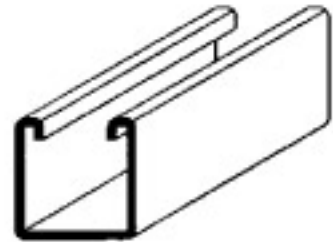
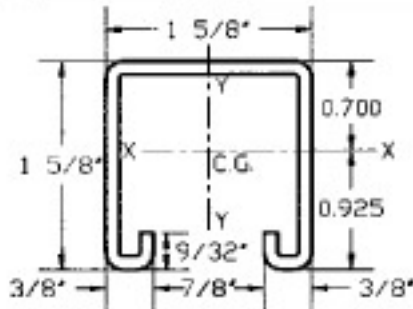
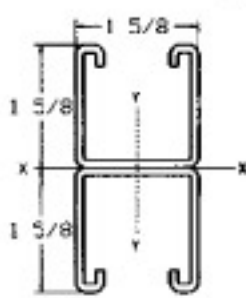


# A-12 CHANNEL



ELEMENTS OF SECTION								
Channel Part #	Weight lbs/ft	Area of Section sq. in.	Axis x-x			Axis y-y		
			I (in. <sup>4</sup> )	S (in. <sup>3</sup> )	R (in.)	I (in. <sup>4</sup> )	S (in. <sup>3</sup> )	R (in.)
A-12	1.890	.583	.188	.203	.581	.257	.316	.680
A-12A	3.780	1.166	.920	.566	.910	.514	.634	.680

I = Moment of inertia

S = section modulus

R = radius of gyration

BEAM AND COLUMN LOADS DATA					
Channel Part #	BEAM SPAN or Unbraced Column Height	UNIFORM LOAD at Stress of 25,000 PSI (lbs.)	DEFLECTION at Stress of 25,000 PSI (lbs.)	UNIFORM LOAD (lbs.) when Maximum Deflection = $\frac{S^2}{240}$	Maximum Allowable Load of Column (lbs.)
A-12 UL Listed	18"	2256	.031	2256	9481
	24"	1692	.056	1692	8582
	30"	1353	.087	1353	7601
	36"	1128	.126	1128	6595
	42"	967	.171	967	5595
	48"	846	.223	757	4718
	54"	752	.283	598	4090
	60"	677	.349	485	3616
	72"	564	.503	337	2936
	84"	483	.684	247	2461
	96"	423	.894	189	2101
	108"	376	1.131	150	1816
120"	338	1.396	121	1583**	
A-12A	18"	6289	.018	6289	21239
	24"	4717	.032	4717	20819
	30"	3773	.050	3773	20279
	36"	3144	.072	3144	19619
	42"	2895	.097	2895	18840
	48"	2358	.127	2358	17940
	54"	2096	.161	2096	16920
	60"	1887	.199	1887	15781
	72"	1572	.286	1572	13141
	84"	1348	.39	1210	10076
	96"	1179	.509	826	7715
	108"	1048	.644	732	6096
120"	943	.796	593	4937	

**BEAM LOADS** - Loads listed are uniformly distributed. When deflection is not a factor, use stress of 25,000 PSI.

When deflection is a factor use deflection of  $\frac{S^2}{240}$ .

**COLUMN LOADS** - Loads listed are for unbraced height, K=1.0.

Modules of elasticity = 29,000,000 PSI.

\*\* KL / r exceeds 200