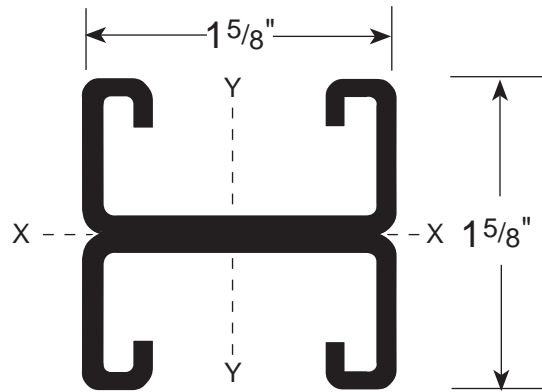
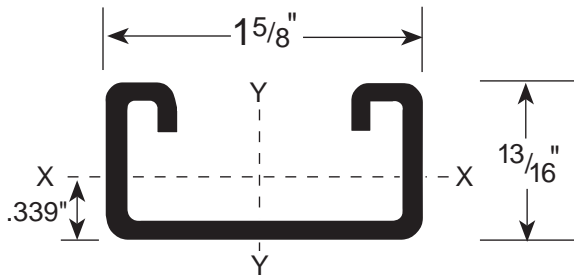


SECTION PROPERTIES			X-X AXIS			Y-Y AXIS		
CHNL P/N	WT/FT LBS.	AREA SQ. IN.	I _x in ⁴	S _x in ³	R _x in	I _y in ⁴	S _y in ³	R _y in
FS-500	.99	.290	.025	.053	.295	.107	.132	.607
FS-501	1.98	.581	.117	.144	.449	.214	.263	.607

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

- 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-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

- 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.