



Our mini channels and fittings provide for an economical method of supporting light load requirements on a strut system.

**Channel**

Channels are cold formed on our modern rolling mills from 18 Ga. (1.2 mm) low carbon steel strips plain steel (ASTM A1008 33,000 PSI min. yield) and pre-galvanized steel strips, (ASTM A653 33,000 PSI min. yield). A continuous slot with inturred lips provides the ability to make attachments at any point. Channel combinations are made with new state of the art, high-tech welding equipment.

**Lengths**

Standard lengths are 10' (3.05 m) and 20' (6.09 m) for B62 series, and 10' (3.05 m) for B72 series. Custom lengths are available.

**Fittings**

Mini fittings are formed from hot rolled pickled and oiled strip or sheet steel (ASTM A1011, HSLAS, Grade 50, Class1). The following dimensions apply to all fittings except as noted on the drawings:

**Hole Size** –  $\frac{9}{32}$ " (7.14 mm) Dia.

**Hole Spacing** –  $\frac{13}{32}$ " (10.3 mm) from end and  $\frac{1}{16}$ " (27.0 mm) on center.

**Width** –  $\frac{13}{16}$ " (20.6 mm)

**Thickness** –  $\frac{1}{8}$ " (3.2 mm)

**Materials & Finishes\***

\*Unless otherwise noted.

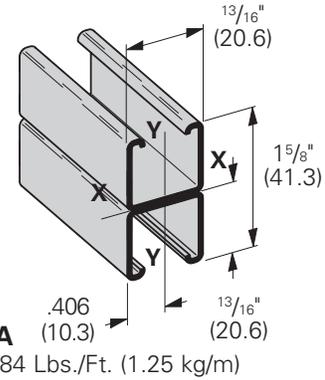
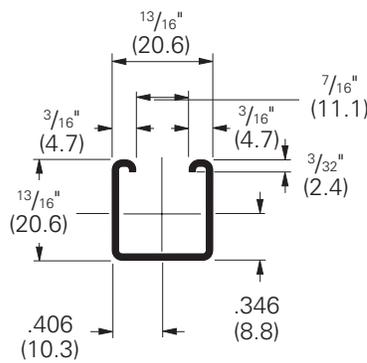
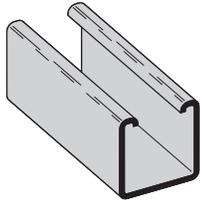
Finish Code	Finish	Specification
PLN	Plain	ASTM A1011, HSLAS, Grade 50, Class 1
ZN	Electro-Plated Zinc	ASTM B633 SC3 Type II
GRN	DURA-GREEN™	
GLV	Pre-Galvanized	ASTM A653 33,000 PSI min. yield
HDG	Hot-Dipped Galvanized	ASTM A123

**Metric**

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

# B62 Channel

- Thickness: 18 Ga. (1.2 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, DURA GREEN™, Pre-Galvanized
- Weight: .42 Lbs./Ft. (.62 kg/m)



Section Properties			X - X Axis				Y - Y Axis			
Channel	Weight lbs./ft. kg/m	Areas of Section sq. in. cm <sup>2</sup>	Moment of Inertia (I) in. <sup>4</sup> cm <sup>4</sup>	Section Modulus (S) in. <sup>3</sup> cm <sup>3</sup>	Radius of Gyration (r) in. cm	Moment of Inertia (I) in. <sup>4</sup> cm <sup>4</sup>	Section Modulus (S) in. <sup>3</sup> cm <sup>3</sup>	Radius of Gyration (r) in. cm		
<b>B62</b>	.420 (.62)	.123 (.80)	.0103 (.43)	.0221 (.36)	.289 (.73)	.0134 (.56)	.0330 (.54)	.330 (.84)		
<b>B62A</b>	.839 (1.25)	.247 (1.59)	.0500 (2.08)	.0616 (1.01)	.450 (1.14)	.0269 (1.12)	.0663 (1.09)	.330 (.84)		

Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.

## Beam Loading

Beam Span In. mm	Channel Style	Uniform Load and Deflection				Uniform Load @ Deflection =			
		Lbs. kN	In. mm	Lbs. kN	Lbs. kN				
12 (305)	<b>B62</b>	364 (1.62)	.027 (.68)	364 (1.62)	364 (1.62)				
	<b>B62A</b>	420* (1.87)	.006 (.15)	420* (1.87)	420* (1.87)				
24 (609)	<b>B62</b>	182 (0.81)	.109 (2.77)	167 (0.74)	111 (0.49)				
	<b>B62A</b>	420* (1.87)	.051 (1.29)	420* (1.87)	420* (1.87)				
36 (914)	<b>B62</b>	121 (0.54)	.245 (6.22)	74 (0.33)	50 (0.22)				
	<b>B62A</b>	341 (1.51)	.141 (3.58)	341 (1.51)	242 (1.07)				
48 (1219)	<b>B62</b>	91 (0.40)	.436 (11.07)	42 (0.18)	28 (0.12)				
	<b>B62A</b>	256 (1.14)	.250 (6.35)	204 (0.91)	136 (0.60)				
60 (1524)	<b>B62</b>	73 (0.32)	.681 (17.30)	27 (0.12)	18 (0.08)				
	<b>B62A</b>	205 (0.91)	.391 (9.93)	131 (0.58)	87 (0.39)				
72 (1829)	<b>B62</b>	61 (0.27)	.981 (24.92)	19 (0.08)	12 (0.05)				
	<b>B62A</b>	170 (0.75)	.563 (14.30)	91 (0.40)	61 (0.27)				

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 12 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. \*Failure determined by weld shear.

## Column Loading

Unbraced Height In. mm	Channel Style	Max. Column Loading K = .80				Max. Column Loading (Loaded @ C.G.)					
		Loaded @ C.G.		Loaded @ Slot Face		K = .65		K = 1.0		K = 1.2	
		Lbs. kN	Lbs. kN	Lbs. kN	Lbs. kN	Lbs. kN	Lbs. kN	Lbs. kN	Lbs. kN		
12 (305)	<b>B62</b>	2052 (9.13)	820 (3.65)	2161 (9.61)	1890 (8.41)	1715 (7.63)					
	<b>B62A</b>	4666 (20.75)	1449 (6.44)	4710 (20.95)	4593 (20.43)	4503 (20.03)					
24 (609)	<b>B62</b>	1350 (6.00)	645 (2.87)	1624 (7.22)	1020 (4.54)	818 (3.64)					
	<b>B62A</b>	4275 (19.01)	1367 (6.08)	4453 (19.81)	3982 (17.71)	3624 (16.12)					
36 (914)	<b>B62</b>	818 (3.64)	471 (2.09)	1053 (4.68)	633 (2.81)	515 (2.29)					
	<b>B62A</b>	3624 (16.12)	847 (3.77)	4023 (17.89)	2965 (13.19)	2179 (9.69)					
48 (1219)	<b>B62</b>	589 (2.62)	369 (1.64)	745 (3.31)	456 (2.03)	365** (1.62)					
	<b>B62A</b>	2713 (12.06)	504 (2.24)	3421 (15.21)	1765 (7.85)	1225 (5.45)					
60 (1524)	<b>B62</b>	456 (2.03)	300 (1.33)	579 (2.57)	347** (1.54)	271** (1.20)					
	<b>B62A</b>	1765 (7.85)	323 (1.44)	2647 (11.77)	1129 (5.02)	784** (3.49)					
72 (1829)	<b>B62</b>	365** (1.62)	248 (1.10)	470 (2.09)	271** (1.20)	-					
	<b>B62A</b>	1225 (5.45)	224 (0.99)	1856 (8.25)	784** (3.49)	545** (2.42)					

\*\*Where the slenderness ratio  $\frac{KL}{r}$  exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 242 for general fitting specifications.