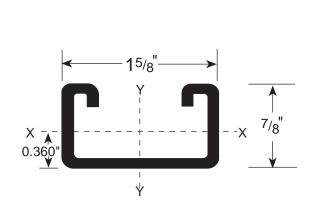
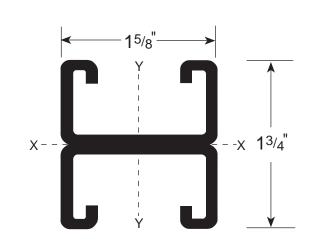
FS-450 • 7/8" CHANNEL • 12 Gauge



SECTION PROPERTIES			X-X AXIS			Y-Y AXIS		
CHNL P/N	WT/FT LBS.	AREA SQ. IN.	Ix in ⁴	Sx in ³	Rx in	Iy in ⁴	Sy in ³	Ry in
FS-450 FS-451	1.35 2.70	.400 .800	.037	.073 .208	.305 .475	.146	.180 .361	.603 .603

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





FS-450

FS-451

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

HOT-DIPPED GALVANIZED (HD)

STANDARD LENGTH: 20 FT. • 10 FT.

> **CHNL** P/N

FS-450 Stress 1/240

FS-451 Stress 1/240

ALLOWABLE	BEAM	LOADS	_	Span In Inches
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24"	30"	36"	42"	48"	60"	72"	84"	96"	108"	120"
600	480 400	400 270	340 201	300 150	240 100	200 70	170 50	150 40	130 30	120 25
1,380*	1,380*	1,160	995 ***	870 765	695 490	580 340	500 250	435 190	385 150	350 120

- 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.

CHNL P/N FS-450 FS-451

ALLOWABLE COLUMN LOADS — Unsupported Height of Column in Inches

	24"	30"	36"	42"	48"	60"	72"	84"	96"	108"	120"
;	5,965	5,390	4,755	4,100	3,450	2,305	1,600	****	****	****	****
1	3,280	12,715	12,060	11,325	10,535	8,855	7,160	5,570	4,265	3,370 ***** = K	**** L/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.