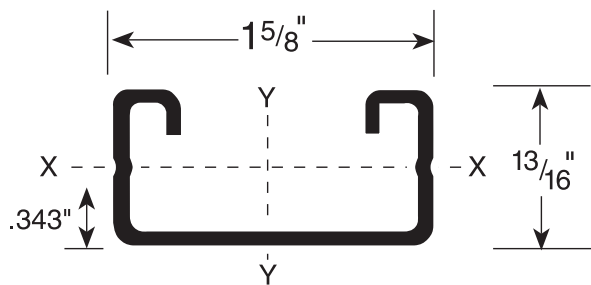


FS-510 • 13/16" CHANNEL • 16 Gauge

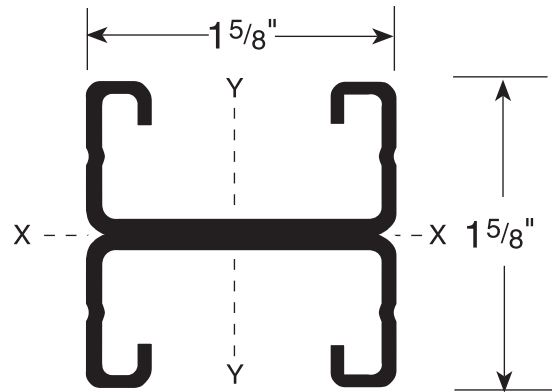


SECTION PROPERTIES			X-X AXIS			Y-Y AXIS		
CHNL P/N	WT/FT LBS.	AREA SQ. IN.	I _x in ⁴	S _x in ³	R _x in	I _y in ⁴	S _y in ³	R _y in
FS-510	.81	.241	.022	.064	.302	.091	.112	.614
FS-511	1.62	.483	.102	.126	.460	.182	.224	.614

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



FS-510



FS-511

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

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-510	Stress	390	310	260	225	195	155	130	110	100	90	80
	1/240	370	235	165	120	90	60	40	30	25	20	15
FS-511	Stress	810*	810*	700	600	525	420	350	300	260	230	210
	1/240	***	***	***	555	425	270	190	140	105	85	70

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-510		3,890	3,470	3,070	2,570	2,100	1,350	940	****	****	****	****
FS-511		9,090	8,610	8,060	7,450	6,810	5,480	4,205	3,115	2,385	1,885	****

**** = KL/R > 20

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