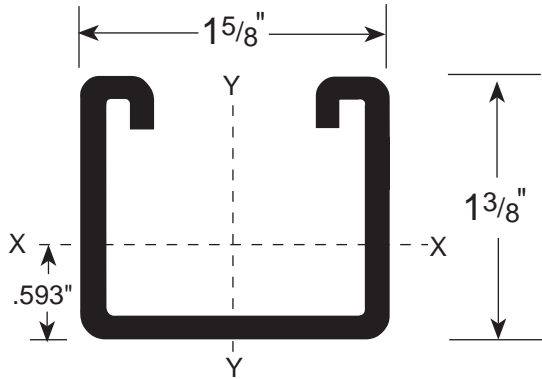


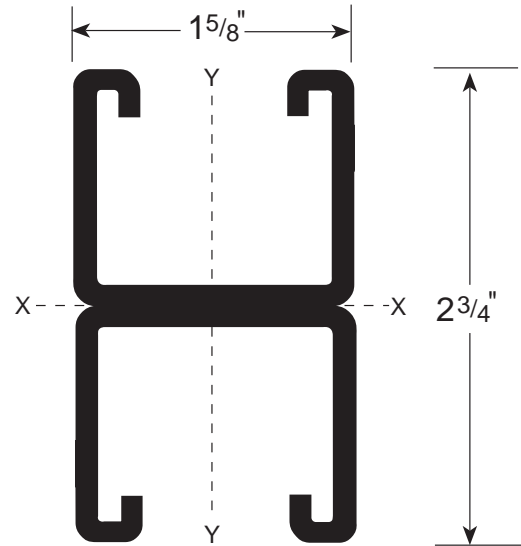
FS-300 • 1-3/8" CHANNEL • 12 Gauge

SECTION PROPERTIES			X-X AXIS			Y-Y AXIS		
CHNL P/N	WT/FT LBS.	AREA SQ. IN.	I _x in ⁴	S _x in ³	R _x in	I _y in ⁴	S _y in ³	R _y in
FS-300	1.70	.500	.118	.151	.487	.204	.251	.639
FS-301	3.40	1.000	.589	.428	.767	.408	.502	.639

I = Moment of Inertia S = Section Modulus R = Radius of Gyration



FS-300



FS-301

CHANNEL FINISH: • PLAIN (PL) • PRE-GALVANIZED (PG) • GREEN (GR)
• HOT-DIPPED GALVANIZED (HD)

STANDARD LENGTH: 20 FT. • 10 FT.

ALLOWABLE BEAM LOADS — Span In Inches

CHNL P/N		24"	30"	36"	42"	48"	60"	72"	84"	96"	108"	120"
FS-300	Stress	1,260	1,010	840	720	630	500	420	360	310	280	250
	1/240	***	***	***	640	490	320	220	160	120	100	80
FS-301	Stress	2,160*	2,160*	2,160*	2,040	1,785	1,430	1,190	1,020	890	795	715
	1/240	***	***	***	***	***	***	1,090	800	615	485	395

- TOTAL STATIC LOAD in LBS.
- Upper line is MAXIMUM ALLOWABLE UNIFORM LOAD creating 25,000 PSI Bending Stress about the X-Axis based on SIMPLE BEAM condition.
- Lower line shows TOTAL UNIFORM LOAD which produces a deflection of 1/240th of the SPAN, (i.e.; 1/2" Def. for 120" Span)
- Multiply values in upper line by 0.5 to obtain ALLOWABLE CENTER CONCENTRATED LOAD at 25,000 PSI Stress. Deflection by 0.8.
- * Load limited by spot weld shear.
- For punched channel, reduce weld limited loads by 0.75 due to 4" weld spacing.
- *** Load controlled by 25,000 PSI design stress.

ALLOWABLE COLUMN LOADS — Unsupported Height of Column in Inches

CHNL P/N		24"	30"	36"	42"	48"	60"	72"	84"	96"	108"	120"
FS-300		7,360	6,745	6,170	5,645	5,175	4,375	3,705	3,120	2,670	2,275	1,845
FS-301		17,215	16,840	16,435	15,875	15,255	13,860	12,330	10,735	9,150	7,635	6,235

- COLUMN LOADS are allowable axial loads applied at the section centroid. Loads applied at the slot face must be reduced for Eccentricity.
- ALLOWABLE COLUMN LOADS shown are based upon an effective length factor K = 0.8 standard engineering practice required for evaluation of other conditions.