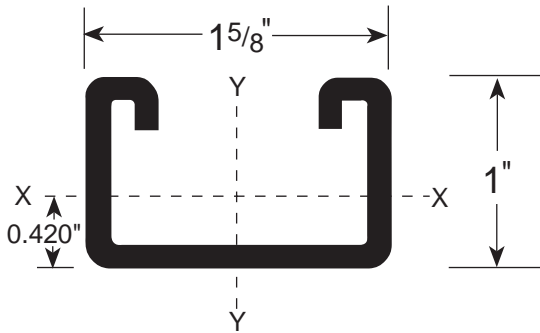
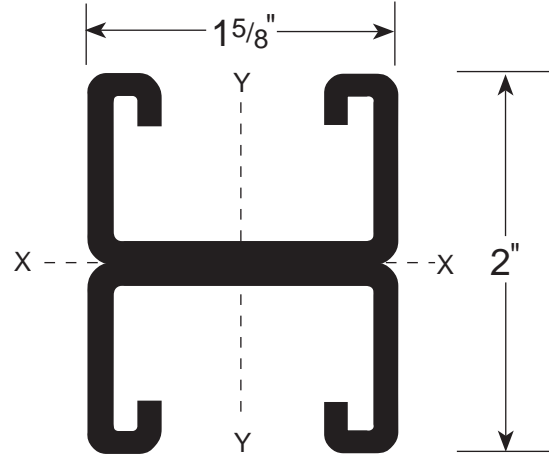


SECTION PROPERTIES			X-X AXIS			Y-Y AXIS		
CHNL P/N	WT/FT LBS.	AREA SQ. IN.	I _x in ⁴	S _x in ³	R _x in	I _y in ⁴	S _y in ³	R _y in
FS-400	1.43	.421	.052	.089	.350	.159	.195	.613
FS-401	2.86	.843	.250	.250	.545	.317	.390	.613

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



FS-400



FS-401

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-400	Stress	750	600	500	430	370	300	250	210	190	170	150
	1/240	***	560	390	280	220	140	100	70	50	40	35
FS-401	Stress	1,540*	1,540*	1,390	1,190	1,040	830	695	595	520	465	420
	1/240	***	***	***	***	***	670	465	340	260	205	170

- 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-400		7,350	6,765	6,240	5,555	4,750	3,260	2,265	1,665	*****	*****	*****
FS-401		14,420	13,965	13,420	12,805	12,130	10,655	9,090	7,540	6,070	4,800	3,890

***** = 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.