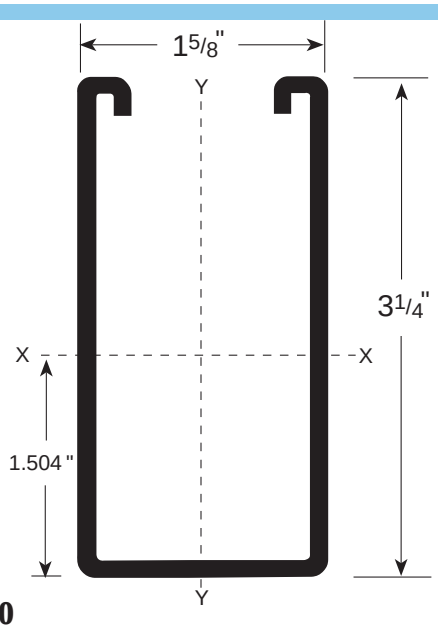
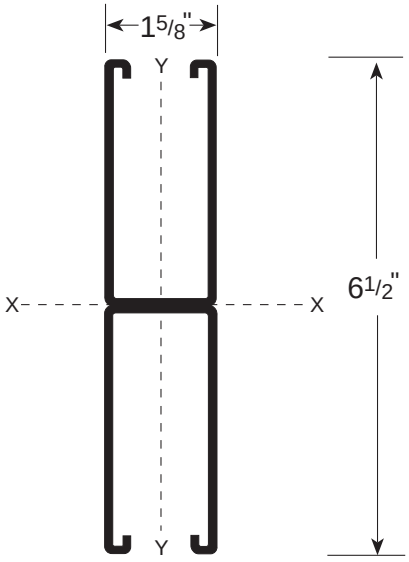
FS-100 • 3-1/4" CHANNEL • 12 Gauge

SECTION PROPERTIES			X-X AXIS			Y-Y AXIS		
CHNL P/N	WT/FT LBS.	AREA SQ. IN.	Ix in^4	Sx in^3	Rx in	Iy in^4	Sy in^3	Ry in
FS-100	3.04	.894	1.089	.624	1.104	.432	.532	.695
FS-101	6.08	1.788	6.222	1.914	1.865	.863	1.063	.695

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



FS-100



FS-101

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

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-100	Stress 1/240	5,200 ***	4,160 ***	3,470 ***	2,970 ***	2,600 ***	2,080 ***	1,730 ***	1,490 1,480	1,300 1,130	1,160 900	1,040 730
FS-101	Stress 1/240	5,020* ***	5,020* ***	5,020* ***	5,020* ***	5,020* ***	5,020* ***	5,020* ***	4,560 ***	3,990 ***	3,545 ***	3,190 ***

1. TOTAL STATIC LOAD in LBS.
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.

ALLOWABLE COLUMN LOADS — Unsupported Height of Column in Inches

CHNL P/N	24"	30"	36"	42"	48"	60"	72"	84"	96"	108"	120"
FS-100	13,400	11,590	9,805	8,140	6,655	4,630	3,520	2,840	2,385	2,070	1,830
FS-101	32,700	32,700	32,330	31,300	30,160	27,580	24,730	21,735	18,730	15,820	13,070

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.