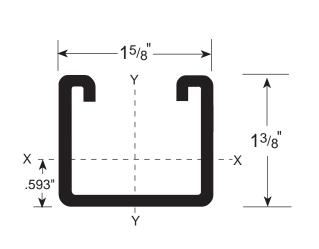
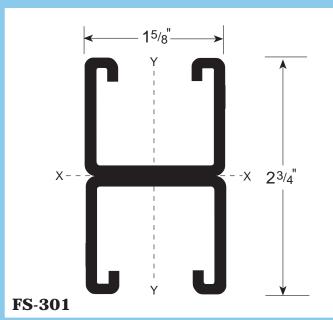
FS-300 • 1-3/8" CHANNEL • 12 Gauge



SECTION PROPERTIES			X-X AXIS			Y-Y AXIS		
CHNL	WT/FT	AREA	Ix	Sx	Rx	Iy	Sy	Ry
P/N	LBS.	SQ. IN.	in ⁴	in ³	in	in ⁴	in ³	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

• PLAIN (PL) • PRE-GALVANIZED (PG) • GREEN (GR)

HOT-DIPPED GALVANIZED (HD)

STANDARD LENGTH: 20 FT. • 10 FT.

> CHNL P/N

CHANNEL FINISH:

FS-300 Stress 1/240 FS-301 Stress

1/240

ALLOWABLE BEAM LOADS — Span In Inches

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

- 2. Upper line is MAXIMUM ALLOWABLE UNIFORM LOAD creating 25,000 PSI Bending Stress about the X-Axis based on SIMPLE BEAM condition.

 3. Lower line shows TOTAL UNIFORM LOAD which produces a deflection of 1/240th of the SPAN, (i.e.; 1/2" Def. for 120" Span)

 4. Multiply values in upper line by 0.5 to obtain ALLOWABLE CENTER CONCENTRATED LOAD at 25,000 PSI Stress. Deflection by 0.8.

- 5. * Load limited by spot weld shear.
- 6. For punched channel, reduce weld limited loads by 0.75 due to 4" weld spacing. 7. *** Load controlled by 25,000 PSI design stress.

CHNL P/N FS-300 FS-301

ALLOWABLE COLUMN LOADS — **Unsupported Height of Column in Inches** 24" 30" 36" 42" 48" 60" 72" 84" 96" 108" 120" 7,360 6,745 6,170 5,645 5,175 4,375 3,705 3,120 2,670 2,275 1,845 17,215 16,840 16,435 15,875 15,255 13,860 12,330 10,735 9,150 7,635 6,235

^{1.} COLUMN LOADS are allowable axial loads applied at the section centroid. Loads applied at the slot face must be reduced for Eccentricity.

^{2.} ALLOWABLE COLUMN LOADS shown are based upon an effective length factor K=0.8 standard engineering practice required for evaluation of other conditions.