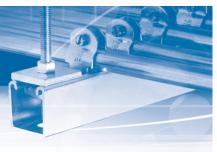
Metal Framing Channels — Overview



Finishes

GoldGalv[®]

The standard GoldGalv[®] finish is made up of a multi-step electrogalvanizing and zinc dichromate process. The trivalent Chromium finish is applied over the zinc, producing a chemically bonded non-porous barrier for protection from moisture and air. The .5 mil electro-plated zinc and gold trivalent Chromium finish provide all of the features and protection of hexavalent Chromium without the use of the chemical.

Green or White Urethane Powder Coated (Suffix GR or WH)

Urethane powder resins are applied electrostatically to the steel after fabrication. Once the material is completely covered with the powder-form urethane, it proceeds through a 400° baking process for ten minutes, creating a chemical bond. This results in a minimum of 1.5 mil thickness of urethane coating, providing excellent resistance to chipping or peeling.

Pregalvanized (Suffix PG)

A zinc coating is applied by hot-dipping the steel coil at the mill prior to fabrication. Once the material is worked by roll-forming, cutting or punching, minimal protection is provided for raw edges. This weakness is typical with precoated material and affects the channel section around holes, extreme ends and the edges of the "U" shape lips. Superstrut pregalvanized material is in conformance with ASTM A-525/G-90 specification standards, representing 0.90 ounces of zinc per square foot of steel. This finish is often referred to as "hot-dipped mill galvanized" or "mill galvanized."

Hot-Dipped Galvanized (Suffix HDG)

The material is zinc coated after fabrication, providing total product protection on all surfaces. The fabricated channel or fitting is suspended and then dipped into tanks of hot zinc for a prolonged period, creating a coherent bond. The result is superior corrosion resistance as compared to pregalvanized material. Hot-dipped galvanizing is not recommended for threaded products, considering the zinc coating thickness will often disrupt the threads. Superstrut hot-dipped galvanized is in conformance with ASTM Specifications A-123 (formerly A-386) and A-153. Superstrut channels maintain a minimum 1.5 ounces of zinc per square foot of steel or 2.5 mils (ASTM A-123, Thickness Grade 65). This finish is also referred to as "hot-dipped galvanized after fabrication."

SilverGalv® (Suffix EG)

Often referred to as "zinc plated" or "electroplated zinc," the steel and .5 mils of zinc are bonded by an electrolysis process. This is the identical process used in the Kindorf Galv-Krom[®] finish without the numerous benefits of the gold colored trivalent chromium conversion coat (see Galv-Krom[®] finish for more information). Electrogalvanizing is most commonly applied to small fittings, hardware and threaded products.

PVC Coated (Suffix PVC)

A polyvinyl chloride (PVC) plastic coating is fused to the channel, fitting or accessory after fabrication by immersing the part in fluidized PVC tanks. The fused-melt mixed powder PVC coating thickness is 15 mils (.015") plus or minus five mils. PVC material is a thermoplastic and will soften in high temperature. An inherent weakness with PVC coatings occurs when field alterations are applied, such as cutting or drilling. These acts disrupt the sealed PVC product and warrant field touch-up. Thomas & Betts cannot be held responsible for field-altered PVC coated products.

Copper Plated ("T" inserted as the second digit of the part number; Example: CTL-710-2)

Plain steel proceeds through a series of rinse tanks to clean the material surface. Once cleaned, the fabricated part is etched by dipping into an acid pickle bath to prepare the surface for adhesion. Copper is electrically applied by submerging in a copper bath. To seal the finish, the product continues to a sealer tank and is then dried by forced hot air.

Black (Suffix B)

A black finish is raw steel with only a light oil finish as supplied by the steel manufacturer. There is no protection against red rust.

Stainless Steel (Suffix SS)

Superstrut

Superstrut channel is supplied in type 304 stainless steel when required. Type 316 stainless steel may be available upon request.

Aluminum (Suffix AL)

Superstrut channel and hardware are available in aluminum.

Warning: Load tables, charts and design criteria provided in this catalog are intended as guides only. Selection of proper product, installation intervals, erection and placement are the responsibility of the user.

Superstrut[®] products are intended to be used for the support and bracing of fixtures, cable, pipe and conduit. Improper use or installation may result in injury to persons or damage of property.

Material and finish specifications are subject to change without notice.



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Thomas Betts

Threaded Products & Hardware

Superstrut[®]



A-100 Regular **Spring Nut**

Sizes: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 7/8"

Nut is square over 1/2" size. For all "A" and "C" series channel and inserts.

AB-100 Springless Nut

5/8" & 3/4"

Sizes: 1/4", 5/16", 3/8", 1/2",

Nut is square over 1/2" size. For use with all channels. Silver Electroplated Finish.

AC-100 **Springless Nut**



Sizes: 1/4", 3/8", 1/2", 5/8" & 3/4" Nut is square over 1/2" size.

For all "A", "C", "E" and "H" series channel and inserts.

B-100 Short Spring Nut

Sizes: 1/4", 5/16", 3/8" & 1/2"

Nut is square over 1/2" size. For all "B" series channel and inserts.

CM-100 Nylon Cone Nut

Sizes: 1/4", 3/8", *1/2" & **100B¹/2"

For all 1%" channel.

*Will not fit "B" series channel.

**For "B" Series channel. GoldGalv® Finish.



Sizes: 1/4" x 1", 1/4" x 11/2", 3/8" x 1", 3/8" x 11/2", 1/2" x 15/16" & 1/2" x 11/2"

See price sheet for additional sizes.

E-145 Standard Hex Nut

Sizes: 1/4", 3/8", 1/2", 5/8", 3/4", 7/8" & 1" GoldGalv® Finish.

E-146 Standard Square Nut

Sizes: 1/4", 5/16", 3/8", 1/2" & 5/8" GoldGalv® Finish.



E-147 Flat Steel Washer

Sizes: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 7/8"

E-148 Lock Washer

Sizes: 1/4", 3/8", 1/2" & 5/8" GoldGalv® Finish.

E-149 Slotted Hex **Indented Head Machine Screw**

Sizes: 1/4" x 3/4", 1/4" x 1", 5/16" x 11/4" & 3/8" x 11/4"



E-150-S **Lag Bolt Screw**

Size: 3/8" & 1/2" Drill Size: 1/4" & 111/32"

E-151-D Wood Screw Drive

Size A: 1/4" Size B: 2" Max. Rec. Load: 100 lbs.

ES-142 Seismic Stiffner Nut

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Size: ES-142-1/2 x 11/2" Bolt Dia.: 1/2"

ES-145 Swivel Nut and Jam Nut **Combinations**

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Sizes: 3/8" & 1/2" GoldGalv® Finish.

H-100 Long Spring Nut

Sizes: 3/8", 1/2" & 5/8" Nut is square over 1/2" size. For all "E" and "H" series channel and inserts.

UC-100 Universal Nylon Cone Nut

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Sizes: 1/4",3/8" & 1/2"

For all $1\frac{5}{8}$ " & $1\frac{1}{2}$ " channels. May be used with ALL strut depths. Can be used for CM-100, A-100, B-100 & AB-100 Series. GoldGalv® Finish.

















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Tool Services Tel: 800.284.8665



D-11

Superstrut[®] Metal Framing, Pipe Hangers and Accessories

Finishes and Materials

FINISHES ON STEEL

Bare (Suffix BC)

Pregalvanized (Suffix PGC)

A zinc coating is applied by hot-dipping the steel coil at the mill prior to fabrication. Once the material is worked by roll-forming, cutting, or punching, minimal protection is provided for raw edges. This weakness is typical with precoated material and affects the channel section around holes, extreme ends, and the edges of the U-shape lips. Superstrut[®] pregalvanized material is in conformance with ASTMA-525/G-90 specification standards,representing 0.90 oz. of zinc per square foot of steel. This finish is often referred to as "hot-dipped mill galvanized" or "mill galvanized."

Electrogalvanized (Suffix EGC)

Often referred to as "zinc plated" or "electroplated zinc," the steel and 0.5 mils of zinc are bonded by an electrolysis process. Electrogalvanizing is most commonly applied to small fittings, hardware, and threaded products.

GoldGalv[®] (No Suffix)

Gold colored zinc dichromate is applied over the zinc, producing a chemically bonded non porous barrier for protection from moisture and air. This extends the protective life of the zinc, and provides an excellent base for paint, if desired. The GoldGalv[®] hardware finish also provides a low electrical resistance when grounding of the system is required. Superstrut[®] channel and fittings are plated after fabrication, so there are no unprotected edges from cutting or punching. Where field cutting is necessary or scratches occur due to construction handling, you still have the sacrificial protection of the plated zinc to minimize the corrosion of raw edges and prevent spreading.

Hot-Dipped Galvanized (Suffix HDGC)

The material is zinc coated after fabrication providing total product protection on all surfaces. The fabricated channel or fitting is suspended and then dipped into tanks of hot zinc for a prolonged period, creating a coherent bond. The result is superior corrosion resistance as compared to pregalvanized material. Hot-dipped galvanizing is not recommended for threaded products, considering the zinc coating thickness will often disrupt the threads. Superstrut® hot-dipped galvanized is in conformance with ASTM Specifications A-123 (formerly A-386) and A-153. Superstrut channels maintain a minimum 1.5 oz. of zinc per square foot of steel or 2.5 mils (ASTM A-123, Thickness Grade 65). This finish is also referred to as "Hot-dipped galvanized after fabrication."

Epoxy Powder Coated – Green, Gray or White (Suffix GR, GY or WH)

Epoxy powder resins are applied electrostatically to the steel after fabrication. Once the material is completely covered with the powder-form epoxy, it proceeds through a 400°F (204°C) baking process for ten minutes, creating a chemical bond. This results in a minimum of 1.5 mil thickness of epoxy coating providing excellent resistance to chipping or peeling.

PVC Coated (Suffix PVC)

A polyvinyl chloride (PVC) plastic coating is fused to the channel, fitting or accessory after fabrication by immersing the part in fluidized PVC tanks. The fused-melt mixed powder PVC coating thickness is 15 mils (0.015") plus or minus five mils. PVC material is a thermoplastic and will soften at high temperatures. An inherent weakness with PVC coatings occurs when field alterations are applied, such as cutting or drilling. These acts disrupt the sealed PVC product and warrant field touch-up. Thomas & Betts cannot be held responsible for field-altered PVC coated products.

SPECIAL MATERIALS

Aluminum (Suffix ALC)

Superstrut[®] channel is available in aluminum. Fittings in HDG finish or fiberglass material are suggested for fastening products.

Stainless Steel

Superstrut[®] **channel** is supplied in Type 304 (SS) and Type 316 (T316L) stainless steel. All fittings and accessories are in 316SS (SS6). Contact your Regional Sales Office for availability.

Thomas & Betts reserves the right to change material and finish specifications without notice, to improve its products.

Thomas&Betts