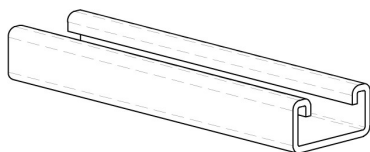




CHANNEL STRUT

FIG. 1201-1242

1⁵/₈" X 1³/₁₆" X 12 GAUGE



Material:

Carbon steel

Finish:

Plain, pre-galvanized, channel green, e-coat, or hot dipped galvanized

Ordering:

Specify figure number, finish, and number of feet.

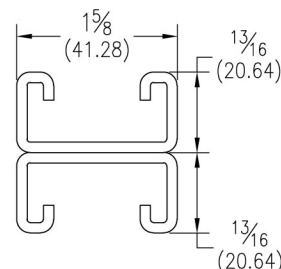
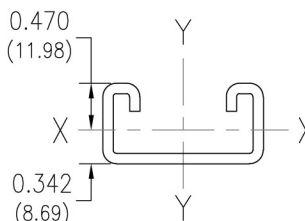
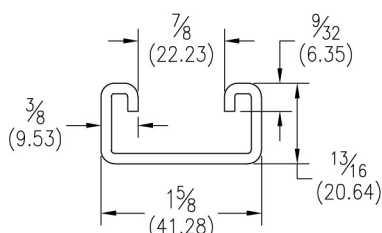
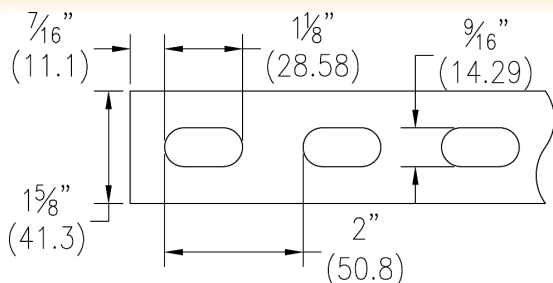
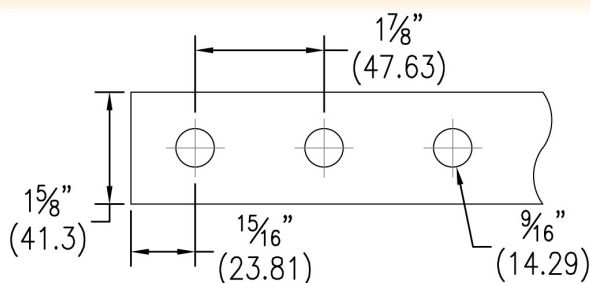


Fig. No.		Type - Description	Weight		Bundle Qty.			
10ft. (3.05m)	20ft. (6.1m)		lbs./ft.	kg/m	10ft.	3.05m	20ft.	6.1m
1201	1202	No Openings	1.22	(1.82)	500	(152.4)	1000	(304.8)
1201A	1202A	Welded Back to Back	2.52	(3.75)	500	(152.4)	500	(152.4)
1211	1212	With 1 ¹ / ₈ " X 9/16" (28.58 X 14.29) slots on 2" (50.8) centers	1.15	(1.71)	500	(152.4)	1000	(304.8)
1211A	1212A	Welded Back to Back	2.36	(3.51)	500	(152.4)	500	(152.4)
1221	1222	With 9/16" (14.29) dia. holes on 1 ⁷ / ₈ " (47.63) centers	1.16	(1.73)	500	(152.4)	1000	(304.8)
1221A	1222A	Welded Back to Back	2.40	(3.57)	500	(152.4)	500	(152.4)
1231	1232	With 3" (76.20) slots	1.15	(1.71)	500	(152.4)	1000	(304.8)
1241	1242	With 7/8" (22.23) Knockouts on 6" (152.40) centers	1.22	(1.82)	500	(152.4)	1000	(304.8)

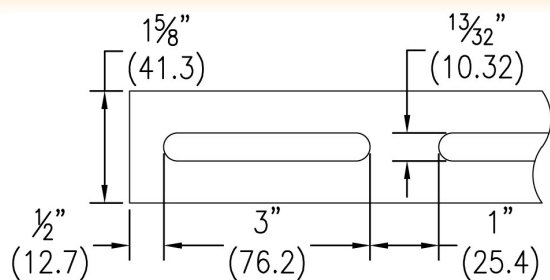
1211-1212



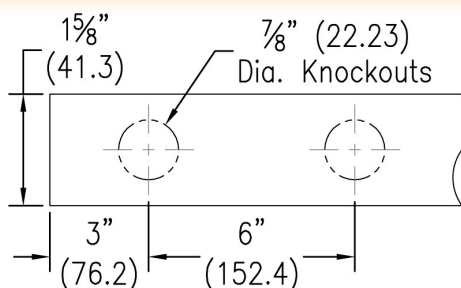
1221-1222



1231-1232



1241-1242



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

CHANNEL STRUT



1⁵/₈" X 1³/₁₆" X 12 GAUGE

FIG. 1201-1242

Section Properties

Fig. No.	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
1201	0.376	(2.426)	0.033	(1.374)	0.068	(1.114)	0.297	(0.754)	0.115	(4.788)	0.142	(2.327)	0.554	(1.407)
1201A	0.752	(4.852)	0.148	(6.162)	0.182	(2.982)	0.444	(1.128)	0.23	(9.576)	0.284	(4.654)	0.554	(1.407)

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

Beam & Column Load Table

Fig. No.	Beam Span or Unbraced Column Height		Maximum Column Load		Uniform Load @25,000 psi		Deflection @25,000 psi		Uniform Load @1/240 Span	
			lbs.	kN	lbs.	kN			lbs.	kN
1201	12	(304.8)	8407	(37.40)	1079	(4.80)	0.02	(0.51)	1079	(4.80)
1201A			19160	(85.23)	1270*	(5.65)	0.01	(0.25)	1270*	(5.65)
1201	24	(609.6)	7519	(33.45)	539	(2.40)	0.10	(2.54)	506	(2.25)
1201A			17444	(77.59)	1270*	(5.65)	0.05	(1.27)	1270*	(5.65)
1201	36	(914.4)	5397	(24.01)	360	(1.60)	0.24	(6.10)	225	(1.00)
1201A			15275	(67.95)	1013	(4.51)	0.14	(3.56)	1013	(4.51)
1201	48	(1219.2)	3178	(14.14)	270	(1.20)	0.43	(10.92)	126	(0.56)
1201A			12692	(56.46)	759	(3.38)	0.25	(6.35)	607	(2.70)
1201	60	(1524.0)	2034	(9.05)	216	(0.96)	0.67	(17.02)	81	(0.36)
1201A			9683	(43.07)	608	(2.70)	0.39	(9.91)	388	(1.73)
1201	72	(1828.8)	-	-	180	(0.80)	0.96	(24.38)	56	(0.25)
1201A			6780	(30.16)	506	(2.25)	0.56	(14.22)	270	(1.20)
1201	84	(2133.6)	-	-	154	(0.69)	1.31	(33.27)	41	(0.18)
1201A			4981	(22.16)	434	(1.93)	0.77	(19.56)	198	(0.88)
1201	96	(2438.4)	-	-	135	(0.60)	1.71	(43.43)	32	(0.14)
1201A			3814	(16.97)	380	(1.69)	1.00	(25.40)	152	(0.68)
1201	108	(2743.2)	-	-	120	(0.53)	2.16	(54.86)	25	(0.11)
1201A			3013	(13.40)	338	(1.50)	1.27	(32.26)	120	(0.53)
1201	120	(3048.0)	-	-	108	(0.48)	2.67	(67.82)	20	(0.09)
1201A			-	-	304	(1.35)	1.56	(39.62)	97	(0.43)
1201	144	(3657.6)	-	-	90	(0.40)	3.84	(97.54)	-	-
1201A			-	-	250	(1.11)	2.25	(57.15)	70	(0.31)
1201	168	(4267.2)	-	-	-	-	-	-	-	-
1201A			-	-	220	(0.98)	3.14	(79.76)	50	(0.22)
1201	192	(4876.8)	-	-	-	-	-	-	-	-
1201A			-	-	190	(0.85)	4.05	(102.87)	-	-
1201	216	(5486.4)	-	-	-	-	-	-	-	-
1201A			-	-	170	(0.76)	5.16	(131.06)	-	-
1201	240	(6096.0)	-	-	-	-	-	-	-	-
1201A			-	-	150	(0.67)	6.24	(158.50)	-	-

For pierced Channels, reduce beam load values as follows:
 1211 & 1212 = 15%
 1221 & 1222 = 10%
 1231 & 1232 = 30%
 1241 & 1242 = 5%

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.

Beam Loads: Published loads are given in total uniform load (lbs.) not uniform load (lbs./ft.). For loads concentrated at center of span multiply uniform load by 0.5 and multiply the deflection by 0.8 (refer to page 26 for reduction factors on other beam configurations.). 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.

CHANNEL

PIPE & CONDUIT
SUPPORTS

STRUT NUTS
& HARDWARE

CONCRETE
INSERTS

END CAPS &
CLOSURES

FLAT PLATE
FITTINGS

90° ANGLE
FITTINGS

ANGLE
FITTINGS

"U"
FITTINGS

"Z"
FITTINGS

WING
FITTINGS

SPECIALTY
FITTINGS

TROLLEY
ASSEMBLIES

POST
BASES

BRACKETS &
BRACE FITTINGS

BEAM
CLAMPS

ROOFTOP
SUPPORTS