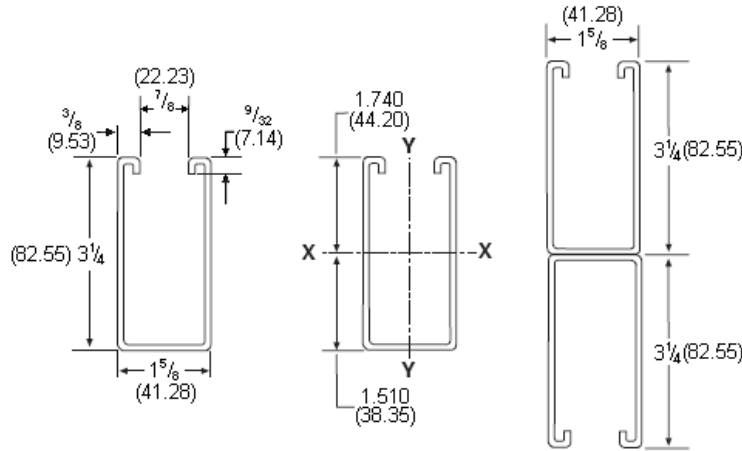
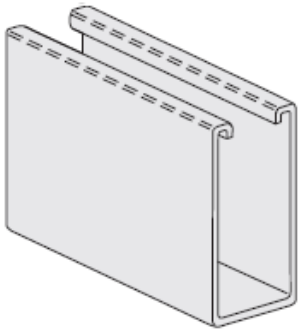




CHANNEL

1501 - 1542

1⁵/₈" X 3¹/₄" X 12 Gauge



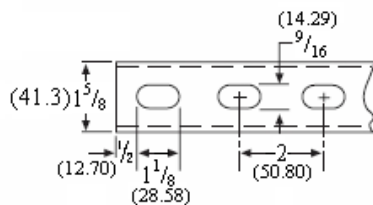
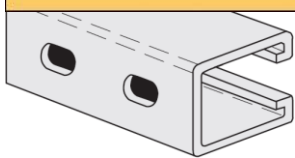
ORDERING:

Specify Figure No., finish and number of feet.

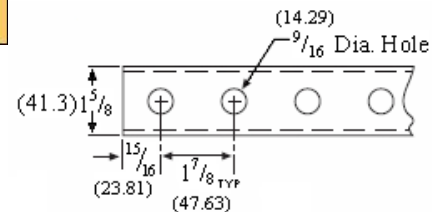
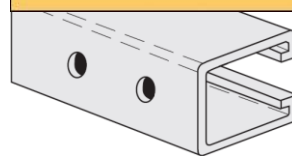
Fig. Number				Type - Description	Weight		Bundle Qty.			
10ft.	3.05m	20ft.	6.10m		lbs./ft.	kg/m	10ft.	3.05m	20ft.	6.10m
1501		1502		No Openings	2.99	(4.45)	300	(91.44)	300	(91.44)
1501A		1502A		Welded Back to Back	5.98	(8.90)	100	(30.48)	200	(60.96)
1511		1512		With 1 ¹ / ₈ " X 9/16" (28.58 X 14.29) slots on 2" (50.8) centers	2.90	(4.32)	300	(91.44)	300	(91.44)
1511A		1512A		Welded Back to Back	5.80	(8.63)	100	(30.48)	200	(60.96)
1521		1522		With 9/16" (14.29) dia. holes on 1 ⁷ / ₈ " (47.63) centers	2.91	(4.33)	300	(91.44)	300	(91.44)
1521A		1522A		Welded Back to Back	6.02	(8.96)	100	(30.48)	200	(60.96)
1531		1532		With 3" (76.20) slots	2.89	(4.30)	300	(91.44)	300	(91.44)
1541		1542		With 7/8" (22.23) Knockouts on 6" (152.40) centers	2.99	(4.45)	300	(91.44)	300	(91.44)

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

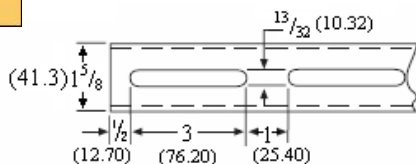
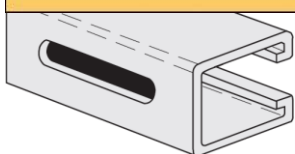
1511 - 1512



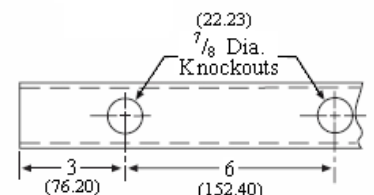
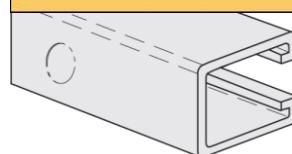
1521 - 1522



1531 - 1532



1541 - 1542



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

Elements of Selection

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
1501	0.902	(5.819)	1.115	(46.423)	0.641	(10.504)	1.112	(2.824)	0.436	(18.153)	0.537	(8.800)	0.695	(1.765)
1501A	1.804	(11.639)	6.349	(264.341)	1.953	(32.004)	1.876	(4.765)	0.873	(36.347)	1.074	(17.600)	0.695	(1.765)

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
1501	24	(609.60)	8190	(36.43)	5130	(22.82)	.03	(0.76)	5130	(22.82)
1501A			17701	(78.74)	5130	(22.82)	.01	(0.25)	5130	(22.82)
1501	36	(914.40)	7311	(32.52)	3488	(15.52)	.07	(1.78)	3488	(15.52)
1501A			17416	(77.47)	5130	(22.82)	.02	(0.51)	5130	(22.82)
1501	48	(1219.20)	6214	(27.64)	2616	(11.64)	.12	(3.05)	2616	(11.64)
1501A			17016	(75.69)	5130	(22.82)	.04	(1.02)	5130	(22.82)
1501	60	(1524.00)	4988	(22.19)	2093	(9.31)	.18	(4.57)	2093	(9.31)
1501A			16503	(73.41)	5130	(22.82)	.08	(2.03)	5130	(22.82)
1501	72	(1828.80)	3816	(16.97)	1744	(7.76)	.26	(6.60)	1744	(7.76)
1501A			15876	(70.62)	5130	(22.82)	.14	(3.56)	5130	(22.82)
1501	84	(2133.60)	3063	(13.62)	1495	(6.65)	.36	(9.14)	1460	(6.49)
1501A			15135	(67.32)	4552	(20.25)	.19	(4.83)	4552	(20.25)
1501	96	(2438.40)	2564	(11.41)	1308	(5.82)	.47	(11.94)	1118	(4.97)
1501A			14279	(63.52)	3983	(17.72)	.25	(6.35)	3983	(17.72)
1501	108	(2743.20)	2213	(9.84)	1163	(5.17)	.59	(14.99)	884	(3.93)
1501A			12210	(54.31)	3541	(15.75)	.32	(8.13)	3541	(15.75)
1501	120	(3048.00)	1953	(8.69)	1046	(4.65)	.73	(18.54)	716	(3.18)
1501A			12226	(54.38)	3187	(14.18)	.39	(9.91)	3187	(14.18)
1501	144	(3657.60)	--	--	880	(3.91)	1.06	(26.92)	500	(2.22)
1501A			--	--	2656	(11.81)	.56	(14.30)	2656	(11.81)
1501	168	(4267.20)	--	--	750	(3.34)	1.43	(36.32)	370	(1.65)
1501A			--	--	2276	(10.12)	.77	(19.45)	2078	(9.24)
1501	192	(4876.80)	--	--	660	(2.94)	1.88	(47.75)	280	(1.25)
1501A			--	--	1992	(8.86)	1.00	(25.42)	1591	(7.08)
1501	216	(5486.40)	--	--	580	(2.58)	2.35	(59.69)	220	(0.98)
1501A			--	--	1770	(7.87)	1.27	(32.18)	1257	(5.59)
1501	240	(6096.00)	--	--	530	(2.36)	2.94	(74.68)	180	(0.80)
1501A			--	--	1593	(7.08)	1.56	(39.72)	1018	(4.53)

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.

1501 - 1542

For Fabricated Channels, reduce beam load values as follows:

1511 & 1512 15%
 1521 & 1522 10%
 1531 & 1532 30%
 1541 & 1542 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.

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