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-500	.99	.290	.025	.053	.295	.107	.132	.607
FS-501	1.98	.581	.117	.144	.449	.214	.263	.607

I = Moment of Inertia   S = Section Modulus   R = Radius of Gyration
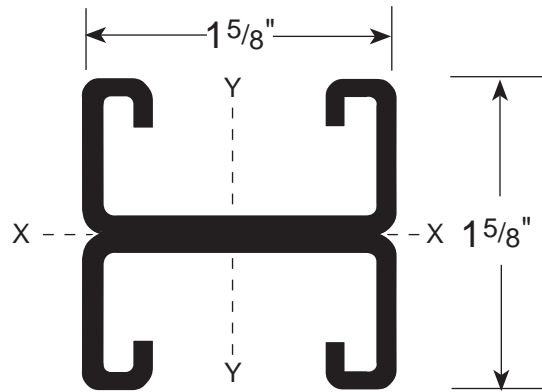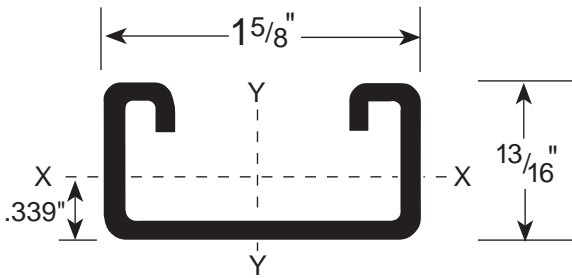
FS-500

FS-501

CHANNEL FINISH:
- **PLAIN (PL)** • **PRE-GALVANIZED (PG)** • **GREEN (GR)**
- **HOT-DIPPED GALVANIZED (HD)** • **ALUMINUM (AL)** • **STAINLESS (ST4) TYPE 304**
- **PVC COATED** • **STAINLESS (ST6) TYPE 316**

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-500	Stress 1/240	440	350	290	250	220	180	150	130	110	100	90
		420	270	190	140	100	70	50	35	25	20	15
FS-501	Stress 1/240	1070*	960	800	690	600	480	400	340	300	270	240
		***	***	***	640	490	310	220	160	120	100	80

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-500	4,855	4,325	3,685	3,055	2,455	1,570	1,090	*****	*****	*****	*****
FS-501	11,230	10,610	9,895	9,115	8,290	6,600	4,995	3,675	2,815	2,225	*****

***** = KL/R>200

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.

(800) FX-STRUT