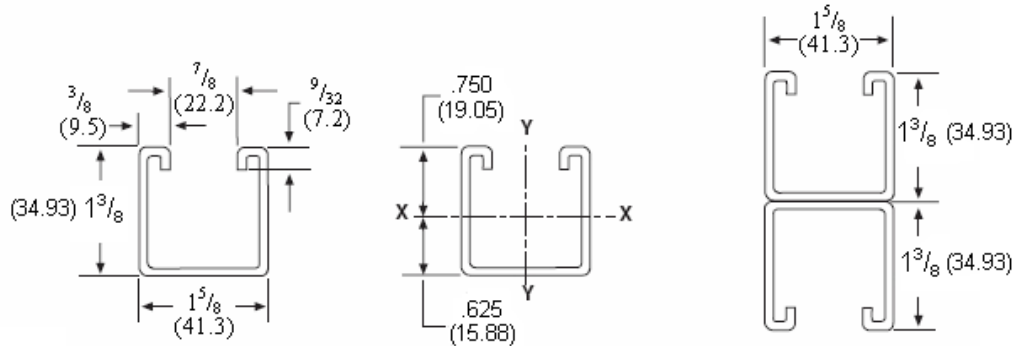
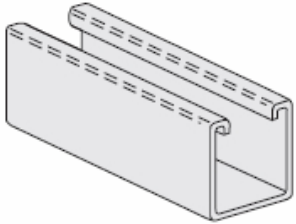




CHANNEL

1701 - 1742

1⁵/₈" X 1³/₈" X 12 Gauge

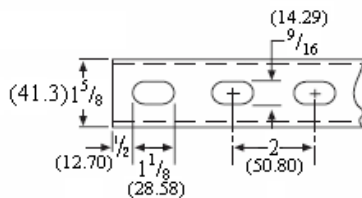
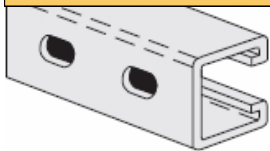


ORDERING:

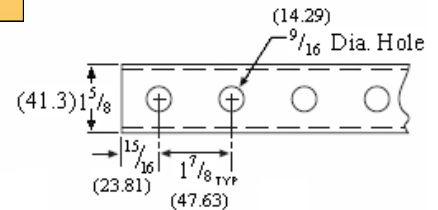
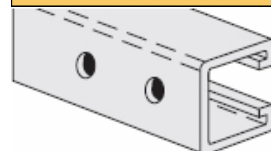
Specify Figure No., finish and number of feet.

Fig. Number				Type - Description	Weight		Bundle Qty.			
10ft.	3.05m	20ft.	6.10m		lbs./ft.	kg/m	10ft.	3.05m	20ft.	6.10m
1701		1702		No Openings	1.59	(2.37)	500	(152.4)	500	(152.4)
1701A		1702A		Welded Back to Back	3.40	(5.06)	200	(61.0)	300	(91.4)
1711		1712		With 1 ¹ / ₈ " X 9 ⁹ / ₁₆ " (28.58 X 14.29) slots on 2" (50.8) centers	1.54	(2.29)	500	(152.4)	500	(152.4)
1711A		1712A		Welded Back to Back	3.24	(4.82)	200	(61.0)	300	(91.4)
1721		1722		With 9 ⁹ / ₁₆ " (14.29) dia. holes on 1 ⁷ / ₈ " (47.63) centers	1.65	(2.46)	500	(152.4)	500	(152.4)
1721A		1722A		Welded Back to Back	3.30	(4.91)	200	(61.0)	300	(91.4)
1731		1732		With 3" (76.20) slots	1.59	(2.37)	500	(152.4)	500	(152.4)
1741		1742		With 7 ⁷ / ₈ " (22.23) Knockouts on 6" (152.40) centers	1.59	(2.37)	500	(152.4)	500	(152.4)

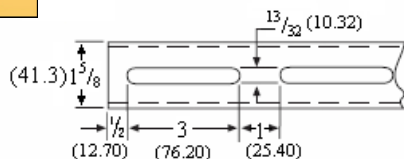
1711 - 1712



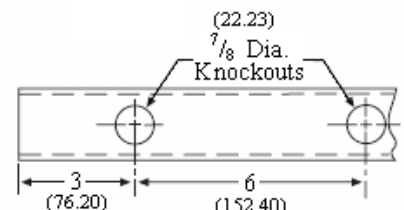
1721 - 1722



1731 - 1732



1741 - 1742



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

Elements of Selection

1701 - 1742

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
1701	0.508	(3.277)	0.124	(5.163)	0.159	(2.606)	0.494	(1.255)	0.209	(8.702)	0.257	(4.211)	0.641	(1.628)
1701A	1.016	(6.555)	0.613	(25.522)	0.445	(7.292)	0.776	(1.971)	0.418	(17.403)	0.514	(8.423)	0.641	(1.628)

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
1701	12	(304.80)	10278	(45.72)	2210	(9.83)	.02	(0.51)	2210	(9.83)
1701A			21320	(94.84)	2210*	(9.83)	.01	(0.25)	2210*	(9.83)
1701	24	(609.60)	9104	(40.50)	1299	(5.78)	.07	(1.78)	1299	(5.78)
1701A			20806	(92.55)	2210*	(9.83)	.02	(0.51)	2210*	(9.83)
1701	36	(914.40)	7640	(33.98)	866	(3.85)	.15	(3.81)	866	(3.85)
1701A			19950	(88.74)	2210*	(9.83)	.08	(2.03)	2210*	(9.83)
1701	48	(1219.20)	6151	(27.36)	649	(2.89)	.26	(6.60)	495	(2.20)
1701A			18751	(83.41)	1817	(8.08)	.15	(3.81)	1817	(8.08)
1701	60	(1524.00)	4778	(21.25)	520	(2.31)	.41	(10.41)	317	(1.41)
1701A			17210	(76.55)	1454	(6.47)	.23	(5.84)	1454	(6.47)
1701	72	(1828.80)	3870	(17.21)	433	(1.93)	.59	(14.99)	220	(0.98)
1701A			15326	(68.17)	1211	(5.39)	.33	(8.38)	1092	(4.86)
1701	84	(2133.60)	3243	(14.43)	371	(1.65)	.80	(20.32)	162	(0.72)
1701A			13100	(58.27)	1038	(4.62)	.45	(11.43)	802	(3.57)
1701	96	(2438.40)	2774	(12.34)	325	(1.45)	1.04	(26.42)	124	(0.55)
1701A			10525	(46.82)	909	(4.04)	.59	(14.99)	614	(2.73)
1701	108	(2743.20)	2403	(10.69)	289	(1.29)	1.32	(33.53)	98	(0.44)
1701A			8316	(36.99)	808	(3.59)	.75	(19.05)	485	(2.16)
1701	120	(3048.00)	1993	(8.87)	260	(1.16)	1.63	(41.40)	79	(0.35)
1701A			6736	(29.96)	727	(3.23)	.92	(23.37)	393	(1.75)
1701	144	(3657.60)	--	--	220	(0.98)	2.04	(51.82)	90	(0.40)
1701A			--	--	600	(2.67)	1.33	(33.78)	270	(1.20)
1701	168	(4267.20)	--	--	180	(0.80)	3.11	(78.99)	40	(0.18)
1701A			--	--	520	(2.31)	1.84	(46.74)	200	(0.89)
1701	192	(4876.80)	--	--	160	(0.71)	4.13	(104.90)	30	(0.13)
1701A			--	--	450	(2.00)	2.37	(60.20)	150	(0.67)
1701	216	(5486.40)	--	--	140	(0.62)	5.15	(130.81)	--	--
1701A			--	--	400	(1.78)	3.00	(76.20)	120	(0.53)
1701	240	(6096.00)	--	--	130	(0.58)	6.56	(166.62)	--	--
1701A			--	--	360	(1.60)	3.70	(93.98)	100	(0.44)

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.

For Fabricated Channels, reduce beam load values as follows:

1711 & 1712 15%
 1721 & 1722 10%
 1731 & 1732 30%
 1741 & 1742 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" (50.8) to 4" (101.6) 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.

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