

## Finishes and Materials

### Finishes on Steel

#### Bare (Suffix BC)

#### Pregalvanized (Suffix PGC)

A zinc coating is applied to 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 oz. of zinc per square foot of steel. This finish is often referred to as “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 coloured 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, Grey 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.

### 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 (Suffix SS)

Superstrut® channel is supplied in 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.**

Bare (suffix BC) is available upon request.

## Threaded Products and Hardware

### Channel Nuts

Superstrut® channel nuts are manufactured from Grade 2 mild steel and are case hardened.

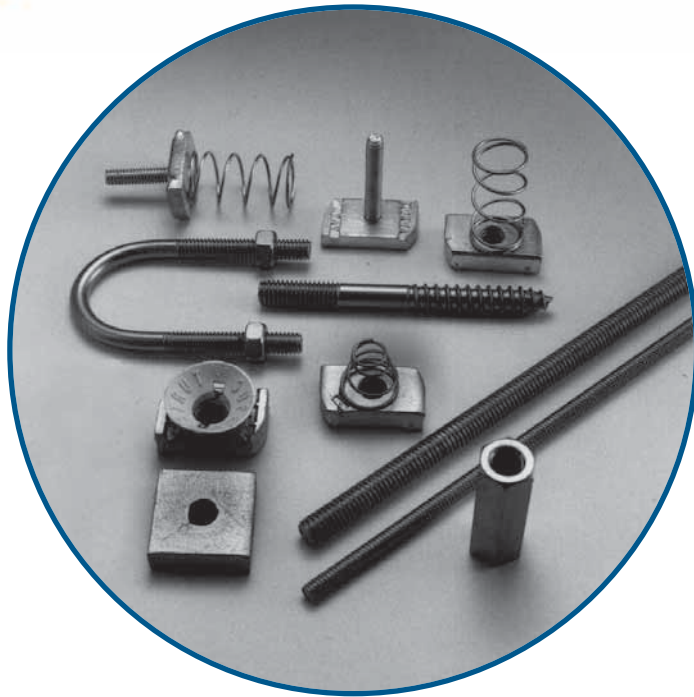
### Design Data

Superstrut® self aligning channel nuts are designed to provide resistance to pullout and resistance to side slip in excess of the full strength of the channels with which they are used. The extreme resistance to side slip results from the unique design of the alternate teeth, spaced and designed to develop a wedging action that increases with pressure or load.

### Screw Threads

All threaded products are American Standard thread, free fit class 2.

Thread Size	1/4	5/16	3/8	1/2	5/8	3/4	7/8	1
Threads per inch	20	18	16	13	11	10	9	8
Design Torque (ft.-lb.)	6	11	19	50	100	125	185	275



### Spring Nut Selector Chart

SPRING NUT	CHANNEL SERIES					
	A - AR	B - BR	C	D	E	H
A100-1/4EGC	■		■			
A100-5/16EGC	■		■			
A100-3/8EGC	■		■			
A100-1/2EGC	■		■			
A100-3/4	■		■			
B100-1/4EGC		■		■		
B100-5/16EGC		■		■		
B100-3/8EGC		■		■		
B100-1/2EGC		■		■		
H100-3/8EGC					■	■
H100-1/2EGC					■	■
CM100-1/4	■		■		■	■
CM100-3/8	■		■		■	■
CM100-1/2	■		■		■	■
CM100-1/2B		■				
UC100-1/4	■		■		■	■
UC100-3/8	■		■		■	■
UC100-1/2	■		■		■	■

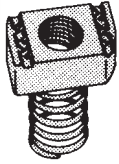
### Finish and special materials

Standard finish for all hardware is Electrogalvanized (EGC) or GoldGalv®. Stainless Steel Type 316 is also available. Contact your Regional Sales Office for availability and minimum quantities.

## Threaded Products and Hardware

### A100 Regular Spring Nut\*

STD. PACK: 100

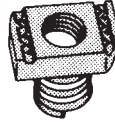


Cat. No.	Size (in.)	Wt./C lb.
A100-1/4EGC	1/4	8
A100-5/16EGC	5/16	9
A100-3/8EGC	3/8	10
A100-1/2EGC	1/2	12
A100-5/8EGC	5/8	19
A100-3/4	3/4	19
A100-7/8	7/8	18

Available in Stainless Steel 316. Nut is square over 1/2 in. size.  
For all A and C Series channel and inserts.

### B100 Short Spring Nut\*

STD. PACK: 100

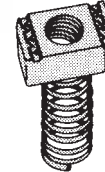


Cat. No.	Size (in.)	Wt./C lb.
B100-1/4EGC	1/4	7
B100-5/16EGC	5/16	8
B100-3/8EGC	3/8	9
B100-1/2EGC	1/2	9

For all B and D Series channel and inserts.

### H100 Long Spring Nut\*

STD. PACK: 100

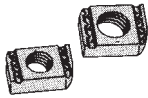


Cat. No.	Size (in.)	Wt./C lb.
H100-3/8EGC	3/8	10
H100-1/2EGC	1/2	14

For all E and H Series channel and inserts.

### AB100 Springless Nut 1/4 in. thick

STD. PACK: 100



Cat. No.	Size (in.)	Wt./C lb.
AB100-1/4EGC	1/4	7
AB100-5/16EGC	5/16	8
AB100-3/8EGC	3/8	9
AB100-1/2EGC	1/2	9
AB100-5/8EGC	5/8	10
AB100-3/4EGC	3/4	10

For use with all channels.  
Nut is square over 1/2 in. size.

### AC100 Springless Nut Heavy duty 3/8 in. thick

STD. PACK: 100



Cat. No.	Size (in.)	Wt./C lb.
AC100-1/4EGC	1/4	7
AC100-3/8EGC	3/8	9
AC100-1/2EGC	1/2	11
AC100-5/8EGC	5/8	18
AC100-3/4EGC	3/4	18

For all A, C, E and H Series channel and inserts.  
Nut is square over 1/2 in. size.

### 813EG Springless Nut Light Duty

STD. PACK: 100

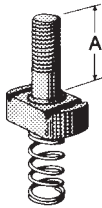


Cat. No.	Size (in.)	Wt./C lb.
813EG	1/4	5

For use with all channels.

### A182 to A185 Regular Spring Stud Nut\*

STD. PACK: 100

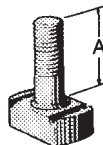


Cat. No.	Bolt Dia (in.)	Length A (in.)	Wt./C lb.
A182-1/4x100EG	1/4	1	10
A182-1/4x125EG	1/4	1-1/4	15
A184-3/8x100EG	3/8	1	10
A184-3/8x125EG	3/8	1-1/4	15
A185-1/2x100EG	1/2	1	10
A185-1/2x125EG	1/2	1-1/4	15

For all A and C Series channels.

### A177 to A179 Springless Stud Nut

STD. PACK: 100

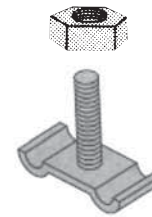


Cat. No.	Bolt Dia (in.)	Length A (in.)	Wt./C lb.
A177-1/4x100EG	1/4	1	8
A177-1/4x125EG	1/4	1-1/4	10
A179-3/8x100EG	3/8	1	13
A179-3/8x125EG	3/8	1-1/4	13.5

For use with all channels.

### 812 Stud Nut

STD. PACK: 100



Cat. No.	For Channel	Wt./C lb.
812-1EG	1/4 x 1	6

For attaching fixture to channel slot down or to channel slot up knockouts. Specify length. Hex nut included.

### CM100 Nylon Cone Nut

STD. PACK: 100



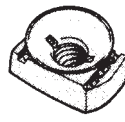
Cat. No.	Size (in.)	Wt./C lb.
CM100-1/4	1/4	8
CM100-3/8	3/8	10
* CM100-1/2	1/2	12
**CM100B-1/2	1/2	10

GoldGalv® only

For all 1-5/8 in. channel.  
\*Will not fit B Series channel.  
\*\*For B Series channel.

### UC100 Universal Nylon Cone Nut

STD. PACK: 100



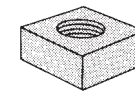
Cat. No.	Size (in.)	Wt./C lb.
UC100-1/4	1/4	8
UC100-3/8	3/8	10
UC100-1/2	1/2	12

GoldGalv® only

For all 1-5/8 in. and 1-1/2 in. channels.  
May be used with ALL Strut Depths.  
Can be used for CM100 Series, A100 Series, B100 Series and AB100 Series.

### AB102 Unhardened Square Nut

STD. PACK: 100



Cat. No.	Size (in.)	Wt./C lb.
AB102-1/4	1/4	13
AB102-3/8	3/8	14
AB102-1/2	1/2	14
AB102-5/8	5/8	12
AB102-3/4	3/4	11
AB102-7/8	7/8	10

### E145 Standard Hex Nut

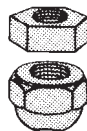
STD. PACK: 100



Cat. No.	Size (in.)	Wt./C lb.
E145-1/4EGC	1/4	.72
E145-3/8EGC	3/8	1.60
E145-1/2EGC	1/2	2.78
E145-5/8EGC	5/8	6.92
E145-3/4EGC	3/4	12.70
E145-7/8EGC	7/8	19.00
E145-1EGC	1	28.00

### ES145 Swivel Nut and Jam Nut Combinations

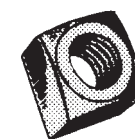
STD. PACK: 100



Cat. No.	Size (in.)	Wt./C lb.
ES145-3/8	3/8	5.5
ES145-1/2	1/2	6.0

### E146 Standard Square Nut

STD. PACK: 100



Cat. No.	Size (in.)	Wt./C lb.
E146-1/4EG	1/4	.93
E146-5/16EG	5/16	1.60
E146-3/8EGC	3/8	2.65
E146-1/2EG	1/2	5.83
E146-5/8EG	5/8	10.80

\*Supplied with a plastic sleeve over the spring portion to prevent tangling inside the carton.