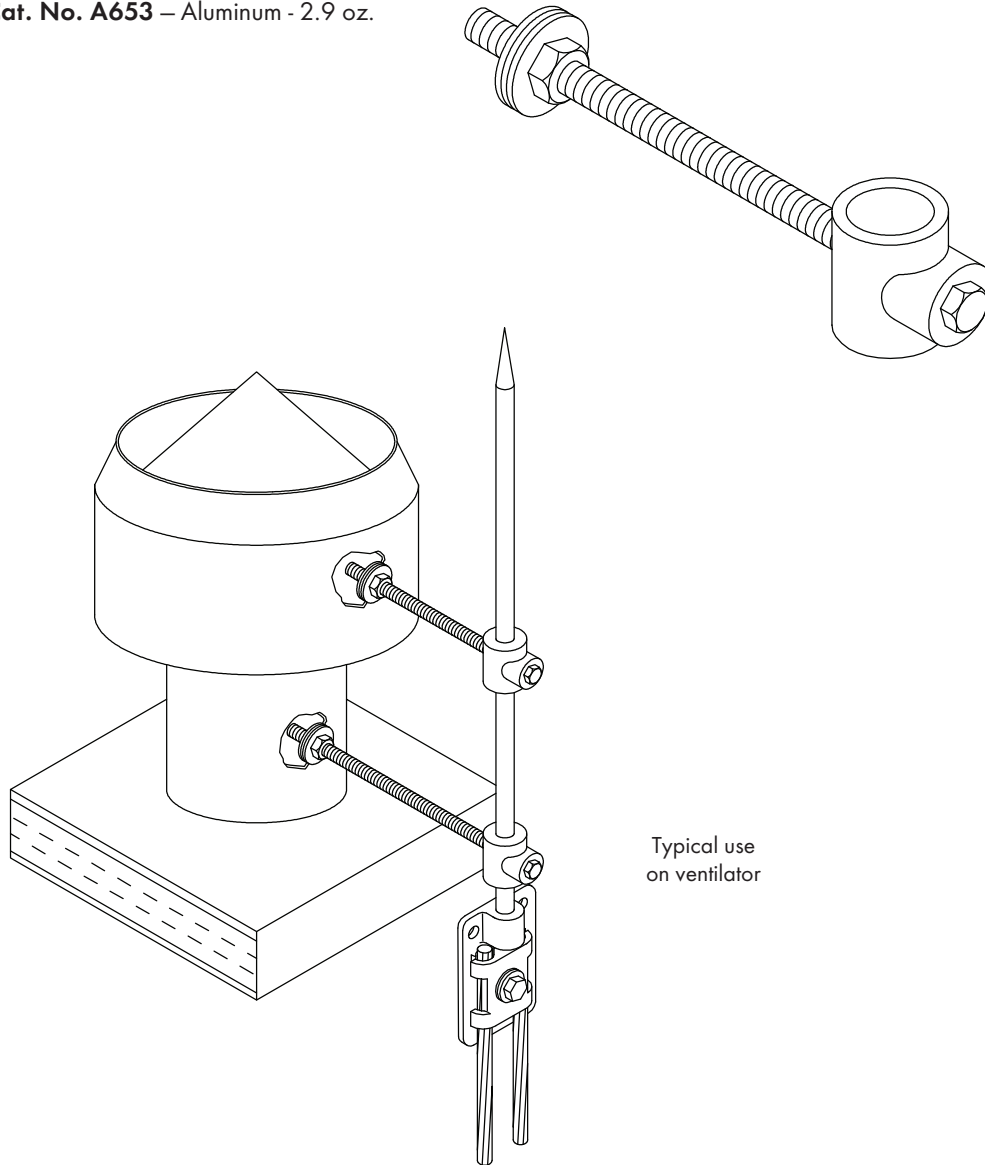


ADJUSTABLE POINT HOLDER

Cast bronze or aluminum point holder with adjustable threaded rod for irregular surface mounting – 3/8" rigid rod for support with two nuts and washers for locking on mounting surface – 1/4" set screw on point – standard rod length 6" – longer or shorter rod available. Overall holder dimensions - 1" x 1-3/4" + rod length.

Cat. No. 653 – Copper - 6.1 oz.

Cat. No. A653 – Aluminum - 2.9 oz.



Typical use
on ventilator

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



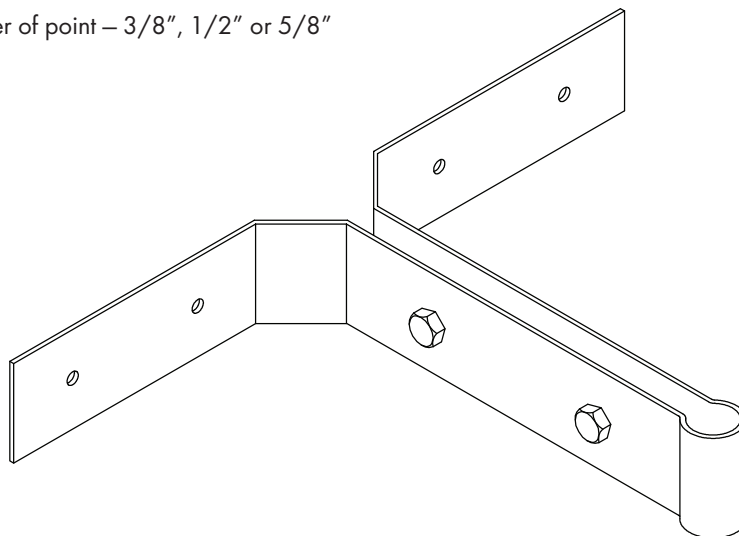
STAND-OFF POINT HOLDER



UNIVERSAL POINT HOLDER

Tinned copper or aluminum strap point holder for use in varying lengths on flat or uneven surfaces — 1/4" bolts draw strap tight around point and secure at mounting — four mounting holes for metal screws or bolts with nuts — made from flat conductor strap No. 17 copper or No. A16 aluminum — stand off lengths over 8" not recommended.

Specify diameter of point — 3/8", 1/2" or 5/8"



Copper

Cat. No. 659-2 — Copper — 2" stand-off - 3.8 oz.

Cat. No. 659-4 — Copper — 4" stand-off - 5.4 oz.

Cat. No. 659-6 — Copper — 6" stand-off - 6.2 oz.

Cat. No. 659-8 — Copper — 8" stand-off - 8.8 oz.

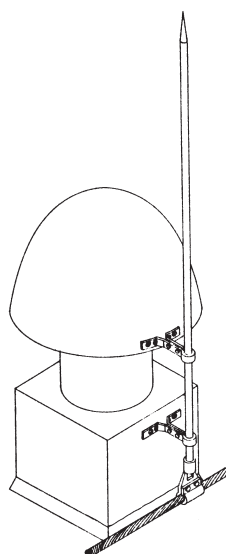
Aluminum

Cat. No. A659-2 — Aluminum — 2" stand-off - 2.2 oz.

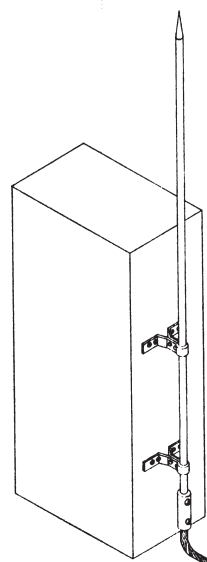
Cat. No. A659-4 — Aluminum — 4" stand-off - 2.9 oz.

Cat. No. A659-6 — Aluminum — 6" stand-off - 3.4 oz.

Cat. No. A659-8 — Aluminum — 8" stand-off - 4.5 oz.



Typical use on
curved vent cover



Typical use on
metal hood

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



THRU-ROOF AND THRU-WALL ASSEMBLIES

ALL ITEMS

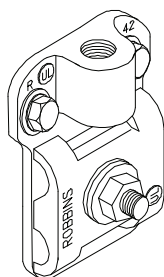


The following pages show various thru-roof and thru-wall assemblies using threaded rods, nuts, and washers, along with a combination of connectors as described below and as indicated by the letters added to the part number. (For complete description of the connectors listed, refer to index for catalog page on each item being considered). Cable connectors are for main sized cable.

"CP" means copper base center nut No. 803
(specify 3/8", 1/2", or 5/8" threads for point) - 1.6 oz.



"AP" means aluminum base center nut No. A803
(specify 1/2" or 5/8" threads for point) - 0.4 oz.

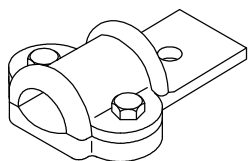
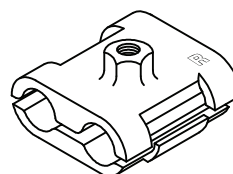


"CT" means copper tee base No. 42AN - 12.9 oz.

"AT" means aluminum tee base No. A42AN - 4.6 oz.

"CD" means copper clamp No. 55D - 6.1 oz.

"AD" means aluminum clamp No. A55D - 2.4 oz.



"CL" means copper lug No. 55B - 8.2 oz.

"AL" means aluminum lug No. A55B - 2.6 oz.

"CS" means copper straight connector No. 42 - (5.8 oz.) or No. 42L - (10.4 oz.)
(specify size of cable being used)

"AS" means aluminum straight connector No. A42L - 3.8 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



THRU-ROOF POINT ADAPTERS

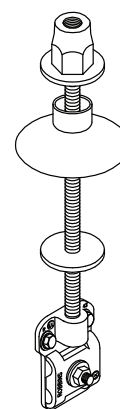
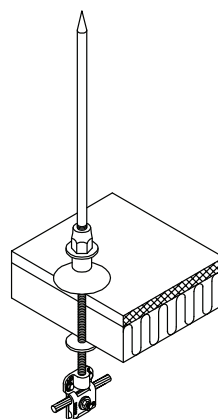


Combination connector used for thru-roof air terminal penetration — draws tight to top and bottom of composition or metal roof surfaces. Point adapter nut No. 803 or No. A803 at top along with neoprene washers and cast bronze or aluminum flashing cone No. 100 or No. A100 to provide a moisture seal. Your choice of No. 42AN or No. A42AN tee connector or No. 55D or No. A55D clamp for bottom end (either fits all main cables through 9/16" diameter). For copper-to-copper connection, all components are copper or bronze except nuts and washers which are stainless steel — for copper-to-aluminum or aluminum-to-aluminum connection, the threaded rod, nuts and washers are stainless steel. Threaded rod 1/2" diameter, standard length 24" — other lengths available upon request.

Cat. No. 742CPCT — Copper Point to Copper
Tee Connector - 3 lbs. - 1 oz.

Cat. No. 742APCT — Aluminum Point to Copper
Tee Connector - 3 lbs. - 0 oz.

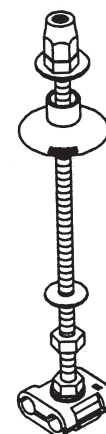
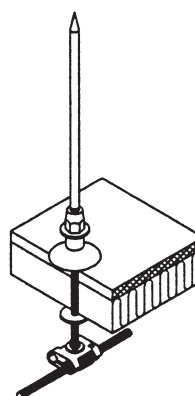
Cat. No. 742APAT — Aluminum Point to Aluminum
Tee Connector - 2 lbs. - 6 oz.



Cat. No. 742CPCD — Copper Point to Copper
Clamp - 2 lbs. - 4 oz.

Cat. No. 742APCD — Aluminum Point to Copper
Clamp - 1 lb. - 13 oz.

Cat. No. 742APAD — Aluminum Point to Aluminum
Clamp - 1 lb. - 11 oz.



Other combination of parts can be made as needed.

Refer to connectors and letter codes as shown on page 62.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

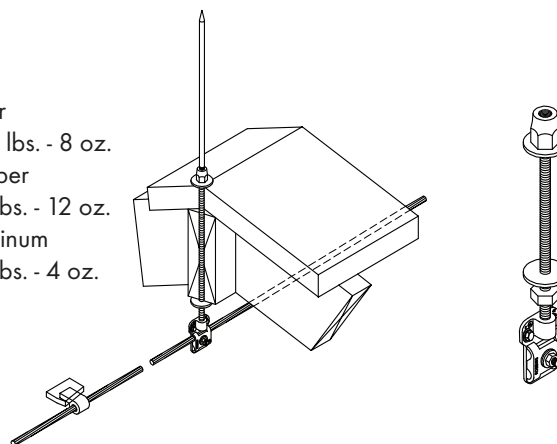


THRU-ROOF POINT ADAPTERS

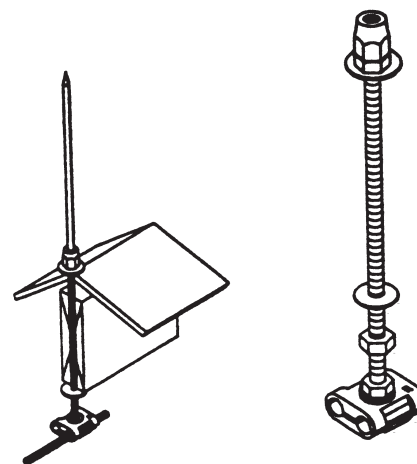


Combination connector used for thru-roof air terminal penetration – draws tight to top and bottom of composition or metal roof surfaces. Neoprene washers are included to provide a moisture seal. Point adapter nut No. 803 or No. A803 at top. Your choice of No. 42AN or No. A42AN tee connector or No. 55D or No. A55D clamp for bottom end (either fits all main cables through 9/16" diameter). For copper-to-copper connection, all components are copper or bronze except nuts and washers which are stainless steel – for copper-to-aluminum or aluminum-to-aluminum connection, the threaded rod, nuts and washers are stainless steel. Threaded rod 1/2" diameter, standard length 24" – other lengths available upon request.

- Cat. No. 745CPCT** – Copper Point to Copper
Tee Connector - 2 lbs. - 8 oz.
- Cat. No. 745APCT** – Aluminum Point to Copper
Tee Connector - 2lbs. - 12 oz.
- Cat. No. 745APAT** – Aluminum Point to Aluminum
Tee Connector - 2lbs. - 4 oz.



- Cat. No. 745CPCD** – Copper Point to Copper
Clamp - 1lb. - 15 oz.
- Cat. No. 745APCD** – Aluminum Point to Copper
Clamp - 1lb. - 11 oz.
- Cat. No. 745APAD** – Aluminum Point to Aluminum
Clamp - 1lb. - 8 oz.



Other combinations of parts can be made as needed.

Refer to connectors and letter codes as shown on page 62.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

THRU-ROOF CABLE CONNECTORS



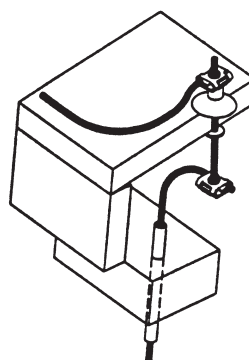
Combination connector for thru-roof cable penetration — draws tight to top and bottom of composition or metal roof surface. Neoprene washers and a cast bronze or aluminum flashing cone provide a moisture seal. Cable clamp No. 55D or No. A55D, lug No. 55B or No. A55B, or tee connector No. 42AN or No. A42AN furnished for either end (any of these connectors fits main sized cables through 9/16" diameter). For copper-to-copper connection, all components are copper or bronze except nuts and washer which are stainless steel — for copper-to-aluminum or aluminum-to-aluminum connection, the threaded rod, nuts and washers are stainless steel. Threaded rod 1/2" diameter, standard length 24" — other lengths available upon request.



Cat. No. 743CDD — Copper Clamp to Copper Clamp - 2 lbs. - 9 oz.

Cat. No. 743ADCD — Aluminum Clamp to Copper Clamp - 1lb. - 15 oz.

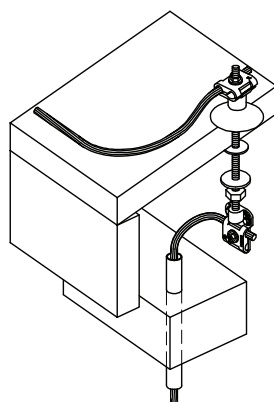
Cat. No. 743ADAD — Aluminum Clamp to Aluminum Clamp - 1lb. - 11 oz.



Cat. No. 743CDCT — Copper Clamp to Copper Tee Connector - 3 lbs. - 5 oz.

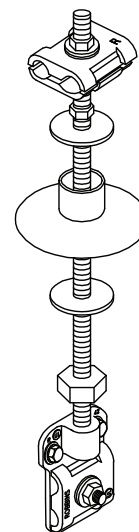
Cat. No. 743ADCT — Aluminum Clamp to Copper Tee Connector - 3 lbs. - 1 oz.

Cat. No. 743ADAT — Aluminum Clamp to Aluminum Tee Connector - 2lbs. - 11 oz.



Other combination of parts
can be made as needed.

Refer to connectors and letter codes
as shown on page 62.



ROBBINS LIGHTNING, INC.

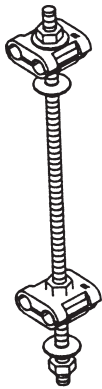
124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



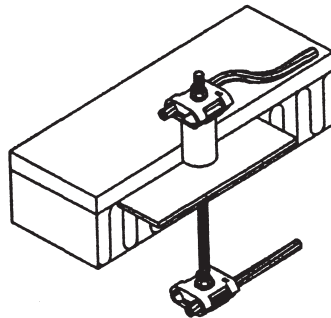
THRU-WALL OR THRU-ROOF CABLE CONNECTORS



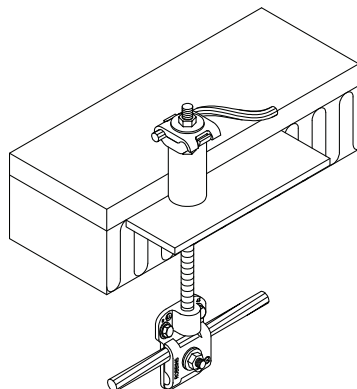
Combination connector for thru-wall or thru-roof penetration giving rigid attachment on both surfaces — assemblies may be used in masonry construction with one end concealed. Neoprene washers are included to provide a moisture seal. Cable clamp No. 55D or No. A55D, lug No. 55B or No. A55B, or tee connector No. 42AN or No. A42AN furnished for either end (any of these connectors fit main sized cables through 9/16" diameter). For copper-to-copper connection, all components are copper or bronze except nuts and washers which are stainless steel — for copper-to-aluminum or aluminum-to-aluminum connection, the threaded rod, nuts and washers are stainless steel. Threaded rod 1/2" diameter, standard length 24" — other lengths available upon request.



- Cat. No. 744CDCD** — Copper Clamp to Copper Clamp - 2 lbs. - 3 oz.
- Cat. No. 744ADCD** — Aluminum Clamp to Copper Clamp - 1lb. - 13 oz.
- Cat. No. 744ADAD** — Aluminum Clamp to Aluminum Clamp - 1lb. - 10 oz.

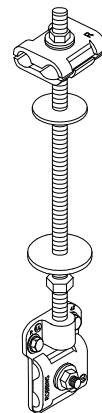


- Cat. No. 744CDCT** — Copper Clamp to Copper Tee Connector - 3 lbs.
- Cat. No. 744ADCT** — Aluminum Clamp to Copper Tee Connector - 3 lbs. - 1 oz.
- Cat. No. 744ADAT** — Aluminum Clamp to Aluminum Tee Connector - 2 lbs. - 11 oz.



Other combination of parts can be made as needed.

Refer to connectors and letter codes as shown on page 62.



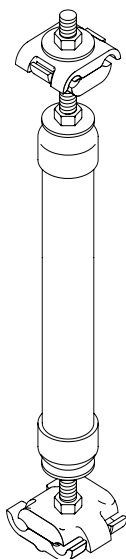
ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

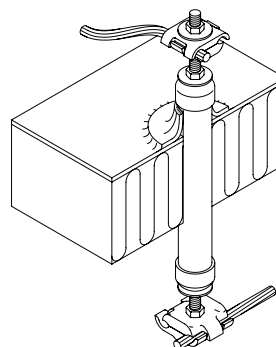
THRU-WALL OR THRU-ROOF CABLE CONNECTORS



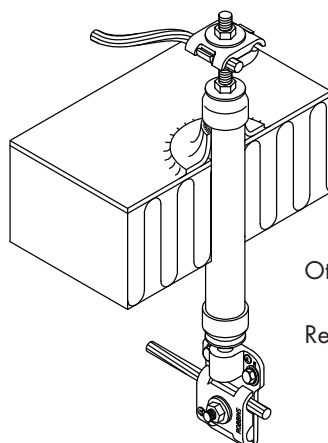
Combination connector for thru-wall or thru-roof penetrations giving rigid attachment on both surfaces — assemblies may be used in masonry construction with one end concealed. PVC sleeve is included to be adhered to roofing membrane to provide a water tight seal. Cable clamp No. 55D or No. A55D, lug No. 55B or No. A55B, or tee connector No. 42AN or No. A42AN furnished for either end (any of these connectors fit main sized cables through 9/16" diameter). For copper-to-copper connections, all components are copper or bronze except nuts and washers, which are stainless steel. For copper-to-aluminum or aluminum-to-aluminum connections, the threaded rod, nuts and washers are stainless steel. Threaded rod 1/2" diameter, standard length 24" — other lengths available upon request.



- Cat. No. 746CDCD** — Copper Clamp to Copper Clamp - 2 lbs. - 8 oz.
- Cat. No. 746ADCD** — Aluminum Clamp to Copper Clamp - 2 lbs. - 3 oz.
- Cat. No. 746ADAD** — Aluminum Clamp to Aluminum Clamp - 1lb. - 15 oz.

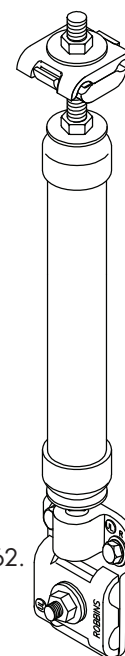


- Cat. No. 746CDCT** — Copper Clamp to Copper Tee Connector - 3 lbs. - 15 oz.
- Cat. No. 746ADCT** — Aluminum Clamp to Copper Tee Connector - 3 lbs. - 14 oz.
- Cat. No. 746ADAT** — Aluminum Clamp to Aluminum Tee Connector - 3 lbs. - 8 oz.



Other combination of parts can be made as needed.

Refer to connectors and letter codes as shown on page 62.



ROBBINS LIGHTNING, INC.

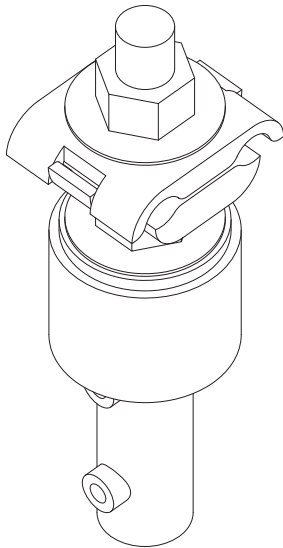
124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



THRU-WALL OR THRU-ROOF CABLE CONNECTORS



Combination connector for thru-wall or thru-roof cable penetration — draws tight to top and bottom of PVC cap to be installed on PVC conduit stubbed through the wall or up through the roof. A neoprene washer is provided to draw tight to top of PVC cap and provides a moisture seal. Cable clamp No. 55D or No. A55D, lug No. 55B or No. A55B, or tee connector No. 42AN or No. A42AN furnished for the top end — straight connector 42 for bottom end to be concealed in 1" PVC — straight connector 42L or A42L for bottom end to be concealed in 1-1/4" PVC. For copper-to-copper connection, all components are copper or bronze except nuts and washers which are stainless steel — for copper-to-aluminum or aluminum-to-aluminum connection, the threaded rod, nuts and washers are stainless steel — threaded rod 1/2" diameter. Overall dimensions - 1.930" x 5.25".



For 1" PVC Conduit

Cat. No. 747CDCS — Copper Clamp to Copper Straight Connector - 14.8 oz.

Cat. No. 747ADCS — Aluminum Clamp to Copper Straight Connector - 11.6 oz.

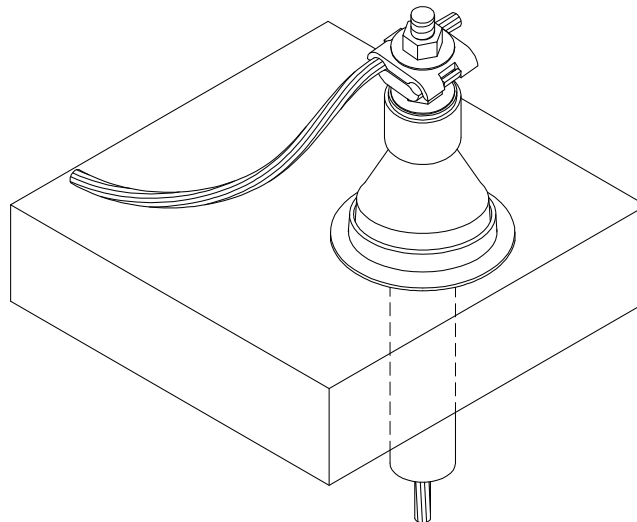
Cat. No. 747ADAS — Aluminum Clamp to Aluminum Straight Connector - 9.2 oz.

For 1-1/4" PVC Conduit

Cat. No. 748CDCS — Copper Clamp to Copper Straight Connector - 15 oz.

Cat. No. 748ADCS — Aluminum Clamp to Copper Straight Connector - 11.8 oz.

Cat. No. 748ADAS — Aluminum Clamp to Aluminum Straight Connector - 9.4 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

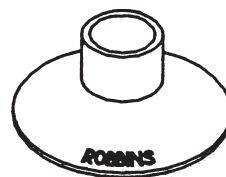


FLASHING CONE

Heavy cast bronze or aluminum flashing cone for use on thru-roof penetrations to provide moisture seal. Overall dimensions - 1-1/4" x 3" diameter.

Cat. No. 100 – Copper - 5 oz.

Cat. No. A100 – Aluminum - 1.4 oz.



FLASHING BOOTS

Flashing boots made of long life, flexible, weatherproof gray EPDM rubber. Corrosion-resistant aluminum base with pleated cone conforms to any roof pitch or configuration.

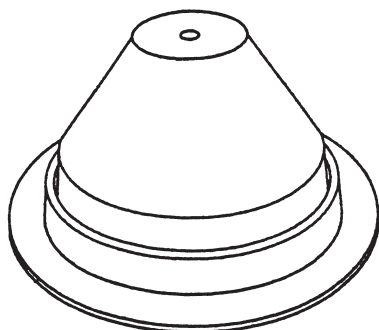
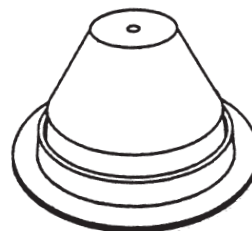


1-3/4" high, 3-1/2" base diameter, for use with No. 34 or No. A34 concealed point assemblies.

Cat. No. 1910 - 1.4 oz.

3" high, 4-3/4" base diameter, for use with assemblies using No. 100 or No. A100 flashing cones.

Cat. No. 3910 - 2.2 oz.



4" high, 7-3/4" base diameter, for use with assemblies using No. 684T or No. 684CT tubular pitch pans.

Cat. No. 9910 - 8 oz.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



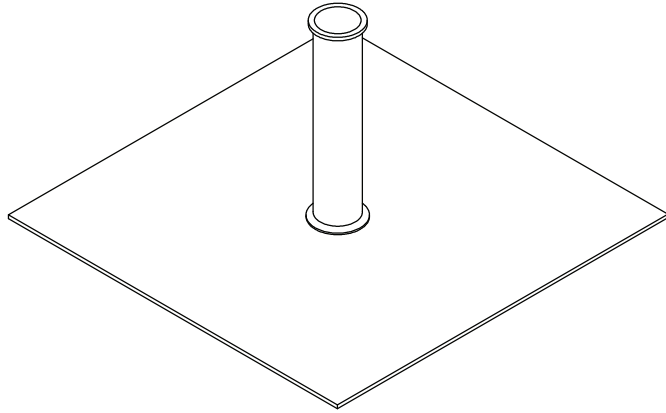
PITCH PANS OR PITCH POCKETS

TUBULAR PITCH PAN

Tubular type pitch pan of galvanized steel or copper — for use with thru-roof cable or rod assemblies — tubular section 3/4" ID for all cables through No. 605 and rods through 5/8" diameter — tube 4" high soldered to 8" square plate. Other sizes available on request.

Cat. No. 684T — Galvanized Steel - 7.8 oz.

Cat. No. 684CT — Copper - 1 lb. - 3 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

EMBEDDED CABLE OUTLET



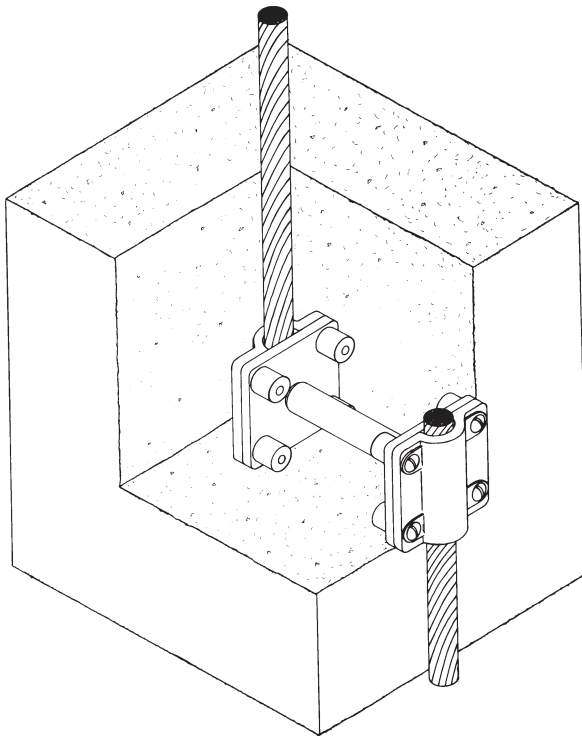
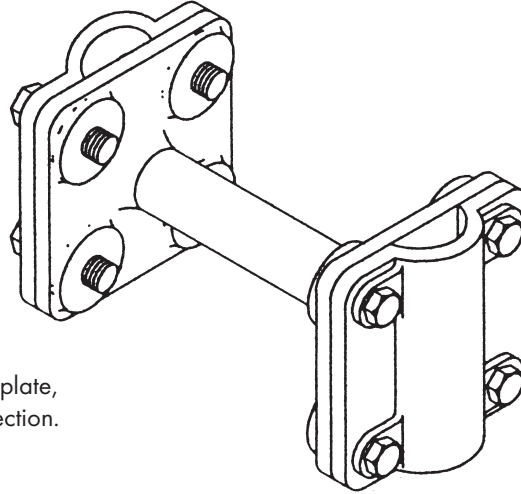
Heavy cast bronze cable outlet for use in poured concrete or pre-cast concrete columns or walls – 2-1/4" contact surface for cable – 3" distance between face of plates – four 1/4" bolts for tension on main sized cables through No. 605. Overall dimensions - 5" x 2-1/4" x 2-1/4".

Not recommended for walls less than 6" thick.

Cat. No. 641—Copper - 1 lb. - 11 oz.

Cat. No. A641 * —Aluminum - 9 oz.

*When used with aluminum exposed cable, this part is provided with one aluminum cover plate, stainless steel bolts and shim for bimetal connection.



Typical use in
concrete column

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



EMBEDDED TERMINAL OUTLET



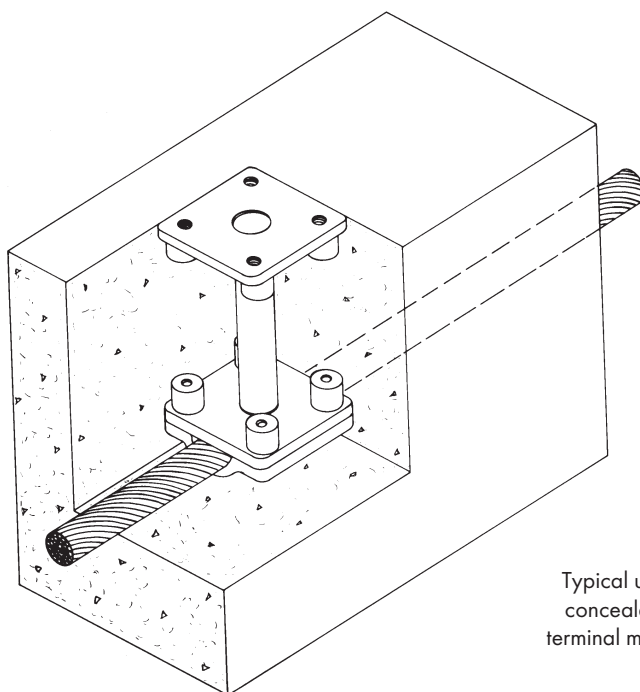
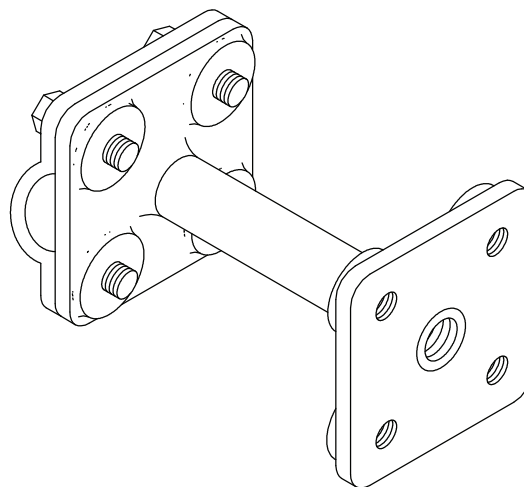
Heavy cast bronze terminal outlet for use in concrete wall or floor – 2-1/4" contact surface for main sized cables through No. 605 – surface plate will accept 1/4" or 3/8" bolts with thread depth of 1/2" – shipped with four bolts 3/4" long. Overall dimensions - 2-1/4" x 2-1/4" x 4-1/2".

Cat. No. 643-3 – Copper – 3/8" threaded - 1 lb. - 8 oz.

Cat. No. 643-4 – Copper – 1/4" threaded - 1 lb. - 8 oz.

Cat. No. A643-4* – Aluminum – 1/4" threaded - 8.8 oz.

*When used with aluminum air terminal mounting, this part is provided with stainless steel bolts and shim for bimetal connection.



Typical use for
concealed air
terminal mounting

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CABLE SPLICERS

ALL ITEMS

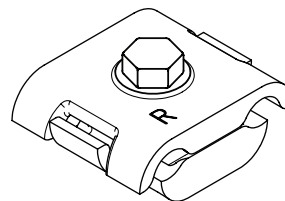
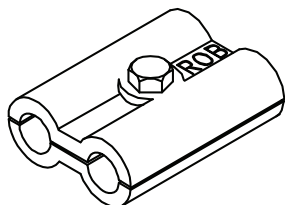


PARALLEL CABLE SPLICERS

Heavy cast bronze or aluminum cable splicer with one 1/4" bolt for tension on cable – for straight cable run splice or tee splice by bending cable. For main sized cables. Overall dimensions - 2" x 1-1/2".

Cat. No. 52AH – Copper - 7.4 oz.

Cat. No. A52AH – Aluminum - 3.5 oz.



Heavy cast bronze or aluminum cable splicer – one bolt tension – for any combination of main sized cables – 1-1/2" cable contact. Overall dimensions - 1-1/2" x 1-3/4"

Cat. No. 52S – Copper - 5 oz.

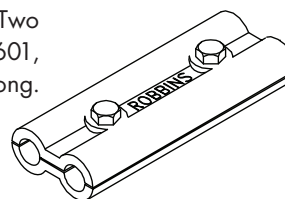
Cat. No. A52S – Aluminum - 2.1 oz.

Heavy cast bronze or aluminum cable splicer with two 1/4" bolts for tension on cable – for straight cable run splice or tee splice by bending cable. Two sizes available - No. 52 for main sized copper cables only through No. 601, 3" long - No. 52A and No. A52A for main sized aluminum cables 4" long. Overall dimensions - 4" x 1-1/2"

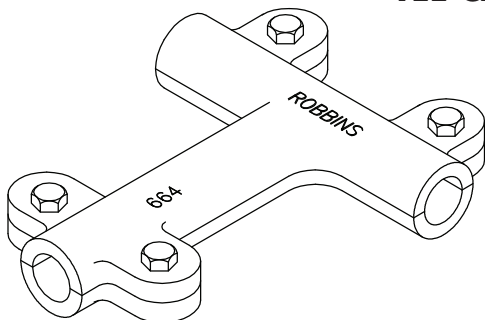
Cat. No. 52 – Copper - 8.6 oz.

Cat. No. 52A – Copper - 12.6 oz.

Cat. No. A52A – Aluminum - 4.2 oz.



TEE CABLE SPLICERS



Heavy cast bronze or aluminum cable splicer with four 1/4" bolts for tension on cable – 3" cable contact each direction – for main sized cables through No. 605. Overall dimensions - 3" x 4-3/4".

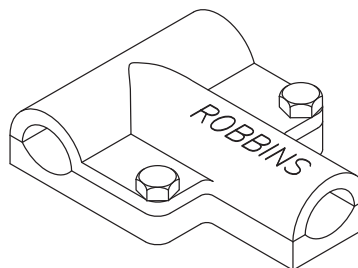
Cat. No. 664 – Copper - 11 oz.

Cat. No. A664 – Aluminum - 4 oz.

Heavy cast bronze or aluminum cable splicer with two 1/4" bolts for tension on cable – 1-3/4" cable contact each direction – for main sized cables through No. 605. Overall dimensions - 1-3/4" x 2-3/8".

Cat. No. 664A – Copper - 6.2 oz.

Cat. No. A664A – Aluminum - 2.2 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CABLE SPLICERS

ALL ITEMS



COMBINATION SPLICERS

Heavy cast bronze or aluminum splicer for main cable through No. 605 to secondary wire or cable through 1/4" diameter – 4" long – two bolt tension on cable. Overall dimensions - 4" x 1-1/4".

Cat. No. 53 – Copper - 10.6 oz.

Cat. No. A53 – Aluminum Class I - 3.7 oz.

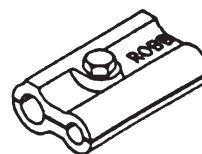
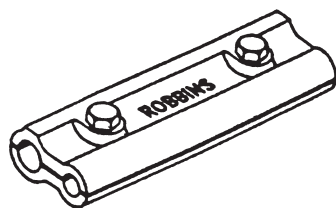
Cat. No. A53AL – Aluminum Class II - 4.2 oz.

Heavy cast bronze or aluminum splicer for main cable through No. 605 to secondary wire or cable through 1/4" diameter – 2" long – one bolt tension on cable. Overall dimensions - 2" x 1-1/4".

Cat. No. 53A – Copper - 5.3 oz.

Cat. No. A53A – Aluminum Class I - 1.8 oz.

Cat. No. A53ALH – Aluminum Class II - 1.8 oz.



SECONDARY WIRE SPLICERS

Heavy cast bronze or aluminum splicer for secondary wires and miniature cables through 1/4" diameter – 4" long – two bolt tension on cable. Overall dimensions - 4" x 1-1/4".

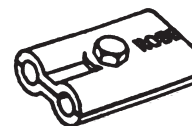
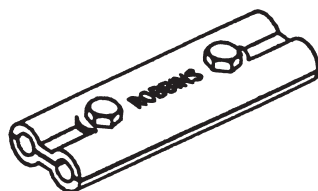
Cat. No. 58 – Copper - 7.7 oz.

Cat. No. A58 – Aluminum - 2.9 oz.

Heavy cast bronze or aluminum splicer for secondary wires and miniature cables through 1/4" diameter – 2" long – one bolt tension on cable. Overall dimensions - 2" x 1-1/4".

Cat. No. 58A – Copper - 3.8 oz.

Cat. No. A58A – Aluminum - 1.4 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CABLE TO ROD OR PIPE CLAMPS



Heavy cast bronze or aluminum bolt tension clamp for connecting cable to rod, pipe or tube. Cable and rod contact 4" long – for main sized cables through No. 605 – pipe sizes from 1/4" OD to 1-1/4" OD. May also be used as ground rod clamps. Overall dimensions - 4" x 1-1/2".

Copper

Cat. No. 59 – for 1/4" rod - 11 oz.

Cat. No. 59A – for 3/8" rod - 13 oz.

Cat. No. 59B – for 1/2" rod - 11.7 oz.

Cat. No. 59C – for 5/8" rod - 13.3 oz.

Cat. No. 59D – for 3/4" rod - 13.3 oz.

Cat. No. 59E – for 1" rod - 1 lb. - 13 oz.

Cat. No. 59F – for 1-1/4" rod - 2 lbs.

Cat. No. 60 – for 3/8" OD pipe - 13 oz.

Cat. No. 60A – for 1/2" OD pipe - 11.7 oz.

Cat. No. 60B – for 3/4" OD pipe - 13.3 oz.

Cat. No. 60C – for 1" OD pipe - 1 lb. - 13 oz.

Cat. No. 60D – for 1-1/4" OD pipe - 2 lbs.

Aluminum

Cat. No. A59 – for 1/4" rod - 3.5 oz.

Cat. No. A59A – for 3/8" rod - 3.8 oz.

Cat. No. A59B – for 1/2" rod - 4.2 oz.

Cat. No. A59C – for 5/8" rod - 4.5 oz.

Cat. No. A59D – for 3/4" rod - 4.3 oz.

Cat. No. A59E – for 1" rod - 4.6 oz.

Cat. No. A59F – for 1-1/4" rod - 5 oz.

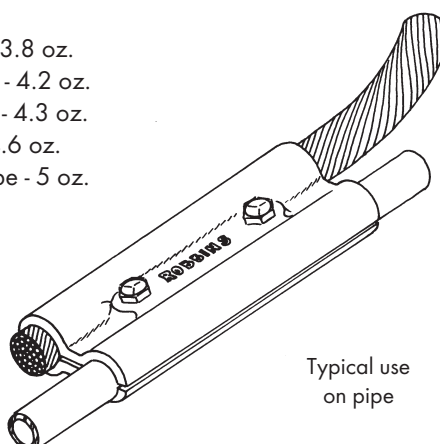
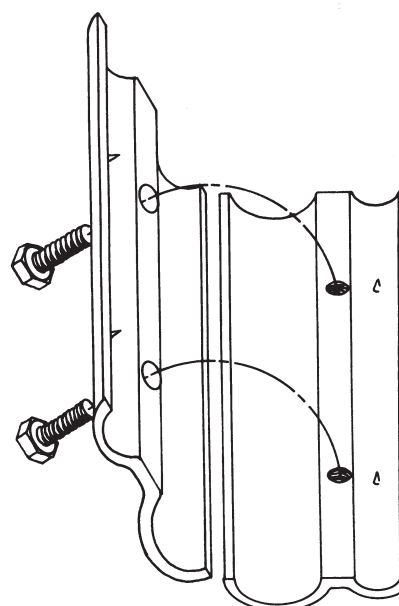
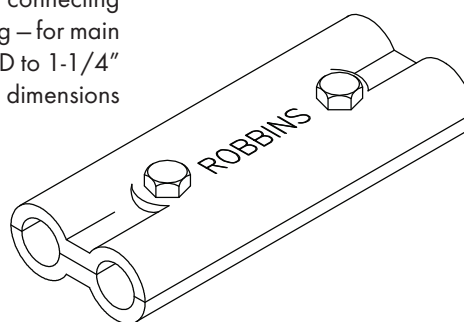
Cat. No. A60 – for 3/8" OD pipe - 3.8 oz.

Cat. No. A60A – for 1/2" OD pipe - 4.2 oz.

Cat. No. A60B – for 3/4" OD pipe - 4.3 oz.

Cat. No. A60C – for 1" OD pipe - 4.6 oz.

Cat. No. A60D – for 1-1/4" OD pipe - 5 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



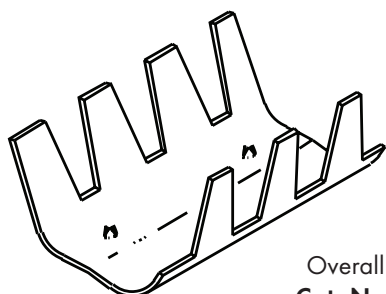
ECONOMY CABLE SPLICERS

ALL ITEMS



FOR CLASS I
STRUCTURES
ONLY

Stamped copper or aluminum cable splicers made from highest quality sheet metal – copper 0.064" thick, aluminum 0.100" thick. For main sized cables.



DOUBLE SPLICER

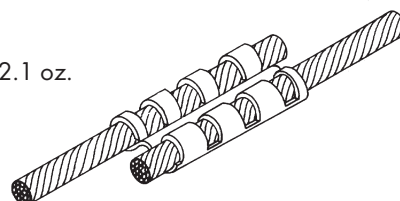
Typical use on
parallel splice

Overall dimensions - 2-1/2" x 1-1/4".

Cat. No. 66 – Copper – 2.1 oz.

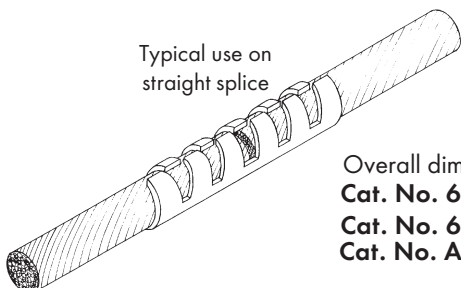
Cat. No. 66T – Copper - Tinned Copper – 2.1 oz.

Cat. No. A66 – Aluminum – 0.8 oz.



STRAIGHT SPLICER

Typical use on
straight splice

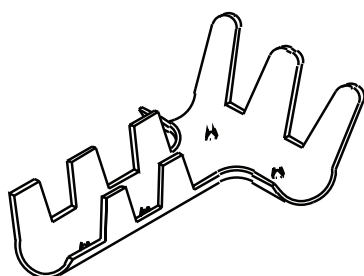
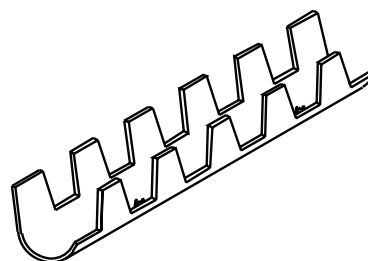


Overall dimensions - 3-3/4" x 1/2"

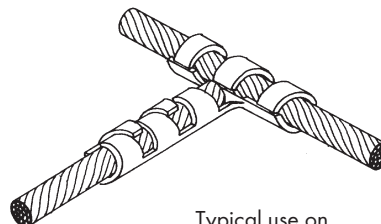
Cat. No. 65 – Copper – 1.6 oz.

Cat. No. 65T – Tinned Copper – 1.6 oz.

Cat. No. A65 – Aluminum – 0.6 oz.



TEE SPLICER



Typical use on
tee splice

Overall dimensions - 2-1/2" x 2"

Cat. No. 64 – Copper – 1.8 oz.

Cat. No. 64T – Tinned Copper – 1.8 oz.

Cat. No. A64 – Aluminum – 0.8 oz.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



UNIVERSAL CABLE SPLICER

ALL ITEMS



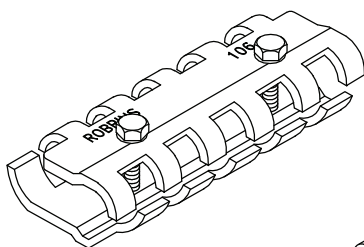
Heavy cast bronze or aluminum universal cable splicer with $5/16$ " diameter bolt for tension – for use with all combinations of cable or wire from $1/8$ " to $3/4$ " diameter. May also be used for bonding of reinforcing rod. Available in 4" contact length (No. 68 and No. A68) or 2" length (No. 68A or No. A68A). Overall dimensions - 4" x 2" or 2" x 2".

Cat. No. 68 – Copper - 11 oz.

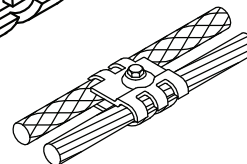
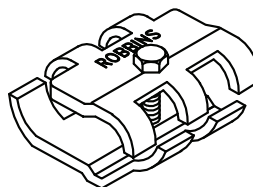
Cat. No. A68 – Aluminum - 4.8 oz.

Cat. No. 68A – Copper - 5.4 oz.

Cat. No. A68A – Aluminum - 2.4 oz.



Typical use on large to small cable splice



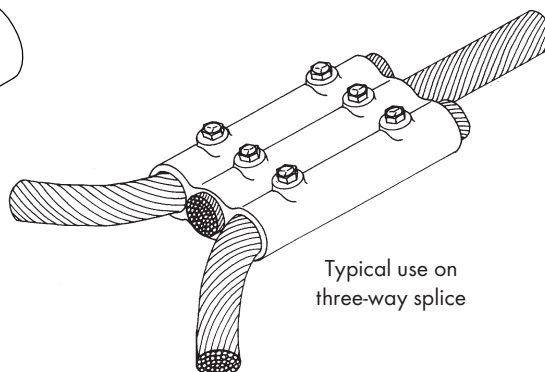
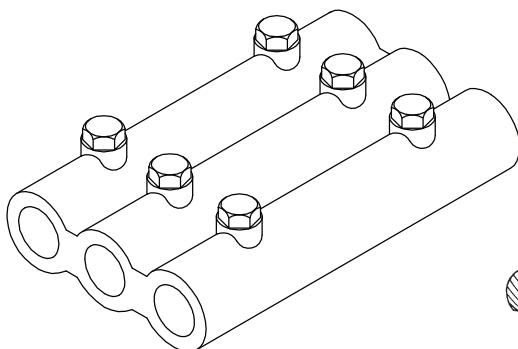
Typical bond to reinforcing rod

THREE WAY SPLICER

Heavy cast bronze or aluminum splicer for three-way cable splice – two bolt tension on each cable – 4" contact length – for main sized cables No. 1 through No. 605. Overall dimensions - 4" x 2-1/2".

Cat. No. 61 – Copper - 1 lb. - 4 oz.

Cat. No. A61 – Aluminum - 7.4 oz.



Typical use on three-way splice

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CABLE SPLICERS

ALL ITEMS

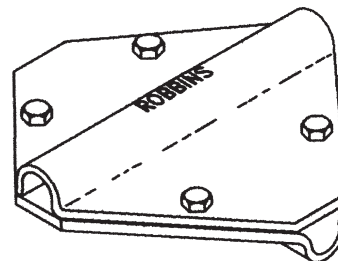


CROSS RUN CABLE SPLICERS

Heavy cast bronze or aluminum cable splicer with four 1/4" bolts for tension on cables – used when two cables cross in continuing runs – for main sized copper or aluminum cables through 1/2" diameter, 4" contact both cables. Overall dimensions - 3-1/2" x 3-1/2".

Cat. No. 635 – Copper - 1 lb. - 1 oz.

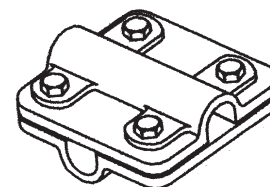
Cat. No. A635 – Aluminum - 5.6 oz.



Heavy cast bronze or aluminum cable splicer with four bolt tension on cables – for use when two cables cross in continuing runs – for main sized cables through 1/2" diameter – 2-1/4" contact on both cables.

Cat. No. 635A – Copper - 12.6 oz.

Cat. No. A635A – Aluminum - 3.8 oz.

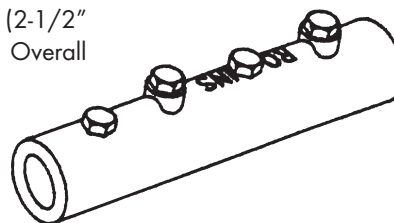


STRAIGHT SPLICER

Heavy cast bronze or aluminum cable splicer for straight run – two 1/4" bolts for tension on each cable end – 5" total length (2-1/2" contact each cable) – for all main sized cables through No. 605. Overall dimensions - 5" x 1" diameter.

Cat. No. 65A – Copper - 11.2 oz.

Cat. No. A65A – Aluminum - 3.8 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



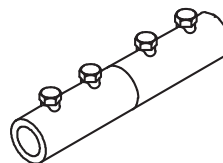
BIMETALLIC CONNECTORS



STRAIGHT BIMETALLIC CONNECTOR

Cast combination bronze and aluminum connector for making transition from copper cable to aluminum cable. Molded and cast together to exclude moisture from joint. For use with main sized copper cable through No. 605 and main sized aluminum cable through No. A604. Overall dimensions - 3" x 1-1/2".

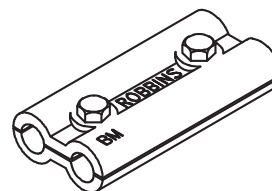
Cat. No. A341-BM - 7.4 oz.



PARALLEL BIMETALLIC CONNECTORS

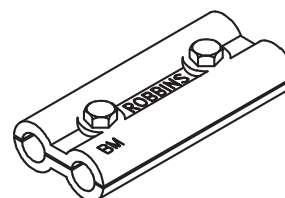
Heavy cast cadmium plated bronze cable splicer - two bolt tension - for main sized cables through No. 601. Overall dimensions - 3" x 1-1/2".

Cat. No. 52-BM - 8.6 oz.



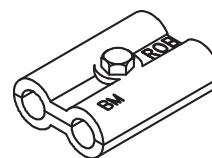
Heavy cast cadmium plated bronze cable splicer - two bolt tension - for main sized cables No. 601 through No. 605. Overall dimensions - 4" x 1-1/2".

Cat. No. 52A-BM - 12.6 oz.



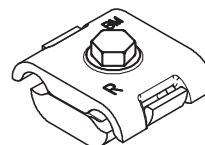
Heavy cast cadmium plated bronze cable splicer - one bolt tension - for main sized cables No. 601 through No. 605. Overall dimensions - 2" x 1-1/2".

Cat. No. 52AH-BM - 6.3 oz.



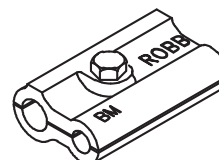
Heavy cast cadmium plated bronze cable splicer - one bolt tension - for any combination of main sized cables. Overall dimensions - 1-1/2" x 1-3/4".

Cat. No. 52S-BM - 5 oz.



Heavy cast cadmium plated bronze cable splicer - one bolt tension - for main sized cables through No. 605 to secondary wire or cable. Overall dimensions - 2" x 1-1/2".

Cat. No. 53A-BM - 5.3 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



BONDING LUGS

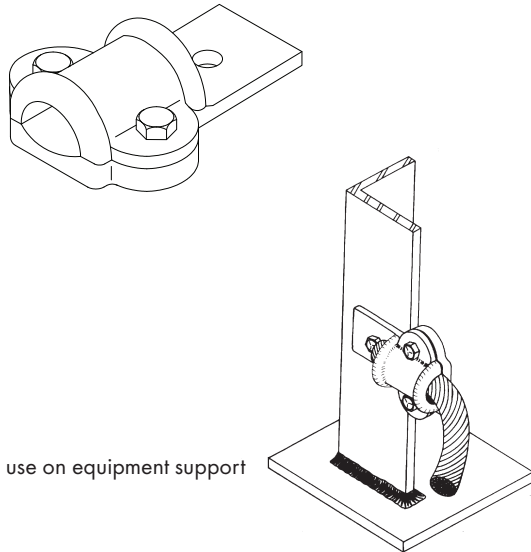
Heavy cast bronze or aluminum bonding lug with 3 square inches of surface contact on flat metal – cable contact 1-1/2" under bolt tension – anchor bolt hole for 3/8" diameter bolt – available with hole for 1/2" bolt on special request – fits all main sized cables through No. 605. May be used for extra cable runs from a thru-wall or thru-roof connector on Class I or Class II systems. Overall dimensions - 2-1/4" x 2-3/4".

Cat. No. 55B – Copper - 8.2 oz.

Cat. No. A55B – Aluminum - 2.6 oz.



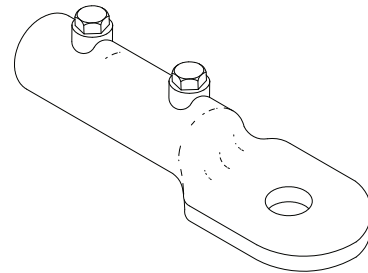
Typical use on equipment support



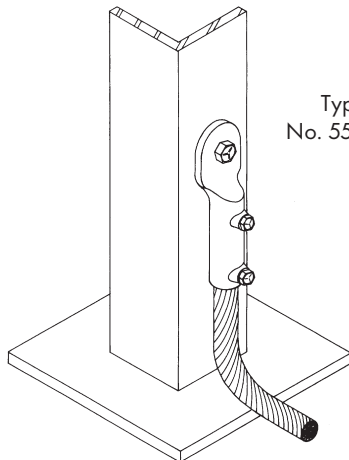
Heavy cast bronze or aluminum bonding lug for flat metal surface – cable contact over 2" long with two 1/4" bolt pressure on cable – for use with main sized cables through No. 605 with hole for 3/8" bolt. Available with hole for 1/2" bolt on special request. Overall dimensions 4" x 1-1/4".

Cat. No. 55 – Copper - 5.8 oz.

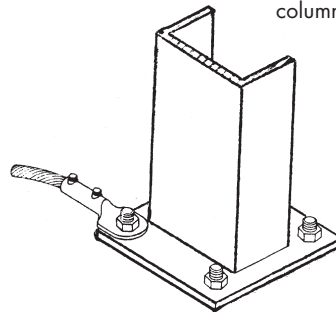
Cat. No. A55 – Aluminum - 2.1 oz.



Typical use of
No. 55 on angle iron



Typical use of No. 55 on
column anchor bolt



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



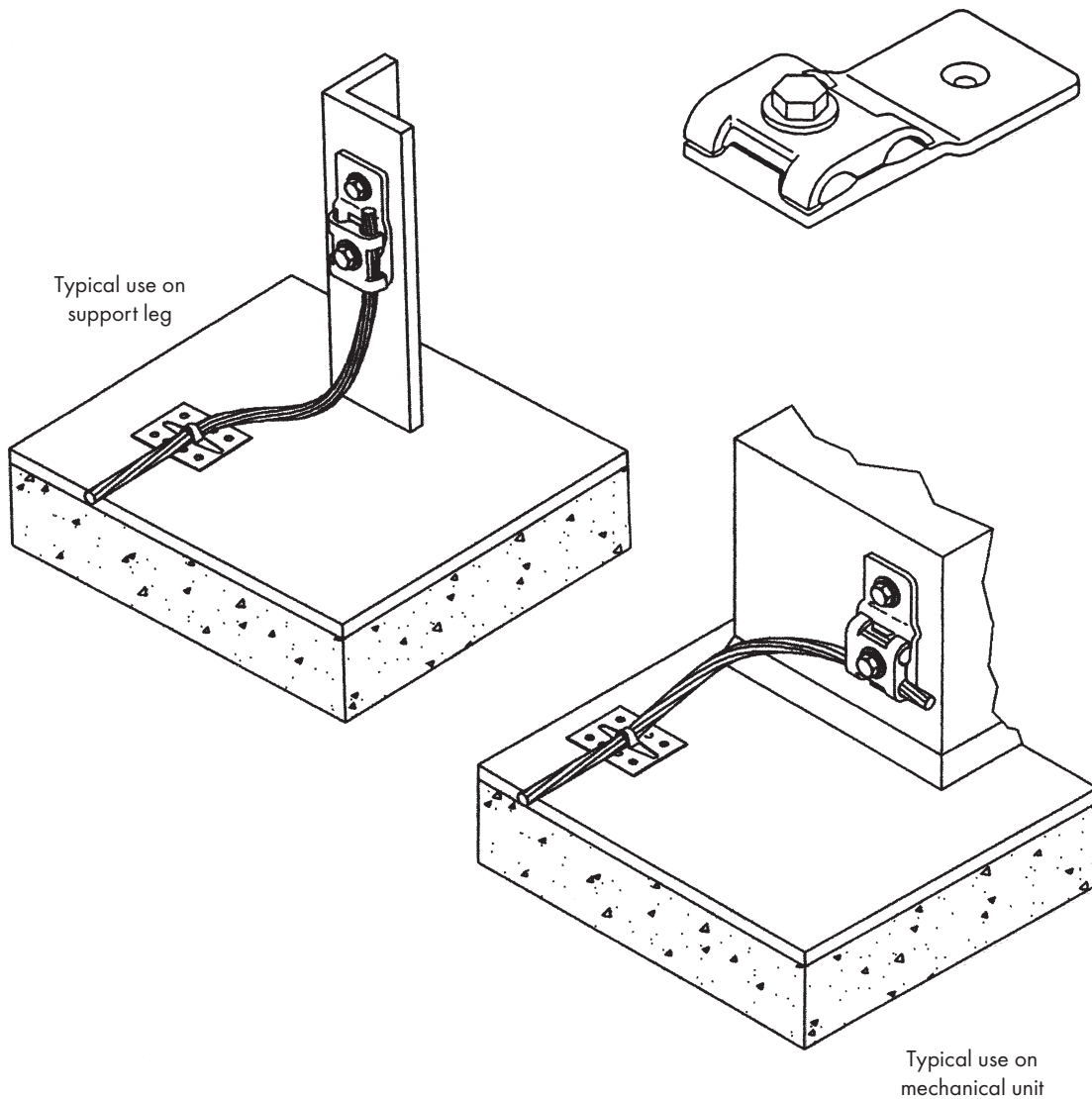
BONDING LUG



Heavy cast bronze or aluminum bonding lug with 3 square inches of surface contact on flat metal – two-way cable contact, 1-1/2", under one-bolt tension – anchor bolt hole for 3/8" diameter bolt, available with hole for 1/2" bolt on special request. Fits all main sized cables through No. 605. Overall dimensions - 1-1/2" x 3-1/2".

Cat. No. 57 – Copper - 9.6 oz.

Cat. No. A57 – Aluminum - 3.4 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



BONDING LUG



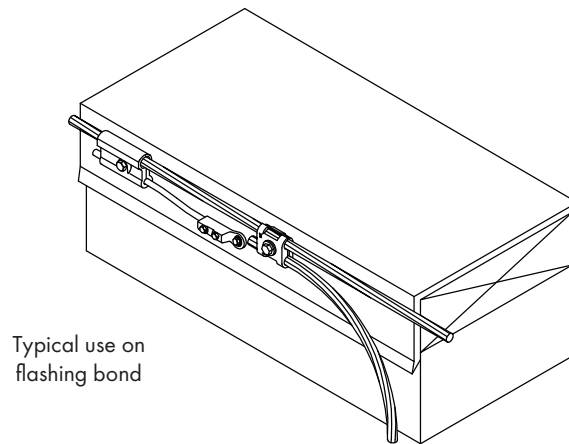
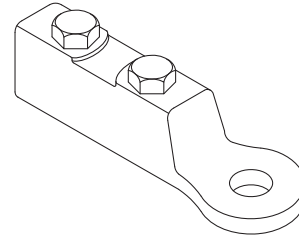
MINIATURE BONDING LUG (HEAVY DUTY)

Heavy cast copper or aluminum bonding lug for flat metal surface — 1-1/2 square inch contact surface — cable contact 1-1/4" long with two 1/4" bolt pressure on cable — will take all secondary cables, wires and miniature cables through 1/4" diameter — 1/4" bolt hole in lug end. Overall dimensions - 2-3/4" x 3/4".

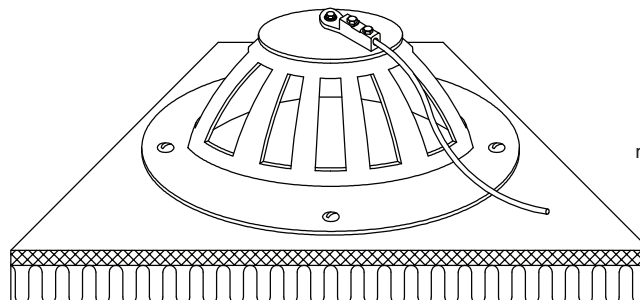
Cat. No. 655 — Copper - 3.2 oz.

Cat. No. 655BM — Bimetallic - 3.2 oz.

Cat. No. A655 — Aluminum - 1.2 oz.



Typical use on
flashing bond



Typical use on
roof drain bond



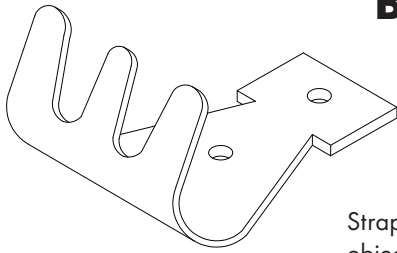
ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

BONDING PLATE



FOR CLASS I
STRUCTURES
ONLY

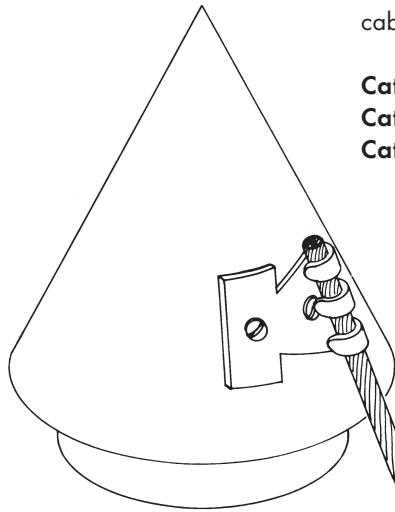


Strap copper, tinned copper or aluminum bonding plate for small metal objects, flat or curved, requiring 3 square inches of contact surface—cable contact 2-1/2" long crimp type—two holes for metal screws or bolts with nuts—copper 0.064" thick—aluminum 0.08" thick. For all main sized cables. Overall dimensions - 2-1/4" x 2-3/4".

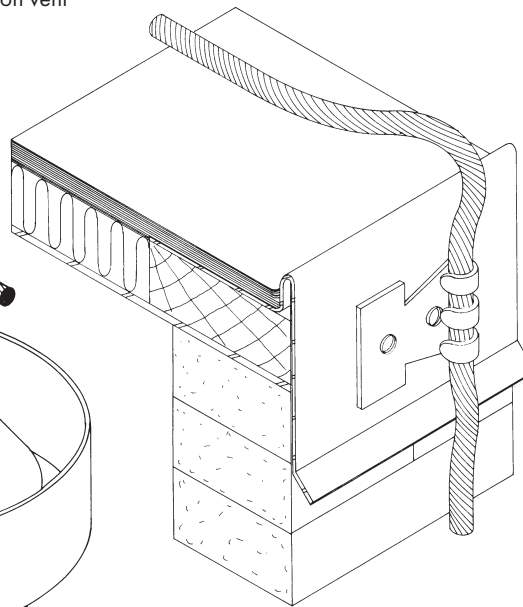
Cat. No. 56—Copper - 2.1 oz.

Cat. No. 56T—Tinned Copper - 2.1 oz.

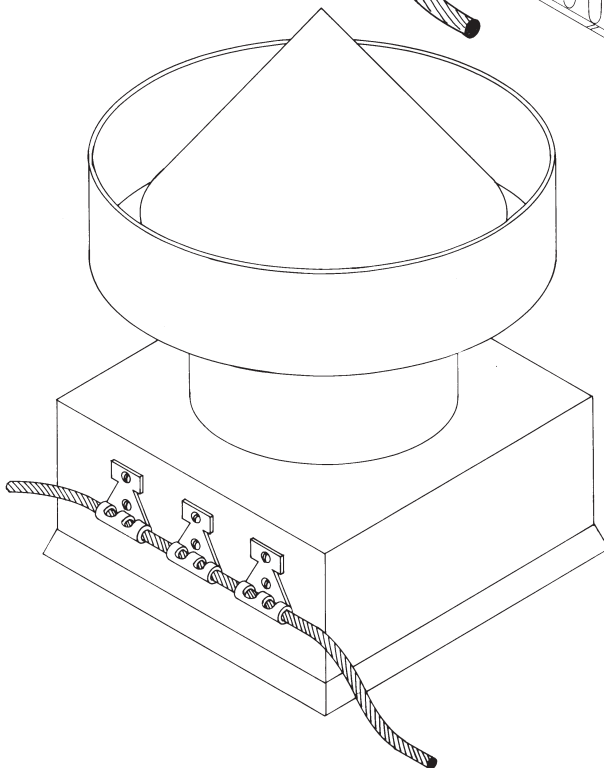
Cat. No. A56—Aluminum - 1 oz.



Typical use on
insulation vent



Typical use on metal vent
with continuing cable run

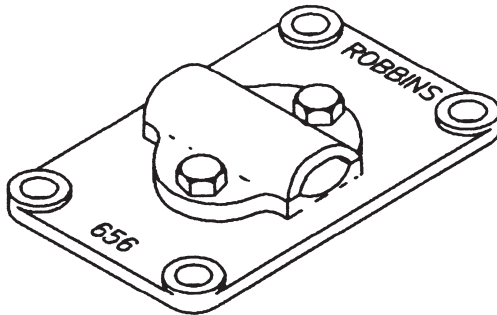


ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



BONDING PLATE



Heavy cast bronze or aluminum metal bonding plate – over 8 square inches of contact surface – 1-1/2" cable contact. May be fastened to metal surface with bolts and nuts, "C" clamps or may be brazed. For main sized cables through No. 605. Overall dimensions - 2-1/4" x 4".

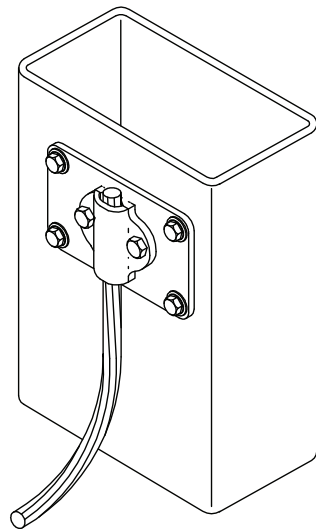
Cat. No. 656 – Copper - 10.2 oz.

Cat. No. A656 – Aluminum - 3.4 oz.

NOTE: Also available with 16 square inches of contact surface. Overall dimensions - 4" x 4"

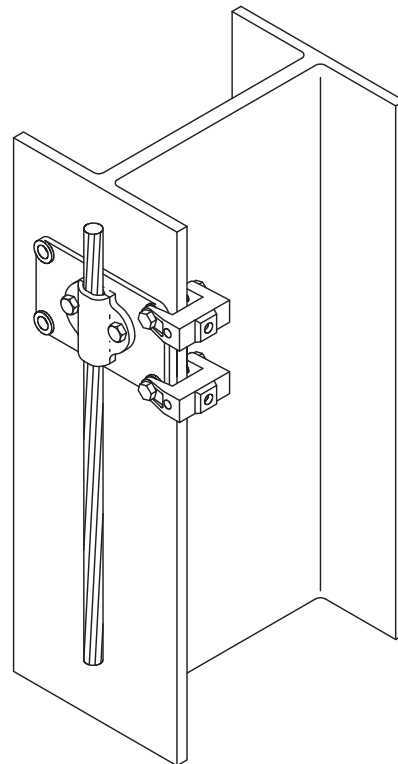
Cat. No. 656-16 – Copper - 15 oz.

Cat. No. A656-16 – Aluminum - 6.6 oz.



Typical use
on channel iron

Typical use with
"C" clamps on column

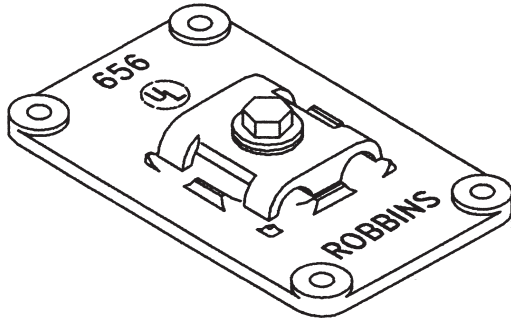


ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



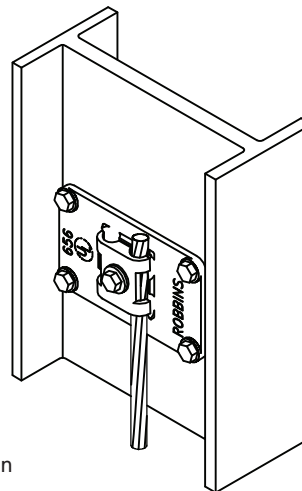
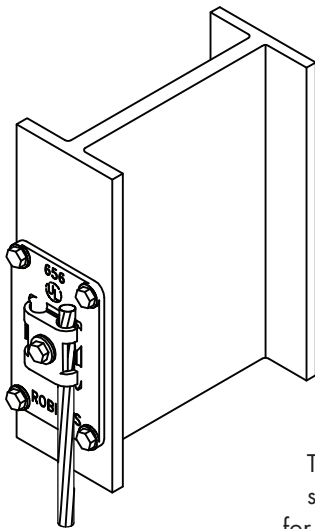
BONDING PLATE



Heavy cast bronze or aluminum metal bonding plate – over 8 square inches of contact surface and 1-1/2" cable contact. Cap may be rotated for alternate cable position. May be fastened to metal surface with bolts and nuts or may be brazed. For main sized cables through No. 605. Overall dimensions - 2-1/4" x 4".

Cat. No. 656N – Copper - 11.4 oz.

Cat. No. A656N – Aluminum - 3.8 oz.



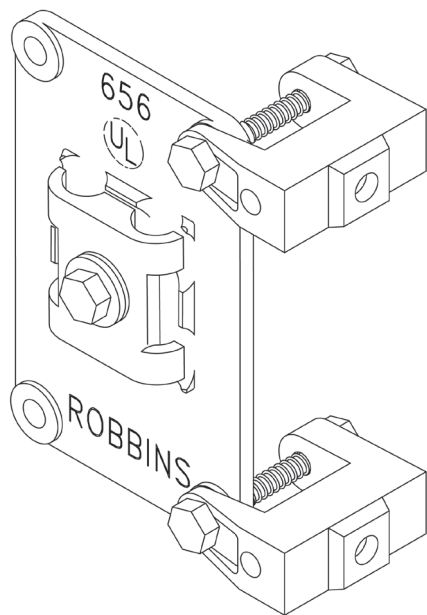
Typical use on steel column
showing both cap positions
for standard and side run cable.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



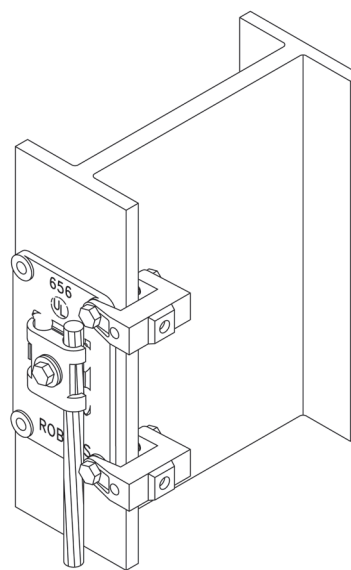
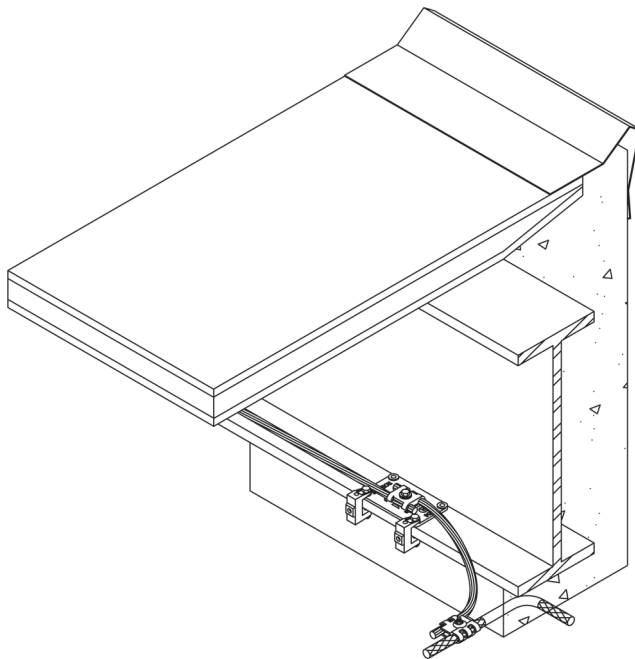
BONDING PLATE



Heavy cast bronze or aluminum metal bonding plate – over 8 square inches of contact surface and 1-1/2" cable contact. Cap may be rotated for alternate cable position. Provided with 2 cast, "C" clamps to fasten to steel surface. For main sized cables through No. 605. Overall dimensions - 2-1/4" x 4".

Cat. No. 656NC – Copper - 1 lb. - 1.6 oz.

Cat. No. A656NC – Aluminum - 10.4 oz.



Typical use on steel column showing both cap positions.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

BONDING PLATE



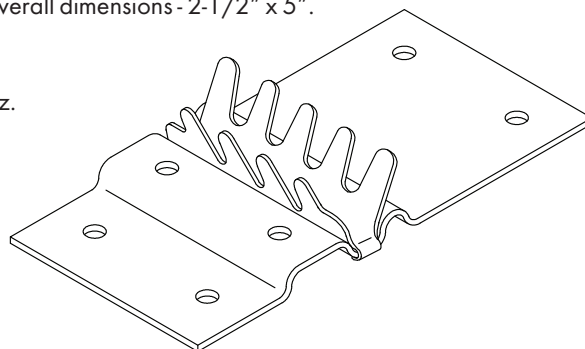
FOR CLASS I
STRUCTURES
ONLY

Stamped copper, tinned copper, or aluminum bonding plate for metal surface, flat or curved – over 8 square inches of contact on surface and 2-1/2" long crimp type contact on cable – four mounting holes for metal screws or bolts with nuts – copper 0.064" thick – aluminum 0.080" thick. For main sized cables. Overall dimensions - 2-1/2" x 5".

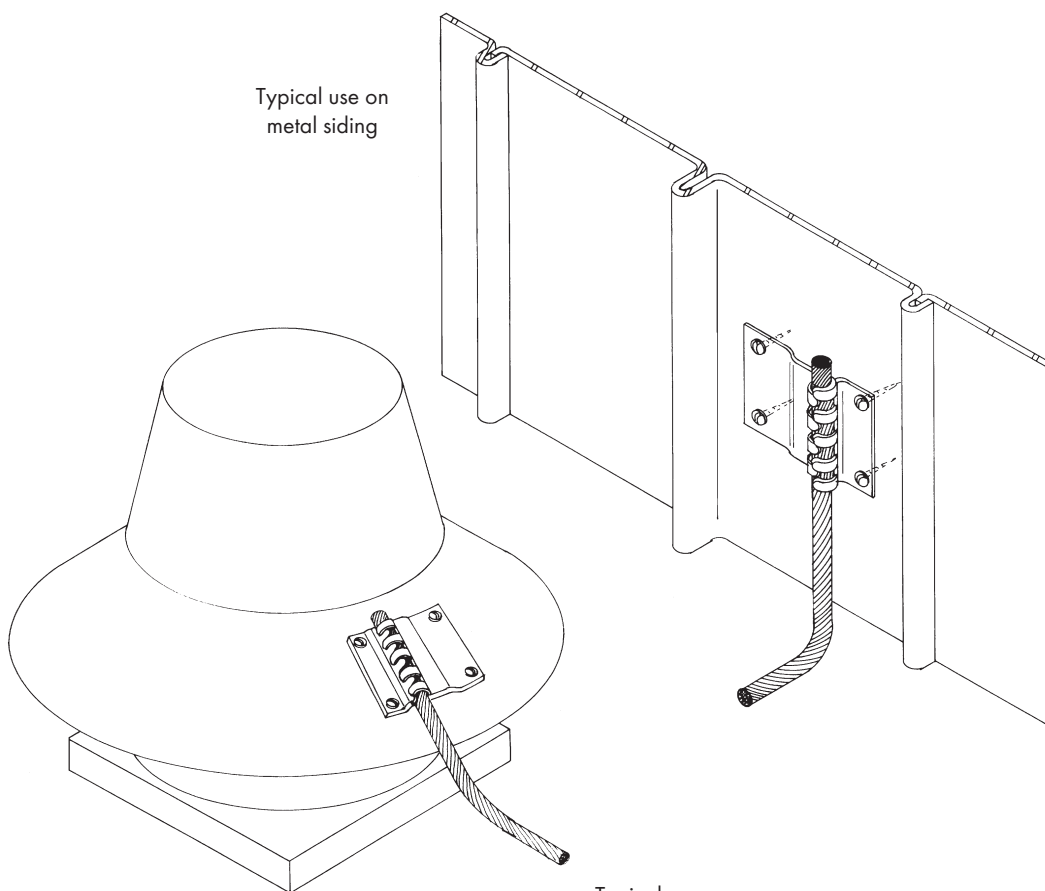
Cat. No. 56B – Copper - 6 oz.

Cat. No. 56BT – Tinned Copper - 6 oz.

Cat. No. A56B – Aluminum - 2.9 oz.



Typical use on
metal siding



Typical use on
exhaust fan

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



BONDING PLATE

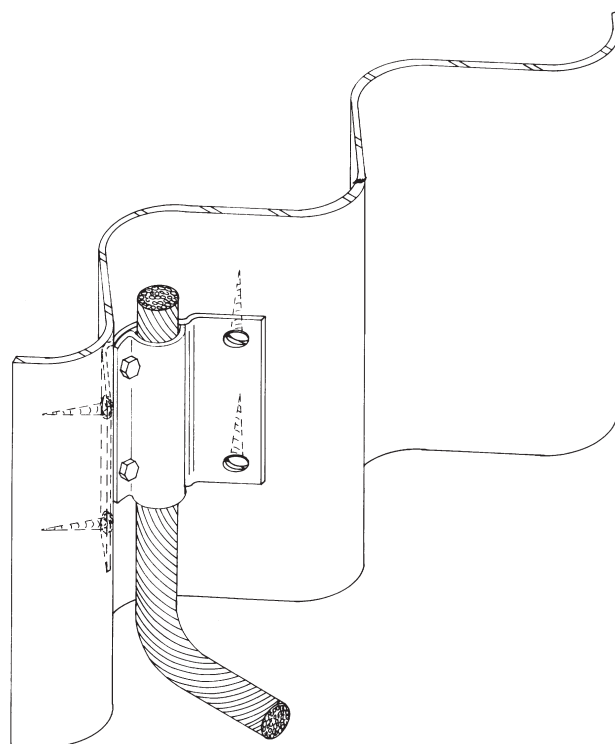
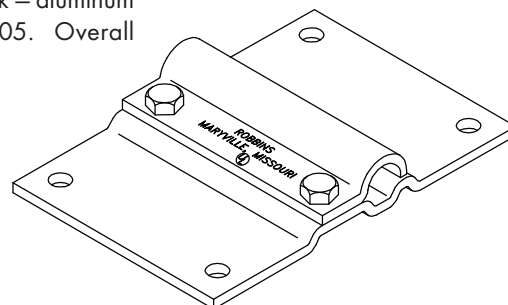


Strap copper, tinned copper, or aluminum bonding plate for metal surface, flat or curved – over 8 square inches of contact on surface and 2-1/2" long contact under bolt tension on cable – four mounting holes for metal screws or bolts with nuts – copper 0.064" thick – aluminum 0.080" thick – for main sized cables through No. 605. Overall dimensions - 2-1/2" x 5".

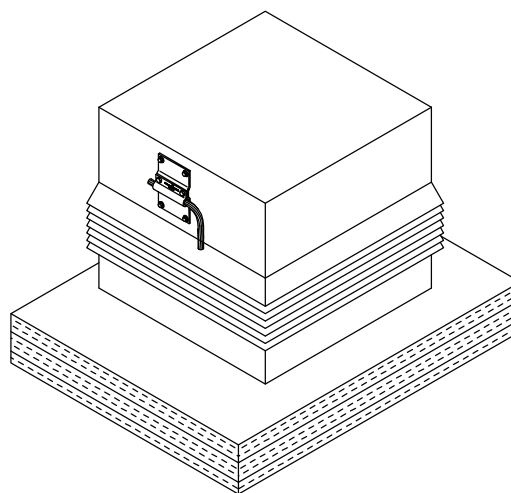
Cat. No. 56C – Copper - 6.1 oz.

Cat. No. 56CT – Tinned Copper - 6.1 oz.

Cat. No. A56C – Aluminum - 2.9 oz.



Typical use on
metal siding



Typical use on
exhaust fan



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

PIPE BONDING CLAMP



Adjustable pipe bonding clamp of tinned copper or aluminum strap – 2-1/2" wide for full contact along axis of pipe – 2-1/2" cable contact. For all main sized cables through No. 605. Shipped flat, to be formed at the jobsite for exact pipe size.

Copper

Cat. No. 62 – For 1" through 1-1/2" OD pipe - 14.6 oz.

Cat. No. 62-3 – For 1-1/2" through 3" OD pipe - 1lb. - 1 oz.

Cat. No. 62-4 – For 3" through 4" OD pipe - 1lb. - 4 oz.

Cat. No. 62-6 – For 4" through 6" OD pipe - 1lb. - 7 oz.

Cat. No. 62-10 – For 8" through 10" OD pipe - 1lb. - 13 oz.

Aluminum

Cat. No. A62 – For 1" through 1-1/2" OD pipe - 7.4 oz.

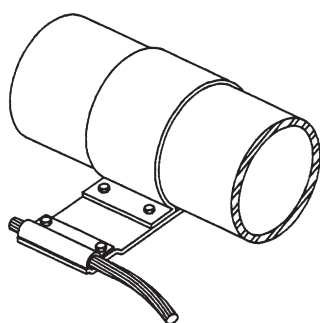
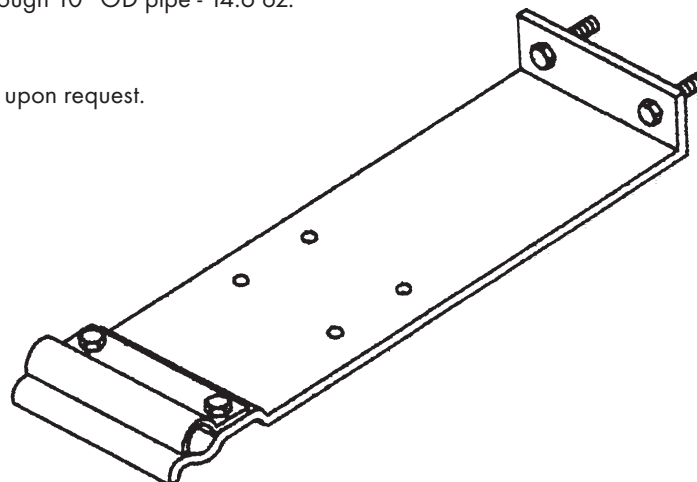
Cat. No. A62-3 – For 1-1/2" through 3" OD pipe - 8.8 oz.

Cat. No. A62-4 – For 3" through 4" OD pipe - 10 oz.

Cat. No. A62-6 – For 4" through 6" OD pipe - 12.6 oz.

Cat. No. A62-10 – For 8" through 10" OD pipe - 14.6 oz.

Special size are also available upon request.



Typical use on
metal pipe

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

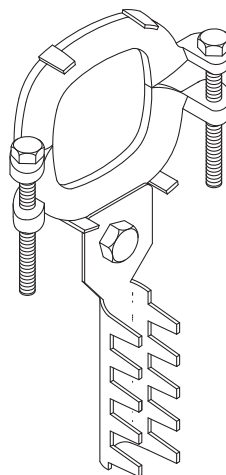


BONDING CLAMP

SILL COCK CLAMP

Cast bronze sill cock grounding clamp fits most standard flanges – adjusts with two 1/4" screws – cable lug of stamped copper, cadmium plated, for use with copper or aluminum cables – 2 - 1/2" cable contact – tabs must be hammered over flange for positive contact – for main sized cables through No. 605. Class I only.

Cat. No. 63 – Copper - 5.6 oz.



PIPE BONDING STRAP

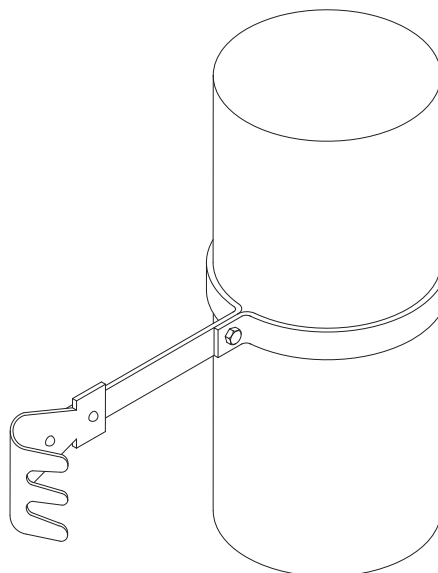
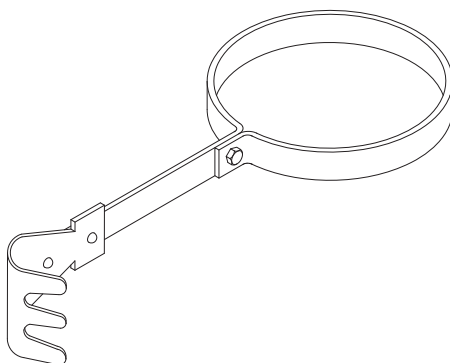
Adjustable strap - type pipe bonding assembly – consists of tinned copper or bare aluminum strap 1" wide – copper 0.064" thick; aluminum 0.080" thick – with No.56 or No. A56 securely bolted to strap – for main sized cables through No. 605 – sized for 4" pipe. Other sizes available on request. Shipped flat, to be formed at the jobsite for exact pipe size. Class I only.

Cat. No. 67 – Copper - 9.6 oz.

Cat. No. A67 – Aluminum - 5 oz.



FOR CLASS I ONLY



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



PIPE BONDING CLAMP



Heavy cast bronze or aluminum pipe bonding clamp with 1/4" bolt tension – 1-1/2" cable contact along axis of pipe. Available in three sizes for a range of pipe sizes. Bronze clamps may be cadmium plated, on request, to prevent corrosion when used on water pipes. Add "L" to part numbers shown. For use with main sized cables. Overall dimensions - 63A 2-1/2" x 1-3/4" - 63B 4-1/4" x 1-1/2" - 63C 5-1/2" x 1-1/2".

Copper

Cat. No. 63A – For 3/4" to 1-1/2" OD pipe - 9 oz.

Cat. No. 63B – For 1-3/4" to 2-1/2" OD pipe - 1 lb.

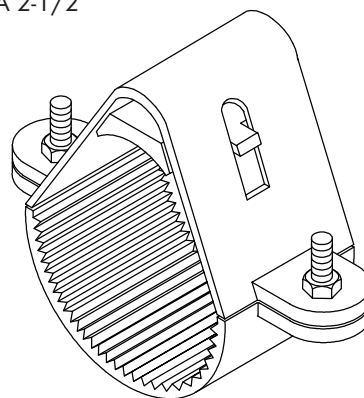
Cat. No. 63C – For 2-1/2" to 4-1/2" OD pipe - 1 lb. - 2 oz.

Aluminum

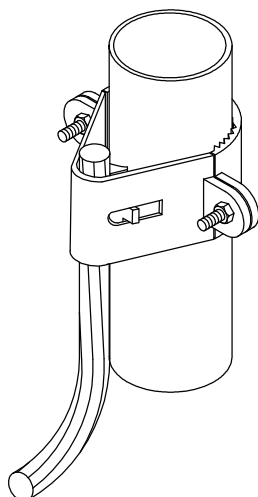
Cat. No. A63A – For 3/4" to 1-1/2" OD pipe - 3.4 oz.

Cat. No. A63B – For 1-3/4" to 2-1/2" OD pipe - 6.1 oz.

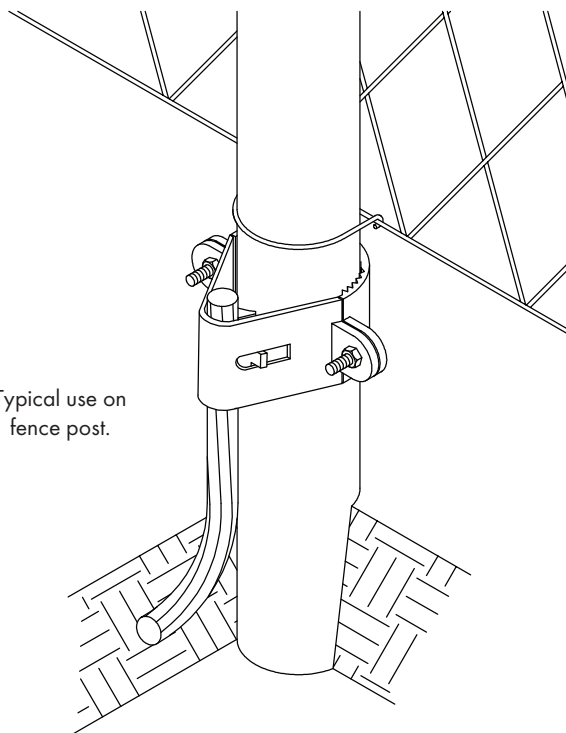
Cat. No. A63C – For 2-1/2" to 4-1/2" OD pipe - 6.6 oz.



Typical use on water pipe or TV mast.



Typical use on fence post.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



BONDING LUG



FOR CLASS I
STRUCTURES
ONLY

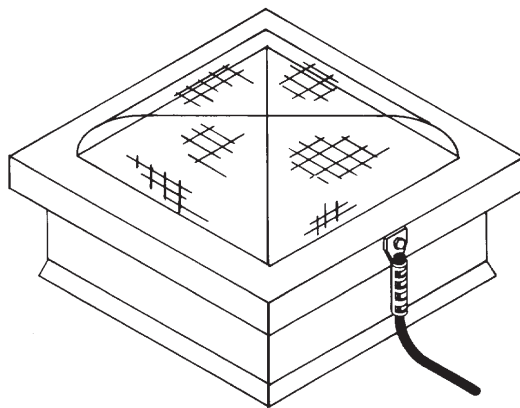
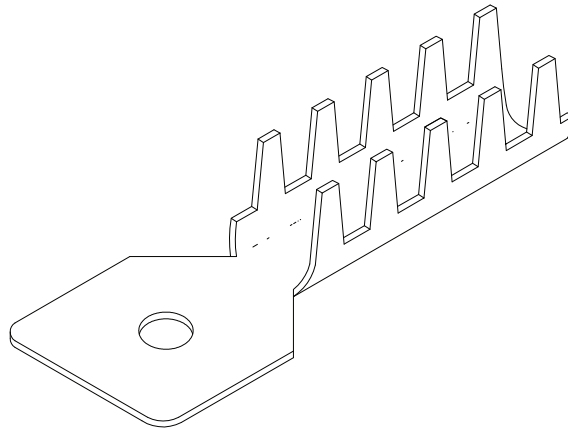
BONDING LUG — LIGHT DUTY FOR MAIN CABLES

Stamped copper, tinned copper or aluminum bonding lug for main size cable to flat metal surface — over 1 square inch contact surface — compression type cable holder with 2-1/2" contact length — copper 0.064" thick, aluminum 0.100" thick — 1/4" bolt hole in lug end. Overall dimensions - 3-3/4" x 1-1/4".

Cat. No. 85 — Copper - 1.6 oz.

Cat. No. 85T — Tinned Copper - 1.6 oz.

Cat. No. A85 — Aluminum - 0.8 oz.



Typical use on
metal skylight frame



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

BONDING CLAMPS

GUTTER BONDING CLAMP

Stamped copper, tinned copper or aluminum gutter bonding clamp for round or square edge metal gutters – compression type contact 2" long on gutter and 1-1/2" long on cable – copper 0.064" thick, aluminum 0.100" thick. For main sized cable. Overall dimensions - 2-1/2" x 2".

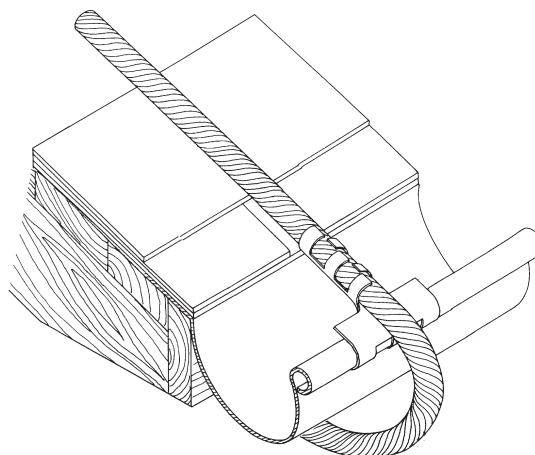
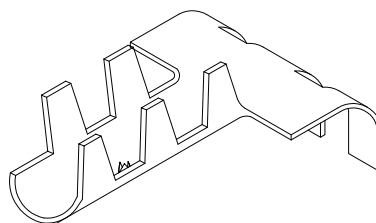
Cat. No. 87 – Copper - 1.8 oz.

Cat. No. 87T – Tinned Copper - 1.8 oz.

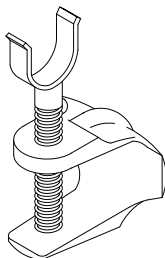
Cat. No. A87 – Aluminum - 0.8 oz.



FOR CLASS I
STRUCTURES
ONLY



Typical use
on gutter



GUTTER BONDING CLAMP OR CABLE HOLDER

Cast bronze or aluminum clamp for use in bonding metal gutters or supporting cable on metal column or rib – may be used on round or square edge gutters and column edge to 1/2" thick – compression type cable holder for main sized cables through No. 605 – 1" contact length on metal. Overall dimensions - 1-1/4" x 2" x 1-1/2".

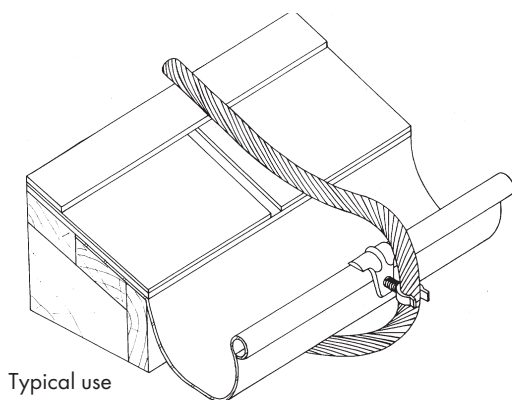
Cat. No. 77 – Copper - 3.7 oz.

Cat. No. 77L – Lead covered - 3.8 oz.

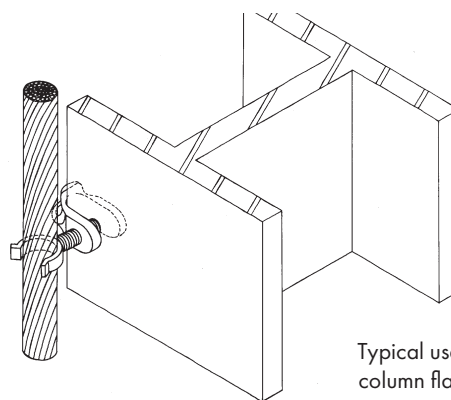
Cat. No. A77 – Aluminum - 1 oz.



(when used as cable holder only)



Typical use
on gutter



Typical use on
column flange

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



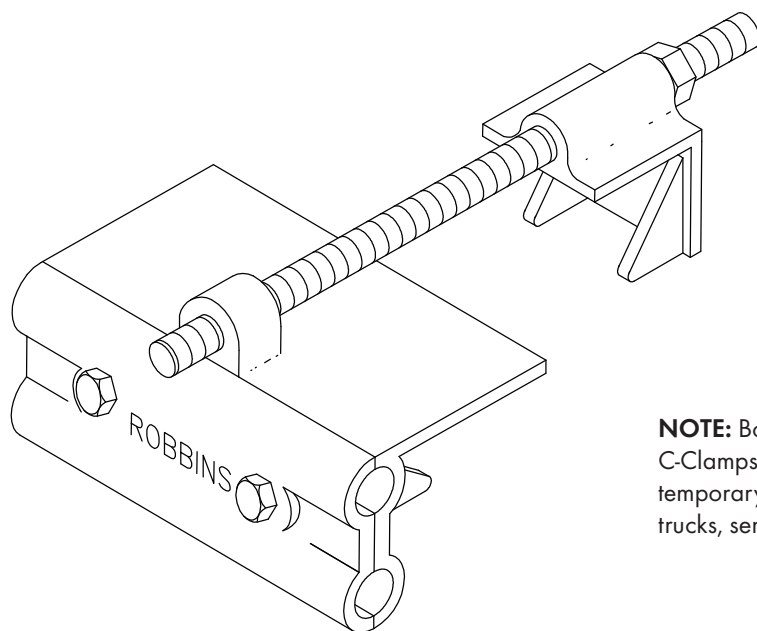
TEMPORARY COLUMN AND BEAM BONDING CLAMP

Heavy cast bronze or aluminum column or beam bonding clamp — no holes required in iron — over 8 square inches of pressure contact surface — four inch cable contact for main sized cables through No. 605 — 3/8" threaded brass or stainless steel take-up rod — end grips for flange thickness to 5/8".

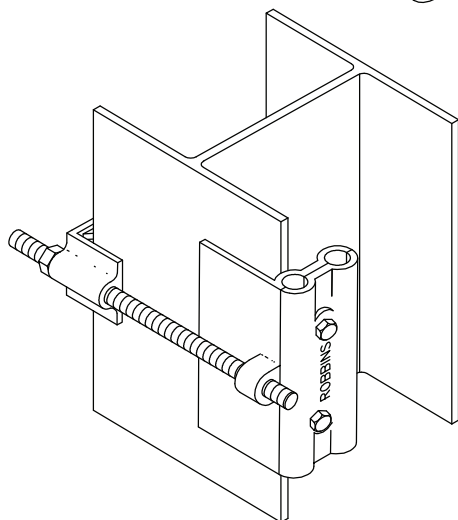
Standard span 10", longer or shorter upon request.

Cat. No. 660 — Copper - 2 lbs. - 6 oz.

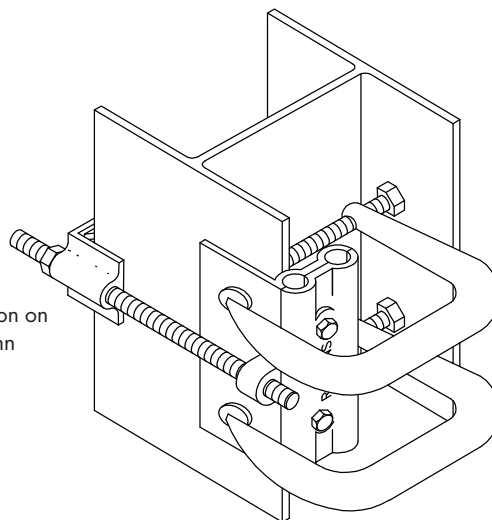
Cat. No. A660 — Aluminum - 11 oz.



NOTE: Bonding plate is used without C-Clamps in situations where only a temporary bond is required (e.g. fuel trucks, semi's, job trailers).



Typical application on
vertical column



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



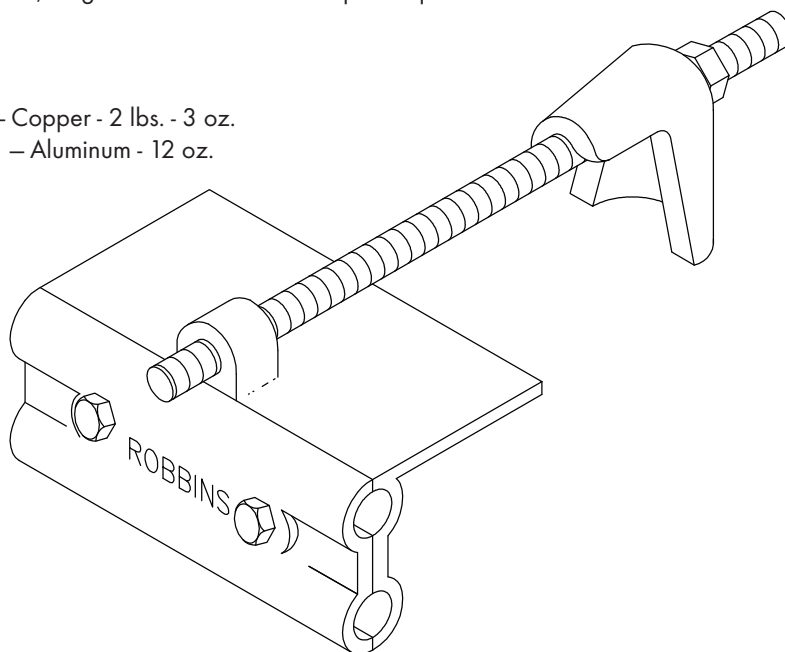
TEMPORARY ANGLE AND CHANNEL BONDING CLAMP

Heavy cast bronze or aluminum angle iron or channel iron bonding clamp – no holes required in iron – over 8 square inches of pressure contact surface – four inch cable contact for main sized cables through No. 605 – 3/8" threaded brass or stainless steel take-up rod.

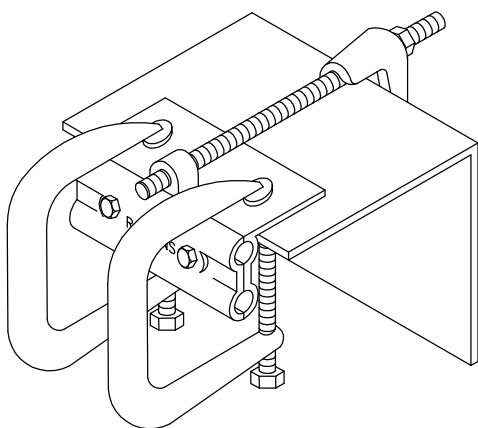
Standard Span 10", longer or shorter available upon request.

Cat. No. 661 – Copper - 2 lbs. - 3 oz.

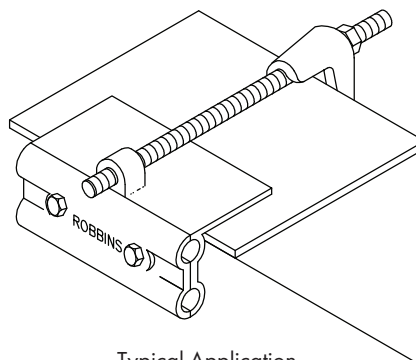
Cat. No. A661 – Aluminum - 12 oz.



Typical Application
on Channel



NOTE: Bonding plate is used without C-Clamps in situations where only a temporary bond is required (e.g. fuel trucks, semi's, job trailers).



Typical Application
on Angle

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



PIPE BONDING STRAP



Adjustable strap-type pipe bonding assembly – consists of tinned copper or bare aluminum strap 1" wide – copper 0.064" thick; aluminum 0.080" thick – with No. 55B or No. A55B lug securely bolted to strap – for main sized cables through No. 605 – 1/4" x 1" take-up bolt with nut. Standard sizes shown – other sizes available on request. For main sized cables. Shipped flat, to be formed at the jobsite for exact pipe size.

Copper

Cat. No. 677-4 – for 2" through 4" pipe - 1 lb.

Cat. No. 677-6 – for 4-1/2" through 6" pipe - 1lb. - 2 oz.

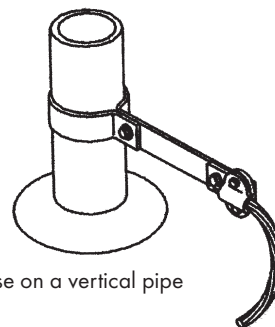
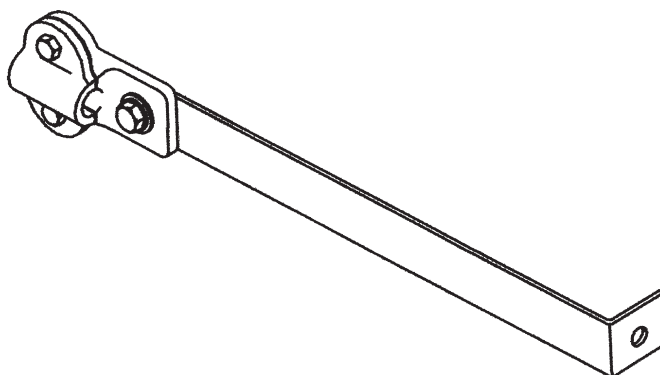
Cat. No. 677-8 – for 6-1/2" through 8" pipe - 1lb. - 4 oz.

Aluminum

Cat. No. A677-4 – for 2" through 4" pipe - 7 oz.

Cat. No. A677-6 – for 4-1/2" through 6" pipe - 7.8 oz.

Cat. No. A677-8 – for 6-1/2" through 8" pipe - 9 oz.



Typical use on a vertical pipe

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



PIPE BONDING STRAP



Adjustable strap-type pipe bonding assembly – consists of tinned copper or bare aluminum strap 1" wide – copper 0.064" thick; aluminum 0.080" thick – with No. 52S or No. A52S universal cable connector – for main sized cables through No. 605 – 1/4" x 1" take-up bolt with nut. Standard sizes shown – other sizes available on request. For main sized cables. Shipped flat, to be formed at the jobsite for exact pipe size.

Copper

Cat. No. 677D-4 – for 2" through 4" pipe - 12.8 oz.

Cat. No. 677D-6 – for 4-1/2" through 6" pipe - 14.2 oz.

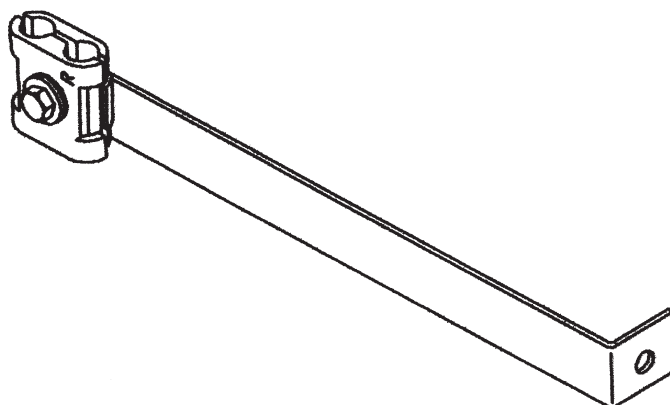
Cat. No. 677D-8 – for 6-1/2" through 8" pipe - 1 lb. - 1 oz.

Aluminum

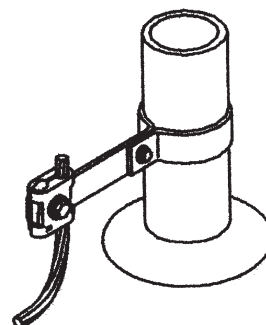
Cat. No. A677D-4 – for 2" through 4" pipe - 6.1 oz.

Cat. No. A677D-6 – for 4-1/2" through 6" pipe - 7 oz.

Cat. No. A677D-8 – for 6-1/2" through 8" pipe - 8 oz.



Typical use on
vertical pipe



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



PIPE BONDING STRAP



Adjustable strap-type pipe bonding assembly – consists of tinned copper or bare aluminum strap 1" wide – copper 0.064" thick; aluminum 0.080" thick – with No. 655 or No. A655 lug for secondary bonding with wires and miniature cables through 1/4" diameter – 1/4" x 1" take-up bolt with nut. Standard sizes shown – other sizes available on request. For secondary cables and wires up to 1/4" in diameter. Shipped flat, to be formed at the job site for exact pipe size.

Copper

Cat. No. 677S-4 – for 2" through 4" pipe - 10.8 oz.

Cat. No. 677S-6 – for 4-1/2" through 6" pipe - 12.4 oz.

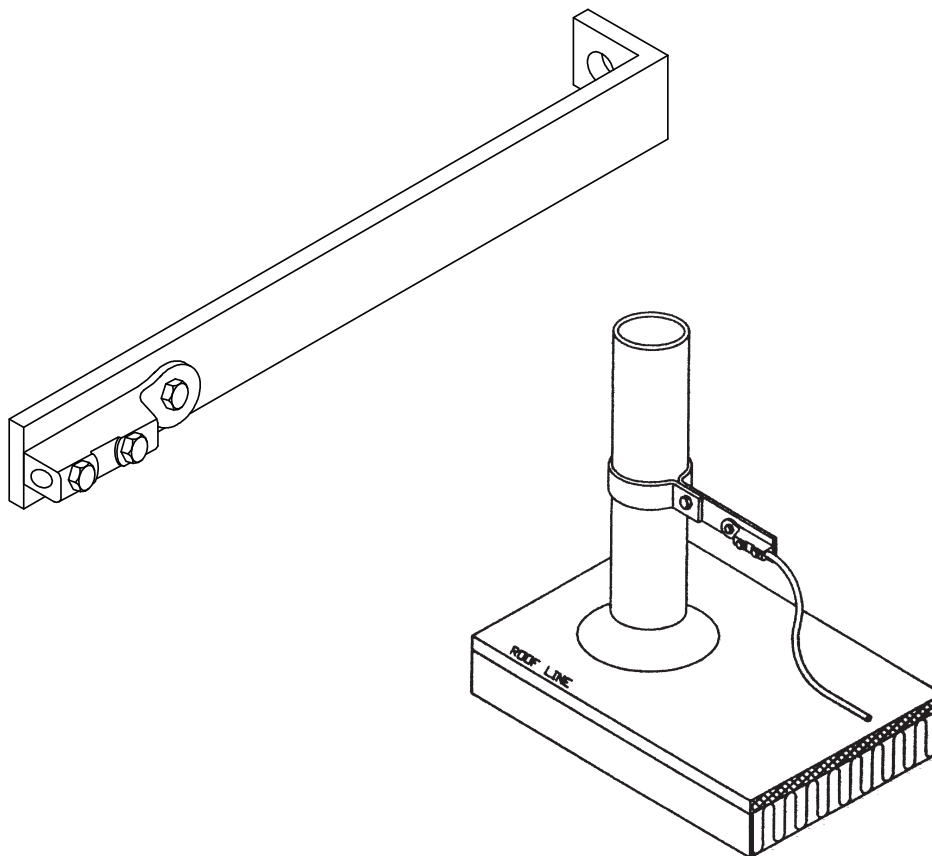
Cat. No. 677S-8 – for 6-1/2" through 8" pipe - 15 oz.

Aluminum

Cat. No. A677S-4 – for 2" through 4" pipe - 5.3 oz.

Cat. No. A677S-6 – for 4-1/2" through 6" pipe - 6.2 oz.

Cat. No. A677S-8 – for 6-1/2" through 8" pipe - 7 oz.



Typical use on
vertical pipe

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

REBAR OR PIPE BONDING CLAMP

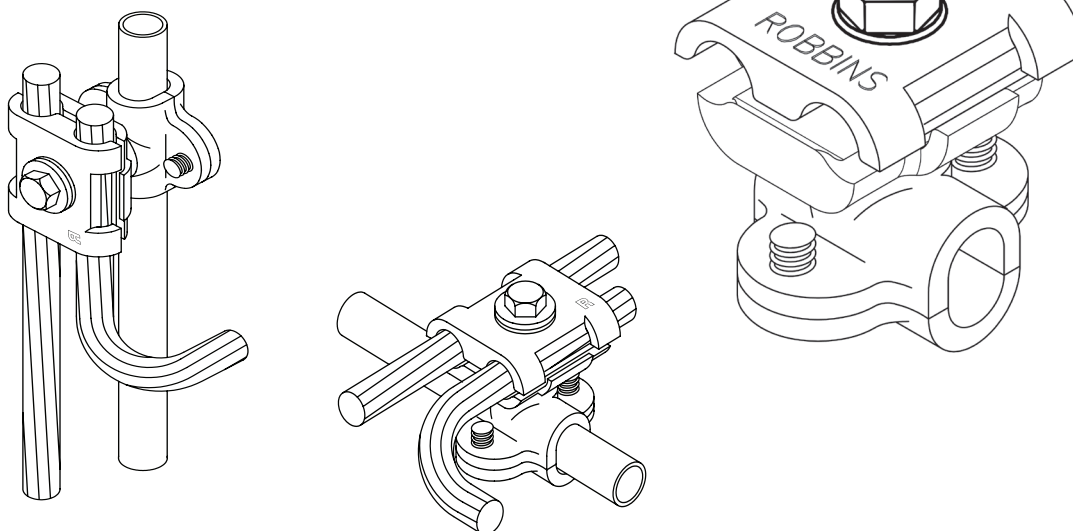
ALL ITEMS



Heavy cast bronze or aluminum pipe or rebar bonding clamp with 1/4" bolt tension - 1-1/2" of cable contact length - 1-1/2" contact along axis of pipe or rebar with approximately 1.8 sq. in. contact area. For pipes and rebar with approximately 1/2" through 1-1/4" outside diameter. For all main sized cables through No. 605. Overall dimensions - 2 -1/4" x 1-3/8" x 1-1/2".

Cat. No. 69 – Copper - 11.4 oz.

Cat. No. A69 – Aluminum - 4.5 oz.



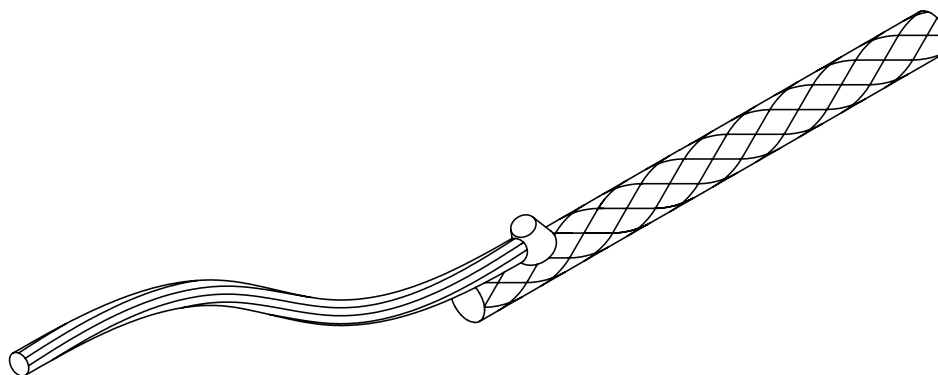
PRE - ASSEMBLED REBAR BOND

Pre-assembled copper cable pigtail exothermically welded to an 18" long #4 rebar. Standard copper cable length provided is 36". Special lengths available upon request.

Cat. No. RB-1 – #1 Copper cable (32 Str., X 17 Ga. - 2 AWG.) - 12.2 oz.

Cat. No. RB-604 – #604 Copper cable (28 Str., X 14 Ga.) - 1 lb. - 12 oz.

Cat. No. RB-605 – #605 Copper cable (37 Str., - 4/0 AWG.) - 2 lbs. - 11 oz.



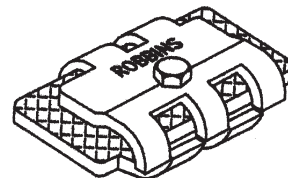
ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



METAL BONDING CLAMP AND CABLE HOLDER

Heavy cast bronze or aluminum clamp for bonding to metal surface or for use as cable holder to edge of column or beam — bolt tension on surface and cable — universal capacity from secondary bonding wire through 3/4" cable and flat surface to 5/8" thick — two sizes available — No. 68X and No. A68X — 2" long with 1-1/2 square inches of surface contact or No. 68X-3 and No. A68X-3 with 3 square inches of surface contact. Overall dimensions - 68X: 2" x 2-1/4" - 68X-3: 4" x 2-1/4".



Cat. No. 68X — Copper - 5 oz.

Cat. No. A68X — Aluminum - 1.8 oz.



(for cable holder only)

Cat. No. 68X-3 — Copper - 7.0 oz.

Cat. No. A68X-3 — Aluminum - 3.0 oz.



(for bonding on Class 1 structures only)

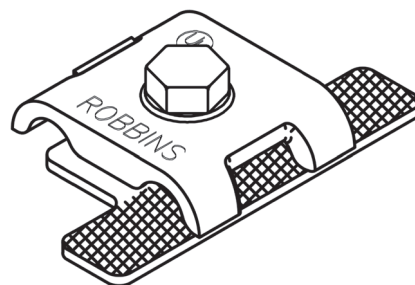
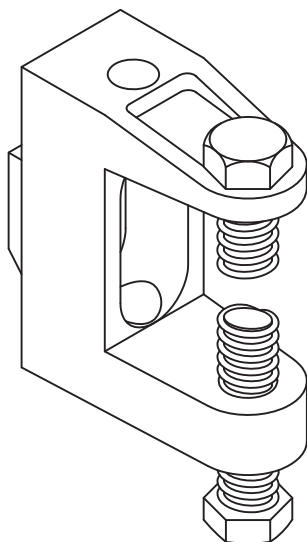


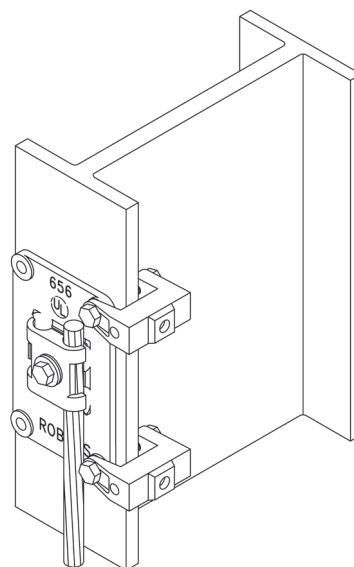
PLATE HOLDERS

Cast iron "C" clamp for holding metal bonding plate to metal structural member — opens 11/16" for heavy column section or closes to 3/16" for thin metal sections — throat depth 15/16" — screw sets firm for permanent installation. Overall dimensions - 1-1/2" x 1-3/8".



Cat. No. 156BM - 4 oz.

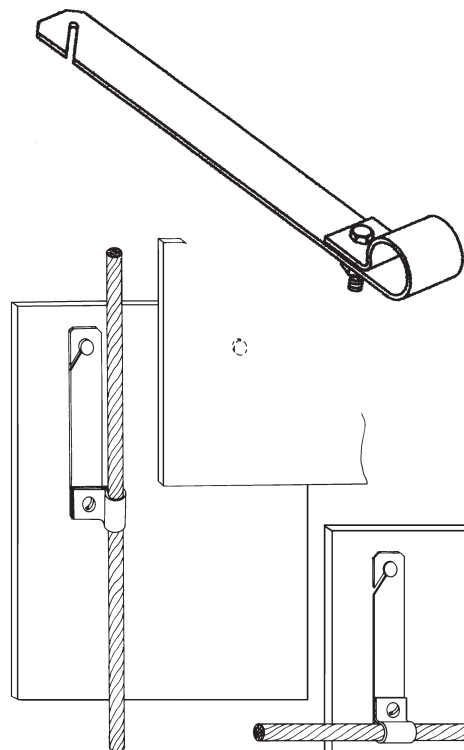
Typical use to hold
bonding plate.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

SLATE ROOF CABLE HOLDER



Tinned copper or aluminum strap cable holder for use under flat slate roof sections – made of 1" wide strap 12" long with loop, bolt and nut to secure cable – simply slips under slate to hook on existing nail – for all cables.

Cat. No. 76A – Copper - 4.5 oz.

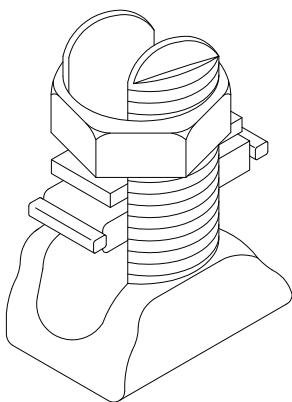
Cat. No. A76A – Aluminum - 1.6 oz.



SPLIT BOLT CONNECTORS

Used For Fence Grounding or Wire Mesh

High strength bronze split bolt connectors, completely tin plated for use with copper, aluminum or steel wires – spacer allows separation of dissimilar metals – contact paste recommended when used with aluminum wire – for use in attaching home service protectors, grounding fence wire fabric and other grounding work – not recommended for use as splice for Lightning Protection system circuits.



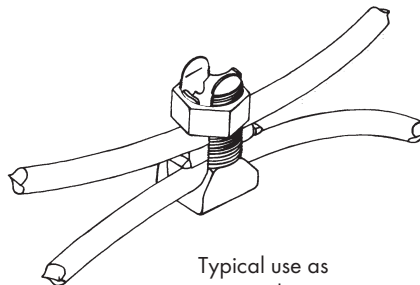
Copper

Cat. No. 124A – Maximum wire diameter 0.217" - 1.4 oz.

Cat. No. 124B – Maximum wire diameter 0.271" - 1.8 oz.

Cat. No. 124C – Maximum wire diameter 0.385" - 3 oz.

Cat. No. 124D – Maximum wire diameter 0.443" - 4.8 oz.



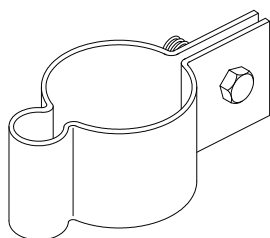
ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



PIPE AND HANDRAIL CABLE HOLDERS

ALL ITEMS



Strap type cable or point holder for use on vertical or horizontal pipe run — copper holder made of tinned copper strap 1" wide, 0.064" thick — aluminum holder made of aluminum strap 1" wide, 0.080" thick — furnished with 1" long bronze or stainless steel bolt and nut for tension on pipe — for main sized cables through No. 605 and point diameters 3/8" to 5/8" — various pipe sizes available on request.

Copper

Cat. No. 821A — for 1.660" O.D. Pipe - 3 oz.

Cat. No. 821B — for 1.90" O.D. Pipe - 3.4 oz.

Cat. No. 821C — for 2.375" O.D. Pipe - 3.8 oz.

Cat. No. 821D — for 2.875" O.D. Pipe - 4.2 oz.

Cat. No. 821E — for 4.5" O.D. Pipe - 6.2 oz.

Aluminum

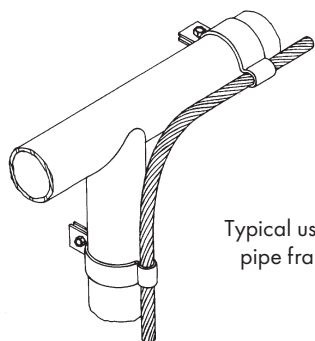
Cat. No. A821A — for 1.660" O.D. Pipe - 1.7 oz.

Cat. No. A821B — for 1.90" O.D. Pipe - 1.8 oz.

Cat. No. A821C — for 2.375" O.D. Pipe - 1.9 oz.

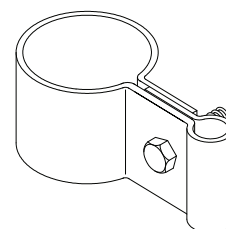
Cat. No. A821D — for 2.875" O.D. Pipe - 2 oz.

Cat. No. A821E — for 4.5" O.D. Pipe - 2.3 oz.



Typical use on
pipe frame

Strap type cable or point holder for use on vertical or horizontal pipe run — copper holder made of tinned copper strap 1" wide, 0.064" thick — aluminum holder made of aluminum strap 1" wide, 0.080" thick — stand-off distance 1" from wall of pipe — furnished with 1" long bronze or stainless steel bolt and nut for tension on pipe — for main sized cables through No. 605 and point diameters 3/8" to 5/8" — various pipe sizes available on request.



Copper

Cat. No. 822A — for 1.660" O.D. Pipe - 2.6 oz.

Cat. No. 822B — for 1.90" O.D. Pipe - 3.7 oz.

Cat. No. 822C — for 2.375" O.D. Pipe - 4 oz.

Cat. No. 822D — for 2.875" O.D. Pipe - 4.2 oz.

Cat. No. 822E — for 4.5" O.D. Pipe - 5.2 oz.

Aluminum

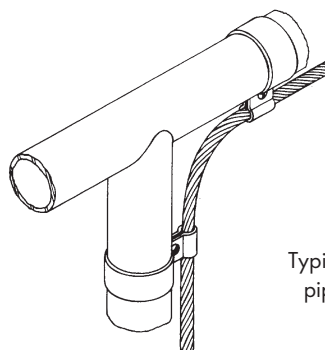
Cat. No. A822A — for 1.660" O.D. Pipe - 2 oz.

Cat. No. A822B — for 1.90" O.D. Pipe - 2.1 oz.

Cat. No. A822C — for 2.375" O.D. Pipe - 2.2 oz.

Cat. No. A822D — for 2.875" O.D. Pipe - 2.3 oz.

Cat. No. A822E — for 4.5" O.D. Pipe - 2.6 oz.



Typical use on
pipe frame

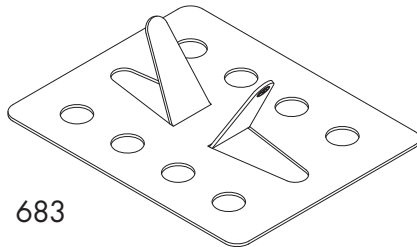
ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

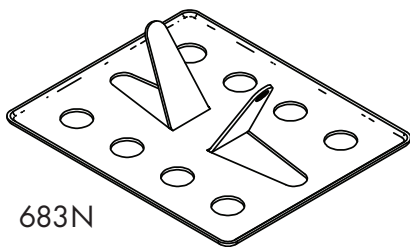


ADHESIVE CABLE HOLDERS

ALL ITEMS



683



683N

Adhesive cable holder of stamped and formed copper or aluminum. Should be placed on flat or gently sloping roof surface in a bed of hot pitch or approved adhesive. For main and secondary cables and wires. Overall dimensions - 3" x 2-1/2". Adhesive contact area - 7.5 in².

Cat. No. 683 – Copper - 1 oz.

Cat. No. A683 – Aluminum - 0.4 oz.

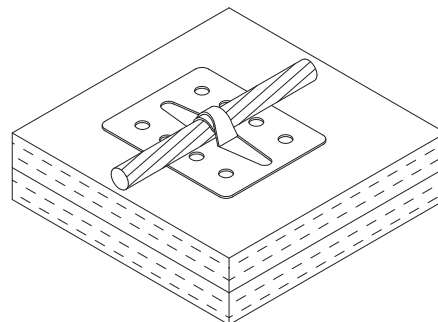
Cat. No. 683N – Copper - 1 oz.

Cat. No. A683N – Aluminum - 0.4 oz.

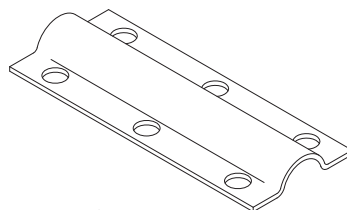
Adhesive cable holder of stamped and formed copper or aluminum. Should be placed on flat or gently sloping roof surface in a bed of hot pitch or approved adhesive. For main and secondary cables and wires. Overall dimensions - 1-3/4" x 4". Adhesive contact area - 7 in².

Cat. No. 683LARGE – Copper - 1.5 oz.

Cat. No. A683LARGE – Aluminum - 0.6 oz.



Typical use on
built-up roof



683LARGE

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



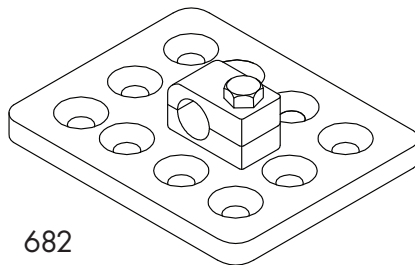
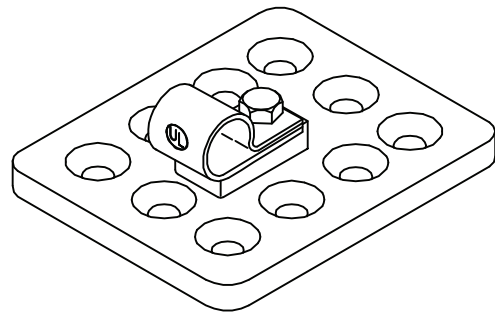
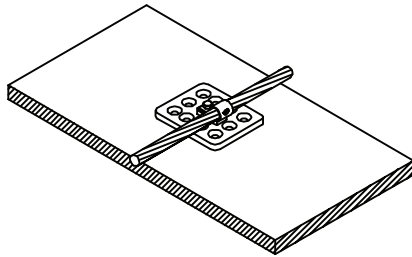
CABLE HOLDERS

ROOF CABLE HOLDERS

Adhesive bronze or aluminum cable holder for use on flat roofs, standing seams, steel beams, etc., where no penetration of roof is desired or permitted. Consists of No. 72 or A72 loop, No. 682 or No. A682 Base. For all main and secondary cables and wires. Overall dimensions - 2-3/4" x 2-1/4". Adhesive contact area - 6.19 in²

Cat. No. 682X – Copper - 6.4 oz.

Cat. No. A682X – Aluminum - 2.2 oz.

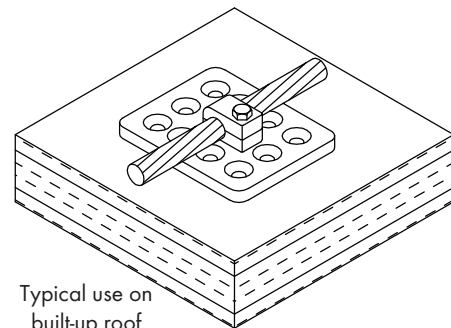


682

Adhesive cable holder of heavy cast bronze or aluminum. Should be placed on flat or gently sloping roof surface in a bed of hot pitch or approved adhesive. For main sized cables through 604. Overall dimensions - 2-3/4" x 2-1/4". Adhesive contact area - 6.19 in².

Cat. No. 682 – Copper - 6.4 oz.

Cat. No. A682 – Aluminum - 2.2 oz.



Typical use on
built-up roof

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

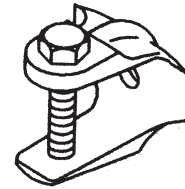
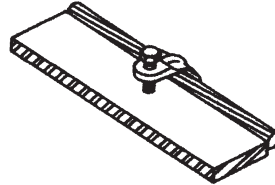
CABLE HOLDERS



Cast bronze or aluminum clamp for use in supporting cable on metal column or rib – may be used on column edge to 1/2" thick – compression type cable holder for main sized cable through No. 605 – with one 1/4" bolt for tension on column or rib. Rubber caps included on bolts to prevent damage to roof. Recommended torque on mounting bolt: 15 in./lbs. maximum. Overall dimensions - 1-1/4" x 1-1/4" x 1-1/2".

Cat. No. 77X – Copper - 2.1 oz.

Cat. No. A77X – Aluminum - 0.6 oz.

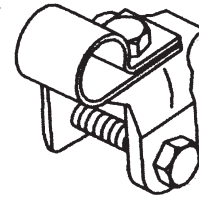
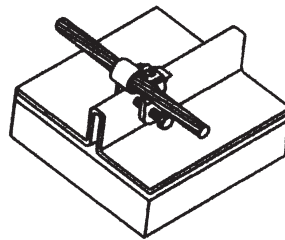


STANDING SEAM CABLE HOLDERS

Cast bronze or aluminum cable holder for use on standing seams, steel beams, etc., where no penetration of metal is desired or permitted. Consists of No. 77X or No. A77X clamp with No. 72 or No. A72 loop, two 1/4" stainless bolts. Rubber caps included on bolts to prevent damage to roof. Recommended torque on mounting bolt: 15 in./lbs. maximum. For main and secondary cables and wires. Overall dimensions - 1-1/4" x 1-1/4" x 2".

Cat. No. 75 – Copper - 2.6 oz.

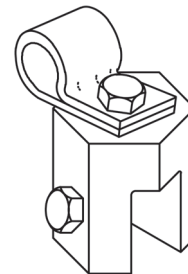
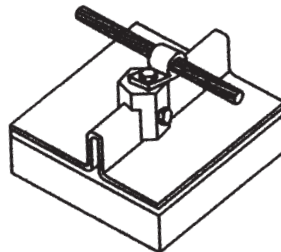
Cat. No. A75 – Aluminum - 1 oz.



Machined brass or aluminum hexagonal holder for use on standing seams, steel beams, etc. where no penetration of metal is desired or permitted. Comes with No. 72 or No. A72 loop, which can be attached to 1/4" stainless bolt, 1/4" stainless nut for tightening loop. Rubber cap included on bolts to prevent damage to roof. For main and secondary cables and wires.

Cat. No. 79 – Copper - 2.2 oz.

Cat. No. A79 – Aluminum - 1 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



PEEL AND STICK CABLE HOLDERS

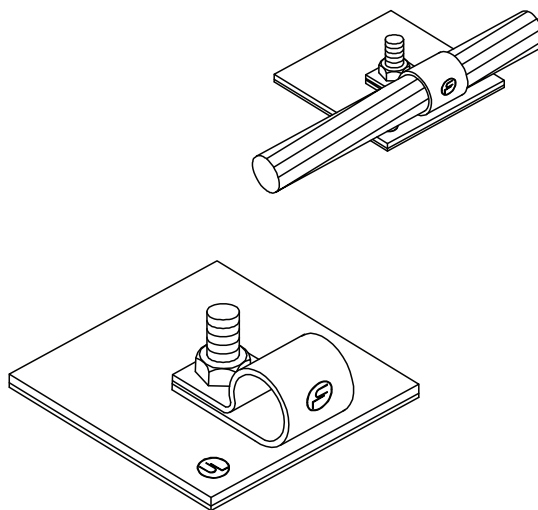
UL Conforms: Peel and stick bronze or aluminum cable holder for use on metal materials - strap cable holder for cables 3/8" through 5/8" diameter. For main and secondary cables and wires. Add "X" after the part number to indicate use with 4/0 AWG cables.

FLAT METAL ROOF CABLE HOLDERS

Adhesive bronze or aluminum cable holder for use on standing seams, steel beams, etc., where no penetration of metal is desired or permitted. Consists of No. 72 or A72 loop, No. A Base - 2" plate or Base - 2" plate, and TESA 7074 adhesive. TESA ACXplus 7074 product information is located in the front of the catalog. For main and secondary cables and wires. Overall dimensions - 2" x 2".

Cat. No. 72PS – Copper - 2.7 oz.

Cat. No. A72PS – Aluminum - 1.4 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

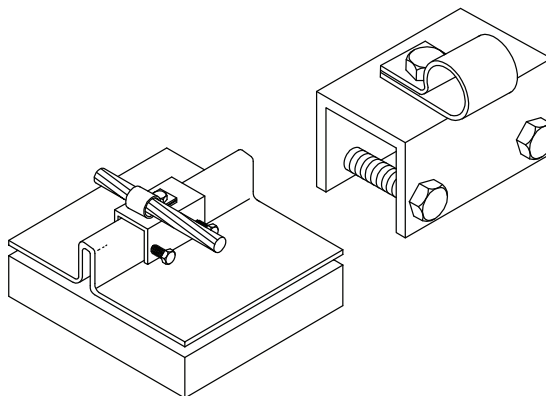
STANDING SEAM CABLE HOLDERS

Aluminum cable holder for use on standing seams, steel beams, etc., where no penetration of metal is desired or permitted. Consists of extruded architectural channel 1 1/4" x 1 1/4" x 1/8" with No. 72 or No. A72L loop, two 1/4" stainless steel bolts for tension on beam or rib. Rubber caps are included on bolts to prevent damage to roof.

Recommended torque on mounting bolts: 15 in./lbs. maximum. For Class II applications for use with main and secondary cables and wires.

Overall dimensions — 1-1/4" x 1-1/4" x 1-1/2". Inside clear dimension: 1"

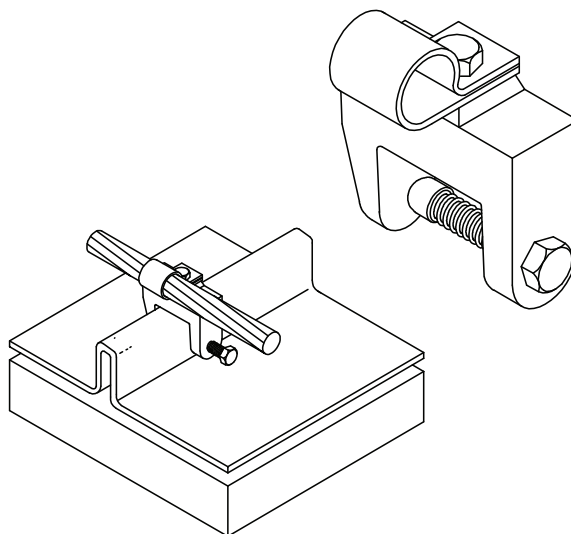
Cat. No. A75XX



Aluminum cable holder for use on standing seams, steel beams, etc., where no penetration of metal is desired or permitted. Consists of No. 156 or A156 C-Clamp with No. 72 or No. A72 loop, one 1/4" stainless steel bolt for tension on beam or rib. Rubber cap is included on bolt to prevent damage to roof. Recommended torque on mounting bolt: 15 in./lbs. maximum. For Class I applications for use with main and secondary cables and wires.

Overall dimensions — 1-1/2" x 1-1/2" x 3/4". Inside clear dimension: 1"

Cat. No. A75X



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CABLE FASTENERS

ALL ITEMS



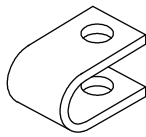
LOOP FASTENER (SMALL)

Strap copper or aluminum loop type cable fastener requiring one nail or screw – 1/2" wide, copper 0.032" thick, aluminum 0.051" thick – for main and secondary cables 1/4" through 1/2" diameter – for nail or screw to No. 10 (3/16") diameter.

Cat. No. 72A – Copper - 0.26 oz.

Cat. No. A72A – Aluminum - 0.1 oz.

Cat. No. 72AT – Tinned Copper - 0.26 oz.

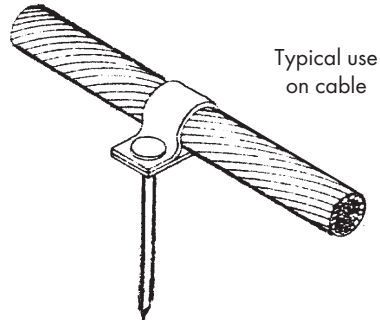


LOOP FASTENER (LARGE)

Strap copper or aluminum loop type cable fastener requiring one nail or screw – 5/8" wide, copper 0.032" thick, aluminum 0.051" thick – for cables 3/8" through 5/8" diameter – for screw or bolt to 1/4" diameter. For main and secondary cables and wires. Add "X" after the part number to indicate use with 4/0 AWG cables.

Cat. No. 72 – Copper - 0.29 oz.

Cat. No. A72 – Aluminum - 0.15 oz.



Typical use
on cable

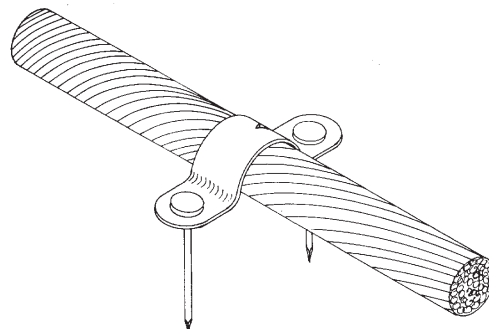
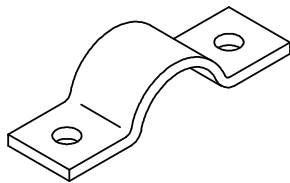
STRAP FASTENER

Strap copper or aluminum two-hole cable fastener – copper strap 0.032" thick, aluminum strap 0.051" thick. Strap 1/2" wide for cables 1/4" through 1/2" diameter – for nail or screw to No. 10 (3/16") diameter. For main sized cables.

Cat. No. 72C – Copper - 0.26 oz.

Cat. No. A72C – Aluminum - 0.1 oz.

Cat. No. 72CT – Tinned Copper - 0.26 oz.



Typical use
on cable

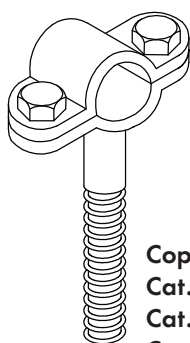


ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

CABLE FASTENERS

ALL ITEMS



STAND-OFF CABLE HOLDER

Heavy cast bronze or aluminum stand-off cable holder – two bolt tension on cable – 1" to 2" stand-off distance – for main sized cables through No. 605 – available without fastener (No. 74 or No. A74), with No. 86A lead anchor (No. 74A or No. A74A) or with two 3/8" nuts and washers (No. 74B or No. A74B). Overall dimensions - 1-3/4" x 2-3/4".

Copper

Cat. No. 74 – 3/8" threaded end - 4 oz.

Cat. No. 74A – with lead anchor - 6.2 oz.

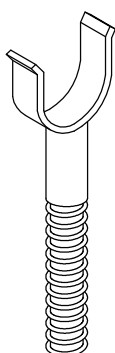
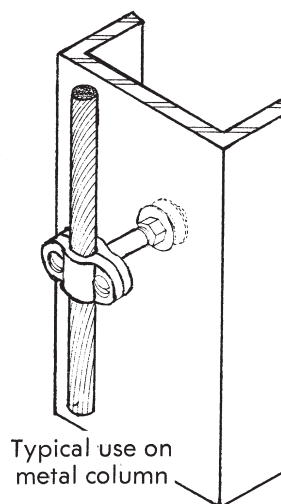
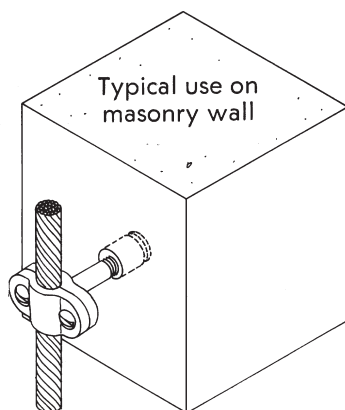
Cat. No. 74B – with nuts and washers - 4.8 oz.

Aluminum

Cat. No. A74 – 3/8" threaded end - 1.4 oz.

Cat. No. A74A – with lead anchor - 3.4 oz.

Cat. No. A74B – with nuts and washers - 2.2 oz.



STAND-OFF CABLE HOLDER (COMPRESSION TYPE)

Heavy cast bronze or aluminum compression type stand-off cable holder – 1" to 2" stand-off distance – for main sized cables through No. 605 – available without fastener (No. 73A or No. A73A), with No. 86A lead anchor (No. 73B or No. A73B) or with two 3/8" nuts and washers (No. 73C or No. A73C). (For Class 1 structures only.)

Copper

Cat. No. 73A – 3/8" threaded end - 1.6 oz.

Cat. No. 73B – with lead anchor - 3.8 oz.

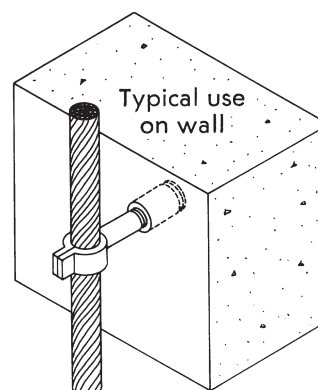
Cat. No. 73C – with nuts and washers - 2.4 oz.

Aluminum

Cat. No. A73A – 3/8" threaded end - 0.4 oz.

Cat. No. A73B – with lead anchor - 2.4 oz.

Cat. No. A73C – with nuts and washers - 1.2 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CABLE FASTENERS

ALL ITEMS

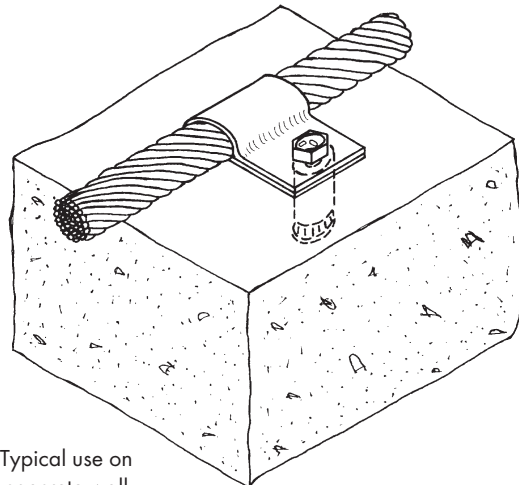
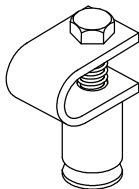


MASONRY ANCHOR

Complete masonry anchor assembly consisting of No. 72 copper or No. A72 aluminum loop with 1/4" x 1" stainless steel bolt and No. 86 lead expansion anchor. For main and secondary cables and wires.

Cat. No. 82 – Copper - 1 oz.

Cat. No. A82 – Aluminum - 0.8 oz.



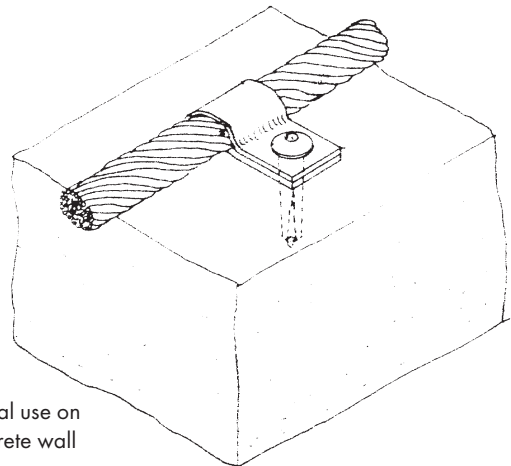
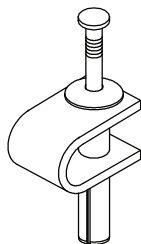
Typical use on
concrete wall

MASONRY ANCHOR

Complete masonry anchor assembly consisting of No. 72 copper or No. A72 aluminum loop with No. 86Z nail-in anchor. For main and secondary cables and wires.

Cat. No. 82Z – Copper - 0.64 oz.

Cat. No. A82Z – Aluminum - 0.48 oz.



Typical use on
concrete wall



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

CABLE FASTENERS

ALL ITEMS

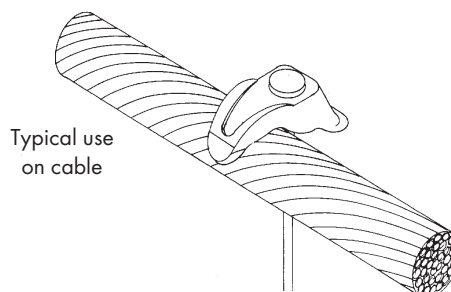


CABLE CLIP

Cast bronze or aluminum clip for main sized holding cables through 9/16" diameter — anchor hole for nail, screw or bolt to 1/4" diameter — heel of clip exerts positive pressure on cable. Overall dimensions 1-1/4" x 3/4".

Cat. No. 81B — Copper - 0.48 oz.

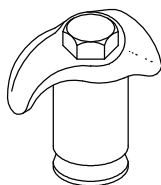
Cat. No. A81B — Aluminum - 0.1 oz.



Typical use on cable

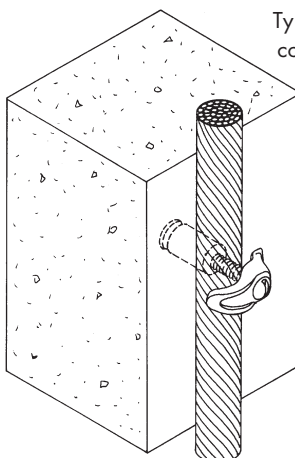
MASONRY ANCHOR CLIPS

Complete masonry anchor assembly consisting of cast bronze or aluminum clips shown on this page with 1/4" x 1" brass or stainless steel bolt and No. 86 expansion anchor. For main sized cables through 9/16" diameter.

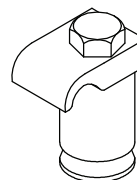


Cat. No. 81C — Copper - 1.2 oz.

Cat. No. A81C — Aluminum - 0.8 oz.

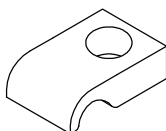


Typical use on concrete wall



Cat. No. 81D — Copper - 2.1 oz.

Cat. No. A81D — Aluminum - 1.2 oz.

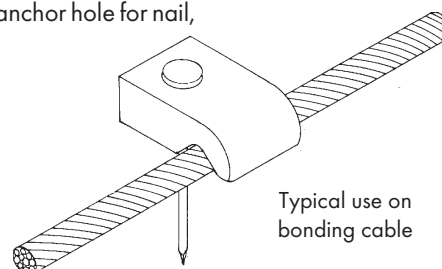


WIRE OR MINIATURE CABLE CLIP

Cast bronze or aluminum clip for holding secondary wire or miniature cable through 3/8" diameter — anchor hole for nail, screw or bolt to 1/4" diameter.

Cat. No. 81 — Copper - 1 oz.

Cat. No. A81 — Aluminum - 0.16 oz.



Typical use on bonding cable

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

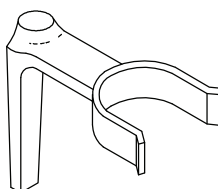


SPECIAL PURPOSE FASTENERS

ALL ITEMS



FOR CLASS I
STRUCTURES
ONLY



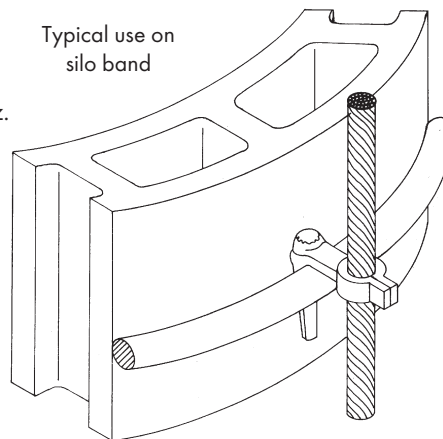
SILO BAND DRIVE FASTENER

Cast bronze or aluminum drive fastener for use on steel bands of silos — one piece malleable construction for compression holding of cable — for main sized cables through No. 605.

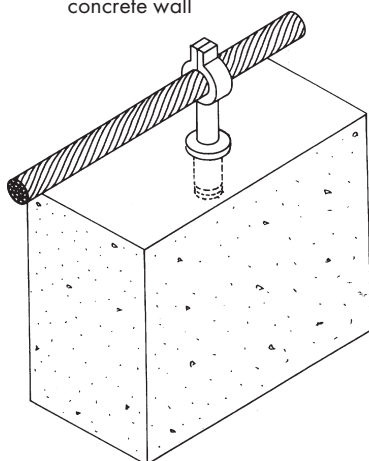
Cat. No. 150 — Copper - 0.16 oz.

Cat. No. A150 — Aluminum - 0.48 oz.

Typical use on
silo band



Typical use on
concrete wall



STAND-OFF CABLE HOLDER

Cast bronze or aluminum stand-off cable holder for use with No. 86 expansion anchor in masonry or with No. A80E-4 nut on metal surface — cable located 1" off surface — pinch type closure — for main sized cable through No. 604. Overall dimensions - 2-1/2" x 1".

Cat. No. 73 — Copper - 1.2 oz.

Cat. No. A73 — Aluminum - 0.16 oz.

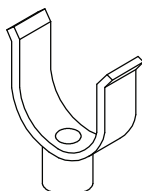


PINCH TYPE CABLE HOLDER

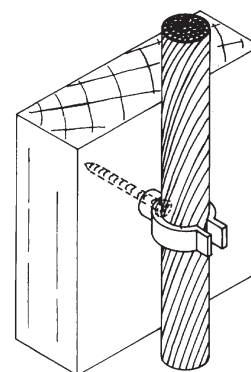
Cast bronze or aluminum stand-off cable holder for use with 3/16" diameter nail, wood screw or metal screw — for main sized cables through No. 605.

Cat. No. 81A — Copper - 0.64 oz.

Cat. No. A81A — Aluminum - 0.01 oz.



Typical use on wall



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

"U" BOLT FASTENERS



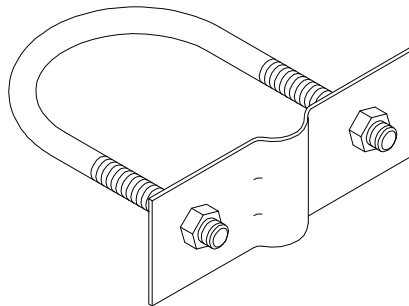
Point to pipe or handrail U-Bolt clamp type fastener. U-Bolt clamps available in 3/8", 1/4" or 5/16" diameter stainless steel. Weights shown below are for 3" O.D. pipe

NOTE: Specify pipe O.D. when ordering.

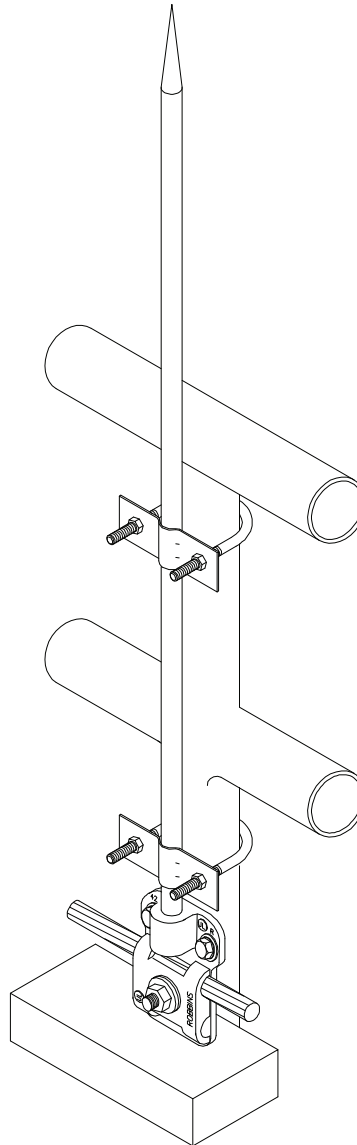
Cat. No. 80-U-4SS – 1/4" Stainless - 2.1 oz.

Cat. No. 80-U-3SS – 3/8" Stainless - 4.2 oz.

Cat. No. 80-U-5SS – 5/16" Stainless - 3 oz.



Typical use
on handrail



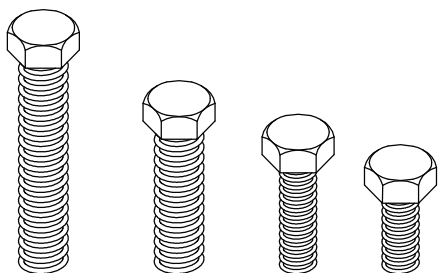
ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

-113-



FASTENERS



MACHINE SCREWS

High quality bronze or stainless steel machine screws for use in fastening system components — all screws have N.C. threads — note stainless steel screws may be used with copper or aluminum materials.

Copper (Bronze)	Size	Stainless Steel
Cat. No. 80-12	— 1/4" diam. x 1/2" long	— Cat. No. A80-12 - 0.18 oz.
Cat. No. 80-34	— 1/4" diam. x 3/4" long	— Cat. No. A80-34 - 0.22 oz.
Cat. No. 80-10	— 1/4" diam. x 1" long	— Cat. No. A80-10 - 0.26 oz.
Cat. No. 80-15	— 1/4" diam. x 1-1/2" long	— Cat. No. A80-15 - 0.34 oz.
Cat. No. 80-20	— 1/4" diam. x 2" long	— Cat. No. A80-20 - 0.45 oz.
Cat. No. 80H-34	— 5/16" diam. x 3/4" long	— Cat. No. A80H-34 - 0.34 oz.
Cat. No. 80H-10	— 5/16" diam. x 1" long	— Cat. No. A80H-10 - 0.45 oz.
Cat. No. 80H-15	— 5/16" diam. x 1-1/2" long	— Cat. No. A80H-15 - 0.54 oz.
Cat. No. 80C-58	— 3/8" diam. x 5/8" long	— Cat. No. A80C-58 - 0.50 oz.
Cat. No. 80C-34	— 3/8" diam. x 3/4" long	— Cat. No. A80C-34 - 0.54 oz.
Cat. No. 80C-10	— 3/8" diam. x 1" long	— Cat. No. A80C-10 - 0.64 oz.
Cat. No. 80C-15	— 3/8" diam. x 1-1/2" long	— Cat. No. A80C-15 - 0.85 oz.



MACHINE BOLT

Flat head machine bolt of stainless steel — may be used with copper or aluminum materials.

Cat. No. A80F-10 — Stainless Steel — 1/4" diam. x 1" long - 0.21 oz.

WOOD SCREWS

Slotted wood screws — note that stainless steel screws may be used with copper or aluminum materials.

Cat. No. 84C — Brass — #10 size x 1-1/2" long (Round Head) - 0.18 oz.
 Cat. No. A84C — Stainless — #10 size x 1-1/2" long (Round Head) - 0.16 oz.
 Cat. No. A84F — Stainless — #14 size x 1-1/4" long (Flat Head) - 0.21 oz.



METAL SCREWS

Slotted sheet metal screw of bright finished stainless steel — may be used with copper or aluminum materials.

Cat. No. 84B-1 — #10 size x 1" long (Pan Head) - 0.12 oz.
 Cat. No. 84B-3 — #10 size x 3/4" long (Pan Head) - 0.08 oz.
 Cat. No. 84BF — #14 size x 1-1/4" long (Flat Head) - 0.22 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

FASTENERS

MACHINE SCREW NUTS

High quality bronze or stainless steel hexagon nuts for use on machine screws, points or all thread rod – all nuts have N.C. threads – note stainless steel may be used with copper or aluminum materials.

Copper (Bronze)	Size	Stainless Steel
Cat. No. 80E-4	– 1/4" thread size	– Cat. No. A80E-4 - 0.12 oz.
Cat. No. 80E-5	– 5/16" thread size	– Cat. No. A80E-5 - 0.16 oz.
Cat. No. 80E-6	– 3/8" thread size	– Cat. No. A80E-6 - 0.22 oz.
Cat. No. 80E-8	– 1/2" thread size	– Cat. No. A80E-8 - 0.58 oz.
Cat. No. 80E-10	– 5/8" thread size	– Cat. No. A80E-10 - 1.1 oz.
Cat. No. 80E-12	– 3/4" thread size	– Cat. No. A80E-12 - 1.8 oz.



METAL FLAT WASHERS AND LOCK WASHERS

High quality bronze or stainless steel washers for use on machine screws, points or threaded rod –

NOTE: stainless steel may be used with copper or aluminum materials.

Copper (Bronze)	Size	(Stainless Steel)
Cat. No. 140	– 1/4" flat washer	– Cat. No. A140 - 0.06 oz.
Cat. No. 140L	– 1/4" lock washer	– Cat. No. A140L - 0.05 oz.
Cat. No. 141	– 5/16" flat washer	– Cat. No. A141 - 0.08 oz.
Cat. No. 141L	– 5/16" lock washer	– Cat. No. A141L - 0.06 oz.
Cat. No. 142	– 3/8" flat washer	– Cat. No. A142 - 0.14 oz.
Cat. No. 142L	– 3/8" lock washer	– Cat. No. A142L - 0.1 oz.
Cat. No. 143	– 1/2" flat washer	– Cat. No. A143 - 0.24 oz.
Cat. No. 143L	– 1/2" lock washer	– Cat. No. A143L - 0.21 oz.
Cat. No. 144	– 5/8" flat washer	– Cat. No. A144 - 0.37 oz.
Cat. No. 144L	– 5/8" lock washer	– Cat. No. A144L - 0.38 oz.
Cat. No. 145	– 3/4" flat washer	– Cat. No. A145 - 0.98 oz.
Cat. No. 145L	– 3/4" lock washer	– Cat. No. A145L - 0.62 oz.



Flat



Lock

NEOPRENE WASHERS

Neoprene flat washers for sealing against moisture penetration under bolts, screws or all thread rod. Washers up to 3/8" size are 1/16" thick, larger washers are 1/8" thick.

Cat. No. 205N	– 3/16" bolt - 0.005 oz.
Cat. No. 206N	– 1/4" bolt - 0.02 oz.
Cat. No. 207N	– 3/8" bolt - 0.02 oz.
Cat. No. 208N	– 1/2" bolt - 0.08 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



FASTENERS

STANDARD NAILS

Roofing and siding nails of copper or galvanized steel for corrosion resistant fastening — barbed construction for long lasting grip. Large head nails for base anchoring, small head nails for cable anchoring.

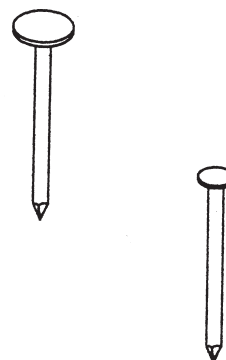
Copper

Cat. No. 84 — Large Head Copper — 2" long — 0.15 oz.

Cat. No. 84A — Small Head Copper — 1-1/2" long — 0.08 oz.

Galvanized

Cat. No. A84G — Large Head Galvanized — 1-3/4" long — 0.09 oz.



NAIL-IN ANCHOR

One-piece nail drive expansion anchor made of special zinc alloy with stainless steel nail.

Cat. No. 86Z — Copper - 0.38 oz.

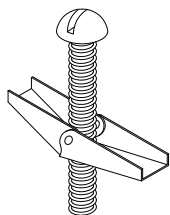


TOGGLE BOLTS

Spring wing type toggle bolt, steel plated to prevent corrosion — round head slotted — for use on hollow block or tile surfaces.

Cat. No. 78 — 1/4" diam. x 3" long - 0.8 oz.

Cat. No. 78A — 1/4" diam. x 4" long - 1 oz.



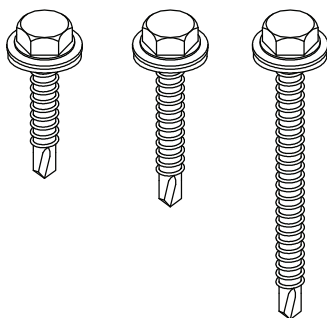
ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



FASTENERS

METAL ROOF NAIL, SCREWS AND SEALING WASHER



Self-tapping tek screws, hex washer head with neobond weather seal – for use on metal roofing and siding – 410 stainless steel.

Cat. No. 83ST-1 – Size #10, 1" long - 0.16 oz.

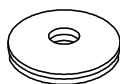
Cat. No. 83ST-2 – Size #10, 1-1/2" long - 0.18 oz.

Cat. No. 83ST-3 – Size #10, 2-1/2" long - 0.26 oz.



Stainless steel ring shank nail with metal washer and attached neobond weather seal for use with metal roofing and siding on wood structure.

Cat. No. 83 – Size #10, 2" long - 0.123 oz.



Sealing washer assembly consisting of cone type stainless steel washer with attached neobond sealing washer – for nails to 1/8" diameter.

Cat. No. 210 - 0.06 oz.



Self-tapping screw with hex washer head, Size #8.

Cat. No. 83NP-4 – Stainless Steel, 1" long - 0.11 oz.

Cat. No. 83NP-3 – Stainless Steel, 3/4" long, Type A - 0.08 oz.

Cat. No. 83NP-2 – Zinc Plated, 1/2" long - 0.08 oz.

ADHESIVE COMPOUND

NOTE: Before using any type of adhesive compound, it is important to consult the roof manufacturer to determine compatibility with roofing material. Improper use may affect roof warranty.

Cat. No. 690M-1 - 1 lb. - 1 oz.

Structural adhesive/sealant manufactured by ChemLink. M-1 is a moisture cure product designed for use in difficult bonding and sealing applications. 1 Tube - Cont. Net 300 ml (10.1 Fl. Oz.). One tube is normally adequate for approximately 10 bases or 25 cable holders. Please specify color when ordering. Information and MSDS sheets are included at the beginning of this catalog. Colors: white, gray, black, - lime stone upon request.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CABLE PROTECTORS

Cable protectors of penta-treated wood, copper pipe, polyvinylchloride (PVC) pipe. For guarding cable near ground from mechanical damage. Install one foot below grade to 6' or more above grade.

COPPER PIPE — 6'-8"

Cat. No. C93A — 5/8" I.D. x long - 2 lbs. - 4 oz.

Cat. No. C93B — 3/4" I.D. x long - 2 lbs. - 10 oz.

PVC PIPE

Cat. No. 93A - 1/2" I.D. x 10' long - 1 lb. - 6 oz.

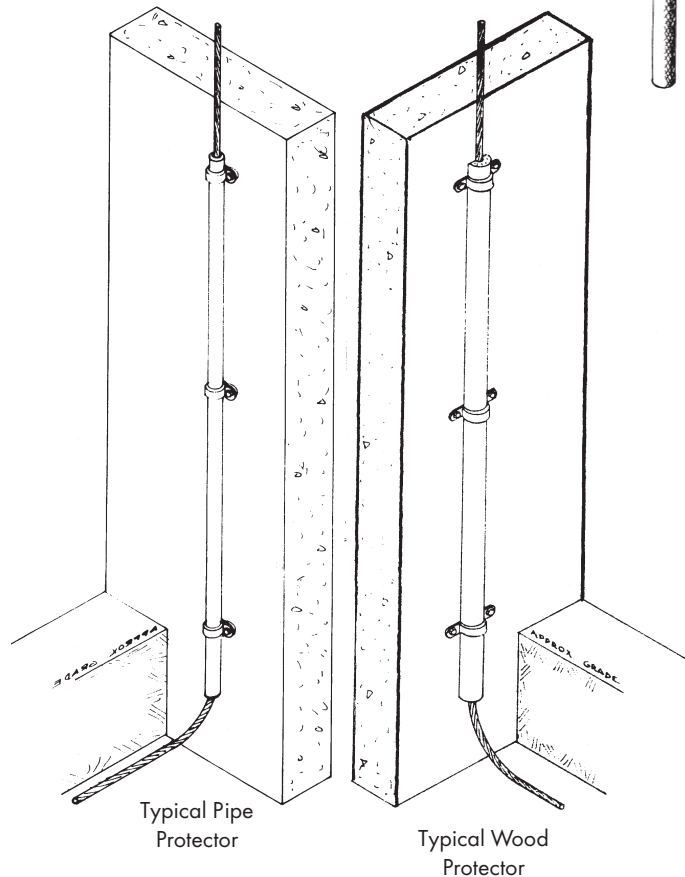
Cat. No. 93B - 3/4" I.D. x 10' long - 2 lbs. - 7 oz.

Cat. No. 93C - 1" I.D. x 10' long - 3 lbs. - 1 oz.

Cat. No. 93D - 1-1/4" I.D. x 10' long - 4 lbs.

WOOD

Cat. No. 96 — 8' long for cables to 3/4" diameter - 3 lbs. - 2 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

FASTENERS FOR PROTECTORS

ALL ITEMS



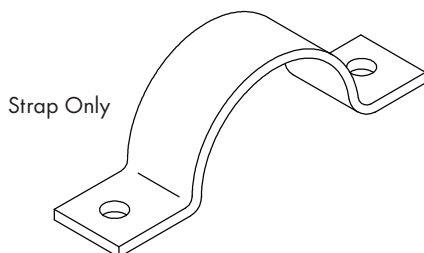
WOOD PROTECTOR STRAP

Heavy galvanized steel strap formed to fit tight on Cat. No. 96 wood molding protector – available as strap only to be used with nails, wood screws or metal screws or with screws and expansion anchors for masonry.

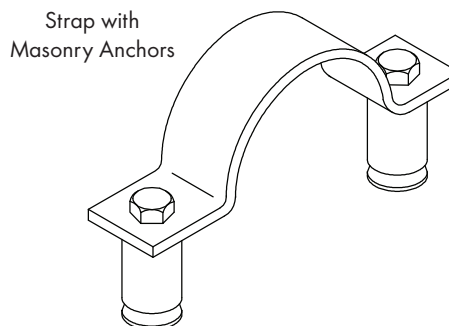
Galvanized

Cat. No. 71M – Strap Only - 1 oz.

Cat. No. 71G – Strap with masonry anchors - 2.6 oz.



Strap Only



Strap with
Masonry Anchors

PIPE PROTECTOR STRAP (TWO BOLT)

Heavy copper strap 1" wide of 0.064" thick metal formed to fit metal pipe or PVC pipe protectors – holes punched to receive bolts, screws, or nails to 1/4" diameter.

Copper

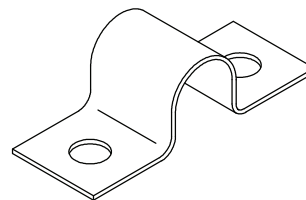
Cat. No. 71B-1 – for 1/2" PVC cable protector #93A - 1.3 oz.

Cat. No. 71B-5 – for 5/8" copper cable protector #C93A - 1.2 oz.

Cat. No. 71B-3 – for 3/4" PVC cable protector #93B - 1.4 oz.

Cat. No. 71B-4 – for 1" PVC cable protector #93C - 2.0 oz.

Cat. No. 71B-6 – for 1-1/4" PVC cable protector #93D - 2.0 oz.



PIPE PROTECTOR LOOP (ONE BOLT)

Heavy copper loop 1" wide of 0.064" thick metal formed to fit metal pipe or PVC pipe protectors – hole punched to receive bolt to 1/4" diameter.

Copper

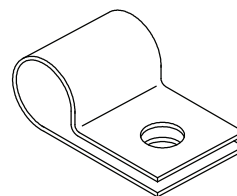
Cat. No. 71-1 – for 1/2" PVC cable protector #93A - 1.8 oz.

Cat. No. 71-5 – for 5/8" copper cable protector #C93A - 1.5 oz.

Cat. No. 71-3 – for 3/4" PVC cable protector #93B - 1.8 oz.

Cat. No. 71-4 – for 1" PVC cable protector #93C - 3.0 oz.

Cat. No. 71-6 – for 1-1/4" PVC cable protector #93D - 3.0 oz.



Aluminum

Cat. No. A71-1 – for 1/2" PVC cable protector #93A - 0.6 oz.

Cat. No. A71-5 – for 5/8" copper cable protector #C93A - 0.7 oz.

Cat. No. A71-3 – for 3/4" PVC cable protector #93B - 0.61 oz.

Cat. No. A71-4 – for 1" PVC cable protector #93C - 0.6 oz.

Cat. No. A71-6 – for 1-1/4" PVC cable protector #93D - 0.8 oz.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



LEAD WEDGES

LEAD WEDGE

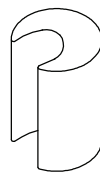
Combination lead and tin wedge to be used in tubing or pipe to wedge cable against wall for making cable electrically continuous with metal at top and bottom of protector pipe or conduit run — each wedge is 1" long — available in size ranges for cables 3/8" to 1/2" diameter.

Cat. No. 461 — for 1/2" conduit or pipe - 1.6 oz.

Cat. No. 461A — for 3/4" conduit or pipe - 2.2 oz.

Cat. No. 461B — for 1" conduit or pipe - 3.7 oz.

Cat. No. 461C — for 1-1/4" conduit or pipe - 6.6 oz.



Typical use
in pipe end



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

GROUND RODS

ALL ITEMS



UL 467
UL 96

COPPERCLAD - STANDARD

Our copperclad ground rods meet standards UL 467, ANSI C33.8 RUS, and are approved for use in lightning protection per UL 96 and UL 96A. Copper cladding is a minimum of 0.010 inches thick.

Cat. No. 90-8 – 1/2" diam. x 8' long - 5 lbs. - 8 oz.

Cat. No. 91-10 – 1/2" diam. x 10' long - 7 lbs.

Cat. No. 94-8 – 5/8" diam. x 8' long - 7 lbs.

Cat. No. 94-10 – 5/8" diam. x 10' long - 9 lbs.

Cat. No. 97-8 – 3/4" diam. x 8' long - 10 lbs.

Cat. No. 97-10 – 3/4" diam. x 10' long - 13 lbs.

Cat. No. 97-12 – 3/4" diam. x 12' long - 15 lbs.

Cat. No. 97C-10 – 1" diam. x 10' long - 18 lbs.

COPPERCLAD - SECTIONAL

(Threaded both ends)

Cat. No. 90-8S – 1/2" diam. x 8' long - 5 lbs. - 8 oz.

Cat. No. 91-10S – 1/2" diam. x 10' long - 7 lbs.

Cat. No. 94-8S – 5/8" diam. x 8' long - 7 lbs.

Cat. No. 94-10S – 5/8" diam. x 10' long - 9 lbs.

Cat. No. 97-8S – 3/4" diam. x 8' long - 10 lbs.

Cat. No. 97-10S – 3/4" diam. x 10' long - 13 lbs.

Cat. No. 97C-10S – 1" diam. x 10' long - 18 lbs.

SOLID COPPER

Cat. No. 90-8-C – 1/2" diam. x 8' long - 6 lbs. - 6 oz.

Cat. No. 91-10-C – 1/2" diam. x 10' long - 8 lbs.

Cat. No. 94-8-C – 5/8" diam. x 8' long - 10 lbs.

Cat. No. 94-10-C – 5/8" diam. x 10' long - 12 lbs. - 8 oz.

Cat. No. 97-8-C – 3/4" diam. x 8' long - 14 lbs. - 6 oz.

Cat. No. 97-10-C – 3/4" diam. x 10' long - 18 lbs.

Cat. No. 97C-10-C – 1" diam. x 10' long - 32 lbs.

STAINLESS STEEL

Cat. No. 90-8ST – 1/2" diam. x 8' long - 5 lbs. - 11 oz.

Cat. No. 91-10ST – 1/2" diam. x 10' long - 7 lbs. - 2 oz.

Cat. No. 94-8ST – 5/8" diam. x 8' long - 9 lbs.

Cat. No. 94-10ST – 5/8" diam. x 10' long - 11 lbs.

Cat. No. 97-8ST – 3/4" diam. x 8' long - 12 lbs. - 13 oz.

Cat. No. 97-10ST – 3/4" diam. x 10' long - 16 lbs.

Cat. No. 97C-8ST – 1" diam. x 8' long - 22 lbs. - 11 oz.

Cat. No. 97C-10ST – 1" diam. x 10' long - 27 lbs.

ROBBINS LIGHTNING, INC.

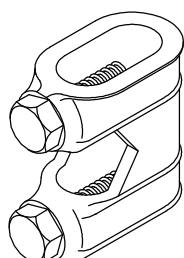
124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

-121-



GROUND ROD CLAMPS

ALL ITEMS



TAP TYPE GROUND CLAMP

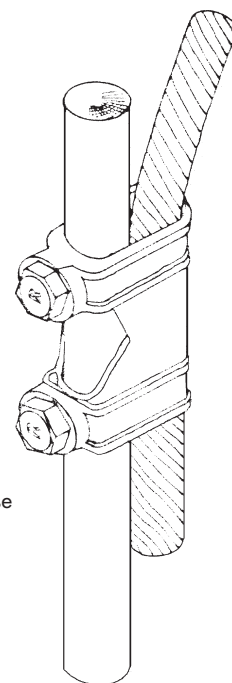
Heavy cast bronze tap type ground rod clamp with 5/16" stainless steel bolts for tension on rod. No. 98 (1/2" size) has 2" contact length along axis of rod and will handle main sized cables through 5/8" diameter. No. 98A has 3" contact length and will handle main sized cables through 3/4" diameter. No. 98B has 3" contact length and will handle main sized cables through 7/8" diameter. Overall dimensions - 98: 2" x 1-1/2" - 98A: 3" x 2" - 98B: 3" x 2-1/4". Suggested torque - 150 in./lbs.

Copper

Cat. No. 98 - for 1/2" Rod - 4.8 oz.

Cat. No. 98A - for 5/8" Rod - 6.4 oz.

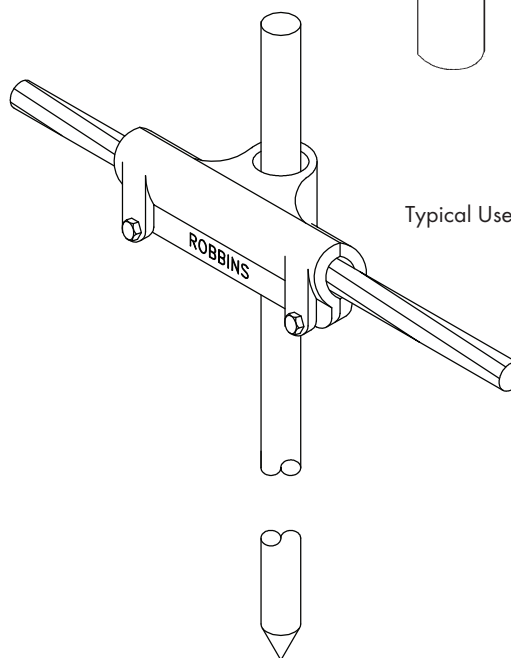
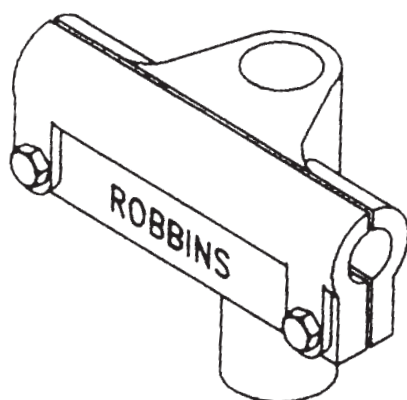
Cat. No. 98B - for 3/4" Rod - 7.8 oz.



Typical Use

BUS TYPE GROUND CLAMP

Heavy cast bronze bus type ground rod clamp with 5/16" bronze bolt tension on rod. All clamps have 2-1/4" contact length along axis of rod and 4" cable contact. For main sized cables through No. 605. Suggested torque: 150 in./lbs.



Typical Use

Copper

Cat. No. 99 - for 5/8" Rod - 15.6 oz.

Cat. No. 99A - for 3/4" Rod - 15 oz.

Cat. No. 99B - for 1/2" Rod - 1 lb. - 1 oz.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

-122-



GROUND ROD COUPLINGS



Coupling

Made of strong copper alloy.

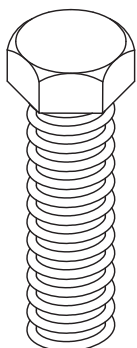
Cat. No. 203-G2 – for 1/2" Ground Rod - 2.2 oz.

Cat. No. 203-G5 – for 5/8" Ground Rod - 3.8 oz.

Cat. No. 203-G6 – for 3/4" Ground Rod - 4.8 oz.

Cat. No. 203-G8 – for 1" Ground Rod - 13.3 oz.

GROUND ROD DRIVING STUD



Driving Stud

For use with couplings to protect threads.

Made of high strength steel.

Cat. No. 232-G2 – for 1/2" Coupling - 1.8 oz.

Cat. No. 232-G5 – for 5/8" Coupling - 3 oz.

Cat. No. 232-G6 – for 3/4" Coupling - 5.3 oz.

Cat. No. 232-G8 – for 1" Coupling - 9.8 oz.

GROUND ROD DRIVING SLEEVE

For use on standard ground rods to prevent
top from mushrooming.

Made of high strength steel.

Cat. No. 233-G2 – for 1/2" Ground Rod - 1lb. - 11 oz.

Cat. No. 233-G5 – for 5/8" Ground Rod - 1lb. - 11 oz.

Cat. No. 233-G6 – for 3/4" Ground Rod - 1lb. - 9 oz.



Driving Sleeve

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

-123-



GROUND PLATES



COPPER FLAT PLATES

Copper ground plates are used for installation in place of ground rods where shallow topsoil is encountered –for soil depth of 1 ft. 6 in. use No. 88X (two square feet) plate –for shallow soil depth less than 1 ft. 6 in. place ground plate as deep as possible using No. 88A (eight square feet) plate –where no topsoil is present, run conductor on bedrock for 12 feet (attaching to bedrock a maximum of 3 feet spacing) and terminate in ground plate –for main sized cables through No. 605.

Copper

Cat. No. 88X – 12" x 12" - 1 lb. - 15 oz.

Cat. No. 88 – 12" x 24" - 3 lbs. - 7 oz.

Cat. No. 88A – 24" x 24" - 6 lbs. - 5 oz.

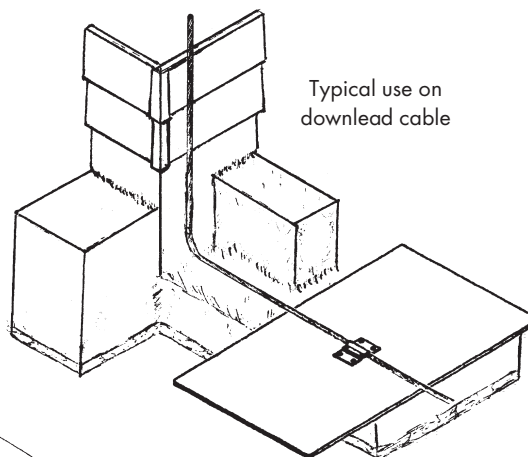
Cat. No. 88B – 36" x 36" - 13 lbs. - 13 oz.

88X = 2ft²

88 = 4ft²

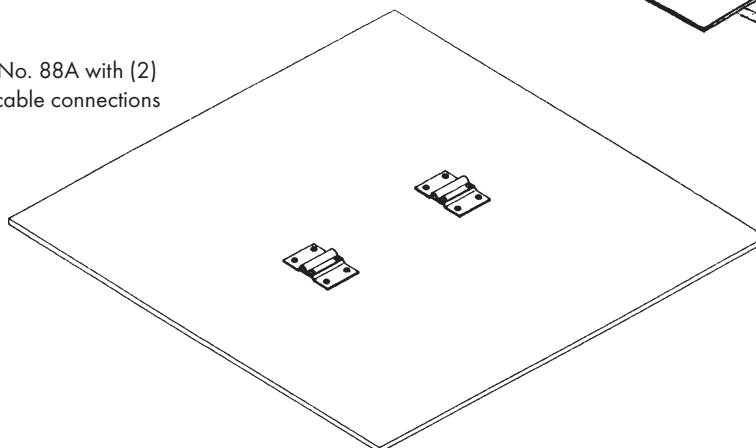
88A = 8ft²

88B = 18ft²

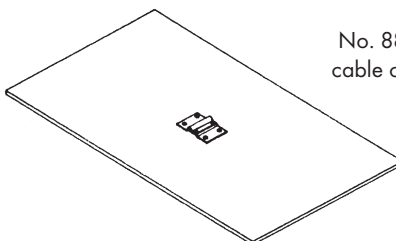


Typical use on
downlead cable

No. 88A with (2)
cable connections



No. 88 with (1)
cable connection



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

-124-



PVC GROUND ACCESS WELLS

Ground Access Wells of Schedule 40
PVC – 1/4" thick galvanized steel lid.

Cat. No. 89A-18 – 6" I.D. x 18" long - 10 lbs. - 9 oz.

Cat. No. 89A-24 – 6" I.D. x 24" long - 12 lbs. - 3 oz.

Cat. No. 89A-36 – 6" I.D. x 36" long - 16 lbs. - 3 oz.

Cat. No. 89B-18 – 8" I.D. x 18" long - 16 lbs. - 6 oz.

Cat. No. 89B-24 – 8" I.D. x 24" long - 19 lbs. - 6 oz.

Cat. No. 89B-36 – 8" I.D. x 36" long - 25 lbs. - 6 oz.

Cat. No. 89C-18 – 10" I.D. x 18" long - 25 lbs.

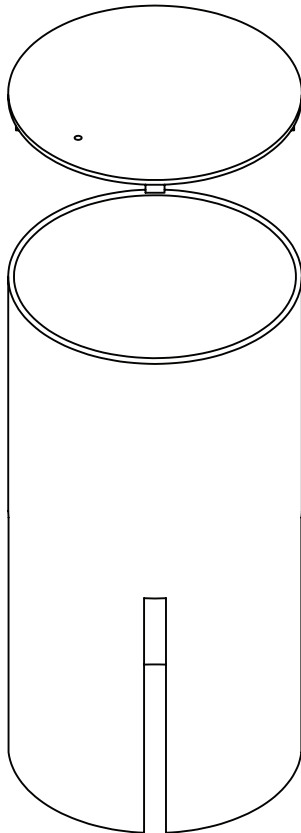
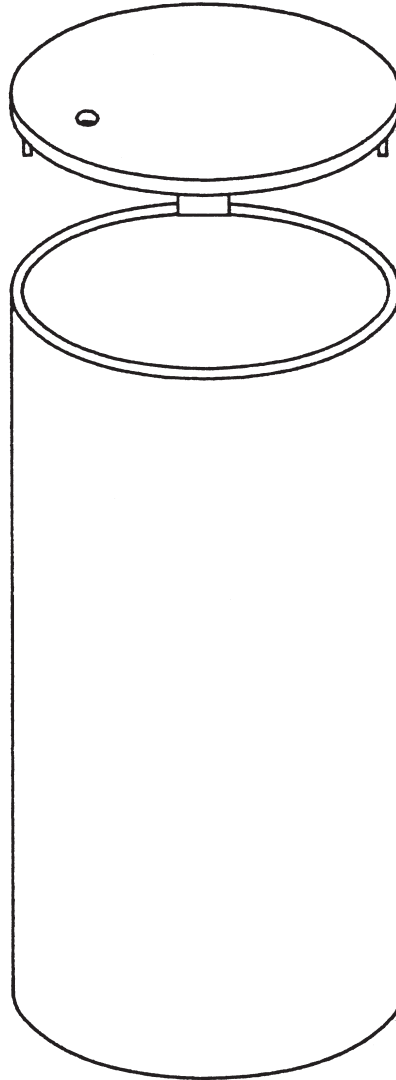
Cat. No. 89C-24 – 10" I.D. x 24" long - 29 lbs. - 1 oz.

Cat. No. 89C-36 – 10" I.D. x 36" long - 36 lbs. - 13 oz.

Cat. No. 89D-18 – 12" I.D. x 18" long - 33 lbs. - 15 oz.

Cat. No. 89D-24 – 12" I.D. x 24" long - 39 lbs.

Cat. No. 89D-36 – 12" I.D. x 36" long - 48 lbs. - 6 oz.



Optional configuration includes 4 slots, equally spaced, 15/16" wide, 1/2 the total length of the ground well. Custom sizes and configurations available upon request.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

-125-



CABLE DISCONNECTOR



Heavy cast bronze or aluminum cable disconnecter with separate bolt tension cable clamps — 1-1/2" cable contact surface. For use to test ground resistance or for use on movable equipment. For cables No. 1 through No. 605. Overall dimensions - 2" x 3-3/4".

No. 694 and No. A694 do not have anchor bolts.

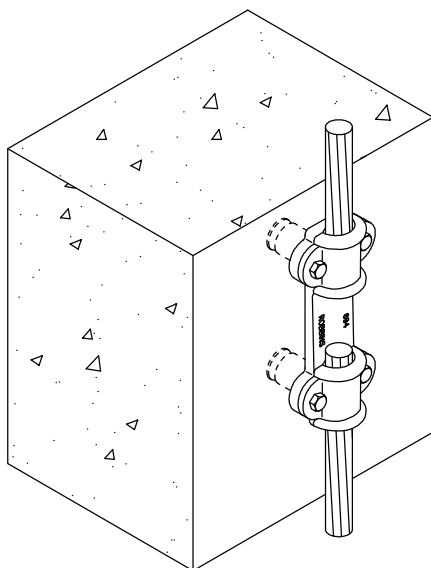
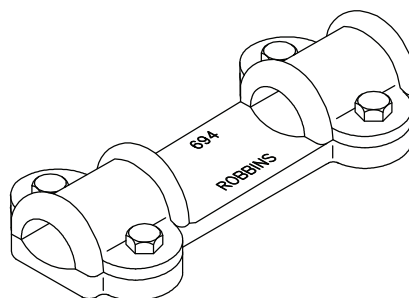
No. 695 and No. A695 are furnished with two 1/4" flat head bolts and two 1/4" expansion anchors.

Cat. No. 694 — Copper - 10.8 oz.

Cat. No. A694 — Aluminum - 3.7 oz.

Cat. No. 695 — Copper - 12.4 oz.

Cat. No. A695 — Aluminum - 5.3 oz.



Typical use on
masonry wall

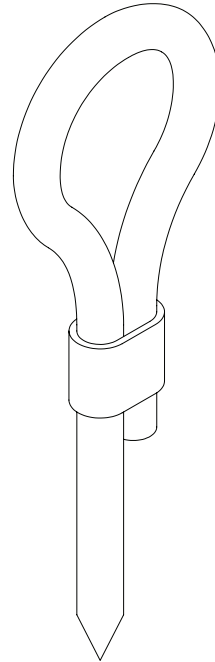


ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

AIRCRAFT TIE-DOWN ANCHOR ROD

Copperclad steel aircraft tie-down anchor rod with copper sleeve compressed on rod — eye radius 1-1/2". These rods meet ASTM-B-371 specifications. While UL 467 does not cover tie-down rods, these rods meet UL's bending test. Rods are manufactured from 3/4" nominal, industry standard ground rods.



Total Length

Cat. No. 94 - 8TD — 5/8" diameter, 8' Long 7'7" - 7 lbs.

Cat. No. 94 - 10TD — 5/8" diameter, 10' Long 9'7" - 9 lbs.

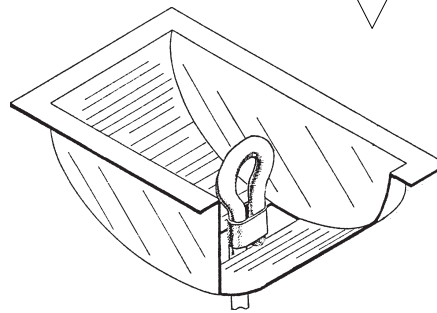
Cat. No. 97 - 8TD — 3/4" diameter, 8' Long 7'7" - 12 lbs.

Cat. No. 97 - 10TD — 3/4" diameter, 10' Long 9'7" - 15 lbs.

PLASTIC DEPRESSION FORM

Cat. No. 761 - 2.1 oz.

Plastic depression form — snaps over loop on tie-down anchor rod to form depression approximately 6" long by 4" wide by 3" deep around standard 5/8" or 3/4" diameter anchor rod.



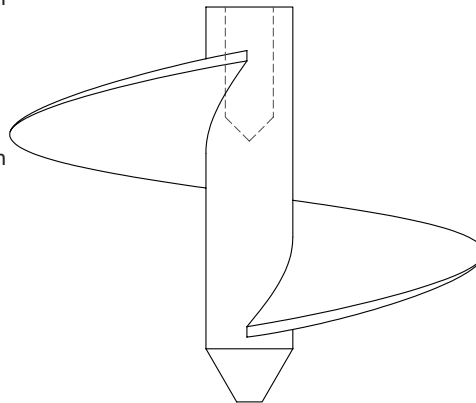
Typical application of form on tie-down rod

COPPERCLAD ANCHOR

A copperclad helix anchor, for use with aircraft tie-down rods.

Cat. No. 95B - for 3/4" rods - 2 lbs. - 15 oz.

When ordering 95A or 95B with aircraft tie-down order tie-down with threads.

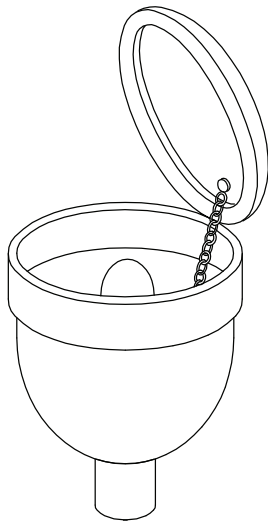


ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

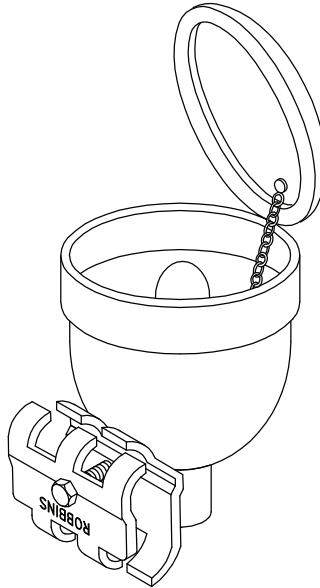


STATIC GROUNDING RECEPTACLES (Aircraft Type)



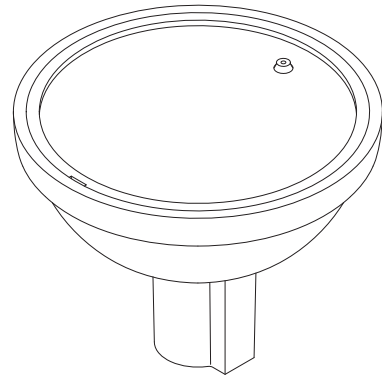
Cat. No. 680 – Copper - 1 lb.- 11 oz.

Cast bronze aircraft type static grounding receptacle. Cover attached with strong linked chain. Replaceable stud for standard 1/2" grounding connector. Base threaded to receive 3/4" sectional ground rod or extension rod. Overall dimensions - 2-15/16" x 3-15/16". Inside dimension: 2-1/4" diameter.



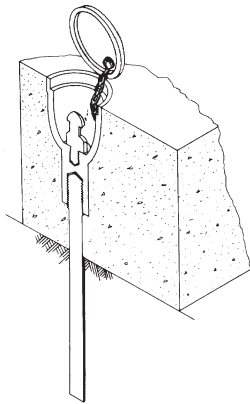
Cat. No. 680A – Copper - 2 lbs.

Same as No. 680 described at left except cable connector No. 68A added. Cable capacity No. 6 AWG through No. 250 MCM AWG. Overall dimensions: 2-15/16" diameter x 3-15/16". Inside dimension: 2-1/4" diameter.

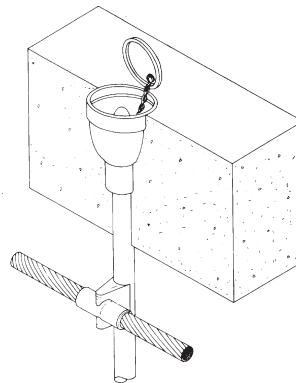


Cat. No. 681 – Copper - 3 lbs.

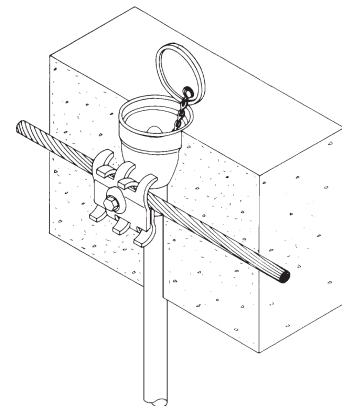
Same as No. 680 described at left except with dimensions as follows: Overall dimensions: 4-1/2" diameter x 3 - 7/16". Inside dimension - 1-15/16" diameter.



Typical use with
ground rod only



Typical use with welded
connection to cable in slab



Typical use with clamped
connection to cable in slab

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

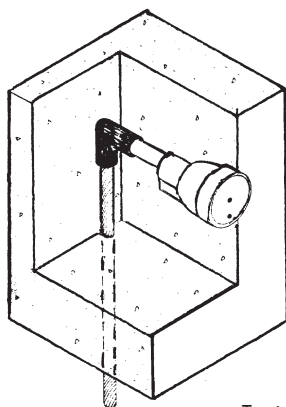


STATIC GROUNDING RECEPTACLES AND EXTENSION RODS



Cast bronze aircraft type static grounding receptacle for use on vertical masonry wall. Cover attached with strong linked chain and spring clip to retain lid. Replaceable stud for standard 1/2" grounding connector – base threaded to receive 3/4" sectional ground rod or extension rod. Overall dimensions: 2-15/16" diameter x 3-15/16". Inside dimension: 2-1/4" diameter.

Cat. No. 680B – Copper - 1 lb. - 11 oz.



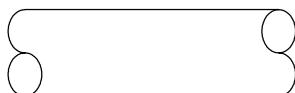
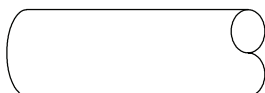
Typical use on
vertical wall

Copperclad steel extension rods to assist in positioning receptacles at correct height when pouring concrete or for cable attachment – each rod threaded 3/4" to fit receptacle hub.

Cat. No. 897 – Copper – 4" long - 6.7 oz.

Cat. No. 897A – Copper – 24" long - 2 lbs. - 8 oz.

Cat. No. 897B – Copper – 36" long - 3 lbs. - 12 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

-129-



HEAVY DUTY STACK CABLES

ALL ITEMS



Standard of the Industry for Commercial Stacks

Cat. No. 604 – 28 strands of 14 gauge (.064) bare copper wire in rope lay configuration, 7/16" diameter, 115,000 circular mil cross section – weight of copper 375 pounds per 1,000'.

Available on 250' and 500' spools.



Cat. No. 605 – 37 strands of 0.0756" bare copper wire in concentric configuration – 1/2" diameter, 211,500 circular mil cross section (#4/0 AWG) – weight of copper 653 pounds per 1,000'.

Available on 250' and 500' spools.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

HEAVY DUTY STACK POINTS



STAINLESS STEEL

Heavy duty stack points of solid stainless steel rod with tapered tip – alloy of steel to prevent corrosion from stack fumes. Available in rod diameters of 1/2", 5/8" or 3/4" – lengths 18" to 72" standard. All points have standard 1/2" NC or 5/8" NC threads.

- Cat. No. 455-4** – 1/2" diameter, 18" long - 1 lb.
Cat. No. 455-5 – 5/8" diameter, 18" long - 1 lb. - 9 oz.
Cat. No. 455-6 – 3/4" diameter, 18" long - 2 lbs. - 4 oz.
- Cat. No. 456-4** – 1/2" diameter, 24" long - 1 lb. - 5 oz.
Cat. No. 456-5 – 5/8" diameter, 24" long - 2 lbs. - 1 oz.
Cat. No. 456-6 – 3/4" diameter, 24" long - 3 lbs.
- Cat. No. 457-4** – 1/2" diameter, 30" long - 1 lb. - 11 oz.
Cat. No. 457-5 – 5/8" diameter, 30" long - 2 lbs. - 11 oz.
Cat. No. 457-6 – 3/4" diameter, 30" long - 3 lbs. - 11 oz.
- Cat. No. 458-4** – 1/2" diameter, 36" long - 2 lbs.
Cat. No. 458-5 – 5/8" diameter, 36" long - 3 lbs. - 2 oz.
Cat. No. 458-6 – 3/4" diameter, 36" long - 4 lbs. - 8 oz.
- Cat. No. 459-4** – 1/2" diameter, 42" long - 2 lbs. - 5 oz.
Cat. No. 459-5 – 5/8" diameter, 42" long - 3 lbs. - 10 oz.
Cat. No. 459-6 – 3/4" diameter, 42" long - 5 lbs. - 4 oz.
- Cat. No. 460-4** – 1/2" diameter, 48" long - 2 lbs. - 11 oz.
Cat. No. 460-5 – 5/8" diameter, 48" long - 4 lbs. - 3 oz.
Cat. No. 460-6 – 3/4" diameter, 48" long - 6 lbs.
- Cat. No. 461-4** – 1/2" diameter, 54" long - 3 lbs.
Cat. No. 461-5 – 5/8" diameter, 54" long - 4 lbs. - 11 oz.
Cat. No. 461-6 – 3/4" diameter, 54" long - 6 lbs. - 12 oz.
- Cat. No. 462-4** – 1/2" diameter, 60" long - 3 lbs. - 5 oz.
Cat. No. 462-5 – 5/8" diameter, 60" long - 5 lbs. - 4 oz.
Cat. No. 462-6 – 3/4" diameter, 60" long - 7 lbs. - 8 oz.
- Cat. No. 463-4** – 1/2" diameter, 66" long - 3 lbs. - 11 oz.
Cat. No. 463-5 – 5/8" diameter, 66" long - 5 lbs. - 12 oz.
Cat. No. 463-6 – 3/4" diameter, 66" long - 8 lbs. - 4 oz.
- Cat. No. 464-4** – 1/2" diameter, 72" long - 4 lbs.
Cat. No. 464-5 – 5/8" diameter, 72" long - 6 lbs. - 4 oz.
Cat. No. 464-6 – 3/4" diameter, 72" long - 9 lbs.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



STACK POINT BASE — SIDE MOUNT



Heavy duty cast stainless steel point base for mounting on vertical surface — threaded end to receive 1/2" or 5/8" diameter points — may be used as two-way, three-way or four-way connection — available in series No. 420B for use in masonry concealed, or in series No. 420 or No. 420A for exposed installation — all screws stainless steel to resist corrosion — series No. 420 furnished complete with 3/8" or 1/2" screw and expansion anchor in back plate — for metal stack, series No. 420A furnished with 3/8" or 1/2" screw, two nuts and two washers — for use with cables No. 604, No. 605, and No. 604L. Overall dimensions 4-1/2" x 3" - weight is 1 lb. - 5 oz.

Cat. No. 420-44S — for 1/2" point, 1/2" anchor

Cat. No. 420-45S — for 5/8" point, 1/2" anchor

Cat. No. 420-34S — for 1/2" point, 3/8" anchor

Cat. No. 420-35S — for 5/8" point, 3/8" anchor

Cat. No. 420A-44S — for 1/2" point, for metal 1/2"

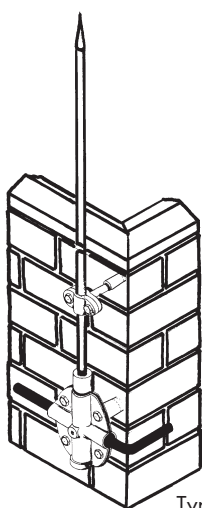
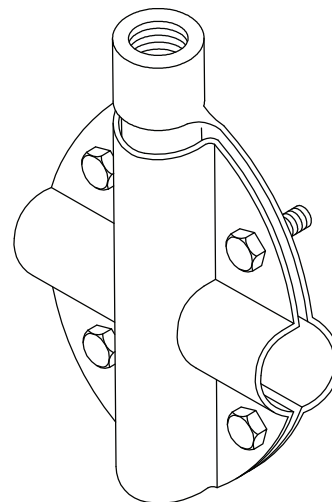
Cat. No. 420A-45S — for 5/8" point, for metal 1/2"

Cat. No. 420A-34S — for 1/2" point, for metal 3/8"

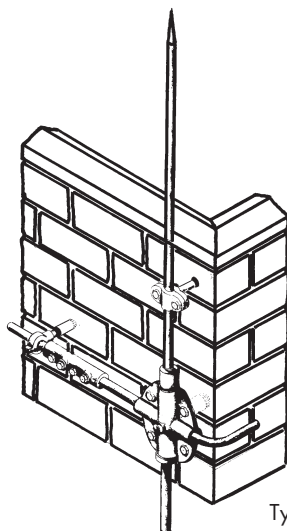
Cat. No. 420A-35S — for 5/8" point, for metal 3/8"

Cat. No. 420B-4S — for 1/2" point, no anchor

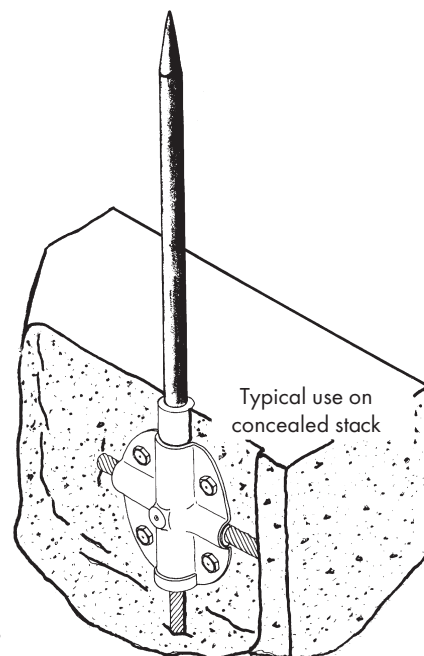
Cat. No. 420B-5S — for 5/8" point, no anchor



Typical use
on brick stack



Typical use as
three way base



Typical use on
concealed stack

ROBBINS LIGHTNING, INC.

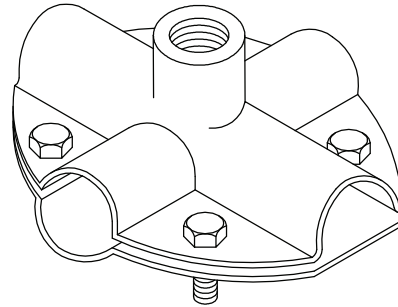
124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



STACK POINT BASE — TOP MOUNT



Heavy duty cast stainless steel point base for mounting on top surface of concrete or metal smoke stack — threaded end to receive 1/2" or 5/8" diameter points — may be used as two-way, three-way or four-way connection — available in series No. 421B for use in concealed masonry cap, or in series No. 421 or No. 421A for exposed installation — all screws stainless steel to resist corrosion — series No. 421 furnished complete with 3/8" or 1/2" screw and expansion anchor in back plate for masonry stack — for metal stack, series No. 421A furnished with 3/8" or 1/2" screw, two nuts and two washers — for use with cables No. 604, No. 605, and No. 604L. Overall dimensions - 3 - 1/2" x 3" x 2" - weight is 1 lb. - 5 oz.



Cat. No. 421-44S — for 1/2" point, 1/2" anchor

Cat. No. 421-45S — for 5/8" point, 1/2" anchor

Cat. No. 421-34S — for 1/2" point, 3/8" anchor

Cat. No. 421-35S — for 5/8" point, 3/8" anchor

Cat. No. 421A-44S — for 1/2" point, for metal 1/2"

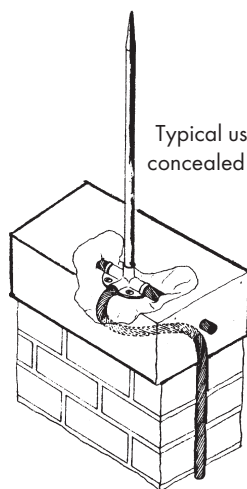
Cat. No. 421A-45S — for 5/8" point, for metal 1/2"

Cat. No. 421A-34S — for 1/2" point, for metal 3/8"

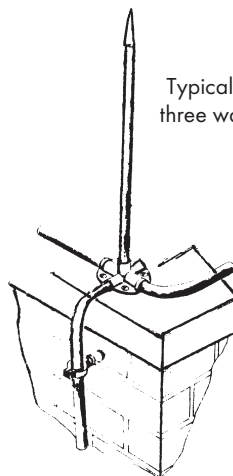
Cat. No. 421A-35S — for 5/8" point, for metal 3/8"

Cat. No. 421B-4S — for 1/2" point, no anchor

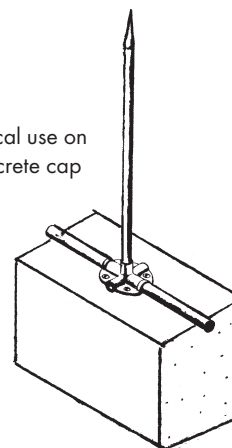
Cat. No. 421B-5S — for 5/8" point, no anchor



Typical use on
concealed stack



Typical use as
three way base



Typical use on
concrete cap

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



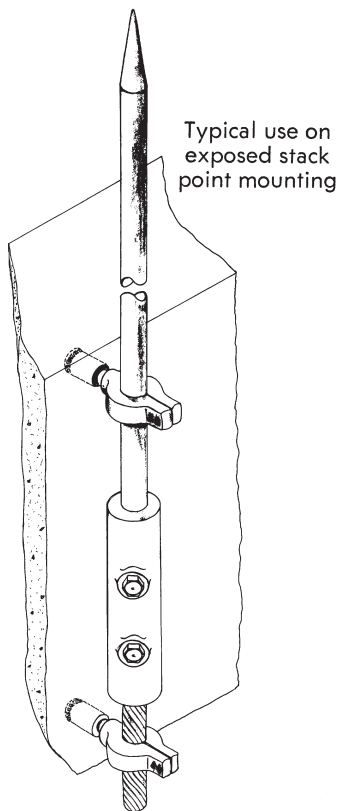
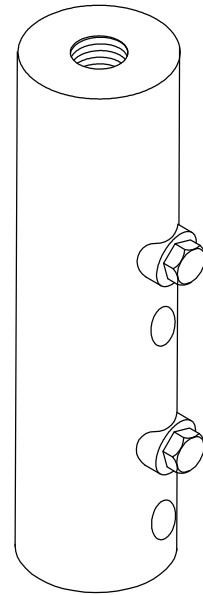
HEAVY DUTY STACK POINT BASE



Heavy duty cast bronze point base for mounting stack point on vertical surface – threaded end to receive 1/2" or 5/8" diameter points – available in bare bronze series No. 422B for use in masonry concealed – All screws stainless steel to resist corrosion – for use with cables No. 604 or No. 605.

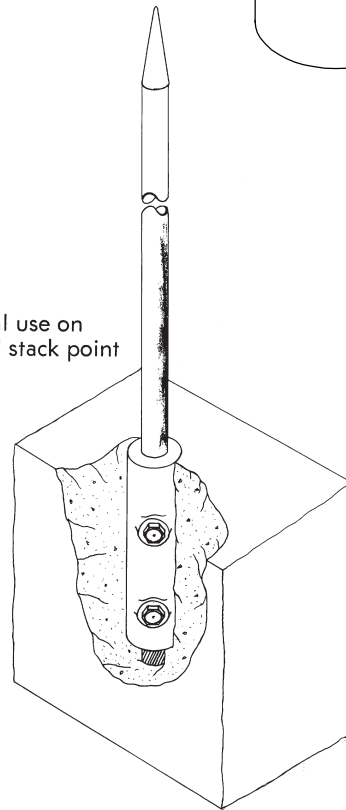
Cat. No. 422B-4 – Bare bronze, for 1/2" point - 11 oz.

Cat. No. 422B-5 – Bare bronze, for 5/8" point - 11 oz.



Typical use on
exposed stack
point mounting

Typical use on
concealed stack point



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

HEAVY DUTY CABLE SPLICERS

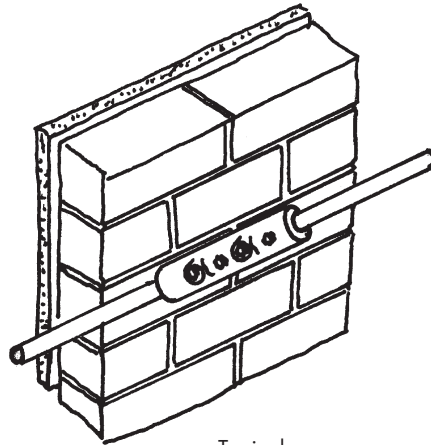
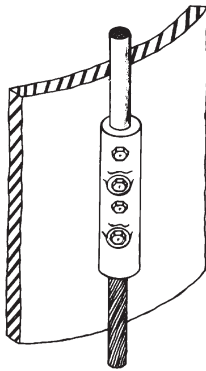
ALL ITEMS



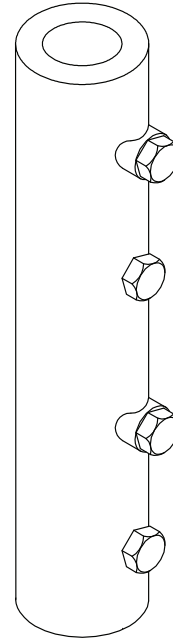
Heavy duty cast bronze cable splicer for use in closing lead coated encircling band on stack or for lead coated cable to bare cable connection — each cable end held securely with two bolt tension — Series No. 418 bare bronze — for use with cables No. 604 or No. 605.

Cat. No. 418 — Bare Bronze - 11 oz.

Typical use as
bare cable splicer

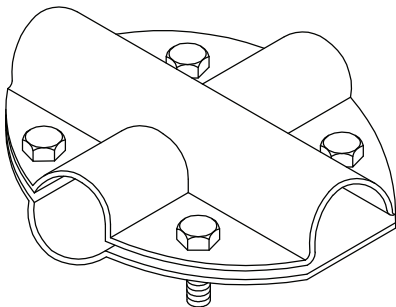


Typical use as
encircling band
splicer

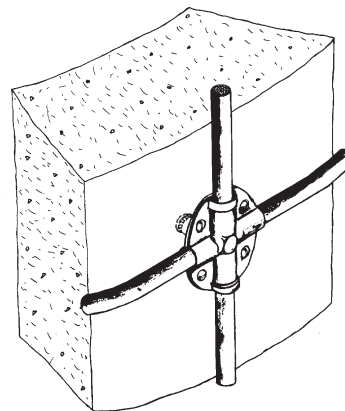


Heavy duty cast stainless steel cross run cable splicer — cable held securely by four bolt tension — for use on top 25' of stack and mid-point encircling band — for use with cables No. 401, No. 402, No. 403 or No. 404. Overall dimensions - 3 - 1/2" x 3".

Cat. No. 466S — Stainless Steel - 1 lb. - 5 oz.



Typical use as
encircling band splicer



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

-135-



POINT AND CABLE HOLDERS



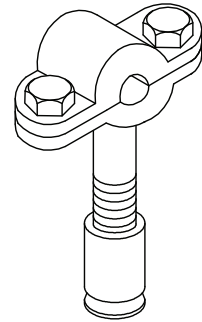
Heavy duty cast bronze point, cable or tubular protector pipe holder – bolt tension cap for positive holding – 3/8" stem diameter – furnished without anchor (Series No. 433 and No. 433B), and with two stainless steel nuts and washers (Series No. 439A and No. 439C) – bare holder for use with 7/8" OD standard protector pipes.

Copper

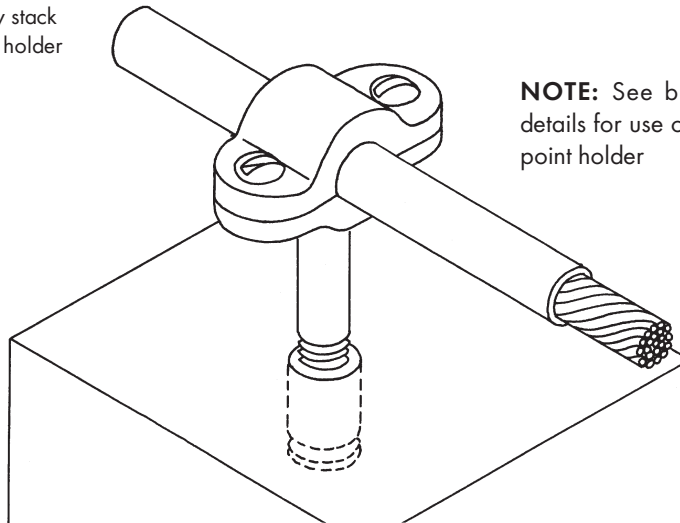
Cat. No. 433B-3 – Bare bronze, 3/8" stem, no anchor - 4 oz.

Cat. No. 439B-3 – Bare bronze, 3/8" stem and anchor for masonry - 6 oz.

Cat. No. 439C-3 – Bare bronze, 3/8" stem for metal - 7.9 oz.



Typical use on
masonry stack
as cable holder



NOTE: See base No. 420
details for use of this series as
point holder



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

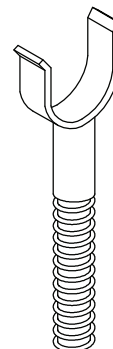
HEAVY DUTY CABLE HOLDERS

ALL ITEMS



COMPRESSION TYPE

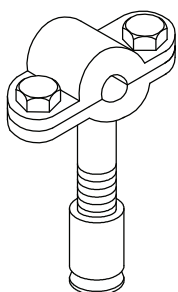
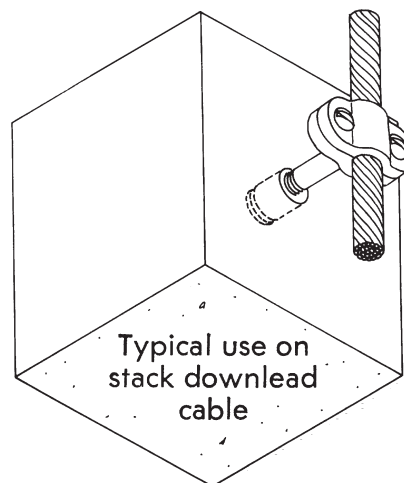
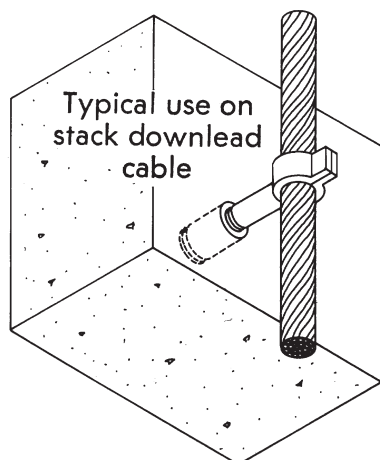
Heavy cast bronze cable holder for use in supporting stack cables — compression type cable grip for secure holding — 3/8" stem diameter — furnished without anchor (Series No. 430), with expansion anchor (Series No. 436) and with two stainless steel nuts and washers (Series No. 436A) for use with cables No. 604 and No. 605. (For Class I structures only.)



Cat. No. 430-3 — Bare bronze, 3/8" stem, no anchor - 2.1 oz.

Cat. No. 436-3 — Bare bronze, 3/8" stem and anchor for masonry - 4 oz.

Cat. No. 436A-3 — Bare bronze, 3/8" stem for metal - 2.9 oz.



BOLT TENSION TYPE

Heavy cast bronze cable holder for use in supporting stack cables — bolt tension cap for positive holding — 3/8" stem diameter — furnished without anchor (Series No. 431), with expansion anchor (Series No. 437) and for metal with two stainless steel nuts and washers (Series No. 437A) — for use with cables No. 604 and No. 605.

Cat. No. 431-3 — Bare bronze, 3/8" stem, no anchor - 4.5 oz.

Cat. No. 437-3 — Bare bronze, 3/8" stem and anchor - 6.4 oz.

Cat. No. 437A-3 — Bare bronze, 3/8" stem for metal - 8.3 oz.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



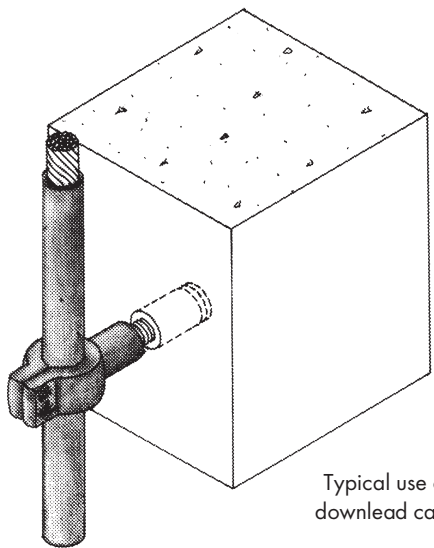
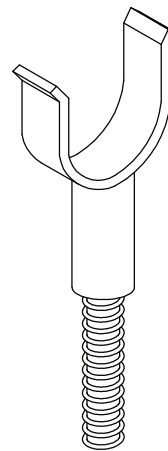
CABLE AND PIPE HOLDERS

Heavy duty cast bronze cable or tubular protector pipe holder – compression type retainer for secure holding – 3/8" stem diameter – furnished without anchor (Series No. 432 and No. 432B), with expansion anchor (Series No. 438 and No. 438B) and with two stainless steel nuts and washers (Series No. 438A and No. 438C) – bare holder for use with 5/8" and 3/4" standard protector pipes.

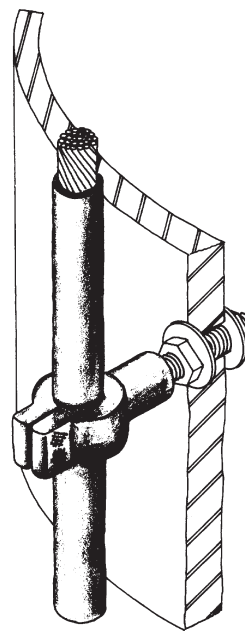
Cat. No. 432B-3 – Bare bronze, 3/8" stem, no anchor - 2.1 oz.

Cat. No. 438B-3 – Bare bronze, 3/8" stem and anchor for masonry - 4 oz.

Cat. No. 438C-3 – Bare bronze, 3/8" stem for metal - 2.9 oz.



Typical use on
downlead cable



Typical use on
metal stack



ROBBINS LIGHTNING, INC.

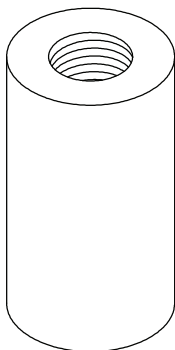
124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

MISCELLANEOUS STACK EQUIPMENT

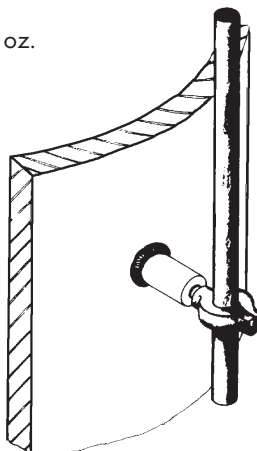
WELDING STUD

Stainless steel female stud for welding to steel stacks to receive threaded bronze cable and point holders — length of stud 1-1/4", diameter 5/8" — with 3/8" threads for holders.

Cat. No. 468-3 — 3/8" thread - 2.4 oz.



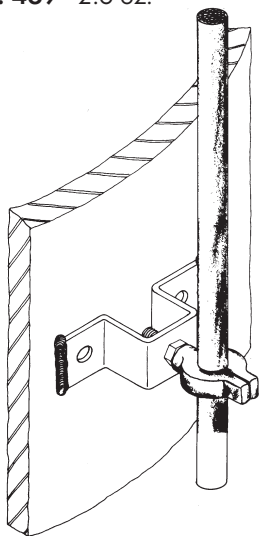
Typical use on
steel surface



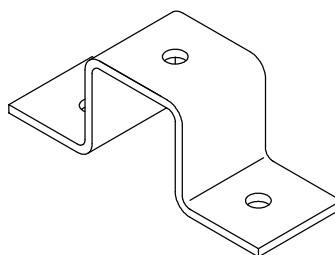
WELDING BRACKET

Stainless steel bracket for welding to steel stacks to support bronze cable and point holders — may be bolted to steel surface with two 3/8" screws — stand-off distance 1-1/2", welding ears 1" wide — made of 1/8" x 1" stainless steel stock — hole to receive 3/8" stem on holder of metal mount series.

Cat. No. 469 - 2.6 oz.



Typical use on
metal surface



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

-139-

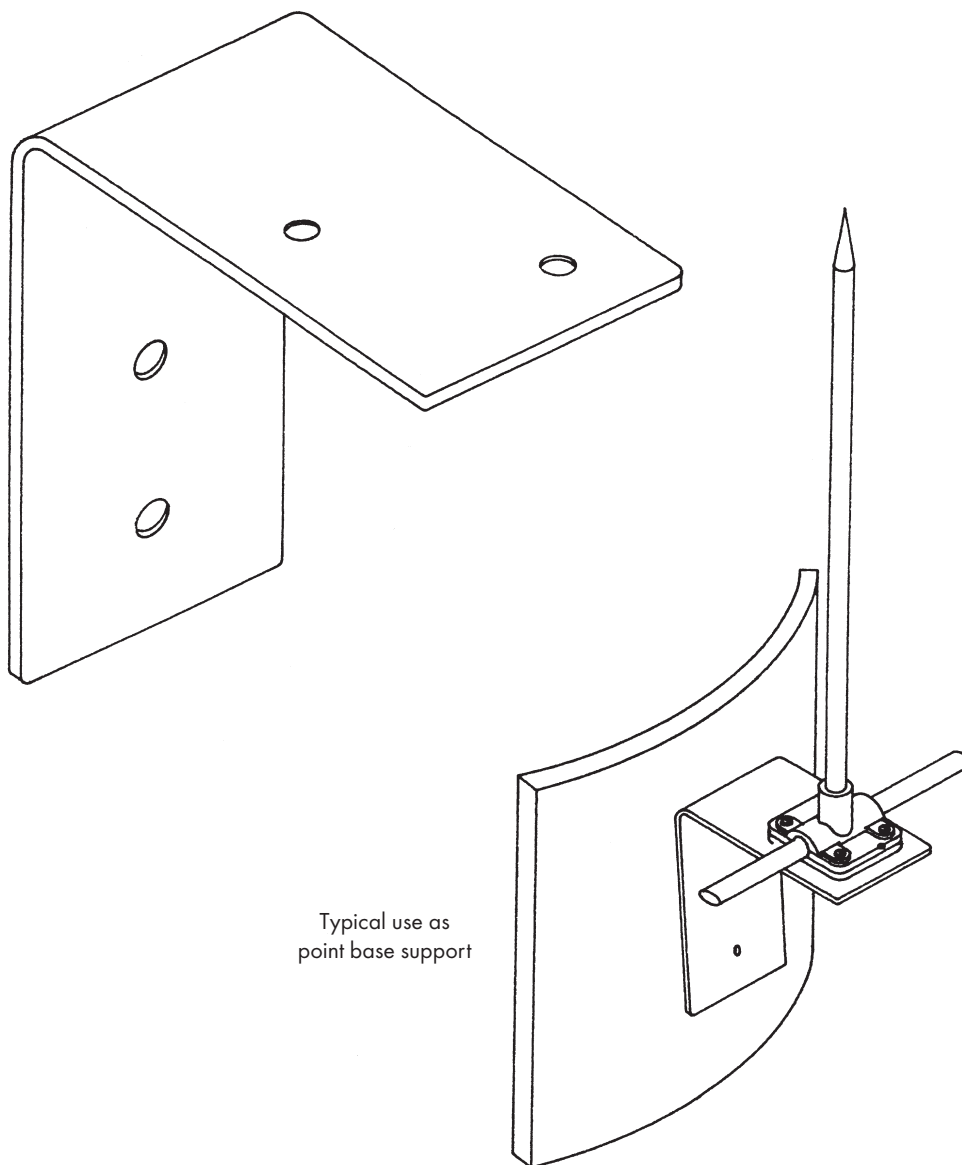


MISCELLAENOUS STACK EQUIPMENT

WELDING ANGLE

Stainless steel angle for welding to steel stack to support air terminals or cable holders — may be bolted to steel surface with two 3/8" screws — made of 1/8" thick stainless steel 3" wide, 6" vertical leg, 4-5/8" horizontal leg of angle — holes to receive 1/4" anchor bolts on point base of metal mount series.

Cat. No. 470 - 13.8 oz.



Typical use as
point base support



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

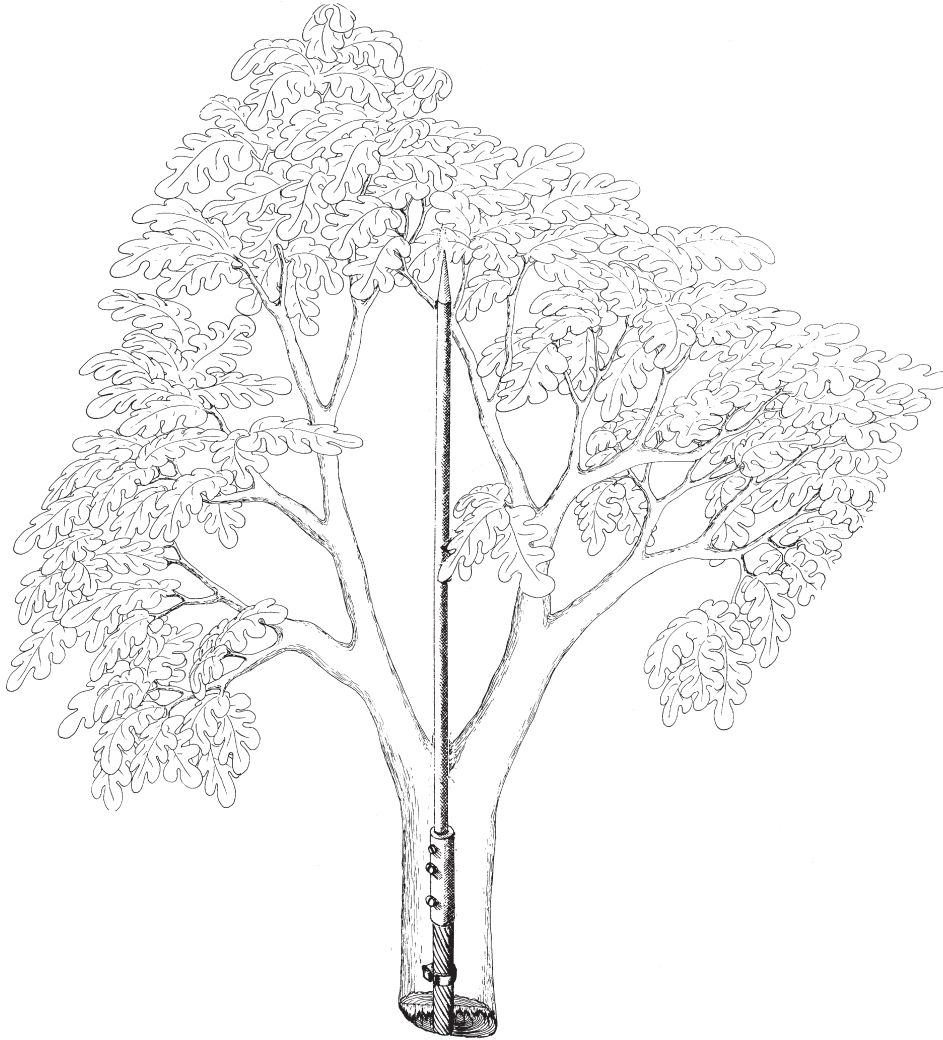
STANDARD TREE AIR TERMINALS

Air terminal assemblies consisting of solid copper point with cast bronze bolt tension base attached – furnished complete with wood screw in base – available in 3/8" or 1/2" diameter copper point 36" or 48" long; base No. 42 as described elsewhere in catalog.

Copper

Cat. No. 160-3 – 36" point - 1 lb. - 10 oz.

Cat. No. 160-4 – 48" point - 1 lb. - 1 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

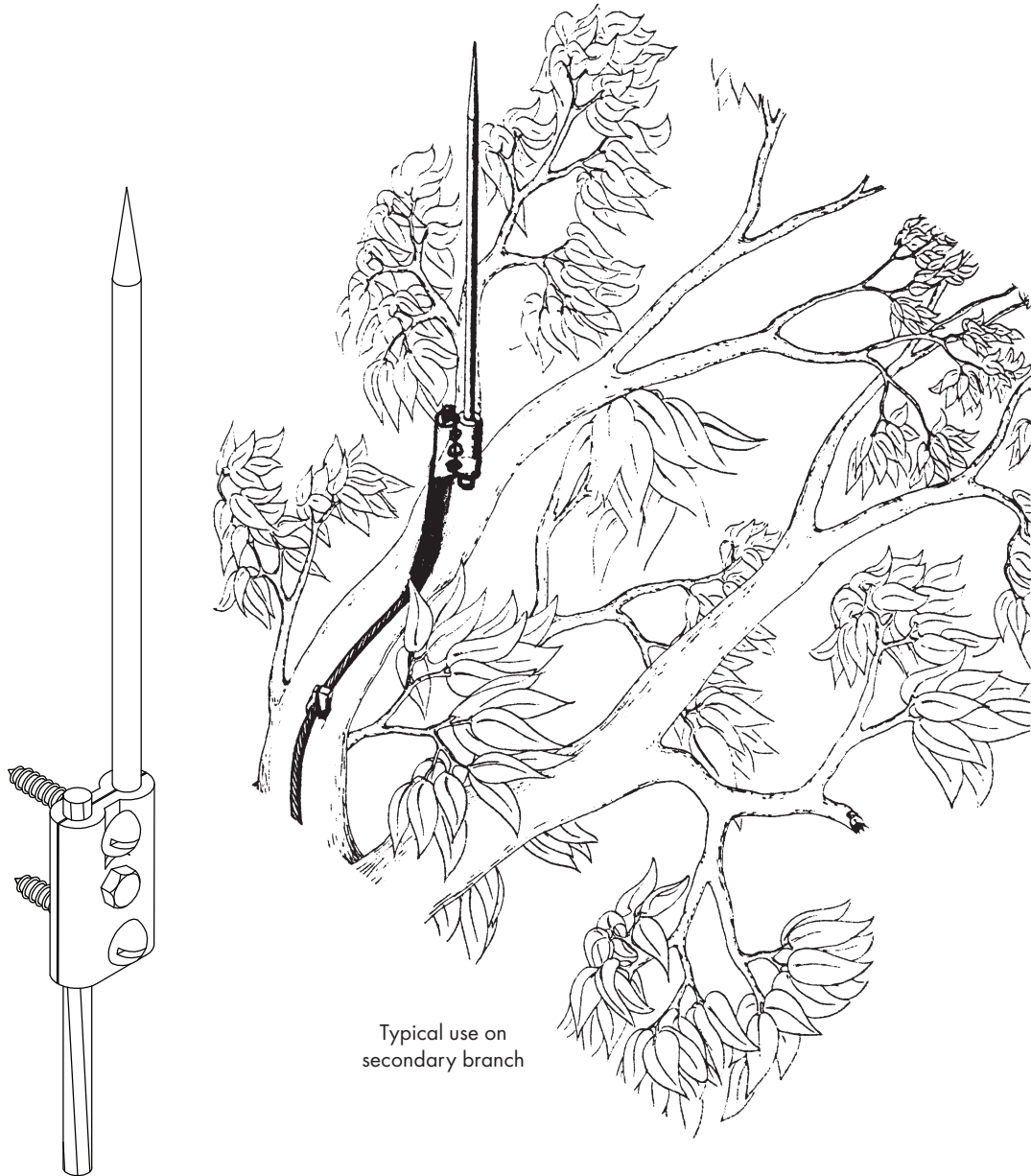
-141-



MINIATURE TREE AIR TERMINAL

Air terminal assembly consisting of solid copper point and base - for use on lateral secondary branches - furnished with two wood screws and bolt tension cable attachment - point of copper 1/4" diameter, 8" long; point of 3/8" diameter, 8" long - base for all miniature cables and wires through 5/16" diameter.

Cat. No. 161 - Copper - 5.8 oz.



ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440

TREE DRIVE CABLE HOLDERS

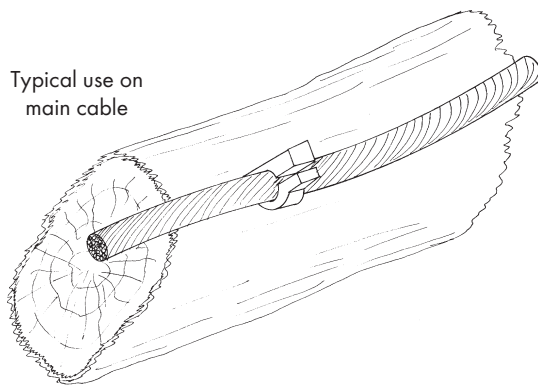
FOR MATURE TREES ONLY WITH BARK 1" THICK OR GREATER.

Cast bronze tree drive, 4" long, for use on main size cables or air terminals – simply drive holder in tree and compress ear around cable – holds firm to cable but allows movement for growth or wind sway – for all cables through No. 605.

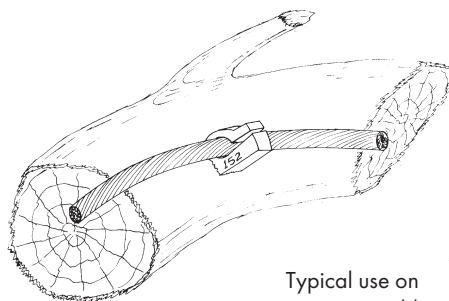
Cat. No. 151 – Copper - .08 oz.



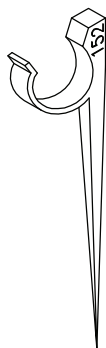
Typical use on
main cable



NOTE: Use 72 & 83 on Young Trees



Typical use on
miniature cable



FOR MATURE TREES ONLY WITH BARK 1" THICK OR GREATER.

Cast bronze tree drive 3-3/4" long for use on miniature cable secondary runs – simply drive holder in tree and compress ear around cable – holds firm to cable but allows movement for growth or wind sway – for all cables and solid wires through 3/8" diameter.

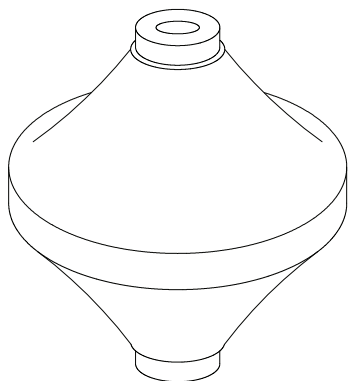
Cat. No. 152 – Copper - .0625 oz.

ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



ORNAMENTAL BALLS AND DIRECTION VANE



ORNAMENTAL BALL

High quality impact resistant plastic ornamental ball and glass for use on all standard 1/2" diameter points. Overall dimensions - 3-1/2" x 3-1/2" diameter.

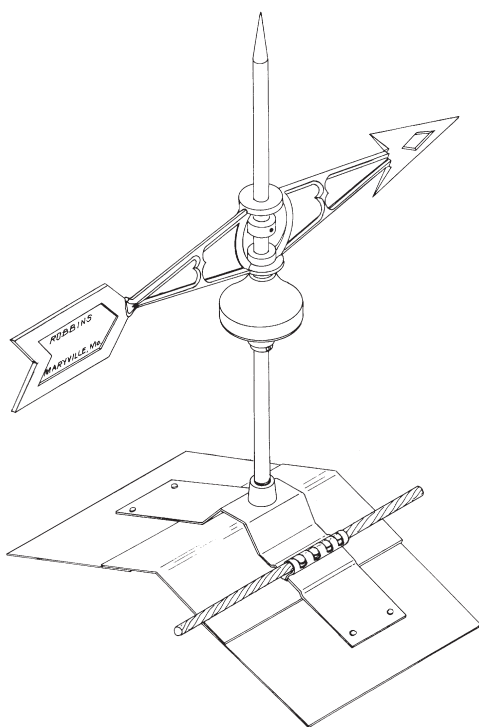
Cat. No. 104-WP (Plastic) - 1.8 oz.

Cat. No 104-WG (Glass)- 6.25 oz.

Specify color listed below:

Blue
White
Red
Yellow

NOTE: Ceramic Balls also available – blue and white – 4" diameter – for 1/2" or 5/8" diameter points. - 8 oz.



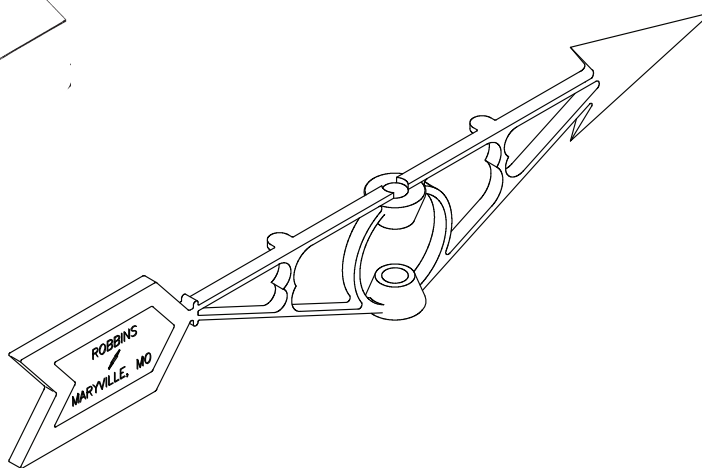
Typical use of
ornamental ball and
direction vane

DIRECTION VANE

Die cast aluminum direction vane to indicate wind direction when only slight breeze – fits standard 1/2" diameter points – rides on nylon bushing.

Shipped for 1/2" point unless otherwise specified.

Cat. No. 105 – Aluminum - 9.3 oz.

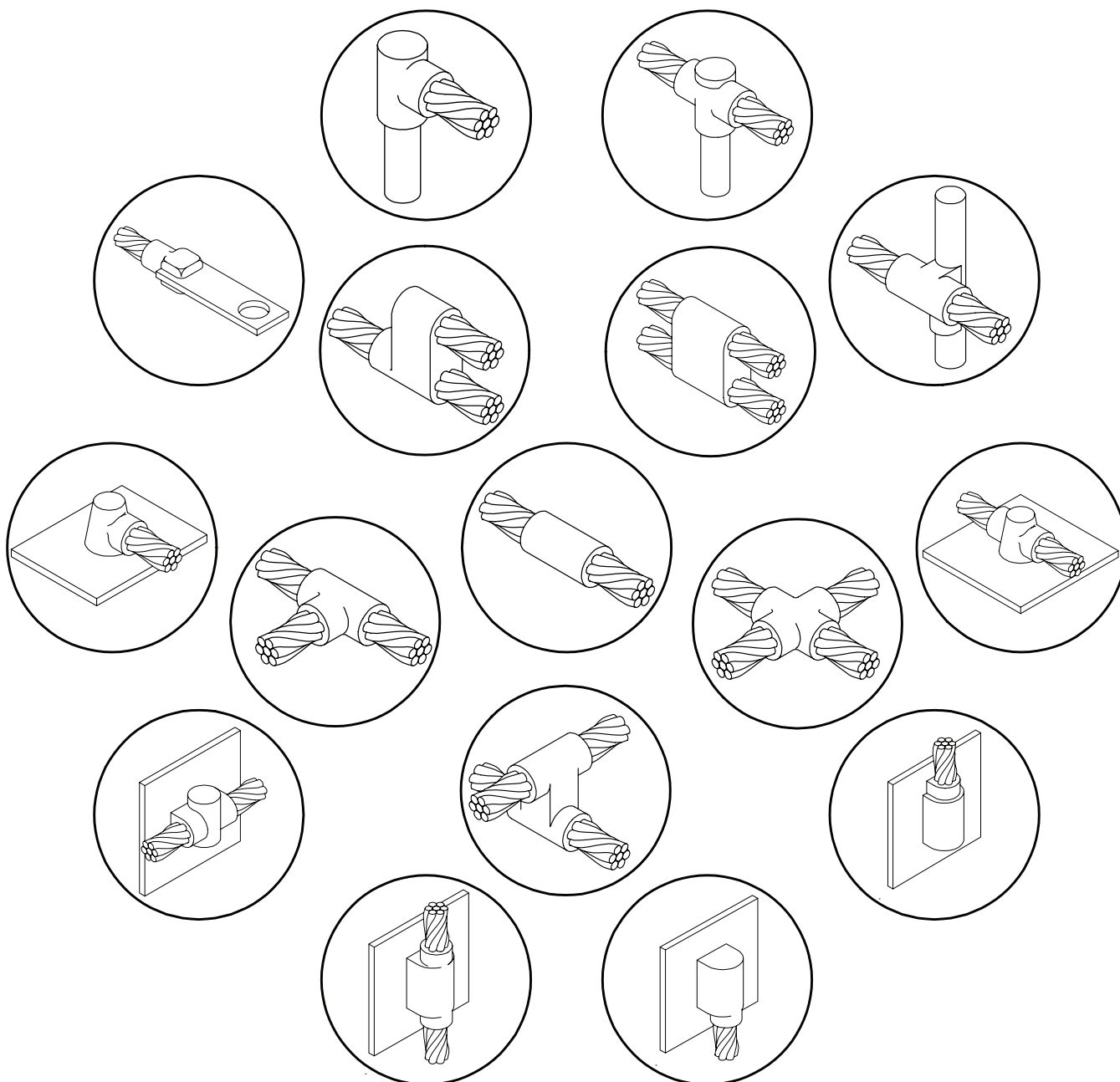


ROBBINS LIGHTNING, INC.

124 EAST SECOND STREET PHONE (660) 582-3156 FAX (660) 582-3039 P.O. BOX 440 MARYVILLE, MISSOURI 64468-0440



CADWELD® TO THERMOWELD® CROSS REFERENCE FOR LIGHTNING PROTECTION CABLE



4102 SOUTH 74TH EAST AVENUE / P.O. BOX 994
TULSA, OKLAHOMA 74101

PHONE (918) 663-1440 FAX (918) 622-1275 website www.thermoweld.com

THERMOWELD® CONNECTIONS FOR LIGHTNING PROTECTION CABLE

INDEX

CADWELD® TYPE	THERMOWELD® TYPE	PAGE #	CADWELD® TYPE	THERMOWELD® TYPE	PAGE #
GN	CR-18	12-13	SS.....	CC-1	3
GR	CR-1	7-8	TA	CC-2	3-5
GT	CR-2	9-10	VC	CS-9	16
GV	CR-36	13-14	VF	CS-7	18
GY	CR-3	10-11	VG	CS-27	19
HA	CS-8	15	VN	CS-18	17
HS	CS-1	15	VS.....	CS-3	17
HT	CS-2	16	VT	CS-6	19
LA	CB-1	21	VV.....	CS-4	18
RA	AC-1	20	XA	CC-4	5-7
RB	AC-2	20			

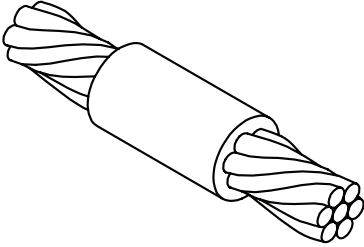
FOR WELD TYPES NOT LISTED, CONTACT FACTORY.

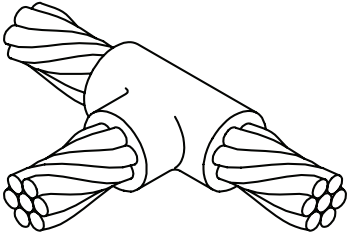
USE THE CHART BELOW TO DETERMINE THE CABLE CODE. THEN SELECT THE WELD CONNECTION TYPE NEEDED AND THEN FIND THE CORRESPONDING CABLE CODE TO ACQUIRE THE MOLD NUMBER, PRICE KEY AND CARTRIDGE SIZE.

CABLE CODE	THOMPSON	ROBBINS	INDEPENDENT	AC	EAST COAST	HEARY	HARGER
A	14	11A, 10	22	C-150	C14	HB6C	14
B	509	11		C-152		HB4C	10
C	29X, 32	1	32S	C-122, C-122L	C29, C32	HB29-17C, HB32-17C	29, 30, 32, 33
D	32S, 505, 28R	601, 603	20, 500	C-125, C-126, C-128	C385	HB24-14C, HB28-14C	25, 35, 28
E		604	40, G1				
F	36S, 506	602	36S	C-123, C-127		HB36-17C, BH28B-13C	20, 36
G			501, 21, 44S, 40S	C-124		HB40-17C	40
H			502				
J			501B				
K	507		G3				38
L			502A				
Q		605*		C-137*	C4/0-19*	HB122-4/0*	54*, 64*

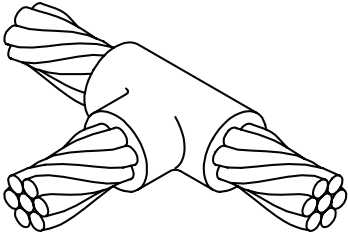
* = 4/0 CONCENTRIC CABLE

MOLDS FOR LIGHTNING PROTECTION CABLE

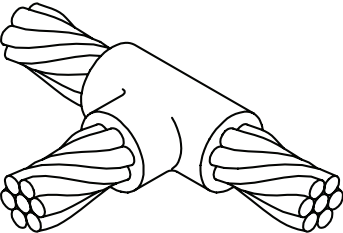
CADWELD® TYPE SS						THERMOWELD® TYPE CC-1	
CABLE CODE		CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK		
RUN	TAP						
A	A	SSC-8A	M-5002	25	4		
B	B	SSC-8B	M-5006	45	4		
C	C	SSC-8C	M-5032	65	4		
D	D	SSC-8D	M-5012	90	4		
E	E	SSC-8E	M-5013	90	4		
F	F	SSC-8F	M-5016	90	4		
G	G	SSC-8G	M-5005	115	4		
H	H	SSC-8H	M-2176	115	4		
J	J	SSC-8J	M-2178	115	4		
K	K	SSC-8K	M-2180	115	4		
L	L	SSC-8L	M-2182	150	4		
Q	Q	SSC-2Q	M-208	90	4		

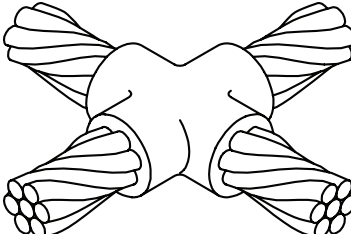
CADWELD® TYPE TA						THERMOWELD® TYPE CC-2	
CABLE CODE		CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK		
RUN	TAP						
A	A	TAC-8A8A	M-5050	45	4		
B	B	TAC-8B8B	M-5056	65	4		
	A	TAC-8B8A	M-2183	45	4		
C	C	TAC-8C8C	M-5048	115	4		
	B	TAC-8C8B	M-2186	90	4		
	A	TAC-8C8A	M-2184	65	4		
D	D	TAC-8D8D	M-5287	115	4		
	C	TAC-8D8C	M-5040	115	4		
	B	TAC-8D8B	M-2185	90	4		
	A	TAC-8D8A	M-5288	65	4		
E	E	TAC-8E8E	M-5023	150	4		
	D	TAC-8E8D	M-5284	150	4		
	C	TAC-8E8C	M-2187	115	4		
	B	TAC-8E8B	M-2192	90	4		
	A	TAC-8E8A	M-5286	90	4		

MOLDS FOR LIGHTNING PROTECTION CABLE

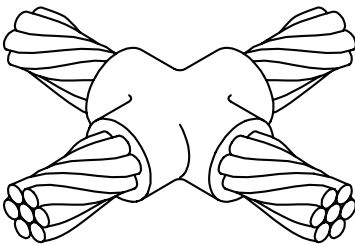
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE TA </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE CC-2 </div> </div>					
CABLE CODE		CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
RUN	TAP				
F	F	TAC-8F8F	M-2193	150	4
	E	TAC-8F8E	M-5014	150	4
	D	TAC-8F8D	M-5015	115	4
	C	TAC-8F8C	M-2194	115	4
	B	TAC-8F8B	M-5019	90	4
	A	TAC-8F8A	M-5017	90	4
	Q	TAC-8F2Q	M-5018	150	4
G	G	TAC-8G8G	M-2195	150	4
	F	TAC-8G8F	M-2197	150	4
	E	TAC-8G8E	M-2222	150	4
	D	TAC-8G8D	M-2223	115	4
	C	TAC-8G8C	M-2224	115	4
	B	TAC-8G8B	M-2225	90	4
	A	TAC-8G8A	M-2226	90	4
	Q	TAC-8G2Q	M-2227	150	4
H	H	TAC-8H8H	M-2228	150	4
	G	TAC-8H8G	M-2229	150	4
	F	TAC-8H8F	M-2230	150	4
	E	TAC-8H8E	M-2231	150	4
	D	TAC-8H8D	M-2232	115	4
	C	TAC-8H8C	M-2233	115	4
	B	TAC-8H8B	M-2234	90	4
	A	TAC-8H8A	M-2843	90	4
	Q	TAC-8H2Q	M-2236	150	4
J	J	TAC-8J8J	M-2237	200	4
	H	TAC-8J8H	M-2238	150	4
	G	TAC-8J8G	M-2239	150	4
	F	TAC-8J8F	M-2240	150	4
	E	TAC-8J8E	M-2241	150	4
	D	TAC-8J8D	M-2242	150	4
	C	TAC-8J8C	M-2243	115	4
	B	TAC-8J8B	M-2244	90	4
	A	TAC-8J8A	M-2245	90	4
	Q	TAC-8J2Q	M-2246	150	4
K	K	TAC-8K8K	M-2247	200	4
	J	TAC-8K8J	M-2248	200	4
	H	TAC-8K8H	M-2249	200	4
	G	TAC-8K8G	M-2250	150	4
	F	TAC-8K8F	M-2251	150	4
	E	TAC-8K8E	M-2252	150	4
	D	TAC-8K8D	M-2253	150	4
	C	TAC-8K8C	M-2254	150	4

MOLDS FOR LIGHTNING PROTECTION CABLE

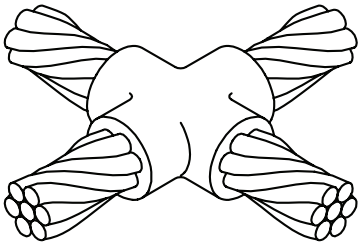
CADWELD® TYPE TA				THERMOWELD® TYPE CC-2	
CABLE CODE		CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
RUN	TAP				
K	B	TAC-8K8B	M-2255	115	4
	A	TAC-8K8A	M-2256	115	4
	Q	TAC-8K2Q	M-2257	150	4
L	L	TAC-8L8L	M-2258	250	4
	K	TAC-8L8K	M-2259	200	4
	J	TAC-8L8J	M-2260	200	4
	H	TAC-8L8H	M-2261	200	4
	G	TAC-8L8G	M-2262	200	4
	F	TAC-8L8F	M-2263	200	4
	E	TAC-8L8E	M-2264	150	4
	D	TAC-8L8D	M-2265	150	4
	C	TAC-8L8C	M-2266	150	4
	B	TAC-8L8B	M-2267	115	4
	A	TAC-8L8A	M-2268	115	4
	Q	TAC-8L2Q	M-2269	200	4
Q	Q	TAC-2Q2Q	M-241	150	4
	F	TAC-2Q8F	M-5033	150	4
	E	TAC-2Q2E	M-5035	150	4
	D	TAC-2Q8D	M-5036	115	4
	C	TAC-2Q8C	M-5020	115	4
	B	TAC-2Q8B	M-2270	90	4
	A	TAC-2Q2A	M-5037	90	4

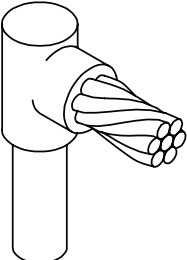
CADWELD® TYPE XA				THERMOWELD® TYPE CC-4	
CABLE CODE		CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
RUN	TAP				
A	A	XAC-8A8A	M-2271	65	4
B	B	XAC-8B8B	M-2272	90	4
	A	XAC-8B8A	M-2273	65	4
C	C	XAC-8C8C	M-2274	150	4
	B	XAC-8C8B	M-2275	115	4
	A	XAC-8C8A	M-2276	90	4

MOLDS FOR LIGHTNING PROTECTION CABLE

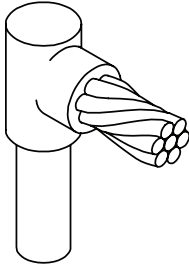
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE XA </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE CC-4 </div> </div>					
CABLE CODE		CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
RUN	TAP				
D	D	XAC-8D8D	M-5231	150	4
	C	XAC-8D8C	M-2277	150	4
	B	XAC-8D8B	M-2278	115	4
	A	XAC-8D8A	M-2279	90	4
E	E	XAC-8E8E	M-2280	200	4
	D	XAC-8E8D	M-2281	200	4
	C	XAC-8E8C	M-2282	150	4
	B	XAC-8E8B	M-2283	115	4
	A	XAC-8E8A	M-2284	115	4
F	F	XAC-8F8F	M-5232	200	4
	E	XAC-8F8E	M-2285	200	4
	D	XAC-8F8D	M-2286	150	4
	C	XAC-8F8C	M-2287	150	4
	B	XAC-8F8B	M-2288	115	4
	A	XAC-8F8A	M-2289	115	4
	Q	XAC-8F2Q	M-2290	200	4
G	G	XAC-8G8G	M-2291	200	4
	F	XAC-8G8F	M-2292	200	4
	E	XAC-8G8E	M-2293	200	4
	D	XAC-8G8D	M-2294	150	4
	C	XAC-8G8C	M-2295	150	4
	B	XAC-8G8B	M-2296	115	4
	A	XAC-8G8A	M-2297	115	4
	Q	XAC-8G2Q	M-2298	200	4
H	H	XAC-8H8H	M-2299	200	4
	G	XAC-8H8G	M-2300	200	4
	F	XAC-8H8F	M-2301	200	4
	E	XAC-8H8E	M-2302	200	4
	D	XAC-8H8D	M-2303	150	4
	C	XAC-8H8C	M-2304	150	4
	B	XAC-8H8B	M-2305	115	4
	A	XAC-8H8A	M-2306	115	4
	Q	XAC-8H2Q	M-2307	200	4
J	J	XAC-8J8J	M-2308	250	4
	H	XAC-8J8H	M-2309	200	4
	G	XAC-8J8G	M-2310	200	4
	F	XAC-8J8F	M-2311	200	4
	E	XAC-8J8E	M-2312	200	4
	D	XAC-8J8D	M-2313	200	4
	C	XAC-8J8C	M-2314	150	4
	B	XAC-8J8B	M-2315	115	4
	A	XAC-8J8A	M-2316	115	4
	Q	XAC-8J2Q	M-2317	200	4
K	K	XAC-8K8K	M-2318	250	4
	J	XAC-8K8J	M-2319	250	4

MOLDS FOR LIGHTNING PROTECTION CABLE

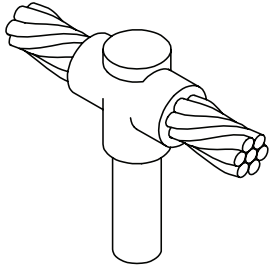
CADWELD® TYPE XA				THERMOWELD® TYPE CC-4	
CABLE CODE		CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
RUN	TAP				
K	H	XAC-8K8H	M-2855	250	4
	G	XAC-8K8G	M-2321	200	4
	F	XAC-8K8F	M-2322	200	4
	E	XAC-8K8E	M-2323	200	4
	D	XAC-8K8D	M-2324	200	4
	C	XAC-8K8C	M-2325	200	4
	B	XAC-8K8B	M-2326	150	4
	A	XAC-8K8A	M-2327	150	4
	Q	XAC-8K2Q	M-2328	200	4
L	L	XAD-8L8L	M-2329	2-150	5
	K	XAC-8L8K	M-2330	250	4
	J	XAC-8L8J	M-2331	250	4
	H	XAC-8L8H	M-2332	250	4
	G	XAC-8L8G	M-2333	250	4
	F	XAC-8L8F	M-2334	250	4
	E	XAC-8L8E	M-2335	200	4
	D	XAC-8L8D	M-2336	200	4
	C	XAC-8L8C	M-2337	200	4
	B	XAC-8L8B	M-2338	150	4
	A	XAC-8L8A	M-2339	150	4
	Q	XAC-8L2Q	M-2340	250	4
Q	Q	XAC-2Q2Q	M-443	200	4
	F	XAC-2Q8F	M-2341	200	4
	E	XAC-2Q8E	M-2342	200	4
	D	XAC-2Q8D	M-2343	150	4
	C	XAC-2Q8C	M-2344	150	4
	B	XAC-2Q8B	M-2345	115	4
	A	XAC-2Q8A	M-2346	115	4

CADWELD® TYPE GR				THERMOWELD® TYPE CR-1	
GRD ROD SIZE	CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
1/2" ①	A	GRC-148A	M-5060	90	4
	B	GRC-148B	M-2347	90	4
	C	GRC-148C	M-5064	90	4

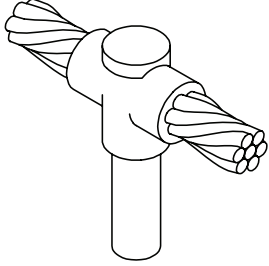
MOLDS FOR LIGHTNING PROTECTION CABLE

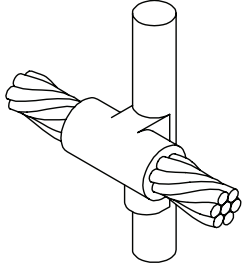
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE GR </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE CR-1 </div> </div>					
GRD ROD SIZE	CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
1/2" ①	D	GRC-148D	M-5061	115	4
	E	GRC-148E	M-5062	115	4
	F	GRC-148F	M-5063	115	4
	G	GRC-148G	M-2348	115	4
	H	GRC-148H	M-2349	115	4
	J	GRC-148J	M-2350	115	4
	K	GRC-148K	M-2351	115	4
	L	GRC-148L	M-2352	150	4
	Q	GRC-142Q	M-500	90	4
5/8" ②	A	GRC-168A	M-5066	90	4
	B	GRC-168B	M-2353	90	4
	C	GRC-168C	M-5073	115	4
	D	GRC-168D	M-5069	115	4
	E	GRC-168E	M-5070	115	4
	F	GRC-168F	M-5071	115	4
	G	GRC-168G	M-2354	115	4
	H	GRC-168H	M-2355	115	4
	J	GRC-168J	M-2356	115	4
	K	GRC-168K	M-2357	115	4
	L	GRC-168L	M-2358	150	4
	Q	GRC-162Q	M-508	90	4
3/4" ③	A	GRC-188A	M-5079	90	4
	B	GRC-188B	M-5086	90	4
	C	GRC-188C	M-5085	115	4
	D	GRC-188D	M-5081	115	4
	E	GRC-188E	M-5083	115	4
	F	GRC-188F	M-5084	115	4
	G	GRC-188G	M-2359	115	4
	H	GRC-188H	M-2360	115	4
	J	GRC-188J	M-2361	115	4
	K	GRC-188K	M-2362	115	4
	L	GRC-188L	M-2363	150	4
	Q	GRC-182Q	M-518	90	4
1" ④	A	GRC-228A	M-2364	150	4
	B	GRC-228B	M-2365	150	4
	C	GRC-228C	M-2366	150	4
	D	GRC-228D	M-2367	150	4
	E	GRC-228E	M-5089	150	4
	F	GRC-228F	M-2368	200	4
	G	GRC-228G	M-2369	200	4
	H	GRC-228H	M-2370	200	4
	J	GRC-228J	M-2371	200	4
	K	GRC-228K	M-2372	200	4
	L	GRC-228L	M-2373	250	4
	Q	GRC-222Q	M-528	150	4

MOLDS FOR LIGHTNING PROTECTION CABLE

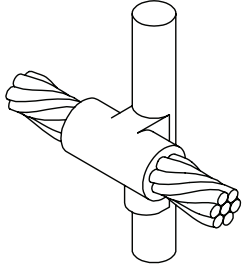
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE GT </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE CR-2 </div> </div>					
GRD ROD SIZE	CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
1/2" ①	A	GTC-148A	M-5090	90	4
	B	GTC-148B	M-2374	90	4
	C	GTC-148C	M-2375	115	4
	D	GTC-148D	M-5091	115	4
	E	GTC-148E	M-5092	115	4
	F	GTC-148F	M-5093	115	4
	G	GTC-148G	M-2376	150	4
	H	GTC-148H	M-2377	150	4
	J	GTC-148J	M-2378	150	4
	K	GTC-148K	M-2379	150	4
	L	GTC-148L	M-2380	200	4
	Q	GTC-142Q	M-542	115	4
5/8" ②	A	GTC-168A	M-5094	90	4
	B	GTC-168B	M-2381	115	4
	C	GTC-168C	M-5099	150	4
	D	GTC-168D	M-5095	150	4
	E	GTC-168E	M-5097	150	4
	F	GTC-168F	M-5098	150	4
	G	GTC-168G	M-2382	200	4
	H	GTC-168H	M-2383	200	4
	J	GTC-168J	M-2384	200	4
	K	GTC-168K	M-2385	200	4
	L	GTC-168L	M-2386	250	4
	Q	GTC-162Q	M-550	115	4
3/4" ③	A	GTC-188A	M-5100	90	4
	B	GTC-188B	M-5106	115	4
	C	GTC-188C	M-5105	150	4
	D	GTC-188D	M-5102	150	4
	E	GTC-188E	M-5103	150	4
	F	GTC-188F	M-5104	150	4
	G	GTC-188G	M-2387	200	4
	H	GTC-188H	M-2388	200	4
	J	GTC-188J	M-2389	200	4
	K	GTC-188K	M-2390	200	4
	L	GTC-188L	M-2391	250	4
	Q	GTC-182Q	M-561	115	4
1" ④	A	GTC-228A	M-2392	150	4
	B	GTC-228B	M-2393	150	4
	C	GTC-228C	M-2394	150	4
	D	GTC-228D	M-2395	200	4
	E	GTC-228E	M-2396	200	4
	F	GTC-228F	M-2397	250	4
	G	GTC-228G	M-2398	250	4
	H	GTC-228H	M-2399	250	4
	J	GTC-228J	M-2400	250	4

MOLDS FOR LIGHTNING PROTECTION CABLE

CADWELD® TYPE GT				THERMOWELD® TYPE CR-2	
GRD ROD SIZE	CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
1" ④	K	GTC-228K	M-2401	250	4
	L	GTC-228L	M-2402	2-150	4
	Q	GTC-222Q	M-572	150	4

CADWELD® TYPE GY				THERMOWELD® TYPE CR-3	
GRD ROD SIZE	CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
1/2" ①	A	GYE-148A	M-5107	90	24
	B	GYE-148B	M-2403	115	24
	C	GYE-148C	M-5111	150	24
	D	GYE-148D	M-5108	150	24
	E	GYE-148E	M-5109	150	24
	F	GYE-148F	M-5110	150	24
	G	GYE-148G	M-2404	200	24
	H	GYE-148H	M-2405	200	24
	J	GYE-148J	M-2406	200	24
	K	GYE-148K	M-2407	200	24
	L	GYE-148L	M-2408	250	24
	Q	GYE-142Q	M-1583	150	24
5/8" ②	A	GYE-168A	M-5114	90	24
	B	GYE-168B	M-2409	115	24
	C	GYE-168C	M-5118	150	24
	D	GYE-168D	M-5115	150	24
	E	GYE-168E	M-5116	150	24
	F	GYE-168F	M-5117	150	24
	G	GYE-168G	M-2410	200	24
	H	GYE-168H	M-2411	200	24
	J	GYE-168J	M-2412	200	24
	K	GYE-168K	M-2413	200	24
	L	GYE-168L	M-2414	250	24
	Q	GYE-162Q	M-1588	150	24
3/4" ③	A	GYE-188A	M-5119	90	24
	B	GYE-188B	M-5125	115	24
	C	GYE-188C	M-5124	150	24
	D	GYE-188D	M-5120	150	24

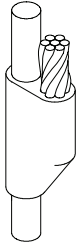
MOLDS FOR LIGHTNING PROTECTION CABLE

<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE GY </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE CR-3 </div> </div>					
GRD ROD SIZE	CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
3/4" ③	E	GYE-188E	M-5121	150	24
	F	GYE-188F	M-5123	150	24
	G	GYE-188G	M-2415	200	24
	H	GYE-188H	M-2416	200	24
	J	GYE-188J	M-2417	200	24
	K	GYE-188K	M-2418	200	24
	L	GYE-188L	M-2419	250	24
	Q	GYE-182Q	M-1596	150	24
1" ④	A	GYE-228A	M-2421	90	24
	B	GYE-228B	M-2422	115	24
	C	GYE-228C	M-2423	150	24
	D	GYE-228D	M-2424	150	24
	E	GYE-228E	M-2174	150	24
	F	GYE-228F	M-2425	150	24
	G	GYE-228G	M-2426	200	24
	H	GYE-228H	M-5122	200	24
	J	GYE-228J	M-5132	200	24
	K	GYE-228K	M-2427	200	24
	L	GYE-228L	M-2428	250	24
	Q	GYE-222Q	M-1605	150	24


NOTES

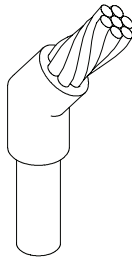
1. .505" actual diameter. THERMOMOLDS for 1/2" ground rod fits both copper-clad ground rods and stainless steel ground rods.
2. .563" actual diameter. For full 5/8" (.625) ground rod and roll-threaded rod, add suffix "-N" to mold number, i.e. M-5058-N is full 5/8" diameter ground rod or roll-threaded rod to 4/0 lightning protection cable.
3. .682" actual diameter. For full 3/4" (.750) ground rod and roll-threaded rod, add suffix "-N" to mold number, i.e. M-2420-N is full 3/4" diameter ground rod or roll-threaded rod to 4/0 lightning protection cable.
4. .914" actual diameter. For full 1" (1.00) ground rod and roll-threaded rod, add suffix "-N" to mold number, i.e. M-2429-N is full 1" diameter ground rod or roll-threaded rod to 4/0 lightning protection cable.

MOLDS FOR LIGHTNING PROTECTION CABLE

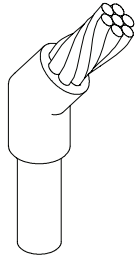
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE GN </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE CR-18 </div> </div>					
GRD ROD SIZE	CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
1/2" ①	A	GNR-148A		90	17
	B	GNR-148B		90	17
	C	GNR-148C		115	17
	D	GNR-148D		150	17
	E	GNR-148E		150	17
	F	GNR-148F		150	17
	G	GNR-148G		150	17
	H	GNR-148H		150	17
	J	GNR-148J		200	17
	K	GNR-148K		200	17
	L	GNR-148L		250	17
	Q	GNR-142Q		150	17
5/8" ②	A	GNR-168A	M-5177	90	17
	B	GNR-168B		90	17
	C	GNR-168C		115	17
	D	GNR-168D		150	17
	E	GNR-168E		150	17
	F	GNR-168F		150	17
	G	GNR-168G		150	17
	H	GNR-168H		150	17
	J	GNR-168J		200	17
	K	GNR-168K		200	17
	L	GNR-168L		250	17
	Q	GNR-162Q		150	17
3/4" ③	A	GNR-188A	M-5490 M-2138	115	17
	B	GNR-188B		115	17
	C	GNR-188C		150	17
	D	GNR-188D		200	17
	E	GNR-188E		200	17
	F	GNR-188F		200	17
	G	GNR-188G		200	17
	H	GNR-188H		200	17
	J	GNR-188J		200	17
	K	GNR-188K		200	17
	L	GNR-188L		250	17
	Q	GNR-182Q		150	17
1" ④	A	GNR-228A		150	17
	B	GNR-228B		150	17
	C	GNR-228C		200	17
	D	GNR-228D		200	17
	E	GNR-228E		200	17
	F	GNR-228F		250	17
	G	GNR-228G		250	17
	H	GNR-228H		250	17
	J	GNR-228J		250	17

MOLDS FOR LIGHTNING PROTECTION CABLE

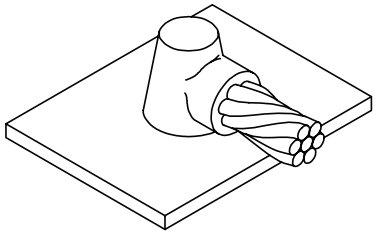
CADWELD® TYPE GN				THERMOWELD® TYPE CR-18	
GRD ROD SIZE	CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
1" ④	K	GNR-228K		250	17
	L	GNR-228L		2-150	17
	Q	GNR-222Q		200	17

CADWELD® TYPE GV				THERMOWELD® TYPE CR-36	
GRD ROD SIZE	CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
1/2" ①	A	GVR-148A		90	17
	B	GVR-148B		90	17
	C	GVR-148C		115	17
	D	GVR-148D		150	17
	E	GVR-148E		150	17
	F	GVR-148F		150	17
	G	GVR-148G		150	17
	H	GVR-148H		150	17
	J	GVR-148J		200	17
	K	GVR-148K		200	17
	L	GVR-148L		250	17
	Q	GVR-142Q		150	17
5/8" ②	A	GVR-168A		90	17
	B	GVR-168B		90	17
	C	GVR-168C		115	17
	D	GVR-168D		150	17
	E	GVR-168E		150	17
	F	GVR-168F		150	17
	G	GVR-168G		150	17
	H	GVR-168H		150	17
	J	GVR-168J		200	17
	K	GVR-168K		200	17
	L	GVR-168L		250	17
	Q	GVR-162Q		150	17
3/4" ③	A	GVR-188A		115	17
	B	GVR-188B		115	17
	C	GVR-188C		150	17
	D	GVR-188D		200	17

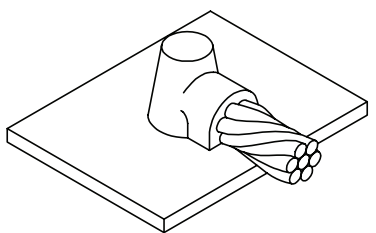
MOLDS FOR LIGHTNING PROTECTION CABLE

<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE GV </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE CR-36 </div> </div>					
GRD ROD SIZE	CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
3/4" ③	E	GVR-188E		200	17
	F	GVR-188F		200	17
	G	GVR-188G		200	17
	H	GVR-188H		200	17
	J	GVR-188J		200	17
	K	GVR-188K		200	17
	L	GVR-188L		250	17
	Q	GVR-182Q		150	17
1" ④	A	GVR-228A		150	17
	B	GVR-228B		150	17
	C	GVR-228C		200	17
	D	GVR-228D		200	17
	E	GVR-228E		200	17
	F	GVR-228F		250	17
	G	GVR-228G		250	17
	H	GVR-228H		250	17
	J	GVR-228J		250	17
	K	GVR-228K		250	17
	L	GVR-228L		2-150	17
	Q	GVR-222Q		200	17

MOLDS FOR LIGHTNING PROTECTION CABLE

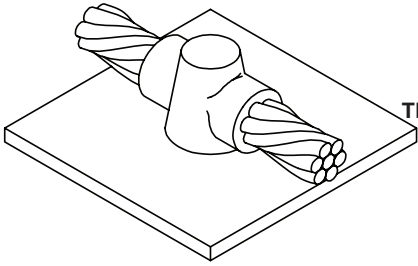
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE HS </div>  <div style="text-align: center;"> THERMOWELD® TYPE CS-1 </div> </div>				
CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
D	HSC-8D	M-5134	115	4
E	HSC-8E	M-5135	115	4
F	HSC-8F	M-5136	115	4
G	HSC-8G	M-2430	115	4
H	HSC-8H	M-2431	115	4
J	HSC-8J	M-2432	150	4
K	HSC-8K	M-2433	200	4
L	HSC-8L	M-2434	250	4
Q	HSC-2Q	M-647	115	4

CS-1 TYPE: CABLE IS OFF SURFACE.

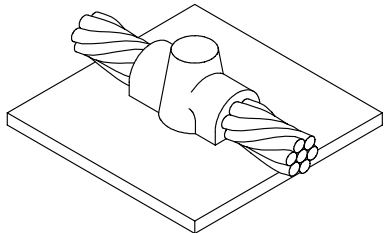
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE HA </div>  <div style="text-align: center;"> THERMOWELD® TYPE CS-8 </div> </div>				
CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
A	HAA-8A	M-5127	45	3
B	HAA-8B	M-2455	65	3
C	HAC-8C	M-5133	90	4
D	HAC-8D	M-5128	115	4
E	HAC-8E	M-5129	115	4
F	HAC-8F	M-5131	115	4
G	HAC-8G	M-2456	115	4
H	HAC-8H	M-2457	115	4
J	HAC-8J	M-2458	150	4
K	HAC-8K	M-2459	200	4
L	HAC-8L	M-2460	250	4
Q	HAC-2Q	M-6114	115	4

TYPE CS-8: CABLE IS ON SURFACE.

MOLDS FOR LIGHTNING PROTECTION CABLE

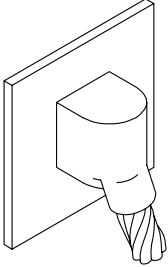
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE HT </div>  <div style="text-align: center;"> THERMOWELD® TYPE CS-2 </div> </div>				
CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
D	HTC-8D	M-5141	150	4
E	HTC-8E	M-5142	150	4
F	HTC-8F	M-5143	150	4
G	HTC-8G	M-2435	150	4
H	HTC-8H	M-2436	150	4
J	HTC-8J	M-2437	200	4
K	HTC-8K	M-2438	200	4
L	HTC-8L	M-2439	250	4
Q	HTC-2Q	M-619	150	4

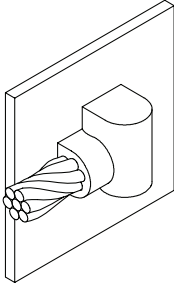
CS-2 TYPE: CABLE IS OFF SURFACE.

<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE VC </div>  <div style="text-align: center;"> THERMOWELD® TYPE CS-9 </div> </div>				
CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
A	HCA-8A		65	3
B	HCA-8B		65	3
C	HCC-8C		90	4
D	HCC-8D		150	4
E	HCC-8E		150	4
F	HCC-8F		150	4
G	HCC-8G		150	4
H	HCC-8H		150	4
J	HCC-8J		200	4
K	HCC-8K		200	4
L	HCC-8L		250	4
Q	HCC-2Q		150	4

CS-9 TYPE: CABLE IS ON SURFACE.

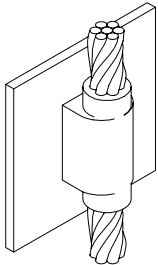
MOLDS FOR LIGHTNING PROTECTION CABLE

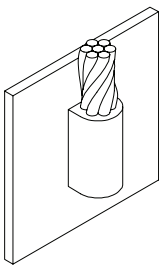
<div> <div>CADWELD® TYPE VS</div> <div>  </div> <div>THERMOWELD® TYPE CS-3</div> </div>				
CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
A	VSC-8A	M-5145	65	4
B	VSC-8B	M-5150	65	4
C	VSC-8C	M-5149	90	4
D	VSC-8D	M-5146	115	4
E	VSC-8E	M-5147	115	4
F	VSC-8F	M-5148	115	4
G	VSC-8G	M-2440	150	4
H	VSC-8H	M-2441	150	4
J	VSC-8J	M-2442	150	4
K	VSC-8K	M-2443	150	4
L	VSC-8L	M-2444	200	4
Q	VSC-2Q	M-593	115	4

<div> <div>CADWELD® TYPE VN</div> <div>  </div> <div>THERMOWELD® TYPE CS18</div> </div>				
CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
A	VNC-8A	M-5054	45	4
B	VNC-8B		65	4
C	VNC-8C	M-5205	65	4
D	VNC-8D	M-5202	90	4
E	VNC-8E	M-5203	115	4
F	VNC-8F	M-5000	115	4
Q	VNC-2Q	M-9253	115	4

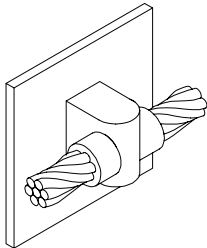
FOR RIGHT HAND MOLD, PLACE SUFFIX -R AFTER MOLD NUMBER (i.e. M-9253-R). FOR LEFT HAND MOLD, PLACE SUFFIX -L AFTER MOLD NUMBER (i.e. M-9253-L).

MOLDS FOR LIGHTNING PROTECTION CABLE

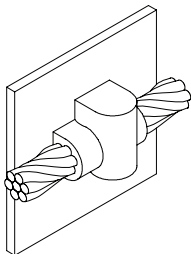
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE VV </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE CS-4 </div> </div>				
CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
A	VVC-8A	M-5153	90	4
B	VVC-8B	M-5160	115	4
C	VVR-8C	M-5159	200	17
D	VVR-8D	M-5154	250	17
E	VVR-8E	M-5156	2-150	17
F	VVR-8F	M-5158	2-150	17
G	VVR-8G	M-2445	2-150	17
H	VVR-8H	M-2446	2-150	17
J	VVF-8J	M-2447	2-200	6
K	VVF-8K	M-2448	2-200	6
L	VVF-8L	M-2449	500	6
Q	VVR-2Q	M-1223	250	17

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE VF </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE CS-7 </div> </div>				
CABLE CODE	CADWELD® MOLD NUMBVS	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
A	VFC-8A	M-5180	90	4
B	VFC-8B	M-5200	90	4
C	VFC-8C	M-5185	115	4
D	VFR-8D	M-5181	150	17
E	VFR-8E	M-5182	150	17
F	VFR-8F	M-5184	150	17
G	VFR-8G	M-2466	150	17
H	VFR-8H	M-2467	150	17
J	VFR-8J	M-2468	200	17
K	VFR-8K	M-2469	200	17
L	VFR-8L	M-2470	250	17
Q	VFR-2Q	M-1643	150	17

MOLDS FOR LIGHTNING PROTECTION CABLE

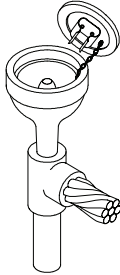
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE VT </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE CS-6 </div> </div>				
CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
A	VTC-8A	M-5171	90	4
B	VTC-8B	M-5176	90	4
C	VTC-8C	M-5175	115	4
D	VTC-8D	M-5172	150	4
E	VTC-8E	M-5173	150	4
F	VTC-8F	M-5174	150	4
G	VTC-8G	M-2461	150	4
H	VTC-8H	M-2462	150	4
J	VTC-8J	M-2463	200	4
K	VTC-8K	M-2464	200	4
L	VTC-8L	M-2465	250	4
Q	VTC-2Q	M-1633	150	4

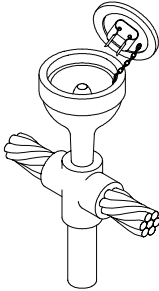
TYPE CS-6: CABLE IS OFF SURFACE.

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE VG </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE CS-27 </div> </div>				
CABLE CODE	CADWELD® MOLD NUMBVS	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
A	VGC-8A	M-5162	65	4
B	VGC-8B	M-5169	90	4
C	VGC-8C	M-5168	115	4
D	VGC-8D	M-5163	150	4
E	VGC-8E	M-5165	150	4
F	VGC-8F	M-5167	150	4
G	VGC-8G	M-2856	150	4
H	VGC-8H	M-2451	150	4
J	VGC-8J	M-2452	200	4
K	VGC-8K	M-2453	200	4
L	VGC-8L	M-2454	250	4
Q	VGC-2Q	M-2177	150	4

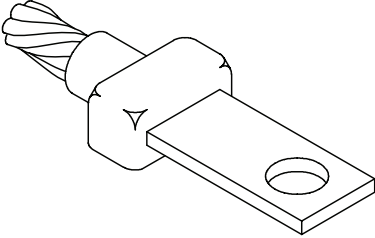
TYPE CS-27: CABLE IS ON SURFACE.

MOLDS FOR LIGHTNING PROTECTION CABLE

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE RA </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE AC-1 </div> </div>				
CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
A	RAC-8A		115	4
B	RAC-8B		115	4
C	RAC-8C		150	4
D	RAC-8D		150	4
E	RAC-8E		150	4
F	RAC-8F		150	4
G	RAC-8G		150	4
H	RAC-8H		150	4
J	RAC-8J		200	4
K	RAC-8K		250	4
L	RAC-8L		250	4
Q	RAC-2Q		150	4

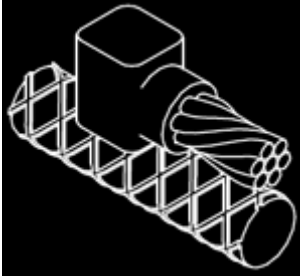
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE RB </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> THERMOWELD® TYPE AC-2 </div> </div>				
CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
A	RBC-8A		115	4
B	RBC-8B		115	4
C	RBC-8C		150	4
D	RBC-8D		200	4
E	RBC-8E		200	4
F	RBC-8F		200	4
G	RBC-8G		200	4
H	RBC-8H		200	4
J	RBC-8J		250	4
K	RBC-8K		2-150	4
L	RBC-8L		2-150	4
Q	RBC-2Q		200	4

MOLDS FOR LIGHTNING PROTECTION CABLE

<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> CADWELD® TYPE LA </div>  <div style="text-align: center;"> THERMOWELD® TYPE CB-1 </div> </div>					
GRD ROD SIZE	CABLE CODE	CADWELD® MOLD NUMBER	THERMOWELD® MOLD NUMBER	CART. SIZE	PK
1/8" X 1"	A	LAC-8ACE	M-2471	65	4
	B	LAC-8BCE	M-2472	65	4
	C	LAC-8CCE	M-2473	90	4
	D	LAC-8DCE	M-2474	90	4
	E	LAC-8ECE	M-2475	90	4
	F	LAC-8FCE	M-2521	90	4
	G	LAC-8GCE	M-5008	90	4
	H	LAC-8HCE	M-5009	90	4
3/16" X 1"	J	LAC-8JDE	M-2201	115	4
	K	LAC-8KDE	M-5030	115	4
	Q	LAC-8QDE	M-984	90	4
1/4" X 1"	J	LAC-8JEE	M-5029	115	4
	K	LAC-8KEE	M-5031	150	4
	L	LAC-8LEE	M-5034	150	4
	Q	LAC-8QEE	M-985	90	4

ThermOweld®

CRE-01



Type Cable to Rebar THERMOMOLD
Parallel / Horizontal Cable Horizontal Rebar
Catalog.

Catalog No.: 600450070000

Mold No.: M-5007

Price Key: 4

Cartridge: 115

Packing: 38-0329-00

Handle: 40-0106-00

Run: C

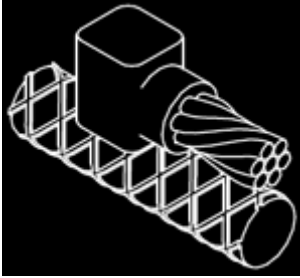
Tap: #5 REBAR

Notes:Lead time 2 days

Copyright © 2004, thermOweld®, a Division of Continental Industries. All Rights Reserved.

ThermOweld®

CRE-01



Type Cable to Rebar THERMOMOLD
Parallel / Horizontal Cable Horizontal Rebar
Catalog.

Catalog No.: 600411710000

Mold No.: M-1171

Price Key: 4

Cartridge: 150

Packing: 38-0329-00

Handle:

Run: E

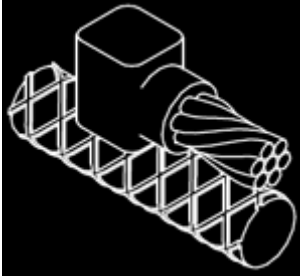
Tap: #4 REBAR

Notes: Lead time 2 days

Copyright © 2004, thermOweld®, a Division of Continental Industries. All Rights Reserved.

ThermOweld®

CRE-01



Type Cable to Rebar THERMOMOLD
Parallel / Horizontal Cable Horizontal Rebar
Catalog.

Catalog No.: 600452650000

Mold No.: M-5265

Price Key: 4

Cartridge: 115

Packing: 38-0329-00

Handle:

Run: D

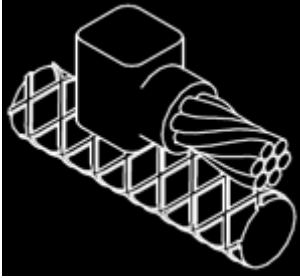
Tap: #5 REBAR

Notes: lead time 2 days

Copyright © 2004, thermOweld®, a Division of Continental Industries. All Rights Reserved.

ThermOweld®

CRE-01



Type Cable to Rebar THERMOMOLD
Parallel / Horizontal Cable Horizontal Rebar
Catalog.

Catalog No.: 600452690000

Mold No.: M-5269

Price Key: 4

Cartridge: 115

Packing: 38-0329-00

Handle:

Run: F

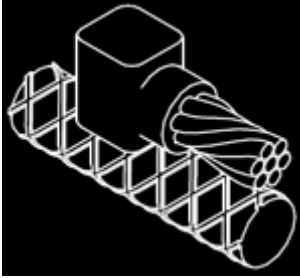
Tap: #5 REBAR

Notes: Lead time 2 days

Copyright © 2004, thermOweld®, a Division of Continental Industries. All Rights Reserved.

ThermOweld®

CRE-01



Type Cable to Rebar THERMOMOLD
Parallel / Horizontal Cable Horizontal Rebar
Catalog.

Catalog No.: 600450450000

Mold No.: M-5045

Price Key: 4

Cartridge: 115

Packing: 38-0329-00

Handle:

Run: 4/0 STR

Tap: #5 REBAR

Notes: Lead time 2 days

Copyright © 2004, thermOweld®, a Division of Continental Industries. All Rights Reserved.



On Line Catalog



BURNDY Catalog Number
UPC Number
Description
Status

YGHP34C26
 7818102209622
 250-500 TO 1/0-2/0 GRN C
 Active

Web Use
 BURNDY Product Line

B Length (in)
 B Length (Fraction)

Dimensional
 0.75
 3/4

General

Product Description
 Prefilled (Oxide Inhibitor)

Cu Compression Ground Rod
 Connector, 1/0 Str - 2/0 str, 5/8" -
 3/4" Rod Dia
 Y

Type of Oxide Inhibitor

Other

Penetrox E

Approvals / Certifications

Rated for Direct Burial
 UL Listed
 CSA Certified
 ROHS Compatible
 UL Recognized
 CULUS
 Industry Standards

Y
 Y
 Y
 Compliant
 N
 N
 UL467, IEEE 837

Conductor(s)

Copper Tap Range
 Copper Stranded Run (Range)
 Copper Solid Tap (Range)
 Copper Solid Run Size (Range)

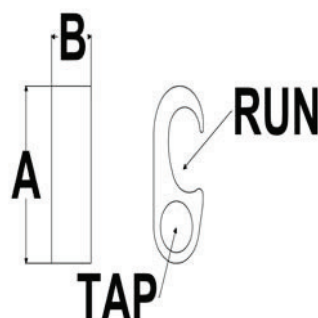
1/0 - 2/0 AWG
 250 kcmil-500 kcmil
 N/A
 N/A

Physical

Type of Plating
 Connector Type
 Plated (Yes or No)
 Index Number
 Product Material

Unplated
 Tap
 N
 998
 Copper

Documentation



For further technical assistance, please contact us

BURNDY LLC - USA

47, industrial Park Drive
 Manchester NH03109

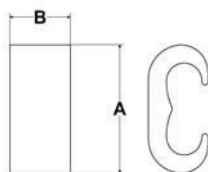
BURNDY Technical Servcies

47, industrial Park Drive
 Manchester NH03109

Hours: 8.00 AM - 5.00 PM
 Monday - Friday
 Phone: 000-346-4175



On Line Catalog



BURNDY Catalog Number
UPC Number
Description
Status

YGHC29C26
 7818102210444
 3/0-250 TO 6-2/0 CU GRD
 Active

Web Use
 BURNDY Product Line

B Length (in)
 Diameter (in) - Total

Dimensional
 0.75
 1.97

Product Description

General
 Copper Compression C Connector,
 3/0 AWG(Str) - 250 kcmil, 1/2" or
 5/8" Rod (Run) & 6 AWG(Sol) -
 2/0 AWG(Str) (Tap)

Copper Tap Range
 Copper Stranded Run (Range)
 Rod Size Run (Range)
 Copper Solid Tap (Range)
 Rebar Run Size (Range)
 Copper Solid Run Size (Range)

Conductor(s)
 7 AWG-2/0 AWG
 3/0 AWG-250 kcmil
 1/2 in-5/8 in
 6 AWG-3/0 AWG
 N/A
 N/A

Type of Plating
 Connector Type
 Plated (Yes or No)
 Index Number
 Product Material

Physical
 Unplated
 Tap
 N
 997
 Copper

Rated for Direct Burial
 UL Listed
 CSA Certified
 ROHS Compatible
 UL Recognized
 CULUS

Approvals / Certifications

Y
 Y
 Y
 Compliant
 N
 N
 UL468A-468B,UL467,IEEE 837

Industry Standards
Documentation

For further technical assistance, please contact us

BURNDY LLC - USA

47, industrial Park Drive
 Manchester NH03109

BURNDY Technical Servcies

47, industrial Park Drive
 Manchester NH03109

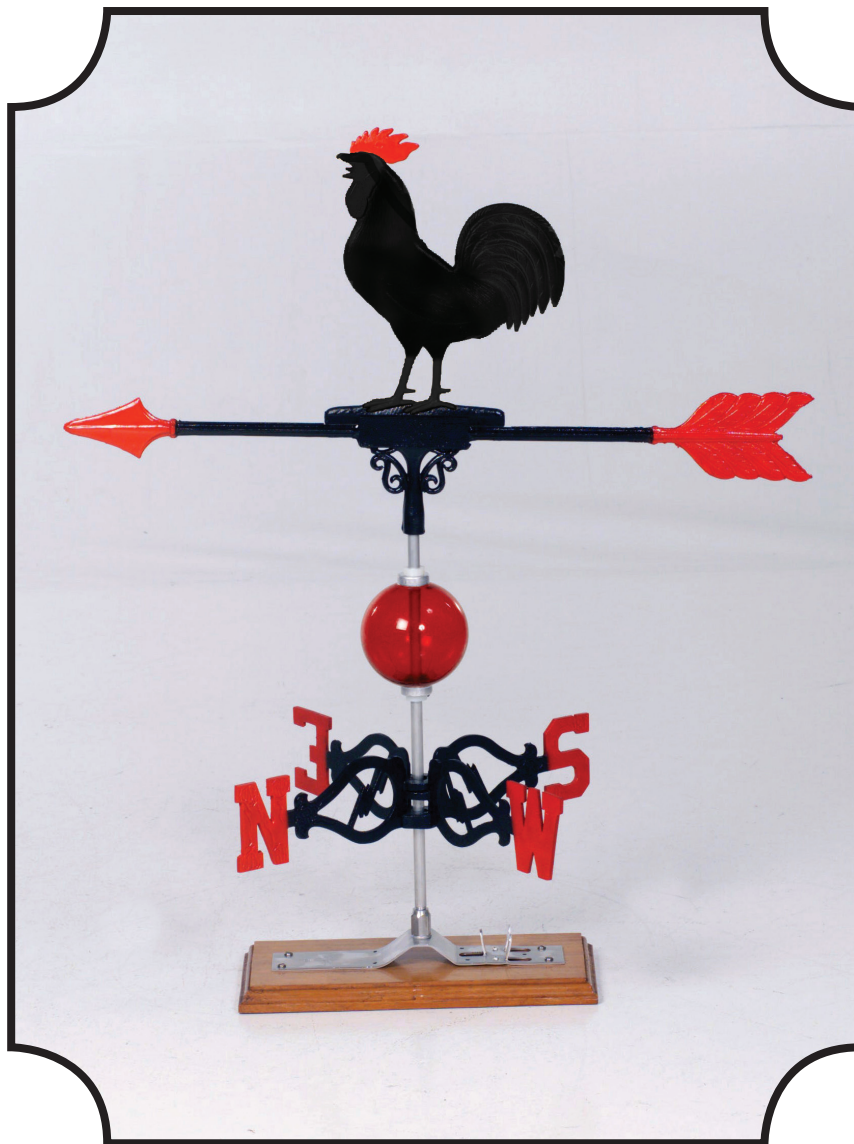
Hours: 8.00 AM - 5.00 PM
 Monday - Friday
 Phone: 000-346-4175

Robbins Metal Craft

(A Division of Robbins Lightning, Inc. • Since 1904)

124 E. Second St. • P.O. Box 440 • Maryville, MO 64468

Phone (660) 582-3156 • Fax (660) 582-7636

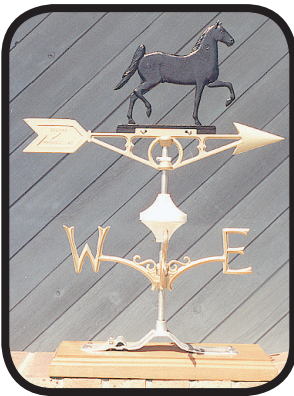


www.robbsinlightning.com

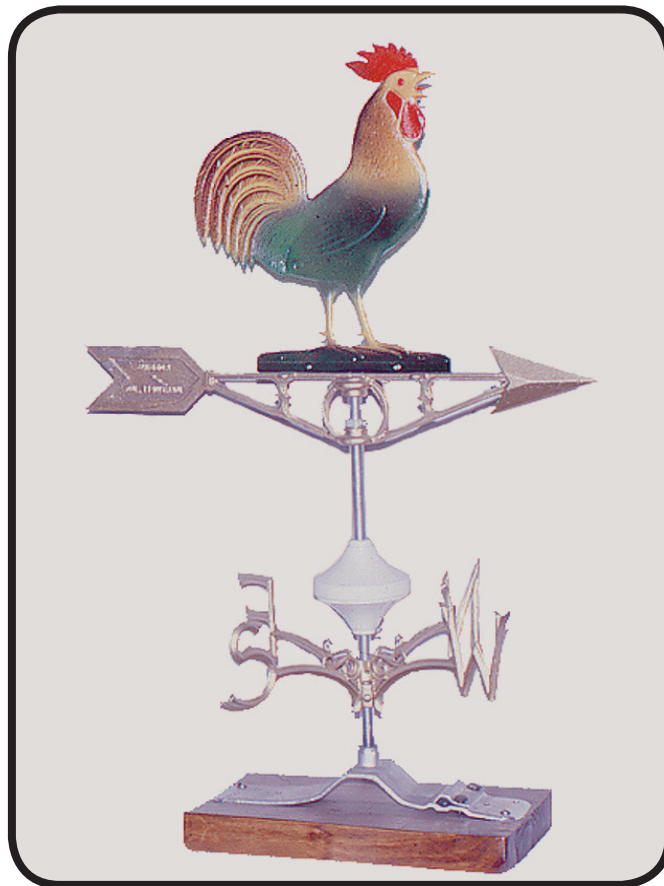
Robbins Metal Craft

Fancy Weather Vanes

Beautifully Painted Cast Aluminum • Easy Installation • Mountings of Lifetime Aluminum



#511 - Prancer
23" H x 19" W



#510 - Rooster
27" H x 19" W



#536 - Cow
22" H x 19" W



#526 - Mallard Duck
28" H x 19" W



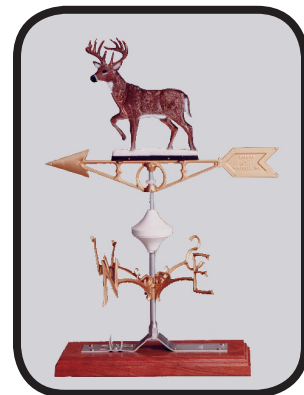
#527 - Roadster
23" H x 19" W



#518 - Eagle
26" H x 19" W



#574 - Pheasant
24" H x 19" W



#576 - Whitetail Deer
24" H x 19" W

www.robbsnlightning.com

Robbins Metal Craft

(A Division of Robbins Lightning, Inc. • Since 1904)

124 E. Second St. • P.O. Box 440 • Maryville, MO 64468

Phone (660) 582-3156 • Fax (660) 582-7636



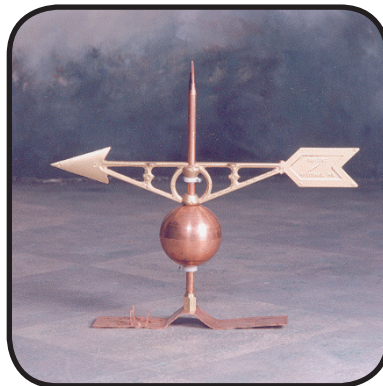
#518P - Patriotic Eagle
26" H x 19" W



Mailbox Attachment
With ornament of your choice



**Glass Balls - Green, Amber, Red,
Blue, White, or Amethyst**
For 1/2" or 5/8" Points - 4" Diameter



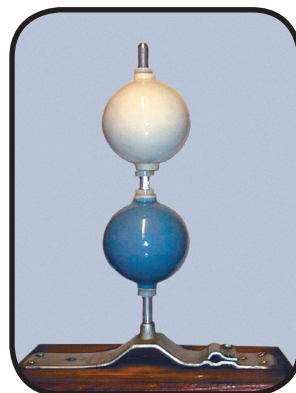
#700 - Copper/Cast Aluminum
15" H x 19" W



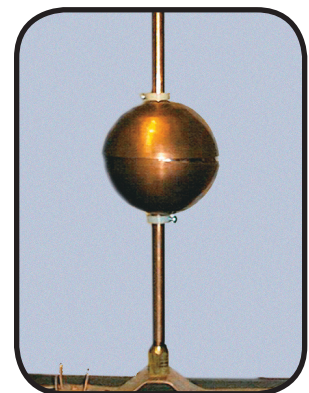
#701 - Copper/Cast Aluminum
18" H x 19" W



Plastic Balls - Red, White, Blue, Yellow
For 1/2" Points - 4" Diameter



Ceramic Balls - Blue or White
For 1/2" or 5/8" Points - 4" Diameter



Copper Balls
For 1/2" or 5/8" Points - 4" Diameter



#512 - Pointer



#512 - German Shorthair



#513 - Irish Setter



#513 - English Setter



#513 - Golden Retriever



#514 - Scottish Dog



#515 - Great Dane



#516 - Bull



#517 - Quail



#519 - Poodle Dog



#520 - Sailboat



#521 - Standard Bred Horse



#524 - Wabash Train



#525 - Bucking Bronco



#528 - Girl with Umbrella



#529 - Golfer

Ornaments Available In:
Black, Gold, or Hand-Painted.
Detail painting extra charge.
Inquire for details.



#530 - Centaur



#531 - Doctor, Horse, & Buggy



#532 - Boxer Dog



#534 - Race Horse with Jockey



#535 - Sheep



#539 - Canadian Goose



#562 - Shriner



#564 - Red Fox



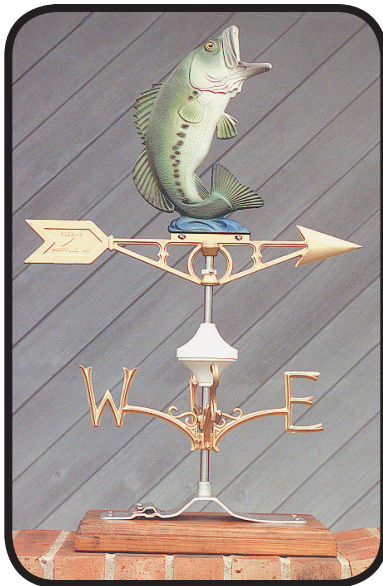
#566 - Shepherd Dog



#567 - Bi-plane



#601 - Masonic



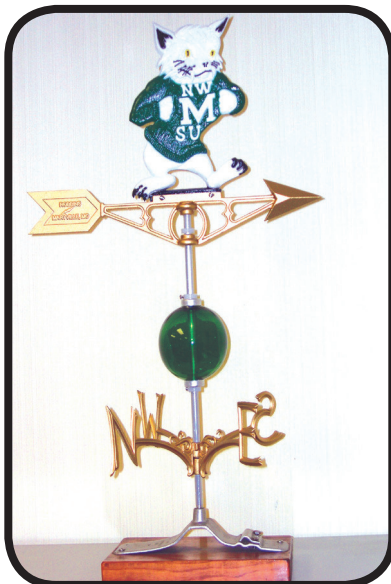
#537 - Bass
27.5" H x 19" W



#561 - Sailfish
28" H x 19" W



Modern Hog
20" H x 19" W
#A335M - Market Hog
#A335D - Duroc Hog
#A335P - Poland China Hog
#A335H - Hampshire Hog
#A335Y - Yorkshire Hog



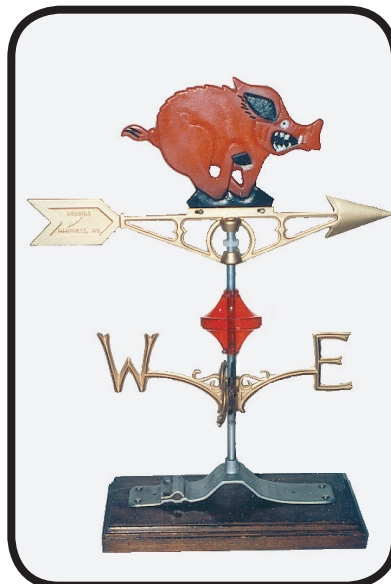
#509 - "The Pride of Northwest Missouri"
NWMSU Bearcats
27" H x 19" W

*Install a Robbins
Lightning Protection System*

*for more information call:
(660) 582-3156*



#568 - Kansas Jayhawk
24" H x 19" W



#563 - Razorback Hog
21" H x 19" W

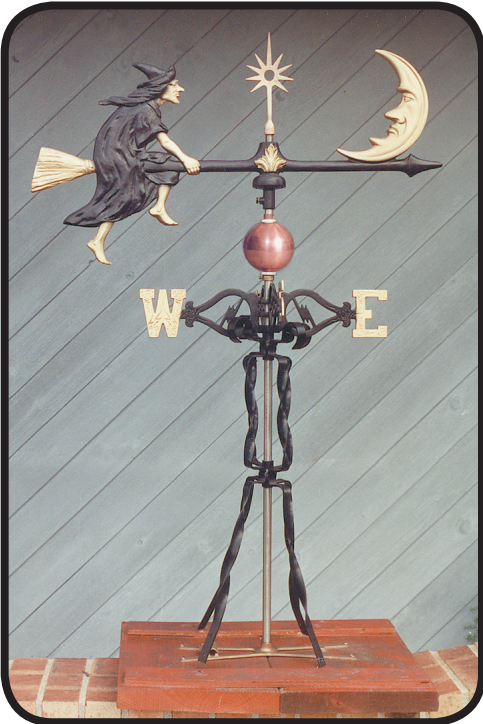


#571 - Nebraska Cornhusker
24" H x 19" W

Special Weather Vanes

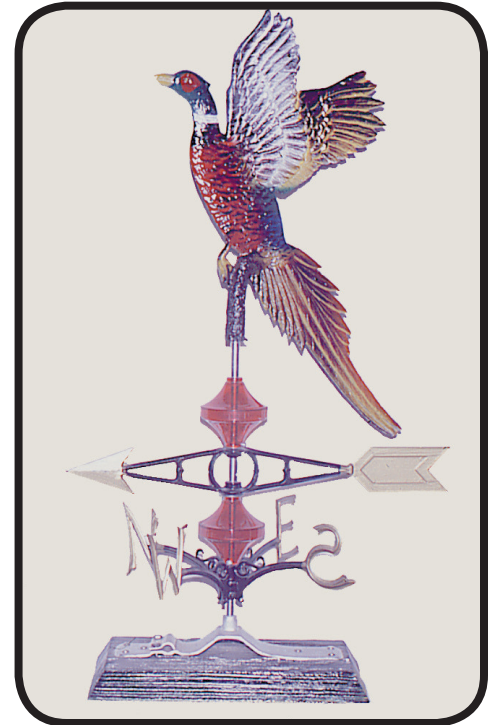
(Only available on assemblies shown.)

Made of Cast Aluminum • A Lifetime of Beauty • Never Rusts



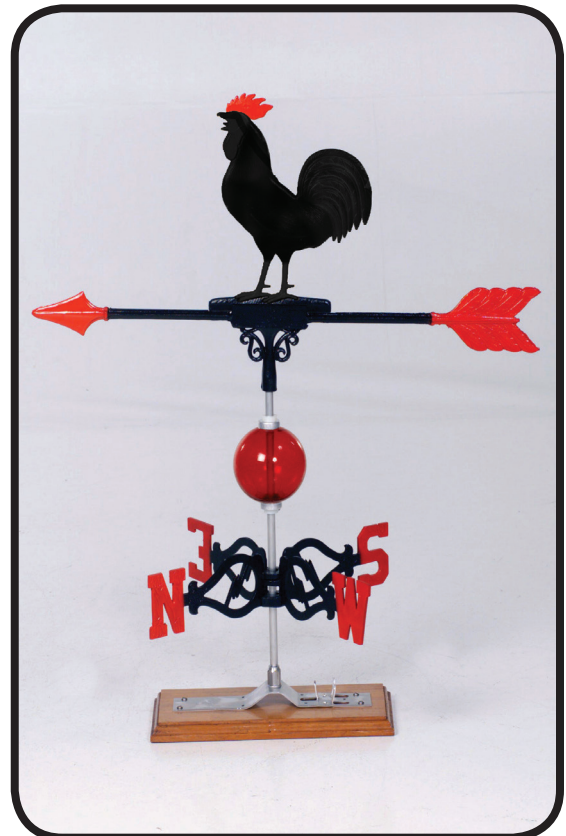
#573 - Witch on Broom*
50" H x 32" W

***Witch on Broom and
Flying Pheasant Not
Available for Mailbox
Ornaments.**



#572 - Flying Pheasant*
35" H x 19" W

**#702 - Antique Style Weather
Vane with Glass Ball**
35" H x 30" W



Robbins Metal Craft

A Division of Robbins Lightning, Inc.

124 E. Second St., P.O. Box 440
Maryville, MO 64468

Phone: (660) 582-3156 Fax: (660) 582-7636

www.robbsnlightning.com