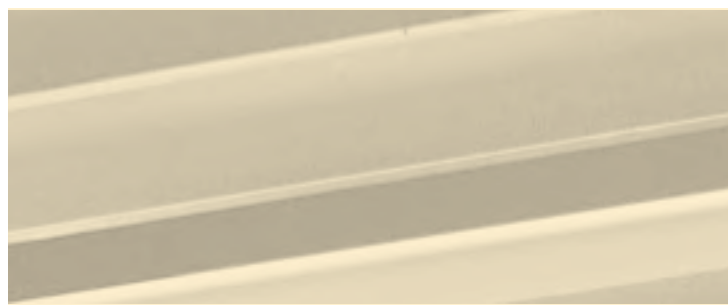
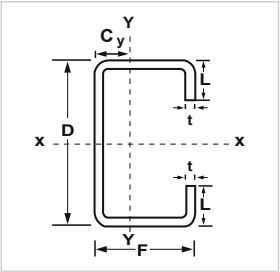
STEEL

PURLINS



Purlins

Dimensions and Properties



9a (i) C Purlins - High Tensile Sections

C- Section Identification	Section Dimensions					Mass Per Unit Length	Area	Second Moment Of Area		Second Modulus		Radius Of Gyration	
	Depth	Flange	Lipped	thickness	Centroid								
	D	F	L	t	C_Y	M	A	I_{XX}	I_{YY}	Z_X	Z_Y	r_X	r_Y
D x F x t	mm	mm	mm	mm	mm	kg/m	mm²	10^6mm^4	10^6mm^4	10^3mm^3	10^3mm^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 Thikness	: 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/m²)	: Minimum 275 g/m² Coating mass.(both sides), for size: 75 x 38mm coating (120~275g/m²)

Standard Tolerances or Manufacturer's Standard

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