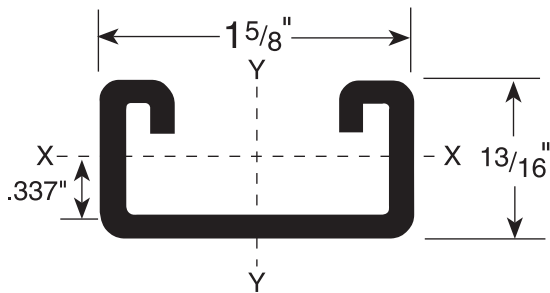
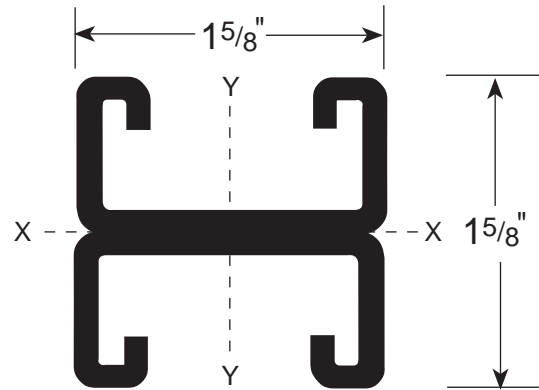


SECTION PROPERTIES			X-X AXIS			Y-Y AXIS		
CHNL P/N	WT/FT LBS.	AREA SQ. IN.	I _x in ⁴	S _x in ³	R _x in	I _y in ⁴	S _y in ³	R _y in
FS-520	1.32	.375	.030	.062	.282	.140	.172	.600
FS-521	2.64	.750	.145	.180	.435	.280	.345	.600

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



FS-520



FS-521

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

STANDARD LENGTH: 20 FT. • 10 FT.

CHNL P/N

ALLOWABLE BEAM LOADS — Span In Inches

FS-520
FS-521

Stress 1/240
Stress 1/240

Span In Inches	24"	30"	36"	42"	48"	60"	72"	84"	96"	108"	120"
Stress 1/240	530	420	350	300	260	210	175	150	130	120	105
Stress 1/240	500	320	220	160	125	80	55	40	30	25	20
Stress 1/240	1,245*	1,190	990	850	745	595	495	425	370	330	295
Stress 1/240	***	***	***	790	605	385	270	195	150	120	95

- 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.
- *** Load controlled by 25,000 PSI design stress.

CHNL P/N

ALLOWABLE COLUMN LOADS — Unsupported Height of Column in Inches

FS-520
FS-521

Unsupported Height of Column in Inches	24"	30"	36"	42"	48"	60"	72"	84"	96"	108"	120"
FS-520	5,600	4,960	4,280	3,595	2,940	1,895	****	****	****	****	****
FS-521	15,300	14,365	13,300	12,145	10,930	8,495	6,230	4,575	3,505	2,765	****

**** = 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.