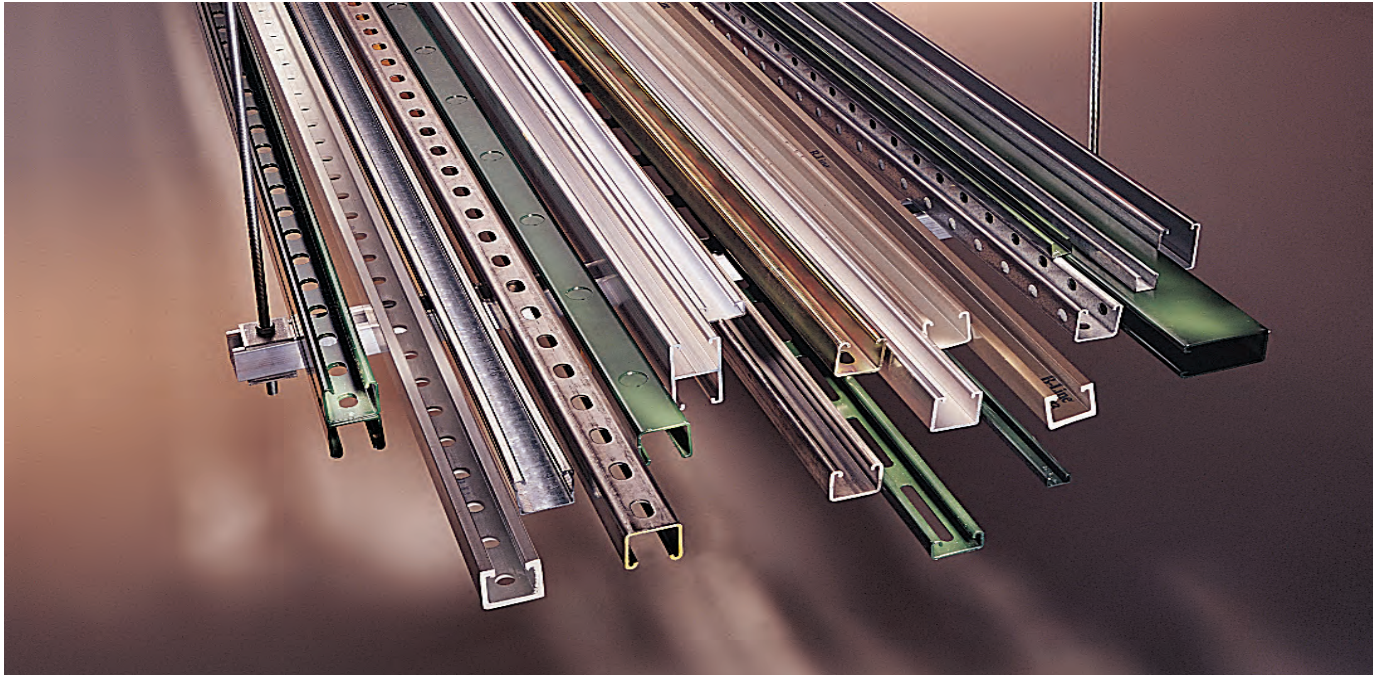


Metal framing channels



Channel

Metal framing channel is cold formed on our modern rolling mills from 12 Ga. (2.6mm) and 14 Ga. (1.9mm) low carbon steel strips. A continuous slot with inturned lips provides the ability to make attachments at any point.

Lengths & Tolerances

All channels excluding 'SH' style $\pm \frac{1}{8}"$ (3.2mm) on 10' (3.05m) and $\pm \frac{3}{16}"$ (4.76mm) on 20' (6.09m)

All 'SH' channels only $\pm \frac{1}{4}"$ (6.35mm) on 10' (3.05m) and $\pm \frac{1}{2}"$ (12.70mm) on 20' (6.09m)

Custom lengths are available upon request.

Slots

Slotted series of channels offer full flexibility. A variety of pre-punched slot patterns eliminate the need for precise field measuring for hole locations. Slots offer wide adjustments in the alignment and bolt sizing.

Holes

A variety of pre-punched $\frac{9}{16}"$ (14.3 mm) diameter hole patterns are available in our channels. These hole patterns provide an economical alternative to costly field drilling required for many applications.

Knockouts

When used with series B217-20 Closure Strips, knockout channels can be used to provide an economical U.L. listed surface raceway. Channels are furnished with $\frac{7}{8}"$ (22.2 mm) knockouts on 6" (152 mm) centers, allowing for perfect fixture alignment on spans up to 20' (6.09 m).

Materials & Finishes (Unless otherwise noted)

Steel: Plain & Pre-galvanized

12 Ga. (2.6) and 14 Ga. (1.9)

Note: A minimum order may apply on special material and finishes.

Design Load (Steel & Stainless Steel)

The design loads given for strut beam loads are based on a simple beam condition using an allowable stress of 25,000 psi. This allowable stress results in a safety factor of 1.68. This is based upon virgin steel minimum yield strength of 33,000 psi cold worked during rolling to an average yield stress of 42,000 psi. For aluminum channel loading multiply steel loading by a factor of 0.38.

Finish Code	Finish	Specification
PLN	Plain	ASTM A1011, 33,000 PSI min. yield
GRN	DURA GREEN™	
GLV	Pre-Galvanized	ASTM A653 33,000 PSI min. yield
HDG	Hot-Dipped Galvanized	ASTM A123
YZN	Yellow Zinc Chromate	ASTM B633 SC3 Type II
SS4	Stainless Steel Type 304	ASTM A240
SS6	Stainless Steel Type 316	ASTM A240
AL	Aluminum	Aluminum 6063-T6

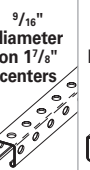
Welding

Weld spacing is maintained between 2½ inches (63.5 mm) and 4 inches (101.6 mm) on center. Through high quality control testing of welded channels and continuous monitoring of welding equipment, we provide the most consistent combination channels available today.

Metric

Metric dimensions are shown in parentheses. Unless noted, all metric dimensions are in millimeters.

Selection Chart for Channels, Materials and Hole Patterns

Channel Type	Channel Dimensions		Material & Thickness*				Channel Hole Pattern**				
	Height	Width	Stainless Steel				SH	S	H1 ⁷ / ₈	TH	KO6
			Steel	Alum.	Type 304	Type 316					
			<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>					
B11	3 ¹ / ₄ " (82.5)	1 ⁵ / ₈ " (41.3)	12 Ga.	.105	—	—	<u>1</u>	<u>1</u>	<u>1</u>	—	<u>1</u>
B12	2 ⁷ / ₁₆ " (61.9)	1 ⁵ / ₈ " (41.3)	12 Ga.	.105	—	—	<u>1</u> <u>2</u>	<u>1</u>	<u>1</u> <u>2</u>	—	<u>1</u> <u>2</u>
B22	1 ⁵ / ₈ " (41.3)	1 ⁵ / ₈ " (41.3)	12 Ga.	.105	12 Ga.	12 Ga.	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	<u>1</u> <u>3</u>	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	<u>1</u>	<u>1</u> <u>2</u>
B24	1 ⁵ / ₈ " (41.3)	1 ⁵ / ₈ " (41.3)	14 Ga.	—	14 Ga.	14 Ga.	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	<u>1</u>	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	—	<u>1</u> <u>2</u>
B32	1 ³ / ₈ " (34.9)	1 ⁵ / ₈ " (41.3)	12 Ga.	—	12 Ga.	—	<u>1</u> <u>3</u>	<u>1</u>	<u>1</u> <u>3</u>	—	<u>1</u>
B42	1" (25.4)	1 ⁵ / ₈ " (41.3)	12 Ga.	—	12 Ga.	—	<u>1</u> <u>3</u>	<u>1</u>	<u>1</u> <u>3</u>	—	<u>1</u>
B52	1 ³ / ₁₆ " (20.6)	1 ⁵ / ₈ " (41.3)	12 Ga.	—	12 Ga.	12 Ga.	<u>1</u> <u>3</u> <u>4</u>	<u>1</u>	<u>1</u>	—	<u>1</u>
B54	1 ³ / ₁₆ " (20.6)	1 ⁵ / ₈ " (41.3)	14 Ga.	.080	14 Ga.	14 Ga.	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	<u>1</u>	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	—	<u>1</u> <u>2</u>
B62	1 ³ / ₁₆ " (20.6)	1 ³ / ₁₆ " (20.6)	18 Ga.	—	—	—	—	—	—	—	—
B72	1 ³ / ₃₂ " (10.3)	1 ³ / ₁₆ " (20.6)	18 Ga.	—	—	—	—	—	—	—	—

The selection has been prepared to provide a reference for available channel, materials and hole patterns. Material types available for various hole patterns are defined by numbers 1 thru 4.

Some stainless steel channels with hole patterns are available on special order only.

* Metric equivalent for thicknesses shown in chart.

12 Ga. = 2.6 mm

18 Ga. = 1.2 mm

14 Ga. = 1.9 mm

.105 = 2.6 mm

16 Ga. = 1.5 mm

.080 = 2.0 mm

** 1 - Steel

2 - Aluminum

3 - Type 304 Stainless Steel

4 - Type 316 Stainless Steel

Properties may vary due to commercial tolerances of the material.

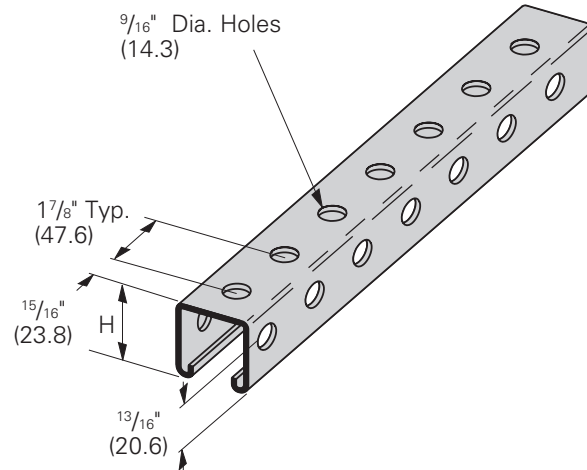
Channel Part Numbering			
Example:			
B22 SH - 120 SS4			
Channel Type	Hole Patterns	Length	Material/Finish
B11	SH (pg. 74)	120	GRN
B12	S (pg. 74)	240	GLV
B22	H178 (pg. 74)		HDG
B24	TH (pg. 75)		PLN
B32	KO6 (pg. 75)		YZN
B42	SHA (pg. 75)		SS4 (See page 222)
B52	S58 (pg. 76)		SS6 (See page 222)
B54	M (pg. 76)		AL (See pages 219-220)
B62 ^D	H25 (pg. 76)		
B72 ^D	Leave blank for no hole pattern		
^D Hole patterns are not available on these channel sizes			

Reference page 48 for general fitting and standard finish specifications.

B22TH TH Type Channel

- For beam loads use 90% of Channel Loading Chart

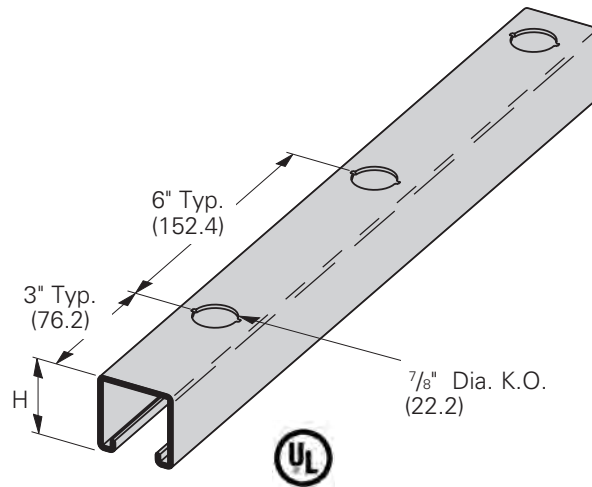
Part No.	Thickness	Height H In. mm	Weight Lbs./Ft. kg/m
B22TH	12 Ga. (2.6)	1 ⁵ / ₈ " (41.3)	1.76 (2.62)



B11KO6 thru B56KO6 KO6 Type Knockout Channel

- For beam loads use 90% of Channel Loading Chart

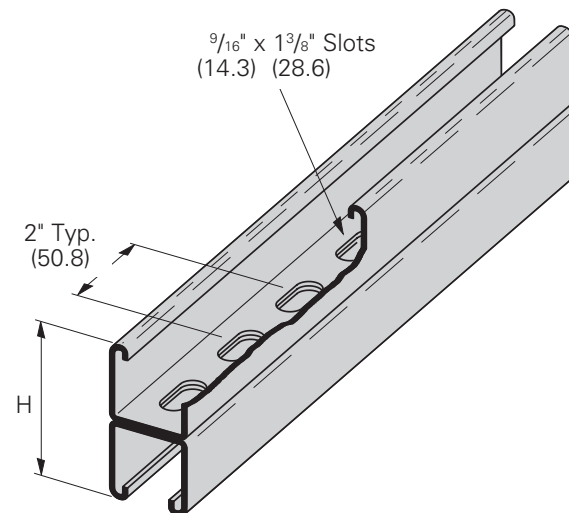
Part No.	Thickness	Height H In. mm	Weight Lbs./Ft. kg/m
B11KO6	12 Ga. (2.6)	3 ¹ / ₄ " (82.5)	3.05 (4.54)
B12KO6	12 Ga. (2.6)	2 ⁷ / ₁₆ " (61.9)	2.47 (3.67)
B22KO6	12 Ga. (2.6)	1 ⁵ / ₈ " (41.3)	1.90 (2.83)
B24KO6	14 Ga. (1.9)	1 ⁵ / ₈ " (41.3)	1.40 (2.08)
B32KO6	12 Ga. (2.6)	1 ³ / ₈ " (34.9)	1.70 (2.53)
B42KO6	12 Ga. (2.6)	1" (25.4)	1.44 (2.14)
B52KO6	12 Ga. (2.6)	1 ³ / ₁₆ " (20.6)	1.27 (1.89)
B54KO6	14 Ga. (1.9)	1 ³ / ₁₆ " (20.6)	.97 (1.44)



B22SHA Back to Back SH Type Channel

- For beam loads use 90% of Channel Loading Chart

Part No.	Thickness	Height H In. mm	Weight Lbs./Ft. kg/m
B22SHA	12 Ga. (2.6)	3 ¹ / ₄ " (82.5)	3.64 (5.42)
B52SHA	12 Ga. (2.6)	1 ⁵ / ₈ " (41.3)	2.38 (1.77)
B54SHA	14 Ga. (1.9)	1 ⁵ / ₈ " (41.3)	1.82 (1.35)



Reference page 48 for general fitting and standard finish specifications.