

Accessories for Aluminum/Copper Code Conductors and Connectors

Copper colloidal surface treatment protects, lubricates and enhances conductivity of all electrical connections

Kopr-Shield® Joint Compound

- Unique, homogenized blend of pure, polished colloidal copper, rust and corrosion inhibitors.
- Simultaneously protects, lubricates and enhances conductivity of mating surfaces
- Extremely adhesive compound flows smoothly into uneven contours and voids, ensuring easy application and complete, positive protection and lubrication.
- Won't settle-out, thin, thicken, harden or dry out under the most severe environmental conditions
- Excellent temperature characteristics– can be brushed on at -45.5°C (-50°F) to 121°C (250°F) (other compounds either turn solid or run like water at these extremes) and remains intact at short terms even at 980°C (1,800°F)

Good connections are one of the most important aspects of electrical work. Mechanics know how much downtime is caused when fluids or oils leak into the raceway system or when they have to look for a weak link in a ground system caused by a high-resistance connection. Mechanics also know how much time is spent keeping contacts, switches, lugs and other connectors clean or replacing parts because of “greenscourage” buildup. Thomas & Betts has the solution to improve connections made in thousands of electrical and raceway installations made each day by electricians everywhere. Kopr-Shield® Compound may be used to advantage in all electrical installations. When the environment is hostile to electrical and mechanical connections, Kopr-Shield® Compound is a must!

ALUMA-SHIELD® Aluminum Joint Compound



CAT. NO.	Contains
21059	Squeeze Bottle, Pt.
AP8	8 oz. Brush Cap Can
M53	5 Gallon Can

For aluminum cable connections; contains fine zinc particles which break through oxide film on cable strands upon compression of connection; ensures a low resistance contact and seals out air and moisture.



Use Kopr-Shield® Compound for battery lugs and cables to:

- Prevent “green scourage” corrosion
- Reduce resistance
- Ease terminal installation and removal

Use Kopr-Shield® Compound for raceways to:

- Lubricate for ease of assembly and disassembly
- Improve grounding continuity (exceeds code requirements)

Use Kopr-Shield® Compound for fuse clips to:

- Eliminate hot spots for even heat distribution
- Prevent oxidation by preventing carbon path formation
- Lubricate for easy installation and removal of fuses

Use Kopr-Shield® Compound for wiping contacts, drum switches and slip rings to:

- Prevent galling, burning, pitting and discoloration
- Suppress arching and dissipation of coronas
- Lubricate for ease of operation



CAT. NO.	Description	Std. Pkg.	Weight lb./C
201-31879	1-1/2 oz. Container with Brush	96	11.46
201-31879-1	4 oz. Container with Brush	24	38.54
CP8-TB	8 oz. Container with Brush	12	64.58
CP16	16 oz. Container with Brush	12	120.83
CP128	1 Gallon Can	4	952.00

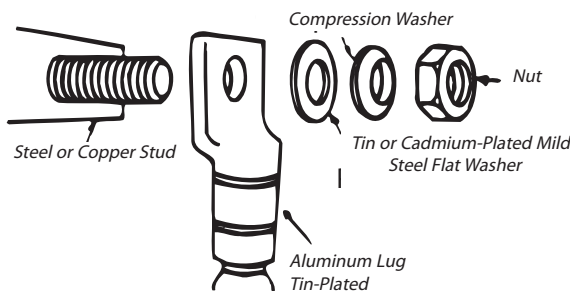
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For tight, secure bus-bar connections.

Belleville Compression Washers

- Essential when bolting aluminum lugs and connectors to bus bars with steel or brass hardware
- Maintains constant pressure in heavy-duty, high-temperature applications
- Available with or without flat washer

When bolting aluminum lugs and connectors to bus bars with steel or brass hardware, the recommended practice to ensure a tight connection is to use a Belleville spring washer on top of a flat washer under the bolt head or nut. For heavy-duty service where the heat rise is expected to exceed 30°C above ambient, this procedure maintains constant pressure as the connector metals expand and contract with temperature changes.



CAT. NO.	Bolt Size (in.)	Dimensions in. (mm)			
		Flat Washer		Belleville Washer	
		A	B	C	D
Belleville Compression Washers Plus Flat Washer					
60800B	1/4	0.75 (19.1)	0.07 (1.8)	0.69 (17.5)	0.06 (1.5)
60801B	5/16	0.88 (22.1)	0.07 (1.8)	0.81 (20.6)	0.07 (1.8)
60802B	3/8	1.00 (25.4)	0.08 (2.0)	0.94 (23.9)	0.08 (2.0)
60803B	1/2	1.25 (31.8)	0.11 (2.8)	0.81 (20.6)	0.10
Belleville Compression Washers ONLY					
60800-TB	1/4	-	-	0.69 (17.5)	0.06 (1.5)
60801-TB	5/16	-	-	0.81 (20.6)	0.07 (1.8)
60802-TB	3/5	-	-	0.94 (23.9)	0.08 (2.0)
60803-TB	1/2	-	-	0.81 (20.6)	0.10 (2.5)
60804-TB	5/8	-	-	1.50 (38.1)	0.11 (2.8)

Note: Ordering quantity must be in unit quantities and multiples thereof. The Belleville washer should be installed with a larger flat washer to spread the high stresses of the compression washer edges over a large area of the lug and/or bus bar.

Quick, dependable and versatile.

Dragon Tooth® Transition Washers

- Connect copper-to-aluminum, copper-to-copper or aluminum-to-aluminum component
- Toothed surface penetrates aluminum and copper oxides
- Lower installed cost – no need to grind aluminum surfaces, apply compounds or use spring-type washers



CAT. NO.	Size (in.)	Bolt Torque in lb.
DTW14	1/4	50-80
DTW516	5/16	125-160
DTW38	3/8	160-240
DTW12	1/2	390-540
DTW58	5/8	540-730

Miscellaneous Hardware

Type BB – Silicon Bronze Hex Head Bolts

CAT. NO. Diameter and Threads per inch				Length (in.)
1/4"-20	5/16"-18	3/8"-16	1/2"-13	
25100BB-C	31100BB-C	37100BB-C	50100BB-C	1
-	31125BB-C	37125BB-C	50125BB-C	1-1/4
-	31150BB-C	37150BB-C	50150BB-C	1-1/2
-	31175BB-C	37175BB-C	50175BB-C	1-3/4
-	32100BB-C	37200BB-C	50200BB-C	2
25225BB-C	31225BB-C	37225BB-C	50225BB-C	2-1/4
-	31250BB-C	37250BB-C	50250BB-C	2-1/2
-	31275BB-C	37275BB-C	50275BB-C	2-3/4
-	31300BB-C	37300BB-C	50300BB-C	3
-	-	37325BB-C	50325BB-C	3-1/4
-	-	37350BB-C	50350BB-C	3-1/2

For tin-plated silicon bronze hardware, add suffix P to Cat. Number.
Bolts 2" long or less have full thread; longer bolts 2" of thread,
except 1/4"-20 bolts have 1/4" min. thread.



Type HN – Silicon Bronze Hex Nuts

CAT. NO.	Diameter and Threads per inch
14010HN-C	1/4 - 20
31010HN-C	5/16 - 18
37010HN-C	3/8 - 16
50010HN-C	1/2 - 13

Type SW – Silicon Bronze Split Lockwashers

CAT. NO.	Bolt Size (in.)
14030SW-C	1/4
31030SW-C	5/16
37030SW-C	3/8
50030SW-C	1/2

Type FW – Silicon Bronze Flat Washers

CAT. NO.	Bolt Size (in.)	O.D. (in.)	I.D. (in.)	Thickness (in.)
14040FW-C	1/4	11/16	0.260	0.040
31040FW-C	5/16	7/8	0.336	0.064
37040FW-C	3/8	1	0.395	0.064
50040FW-C	1/2	1-1/4	0.562	0.091

Type BW – Belleville Compression Washer 304 Series Stainless Steel

CAT. NO.	Bolt Size (in.)	O.D. (in.)	I.D. (in.)	Thickness (in.)	Height (in.)
50050BW-C	1/2	1-1/8	17/32	0.062	1/8

