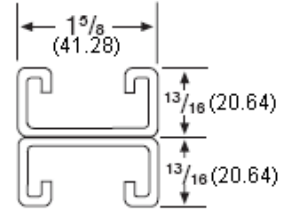
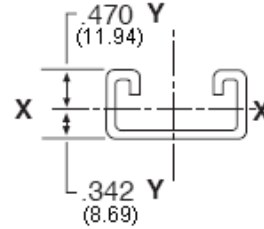
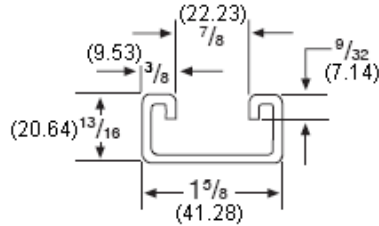
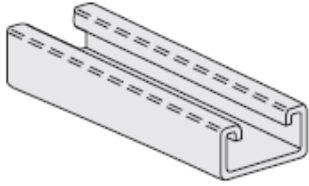




CHANNEL

1301 - 1342

1⁵/₈" X 1³/₁₆" X 14 Gauge



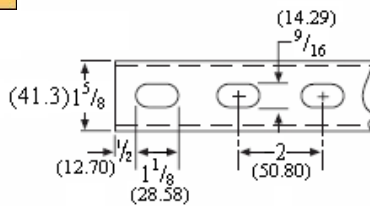
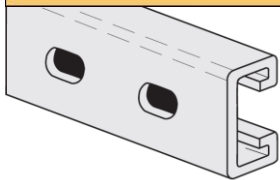
ORDERING:

Specify Figure No., finish and number of feet.

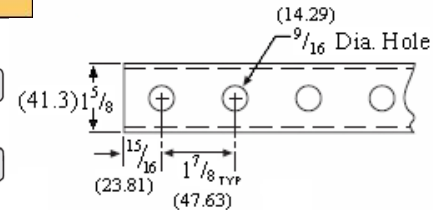
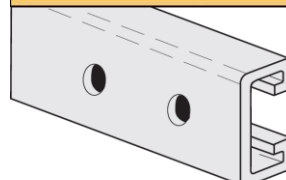
Fig. Number				Type - Description	Weight		Bundle Qty.			
10ft.	3.05m	20ft.	6.10m		lbs./ft.	kg/m	10ft.	3.05m	20ft.	6.10m
1301		1302		No Openings	.93	(.42)	500	(152.4)	1000	(304.8)
1301A		1302A		Welded Back to Back	1.86	(.84)	500	(152.4)	500	(152.4)
1311		1312		With 1 ¹ / ₈ " X 9/16" (28.58 X 14.29) slots on 2" (50.8) centers	.86	(.39)	500	(152.4)	1000	(304.8)
1311A		1312A		Welded Back to Back	1.72	(.78)	500	(152.4)	500	(152.4)
1321		1322		With 9/16" (14.29) dia. holes on 1 ⁷ / ₈ " (47.63) centers	.88	(.40)	500	(152.4)	1000	(304.8)
1321A		1322A		Welded Back to Back	1.92	(.87)	500	(152.4)	500	(152.4)
1331		1332		With 3" (76.20) slots	.87	(.39)	500	(152.4)	1000	(304.8)
1341		1342		With 7/8" (22.23) Knockouts on 6" (152.40) centers	.93	(.42)	500	(152.4)	1000	(304.8)

Available in aluminum and stainless steel. Price on request. To order aluminum, add suffix AL to fig. number. To order stainless steel, specify 304 or 316 and add suffix SS to fig. number.

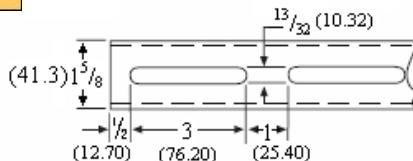
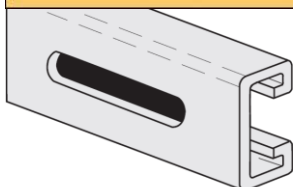
1311 - 1312



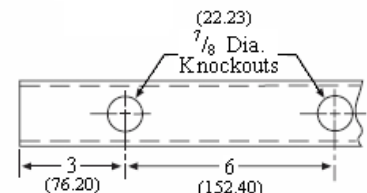
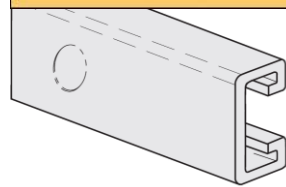
1321 - 1322



1331 - 1332



1341 - 1342



Unless otherwise specified, all dimensions on drawings and in charts are in inches and dimensions shown in parentheses are in millimeters.

Elements of Selection

1301 - 1342

Figure Number	X-X Axis								Y-Y Axis					
	Area of Section		Moment Of Inertia		Section Modulus		Radius of Gyration		Moment Of Inertia		Section Modulus		Radius of Gyration	
	in. ²	cm ²	in. ⁴	cm ⁴	in. ³	cm ³	in.	cm	in. ⁴	cm ⁴	in. ³	cm ³	in.	cm
1301	0.295	(1.903)	0.027	(1.124)	0.056	(0.918)	0.302	(0.767)	0.11	(4.580)	0.135	(2.212)	0.61	(1.549)
1301A	0.59	(3.806)	0.122	(5.079)	0.15	(2.458)	0.455	(1.156)	0.22	(9.160)	0.27	(4.425)	0.61	(1.549)

Modules of Elasticity: 29,500,000 PSI (203,395.3mPa)

Beam & Column Loads

Figure Number	Beam Span or Unbraced Column Height		Maximum Column Load		Uniform Load		Deflection		Uniform Load @ 1/240 Span	
			Lbs.	kN	Lbs.	kN	in.	mm	Lbs.	kN
1301	12	(304.80)	6186	(27.52)	870	(3.87)	.03	(0.76)	870	(3.87)
1301A			12763	(56.77)	870*	(3.87)	.01	(0.25)	870*	(3.87)
1301	24	(609.60)	5464	(24.31)	465	(2.07)	.11	(2.79)	430	(1.91)
1301A			12135	(53.98)	870*	(3.87)	.04	(1.02)	870*	(3.87)
1301	36	(914.40)	4300	(19.13)	310	(1.38)	.24	(6.10)	191	(0.85)
1301A			11087	(49.32)	832	(3.70)	.14	(3.56)	832	(3.70)
1301	48	(1219.20)	2703	(12.02)	233	(1.04)	.43	(10.92)	108	(0.48)
1301A			9620	(42.79)	624	(2.78)	.25	(6.35)	499	(2.22)
1301	60	(1524.00)	1730	(7.70)	186	(0.83)	.68	(17.27)	69	(0.31)
1301A			7734	(34.40)	499	(2.22)	.39	(9.91)	319	(1.42)
1301	72	(1828.80)	1201	(5.34)	155	(0.69)	.97	(24.64)	48	(0.21)
1301A			5571	(24.78)	416	(1.85)	.56	(14.22)	222	(0.99)
1301	84	(2133.60)	--	--	133	(0.59)	1.32	(33.53)	35	(0.16)
1301A			4093	(18.21)	357	(1.59)	.76	(19.30)	163	(0.73)
1301	96	(2438.40)	--	--	116	(0.52)	1.73	(43.94)	27	(0.12)
1301A			3134	(13.94)	312	(1.39)	1.00	(25.40)	125	(0.56)
1301	108	(2743.20)	--	--	103	(0.46)	2.19	(55.63)	21	(0.09)
1301A			2476	(11.01)	277	(1.23)	1.27	(32.26)	98	(0.44)
1301	120	(3048.00)	--	--	93	(0.41)	2.70	(68.58)	17	(0.08)
1301A			--	--	250	(1.11)	1.56	(39.62)	80	(0.36)
1301	144	(3657.60)	--	--	80	(0.36)	4.09	(103.89)	--	--
1301A			--	--	200	(0.89)	2.26	(57.40)	50	(0.22)
1301	168	(4267.20)	--	--	60	(0.27)	4.88	(123.95)	--	--
1301A			--	--	170	(0.76)	3.05	(77.47)	40	(0.18)
1301	192	(4876.80)	--	--	60	(0.27)	7.28	(184.91)	--	--
1301A			--	--	150	(0.67)	4.02	(102.11)	--	--
1301	216	(5486.40)	--	--	50	(0.22)	8.64	(219.46)	--	--
1301A			--	--	130	(0.58)	4.96	(125.98)	--	--
1301	240	(6096.00)	--	--	50	(0.22)	11.85	(300.99)	--	--
1301A			--	--	120	(0.53)	6.28	(159.51)	--	--

Beam Loads: Loads listed are uniformly distributed, for loads concentrated at center of span multiply uniform load by .5 and multiply the deflection by .8. When deflection is not a factor use stress of 25,000 PSI (172.37 mPa). When deflection is a factor use deflection of 1/240 Span. *Failure determined by weld shear.

Column Loads: Column loadings are for allowable axial loads for the unsupported heights listed and include a K value of .80. If eccentric, loads should be reduced according to standard practice.

Unless otherwise specified, all dimensions on drawings and in charts are in inches and dimensions shown in parentheses are in millimeters.

For Fabricated Channels, reduce beam load values as follows:

1311 & 1312 15%
1321 & 1322 10%
1331 & 1332 30%
1341 & 1342 5%

TECHNICAL DATA

SPOT WELDING

Resistance welding of back to back strut channel is accomplished by way of an AC powered press type spot welder. This equipment produces a series of spot welds from 2-1/2" (63.5) to 3" (76.2) apart continuously down the length of the channel. Consistency is maintained by the use of a highly sophisticated constant current weld control. This processor is capable of maintaining weld sequence, duration and current control along with other variables. Any deviations in the programmed parameters will issue forth an alarm or shut down fault, which is then investigated. Weld quality is tested every 300-350 welds through the use of a destructive test method.

Through the use of modern technology, destructive and non-destructive testing, the quality of strut can be maintained. Spot weld strut is fabricated in accordance with the R.W.M.A. guidelines for resistance welding.