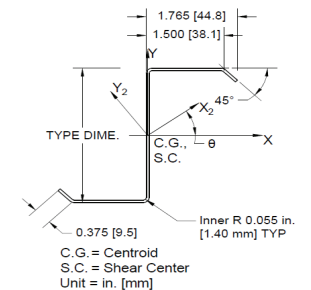


Product Code	Thickness, Mils (ga)	Dimensions				Gross Section Properties							Effective Section Properties @ Fy									
		Web, W in.	Flange, B in.	Return, D in.	Thickness, t, in.	Area in ²	I _x in ⁴	S _x in ³	R _x in.	I _y in ⁴	S _y in ³	R _y in.	A _e in ²	I _{ex} in ⁴	S _{ex} in ³	I _{ey} in ⁴	S _{ey} in ³	M _{alx} in-lbs	M _{aly} in-lbs	M _{adx} in-lbs	M _{ady} in-lbs	V _{ag} lbs
150ZG-33	33 (20)	1.5	1.5	0.375	0.0346	0.176	0.072	0.096	0.640	0.139	0.080	0.890	0.148	0.072	0.082	0.139	0.080	1622	1576	1687	1402	566
200ZG-33	33 (20)	2.0	1.5	0.375	0.0346	0.193	0.137	0.137	0.841	0.139	0.080	0.849	0.155	0.136	0.117	0.139	0.080	2319	1576	2307	1345	780
250ZG-33	33 (20)	2.5	1.5	0.375	0.0346	0.211	0.226	0.181	1.036	0.139	0.080	0.814	0.158	0.225	0.156	0.139	0.080	3077	1576	2943	1299	994
300ZG-33	33 (20)	3.0	1.5	0.375	0.0346	0.228	0.341	0.227	1.224	0.139	0.080	0.782	0.160	0.339	0.197	0.139	0.080	3895	1576	3595	1261	1024
350ZG-33	33 (20)	3.5	1.5	0.375	0.0346	0.245	0.485	0.277	1.407	0.139	0.080	0.754	0.162	0.483	0.242	0.139	0.080	4773	1576	4260	1226	1024
400ZG-33	33 (20)	4.0	1.5	0.375	0.0346	0.262	0.659	0.330	1.585	0.139	0.080	0.729	0.163	0.656	0.289	0.139	0.080	5710	1576	4934	1193	965
150ZG-43	43 (18)	1.5	1.5	0.375	0.0451	0.228	0.092	0.122	0.635	0.179	0.103	0.886	0.211	0.092	0.116	0.179	0.103	2289	2028	2358	1977	725
200ZG-43	43 (18)	2.0	1.5	0.375	0.0451	0.250	0.175	0.175	0.837	0.179	0.103	0.845	0.232	0.175	0.165	0.179	0.103	3266	2028	3260	1909	1004
250ZG-43	43 (18)	2.5	1.5	0.375	0.0451	0.273	0.290	0.232	1.031	0.179	0.103	0.810	0.239	0.290	0.219	0.179	0.103	4321	2028	4192	1854	1284
300ZG-43	43 (18)	3.0	1.5	0.375	0.0451	0.295	0.439	0.293	1.219	0.179	0.103	0.778	0.244	0.439	0.276	0.179	0.103	5453	2028	5153	1808	1563
350ZG-43	43 (18)	3.5	1.5	0.375	0.0451	0.318	0.625	0.357	1.402	0.179	0.103	0.750	0.248	0.625	0.337	0.179	0.103	6660	2028	6141	1765	1740
400ZG-43	43 (18)	4.0	1.5	0.375	0.0451	0.340	0.850	0.425	1.580	0.179	0.103	0.725	0.251	0.850	0.402	0.179	0.103	7944	2028	7148	1726	1740
150ZG-54	54 (16)	1.5	1.5	0.375	0.0566	0.284	0.113	0.150	0.630	0.221	0.127	0.882	0.256	0.113	0.139	0.221	0.127	4155	3801	4207	3560	1355
200ZG-54	54 (16)	2.0	1.5	0.375	0.0566	0.312	0.216	0.216	0.832	0.221	0.127	0.841	0.283	0.216	0.199	0.221	0.127	5955	3801	5837	3435	1886
250ZG-54	54 (16)	2.5	1.5	0.375	0.0566	0.340	0.358	0.286	1.026	0.221	0.127	0.805	0.294	0.358	0.264	0.221	0.127	7904	3801	7527	3337	2416
300ZG-54	54 (16)	3.0	1.5	0.375	0.0566	0.369	0.543	0.362	1.214	0.221	0.127	0.774	0.301	0.543	0.334	0.221	0.127	10001	3801	9274	3254	2947
350ZG-54	54 (16)	3.5	1.5	0.375	0.0566	0.397	0.774	0.442	1.396	0.221	0.127	0.745	0.305	0.774	0.409	0.221	0.127	12243	3801	11073	3180	3372
400ZG-54	54 (16)	4.0	1.5	0.375	0.0566	0.425	1.054	0.527	1.575	0.221	0.127	0.720	0.309	1.054	0.489	0.221	0.127	14629	3801	12913	3110	3372
150ZG-68	68 (14)	1.5	1.5	0.375	0.0713	0.354	0.137	0.183	0.623	0.272	0.157	0.876	0.331	0.138	0.175	0.272	0.157	5244	4702	5489	4702	1668
200ZG-68	68 (14)	2.0	1.5	0.375	0.0713	0.389	0.265	0.265	0.825	0.272	0.157	0.835	0.367	0.265	0.252	0.272	0.157	7559	4702	7829	4635	2336
250ZG-68	68 (14)	2.5	1.5	0.375	0.0713	0.425	0.442	0.353	1.019	0.272	0.157	0.799	0.401	0.442	0.336	0.272	0.157	10061	4702	10188	4528	3004
300ZG-68	68 (14)	3.0	1.5	0.375	0.0713	0.461	0.671	0.448	1.207	0.272	0.157	0.768	0.415	0.671	0.426	0.272	0.157	12748	4702	12643	4437	3673
350ZG-68	68 (14)	3.5	1.5	0.375	0.0713	0.496	0.958	0.548	1.390	0.272	0.157	0.740	0.424	0.958	0.522	0.272	0.157	15616	4702	15187	4355	4341
400ZG-68	68 (14)	4.0	1.5	0.375	0.0713	0.532	1.308	0.654	1.568	0.272	0.157	0.714	0.431	1.308	0.623	0.272	0.157	18666	4702	17808	4277	5010

Product Code	Thickness, Mils (ga)	Torsional Properties							Unbraced Length, L _u in.
		I _{xy} in ⁴	I _{x2} in ⁴	I _{y2} in ⁴	R _{min} in.	θ deg	Jx1000 in ⁴	C _w in ⁴	
150ZG-33	33 (20)	0.079	0.192	0.019	1.045	123.5	0.070	0.043	36.5
200ZG-33	33 (20)	0.108	0.247	0.030	1.130	134.7	0.077	0.080	35.4
250ZG-33	33 (20)	0.137	0.039	0.327	0.428	53.7	0.084	0.131	34.7
300ZG-33	33 (20)	0.166	0.046	0.435	0.448	60.6	0.091	0.196	34.2
350ZG-33	33 (20)	0.195	0.051	0.573	0.458	65.7	0.098	0.277	33.7
400ZG-33	33 (20)	0.224	0.056	0.743	0.462	69.6	0.105	0.374	33.3
150ZG-43	43 (18)	0.102	0.246	0.025	1.039	123.4	0.154	0.054	37.0
200ZG-43	43 (18)	0.139	0.316	0.038	1.124	134.6	0.170	0.101	35.6
250ZG-43	43 (18)	0.176	0.049	0.419	0.425	53.7	0.185	0.166	34.8
300ZG-43	43 (18)	0.214	0.059	0.559	0.445	60.6	0.200	0.250	34.2
350ZG-43	43 (18)	0.251	0.066	0.738	0.455	65.8	0.216	0.354	33.7
400ZG-43	43 (18)	0.289	0.072	0.957	0.459	69.7	0.231	0.478	33.2
150ZG-54	54 (16)	0.125	0.303	0.030	1.033	123.3	0.303	0.065	30.1
200ZG-54	54 (16)	0.172	0.390	0.047	1.118	134.6	0.333	0.123	28.9
250ZG-54	54 (16)	0.218	0.061	0.518	0.423	53.8	0.363	0.203	28.2
300ZG-54	54 (16)	0.264	0.072	0.691	0.443	60.7	0.394	0.306	27.7
350ZG-54	54 (16)	0.311	0.081	0.913	0.452	65.8	0.424	0.434	27.3
400ZG-54	54 (16)	0.357	0.089	1.186	0.456	69.7	0.454	0.586	26.9
150ZG-68	68 (14)	0.154	0.372	0.037	1.026	123.2	0.600	0.079	30.8
200ZG-68	68 (14)	0.211	0.480	0.057	1.110	134.6	0.660	0.150	29.2
250ZG-68	68 (14)	0.269	0.075	0.639	0.419	53.8	0.720	0.247	28.3
300ZG-68	68 (14)	0.326	0.089	0.854	0.439	60.7	0.781	0.374	27.7
350ZG-68	68 (14)	0.384	0.100	1.130	0.449	65.9	0.841	0.530	27.2
400ZG-68	68 (14)	0.441	0.109	1.470	0.453	69.8	0.902	0.717	26.8

Notes:

- I_x = Gross Section Moment of Inertia about X axis
- I_y = Gross Section Moment of Inertia about Y axis
- S_x = Gross Section Section Modulus about X axis
- S_y = Gross Section Section Modulus about Y axis
- r_x = Radius of Gyration about X axis
- r_y = Radius of Gyration about Y axis
- M_{alx} = Fully Braced Allowable Local Moment at Strong axis
- M_{adx} = Fully Braced Allowable Distortional Moment at Strong axis
- M_{aly} = Fully Braced Allowable Local Moment at Weak axis
- M_{ady} = Fully Braced Allowable Distortional Moment at Weak axis
- V_{ag} = Allowable Shear at Full Section
- I_{xy} = Gross Section Product of Inertia
- I_{x2} = Gross Section Moment of Inertia about X₂ axis
- I_{y2} = Gross Section Moment of Inertia about Y₂ axis
- R_{min} = Minimum Radius of Gyration about X₂ axis
- θ = Angle between X axis and minor principal axis
- J = St. Venant Torsional Constant
- C_w = Torsional Warping Constant
- I_{ex} = Fully Effective Moment of Inertia about X axis
- I_{ey} = Fully Effective Moment of Inertia about Y axis
- S_{ex} = Fully Effective Section Modulus about X axis
- S_{ey} = Fully Effective Section Modulus about Y axis
- A_e = Effective Area



F_y = 33 ksi for 33 mils (20-ga) & 43 mils (18-ga), and 50 ksi for 54 mils (16-ga) & 68 mils (14-ga).

Calculated capacities are calculated in accordance with AISI S100-16 (2020) w/S2-20.