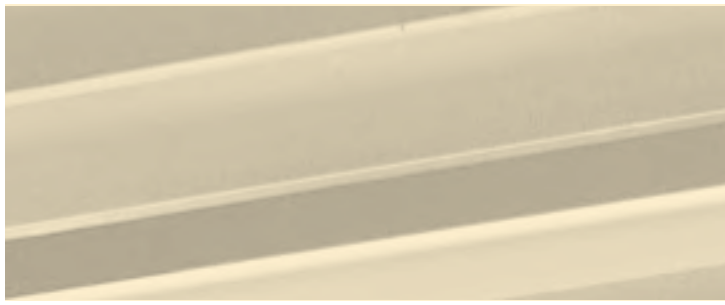
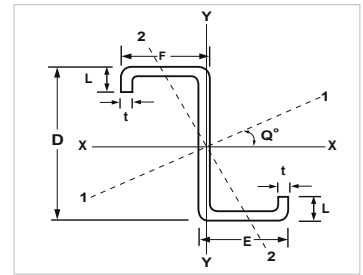


STEEL
PURLINS



Purlins

Dimensions and Properties



9a (ii) Z Purlins - High Tensile Sections

Z- Section Identification	Section Dimensions					Mass Per Unit Length	Area	Second Moment Of Area		Second Modulus		Radius Of Gyration		Form Factor Q	Column Properties	
	Depth	Broad Flange	Narrow Flange	Lipped	thickness			I _{xx}	I _{yy}	Z _x	Z _y	r _x	r _y		J	I _w
	D	E	F	L	t											
102 x 57 x 1.6	102	57	51	16	1.6	3.05	362	0.606	0.266	11.753	4.952	40.930	27.113	0.868	322	0.418
x 2.0	102	57	51	16	2.0	3.72	444	0.732	0.316	14.256	5.939	40.609	26.696	0.942	624	0.504
x 2.5	102	57	51	16	2.5	4.60	542	0.876	0.371	17.134	7.029	40.188	26.152	0.996	1208	0.603
x 3.0	102	57	51	16	3.0	5.29	636	1.004	0.416	19.730	7.959	39.743	25.580	1.000	2070	0.692
127 x 57 x 1.6	127	57	51	16	1.6	3.20	402	1.007	0.266	15.691	4.938	50.086	25.733	0.781	356	0.674
x 2.0	127	57	51	16	2.0	3.94	494	1.222	0.317	19.083	5.922	49.733	25.314	0.853	691	0.816
x 2.5	127	57	51	16	2.5	4.89	605	1.469	0.371	23.020	7.009	49.273	24.770	0.936	1339	0.978
x 3.0	127	57	51	16	3.0	5.90	711	1.692	0.416	26.616	7.935	48.789	24.199	0.989	2295	1.125
153 x 68 x 1.6	153	68	62	16	1.6	4.01	497	1.865	0.549	24.137	7.762	61.281	33.233	0.712	437	1.966
x 2.0	153	68	62	16	2.0	4.92	613	2.277	0.659	29.528	9.381	60.946	32.798	0.793	849	2.394
x 2.5	153	68	62	16	2.5	6.01	754	2.760	0.783	35.900	11.223	60.514	32.238	0.869	1648	2.895
x 3.0	153	68	62	16	3.0	7.35	889	3.208	0.891	41.860	12.862	60.064	31.657	0.935	2831	3.360
175 x 74 x 1.6	175	74	68	16	1.6	4.27	532	2.544	0.549	28.778	7.751	69.153	32.118	0.666	467	2.653
x 2.0	175	74	68	16	2.0	5.26	657	3.109	0.660	35.244	9.367	68.794	31.684	0.740	908	3.233
x 2.5	175	74	68	16	2.5	6.67	809	3.776	0.783	42.914	11.206	68.332	31.125	0.810	1763	3.914
x 3.0	175	74	68	16	3.0	8.08	955	4.398	0.891	50.120	12.843	67.853	30.547	0.877	3029	4.548
203 x 74 x 1.6	203	74	68	16	1.6	4.70	577	3.594	0.549	35.063	7.739	78.945	30.848	0.616	505	3.693
x 2.0	203	74	68	16	2.0	5.74	713	4.400	0.660	42.993	9.352	78.557	30.417	0.683	983	4.505
x 2.5	203	74	68	16	2.5	7.13	879	5.354	0.784	52.432	11.188	78.058	29.863	0.745	1909	5.459
x 3.0	203	74	68	16	3.0	8.79	1039	6.249	0.892	61.341	12.822	77.542	29.290	0.807	3281	6.350
225 x 78 x 1.6	225	78	72	18	1.6	5.28	718	4.400	0.741	34.742	12.150	78.300	32.100	0.458	626	0.853
x 2.0	225	78	72	18	2.0	6.55	890	5.390	0.904	42.585	14.906	77.800	31.900	0.532	1219	1.007
x 2.5	225	78	72	18	2.5	8.16	1100	6.560	1.090	51.913	18.193	77.200	31.500	0.610	2370	1.172
x 3.0	225	78	72	18	3.0	9.80	1305	7.670	1.270	60.711	21.302	76.700	31.200	0.689	4077	1.305
250 x 78 x 2.0	250	78	72	20	2.0	6.69	840	7.651	0.859	60.829	11.495	95.440	31.981	0.618	1152	9.329
x 2.5	250	78	72	20	2.5	8.34	1042	9.400	1.053	74.882	14.184	94.963	31.782	0.673	2250	11.641
x 3.0	250	78	72	20	3.0	10.20	1236	11.020	1.207	87.941	16.368	94.426	31.250	0.723	3870	13.590
300 x 100 x 2.0	300	100	93	25	2.0	8.71	1046	14.060	1.875	93.128	19.442	115.950	42.343	0.563	1427	28.738
x 2.5	300	100	93	25	2.5	10.84	1295	17.260	2.265	114.492	23.608	115.456	41.827	0.635	2776	35.157
x 3.0	300	100	93	25	3.0	12.10	1539	20.330	2.625	135.084	27.496	114.952	41.301	0.681	4779	41.284

Standard Specifications and Tolerance or Manufacturer's Standard		Tolerances	
Base Material Thickness	: 1.6mm, 2.0mm and 2.5mm	Depth, D	:± 1 mm
Steel Grade Available	: High Tensile ASTM 446 Grade D/ASTM Grade E/ GALFAN ASTM A 875SQ50	Flange Width, F	:± 3 mm
Yield Stress	: 345 MPa minimum or 450 MPa minimum	Length	:± 1mm
Tensile Strength	: 450 MPa minimum or 550 MPa minimum.	Holes Centres	:± 1.5 mm
Coating Mass (g/m ²)	: Minimum 275 g/m ² Coating mass.(both sides)	Lips, L	:± 4mm