



聚美集團

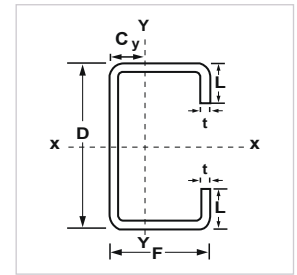
CHOO BEE GROUP

STEEL PURLINS



Purlins

Dimensions and Properties



9a (i) C Purlins - High Tensile Sections

C-Section Identification	Section Dimensions					Mass Per Unit Length M kg/m	Area A mm ²	Second Moment Of Area		Second Modulus		Radius Of Gyration	
	Depth	Flange	Lipped	thickness	Centroid			I _{xx}	I _{yy}	Z _x	Z _y	r _x	r _y
	D	F	L	t	C _y			10 ⁶ mm ⁴	10 ⁶ mm ⁴	10 ³ mm ³	10 ³ mm ³	mm	mm
75 x 38 x 0.6	75	38	8	0.6	12.20	0.80	98	0.092	0.019	2.446	0.748	30.62	14.03
x 0.7	75	38	8	0.7	12.20	0.93	114	0.106	0.022	2.832	0.862	30.56	13.98
x 0.8	75	38	8	0.8	12.20	1.06	129	0.120	0.025	3.211	0.973	30.51	13.92
x 1.0	75	38	8	1.0	12.20	1.31	160	0.148	0.031	3.952	1.186	30.39	13.81
x 1.2	75	38	8	1.2	12.20	1.57	191	0.175	0.036	4.668	1.387	30.28	13.70
x 1.6	75	38	8	1.6	12.10	2.05	250	0.226	0.045	6.027	1.756	30.05	13.47
102 x 51 x 1.6	102	51	16	1.6	17.64	3.05	352	0.582	0.128	11.596	3.926	40.70	19.10
x 2.0	102	51	16	2.0	17.56	3.72	432	0.703	0.152	14.058	4.682	40.30	18.80
x 2.5	102	51	16	2.5	17.45	4.60	527	0.840	0.178	16.882	5.495	39.90	18.30
x 3.0	102	51	16	3.0	17.34	5.29	618	0.961	0.198	19.422	6.156	39.40	17.90
125 x 51 x 1.6	125	51	14	1.6	18.00	3.10	409	1.030	0.160	16.300	4.440	50.11	19.56
x 2.0	125	51	14	2.0	18.00	3.82	510	1.270	0.190	20.100	5.240	49.93	19.39
127 x 51 x 1.6	127	51	16	1.6	15.92	3.20	392	0.971	0.138	15.479	4.027	49.80	18.80
x 2.0	127	51	16	2.0	15.84	3.94	482	1.176	0.164	18.815	4.806	49.40	18.50
x 2.5	127	51	16	2.5	15.74	4.89	590	1.412	0.192	22.680	5.649	48.90	18.00
x 3.0	127	51	16	3.0	15.63	5.90	693	1.625	0.215	26.202	6.340	48.40	17.60
152 x 64 x 1.6	152	64	16	1.6	19.30	3.85	480	1.830	0.260	24.080	5.820	61.70	23.20
x 2.0	152	64	16	2.0	19.50	4.75	600	2.250	0.320	29.340	7.190	61.20	23.10
x 2.5	152	64	16	2.5	19.80	5.87	738	2.750	0.400	36.180	9.040	61.00	23.20
153 x 66 x 1.6	153	66	16	1.6	22.00	4.01	498	1.871	0.329	24.720	6.825	61.30	25.70
x 2.0	153	66	16	2.0	21.90	4.92	614	2.284	0.396	30.250	8.232	61.00	25.40
x 2.5	153	66	16	2.5	21.78	6.01	755	2.769	0.471	36.794	9.817	60.60	25.00
x 3.0	153	66	16	3.0	21.65	7.35	891	3.219	0.536	42.923	11.207	60.10	24.50
175 x 71 x 1.6	175	71	16	1.6	20.60	4.27	533	2.551	0.344	29.427	6.931	69.20	25.40
x 2.0	175	71	16	2.0	20.50	5.26	658	3.118	0.414	36.051	8.361	68.80	25.10
x 2.5	175	71	16	2.5	20.38	6.67	810	3.787	0.493	43.912	9.977	68.40	24.70
x 3.0	175	71	16	3.0	20.26	8.08	957	4.412	0.561	51.307	11.397	67.90	24.20
203 x 71 x 1.6	203	71	16	1.6	19.06	4.70	578	3.605	0.360	35.795	7.039	79.00	25.00
x 2.0	203	71	16	2.0	18.97	5.74	714	4.412	0.434	43.901	8.495	78.60	24.60
x 2.5	203	71	16	2.5	18.86	7.13	880	5.369	0.516	53.557	10.142	78.10	24.20
x 3.0	203	71	16	3.0	18.74	8.79	1041	6.268	0.588	62.679	11.593	77.60	23.80
203 x 74 x 1.6	203	74	16	1.6	20.50	4.70	586	3.760	0.420	37.040	7.850	80.50	26.80
x 2.0	203	74	16	2.0	21.50	5.90	726	4.660	0.560	45.910	10.660	80.10	27.70
x 2.5	203	74	16	2.5	22.00	7.14	908	5.760	0.700	56.750	13.460	79.60	27.70
225 x 78 x 1.6	225	78	18	1.6	20.99	5.28	642	4.930	0.489	44.100	8.700	87.60	27.60
x 2.0	225	78	18	2.0	20.91	6.55	794	6.040	0.591	54.200	10.500	87.30	27.30
x 2.5	225	78	18	2.5	20.80	8.16	980	7.380	0.708	66.300	12.700	86.80	26.90
x 3.0	225	78	18	3.0	20.68	9.80	1161	8.640	0.812	77.800	14.600	86.30	26.50
250 x 78 x 2.0	250	78	18	2.0	19.73	6.69	844	7.748	0.610	62.483	10.653	95.80	26.90
x 2.5	250	78	18	2.5	19.62	8.34	1042	9.466	0.731	76.494	12.790	95.30	26.50
x 3.0	250	78	18	3.0	19.52	10.20	1236	11.100	0.838	89.855	14.712	94.80	26.00
300 x 96 x 2.0	300	96	25	2.0	25.49	8.63	1044	14.020	1.220	94.104	17.556	115.90	34.20
x 2.5	300	96	25	2.5	25.39	10.84	1292	17.210	1.477	115.703	21.294	115.40	33.80
x 3.0	300	96	25	3.0	25.29	12.10	1536	20.270	1.714	136.525	24.769	114.90	33.40

Standard Specification or Manufacturer's Standard

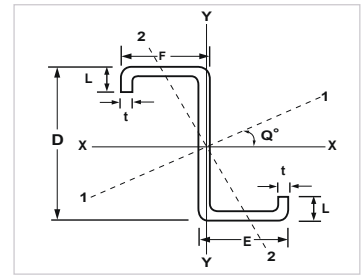
Base Material Thickness	: 1.6mm, 2.0mm, 2.5mm and 3.0 mm
Steel Grade Available	: High Tensile ASTM 446 Grade D/ASTM Grade E/ GALFAN ASTM A 875SQ50/ High Tensile A 653 (M) SQ/ JIS 3302:SGC 440 or SGC 570
Yield Stress	: 345 MPa minimum or 450 MPa minimum
Tensile Strength	: 450 MPa minimum or 550 MPa minimum.
Coating Mass (g/m ²)	: Minimum 275 g/m ² Coating mass.(both sides), for size: 75 x 38mm coating (120~275g/m ²)

Standard Tolerances or Manufacturer's Standard

Tolerance for depth, flange width and length are measured in accordance to ± 3mm and lips ±4 mm.

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



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