

Metal Framing

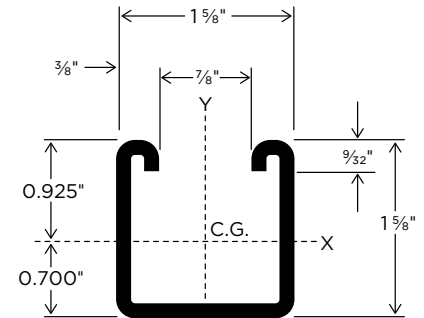
Standard finish is Pre-Galvanized (PG)
 Product finishes and materials are on [page 12](#)

ZI12-158 | 1 5/8" x 1 5/8" Channel
 Metal thickness is 12 gauge (0.105").

ELEMENTS OF SECTION

CATALOG #	STOCK #	PUNCH	LENGTH	WEIGHT	AREA OF SECTION	AXIS X-X			AXIS Y-Y			BUNDLE QTY
						ft.	lbs./ft.	in. ²	I (in. ⁴)	S (in. ³)	R (in.)	
ZI12-158	5201210000	Solid	10	1.89	0.583	0.188	0.203	0.581	0.257	0.316	0.680	500
	5201010000	HS										500
	5201110000	FS										500
	—	P										—
ZI12-158 BTB	5211110000	HS/BTB*	10	3.78	1.166	0.920	0.566	0.910	0.514	0.632	0.680	250
	5201220000	Solid	500									
ZI12-158	5201020000	HS	20	1.89	0.583	0.188	0.203	0.581	0.257	0.316	0.680	500
	5201120000	FS										500
	—	P										—
ZI12-158 BTB	5211120000	HS/BTB*	20	3.78	1.166	0.920	0.566	0.910	0.514	0.632	0.680	300

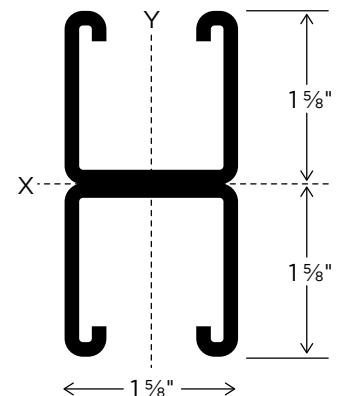
I: Moment of inertia
 S: Section modulus
 R: Radius of gyration
 *BTB is welded back to back



ZI12-158

BEAM AND COLUMN LOADS DATA

CATALOG #	BEAM SPAN OR UNBRACED COLUMN HEIGHT	UNIFORM LOAD AT STRESS OF 25,000 PSI	DEFLECTION AT STRESS OF 25,000 PSI	UNIFORM LOAD WHEN MAXIMUM DEFLECTION = SPAN/240	MAXIMUM ALLOWABLE LOAD OF COLUMN
	in.	lbs.	in.	lbs.	lbs.
ZI12-158	18	2213	0.031	2213	11300
	24	1680	0.055	1680	9700
	30	1340	0.086	1340	8850
	36	1125	0.125	1125	8600
	42	950	0.168	950	7550
	48	855	0.225	757	6720
	60	690	0.356	484	5800
	72	555	0.594	336	4970
	84	490	0.693	247	4250
	96	433	0.915	189	3500
ZI12-158 BTB	120	335	1.382	121	2100
	18	6530	0.018	6530	24340
	24	4895	0.033	4895	21800
	30	3800	0.050	3800	21500
	36	3100	0.070	3100	21000
	42	2700	0.097	2700	20600
	48	2300	0.124	2300	19900
	60	1930	0.203	1930	17950
	72	1560	0.284	1560	15940
	84	1360	0.393	1210	14750
96	1200	0.438	926	12650	
120	953	0.680	593	8000	



ZI12-158 BTB

Beam Loads: Loads listed are uniformly distributed; for loads concentrated at center of span, multiply uniform load at table by 0.5 and multiply the deflection by 0.8. When deflection is not a factor, use stress of 25,000 psi. When deflection is a factor, use deflection of SPAN/240.

All weights and dimensions shown are subject to commercial tolerances.



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov