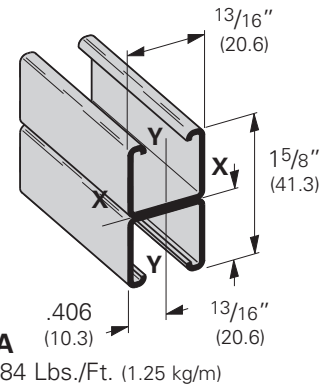
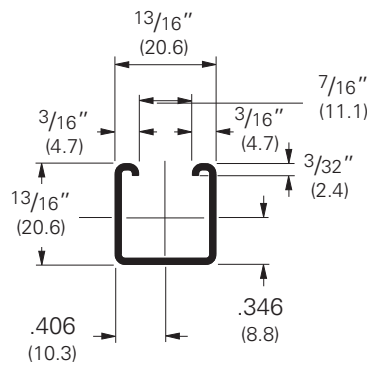
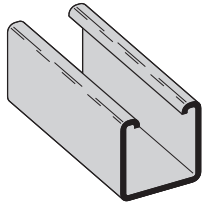


B62 Channel

- 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

Channel	Weight lbs./ft. kg/m	Areas of Section sq. in. cm ²	X - X Axis				Y - Y Axis			
			Moment of Inertia (I) in. ⁴ cm ⁴	Section Modulus (S) in. ³ cm ³	Radius of Gyration (r) in. cm	Moment of Inertia (I) in. ⁴ cm ⁴	Section Modulus (S) in. ³ cm ³	Radius of Gyration (r) in. cm		
B62	.420 (.62)	.123 (.80)	.0103 (.43)	.0221 (.36)	.289 (.73)	.0134 (.56)	.0330 (.54)	.330 (.84)		
B62A	.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		1/240 Span		1/360 Span	
12 (305)	B62	364 (1.62)	.027 (.68)	364 (1.62)	364 (1.62)				
	B62A	420* (1.87)	.006 (.15)	420* (1.87)	420* (1.87)				
24 (609)	B62	182 (0.81)	.109 (2.77)	167 (0.74)	111 (0.49)				
	B62A	420* (1.87)	.051 (1.29)	420* (1.87)	420* (1.87)				
36 (914)	B62	121 (0.54)	.245 (6.22)	74 (0.33)	50 (0.22)				
	B62A	341 (1.51)	.141 (3.58)	341 (1.51)	242 (1.07)				
48 (1219)	B62	91 (0.40)	.436 (11.07)	42 (0.18)	28 (0.12)				
	B62A	256 (1.14)	.250 (6.35)	204 (0.91)	136 (0.60)				
60 (1524)	B62	73 (0.32)	.681 (17.30)	27 (0.12)	18 (0.08)				
	B62A	205 (0.91)	.391 (9.93)	131 (0.58)	87 (0.39)				
72 (1829)	B62	61 (0.27)	.981 (24.92)	19 (0.08)	12 (0.05)				
	B62A	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)	B62	2052 (9.13)	820 (3.65)	2161 (9.61)	1890 (8.41)	1715 (7.63)					
	B62A	4666 (20.75)	1449 (6.44)	4710 (20.95)	4593 (20.43)	4503 (20.03)					
24 (609)	B62	1350 (6.00)	645 (2.87)	1624 (7.22)	1020 (4.54)	818 (3.64)					
	B62A	4275 (19.01)	1367 (6.08)	4453 (19.81)	3982 (17.71)	3624 (16.12)					
36 (914)	B62	818 (3.64)	471 (2.09)	1053 (4.68)	633 (2.81)	515 (2.29)					
	B62A	3624 (16.12)	847 (3.77)	4023 (17.89)	2965 (13.19)	2179 (9.69)					
48 (1219)	B62	589 (2.62)	369 (1.64)	745 (3.31)	456 (2.03)	365** (1.62)					
	B62A	2713 (12.06)	504 (2.24)	3421 (15.21)	1765 (7.85)	1225 (5.45)					
60 (1524)	B62	456 (2.03)	300 (1.33)	579 (2.57)	347** (1.54)	271** (1.20)					
	B62A	1765 (7.85)	323 (1.44)	2647 (11.77)	1129 (5.02)	784** (3.49)					
72 (1829)	B62	365** (1.62)	248 (1.10)	470 (2.09)	271** (1.20)	—					
	B62A	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 201 for general fitting specifications.