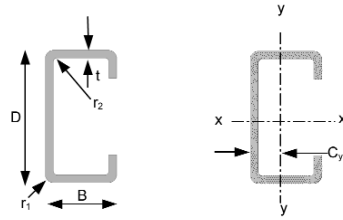
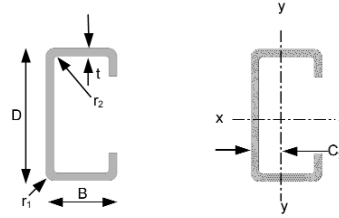


Lipped Channels



Designation		Thick-ness	Inside Outside Radius		Area of Section	Centre of Gravity		Second Moment of Area		Radius of Gyration		Elastic Modulus		Plastic Modulus		Buckling Constant	Torsional Index	Warp Constant	Torsion Constant
Size	Mass per Metre	t	r ₁	r ₂	A	C _v	I _x	I _y	r _x	r _y	Z _x	Z _y	S _x	S _y	u	x	H	J	
DxBxC	kg/m	mm	mm	mm	cm ²	cm	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³			dm ⁶ x10 ⁻³	cm ⁴	
60x30x10	1.62	1.6	4.0	2.4	2.05	1.06	11.4	2.50	2.36	1.10	3.81	1.29	4.48	2.12	0.808	35.5	0.0219	0.0182	
	2.25	2.3	5.8	3.5	2.83	1.05	15.2	3.20	2.32	1.06	5.06	1.64	6.05	2.57	0.801	24.5	0.0281	0.0530	
75x45x15	2.31	1.6	4.0	2.4	2.93	1.72	26.8	8.59	3.03	1.71	7.15	3.09	8.27	4.62	0.776	46.7	0.129	0.0258	
	3.24	2.3	5.8	3.5	4.09	1.71	36.5	11.5	2.99	1.67	9.73	4.11	11.4	6.31	0.772	32.2	0.171	0.0754	
	4.12	3.0	7.5	4.5	5.18	1.70	44.9	13.8	2.94	1.63	12.0	4.94	14.2	7.79	0.769	24.5	0.206	0.165	
100x50x20	2.88	1.6	4.0	2.4	3.65	1.86	57.9	13.8	3.98	1.95	11.6	4.41	13.5	6.73	0.788	62.9	0.373	0.032	
	4.06	2.3	5.8	3.5	5.13	1.86	79.6	18.7	3.94	1.91	15.9	5.95	18.7	9.28	0.785	43.5	0.503	0.094	
	5.18	3.0	7.5	4.5	6.53	1.85	99.1	22.9	3.90	1.87	19.8	7.27	23.6	11.6	0.781	33.1	0.616	0.205	
125x50x20	4.51	2.3	5.8	3.5	5.70	1.68	135	20.3	4.86	1.89	21.5	6.11	25.5	8.91	0.819	51.6	0.767	0.104	
	5.77	3.0	7.5	4.5	7.28	1.68	169	24.8	4.81	1.85	27.0	7.47	32.2	11.2	0.814	39.4	0.942	0.228	
	8.31	4.5	11.3	6.8	10.4	1.66	231	32.3	4.71	1.76	36.9	9.7	45.0	15.4	0.804	26.1	1.24	0.750	
150x65x20	5.50	2.3	5.8	3.5	6.97	2.11	245	40.5	5.93	2.41	32.7	9.23	38.1	13.8	0.840	59.6	2.03	0.126	
	7.07	3.0	7.5	4.5	8.93	2.10	310	50.2	5.89	2.37	41.3	11.4	48.4	17.4	0.836	45.6	2.53	0.277	
	10.25	4.5	11.3	6.8	12.9	2.09	432	67.1	5.78	2.28	57.5	15.2	68.5	24.2	0.828	30.3	3.41	0.917	
175x75x20	6.31	2.3	5.8	3.5	8.00	2.34	386	60.3	6.95	2.75	44.1	11.7	51.1	17.8	0.853	68.0	3.92	0.144	
	8.13	3.0	7.5	4.5	10.3	2.33	489	75.1	6.90	2.70	55.9	14.5	65.2	22.5	0.850	52.0	4.90	0.318	
	11.84	4.5	11.3	6.8	14.9	2.31	689	102	6.80	2.61	78.7	19.6	93.0	31.6	0.842	34.6	6.71	1.05	
200x75x20	6.76	2.3	5.8	3.5	8.58	2.19	527	63.0	7.84	2.71	52.7	11.9	61.5	18.0	0.860	76.8	5.22	0.154	
	8.71	3.0	7.5	4.5	11.0	2.18	669	78.5	7.79	2.67	66.9	14.8	78.5	22.9	0.856	58.8	6.53	0.340	
	12.73	4.5	11.3	6.8	16.0	2.17	945	106	7.68	2.57	94.5	19.9	112	32.6	0.847	39.2	8.98	1.13	
250x75x25	7.85	2.3	5.8	3.5	10	2.07	914	74.0	9.58	2.73	73.1	13.6	86.7	20.1	0.853	96.9	9.73	0.179	
	10.13	3.0	7.5	4.5	12.8	2.07	1165	92.5	9.53	2.69	93.2	17.0	111	25.8	0.850	74.3	12.2	0.394	
	14.85	4.5	11.3	6.8	18.7	2.06	1659	126	9.41	2.60	133	23.2	160	37.4	0.842	49.5	16.9	1.31	

Lipped Channels



High-tensile galvanised C-Purlins

Purlin selection tables for roofing application

The following purlin selection tables provide an easy reference for selection of appropriate purlin size in accordance with the bay width or column spacing of the building.

These tables can be generally used in Singapore and Malaysia. However, for optimum designs where specific roofing and insulation loads are to be used or for any other structure or for application outside Singapore and Malaysia, contact REGENCY STEEL ASIA PTE LTD for free technical advice.

Table No. 2 - Purlin selection table

Roof decking (0.61 mm TCT at 6.55kg/m ² distributed load) on C-Purlin				
Span	Purlin spacing	Purlin spacing	Purlin spacing	Purlin spacing
mm	1200 mm c/c	1500 mm c/c	1800 mm c/c	2100 mm c/c
5000	SC100-16	SC100-20	SC150-16	SC150-16
6000	SC150-16	SC150-16	SC150-16	SC150-20
7000	SC150-20	SC200-16	SC200-16	SC200-16
7500	SC200-16	SC200-16	SC200-20	SC200-16
8000	SC200-16	SC200-16	SC200-16	SC200-16
9000	SC200-16	SC200-16	SC200-20	SC200-25
10000	SC200-20	SC200-25	--	--
11000	SC200-25	--	--	--

Table No. 3 - Purlin selection table

Roof decking (0.61 mm TCT at 6.55kg/m ² distributed load) on 50mm thk insulation wool (32kg/m ³) on 1 layer Aluminium Foil on 1 layer Chicken mesh on C-Purlin				
Span	Purlin spacing	Purlin spacing	Purlin spacing	Purlin spacing
mm	1200 mm c/c	1500 mm c/c	1800 mm c/c	2100 mm c/c
5000	SC100-20	SC100-20	SC150-16	SC150-16
6000	SC150-16	SC150-16	SC150-16	SC150-20
7000	SC150-20	SC200-16	SC200-16	SC200-16
7500	SC200-16	SC200-16	SC200-20	SC200-16
8000	SC200-16	SC200-16	SC200-16	SC200-20
9000	SC200-16	SC200-20	SC200-25	SC200-25
10000	SC200-20	SC200-25	--	--