Dependable Steel

SMI STEEL MASTERS INTERNATIONAL (ME) FZE
TRN NO. : 100282126000003

C-PURLIN

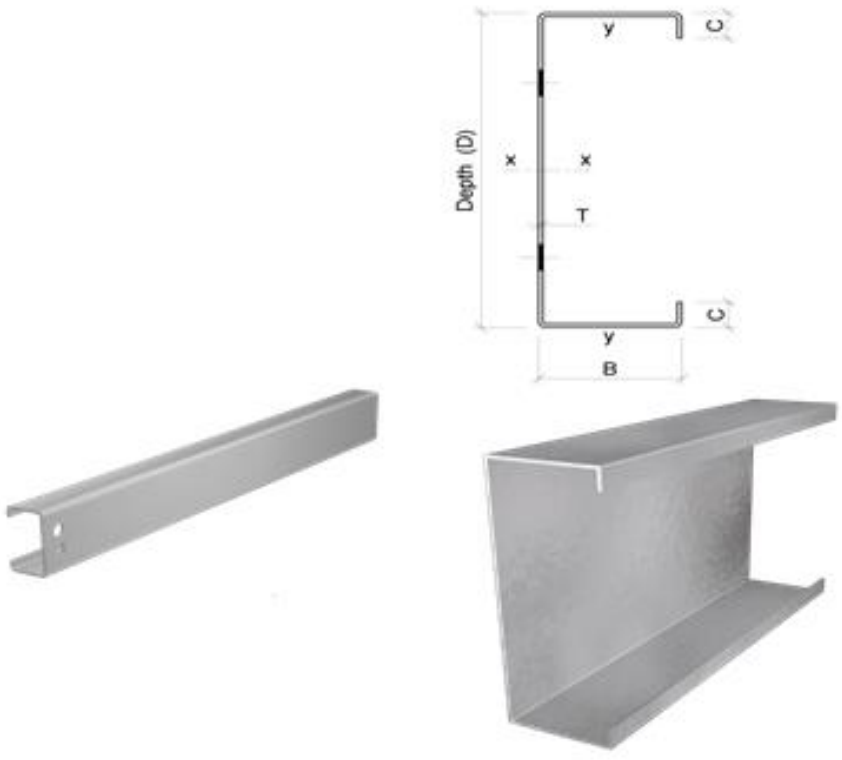
Load Tables

Main Office: Jebel Ali Free Zone, RA08 VB05, P.O.Box 17603, Dubai, U.A.E.
Tel : (9714) 8872882 ; Fax (9714) 8872884 ; Email sales@smi.ae

C-PURLIN: GRADE G50

Cold Formed Profile	C Section

PRODUCT & MATERIAL SPECIFICATIONS	
MATERIAL	A653M. Structural Steel (SS), Grade 50 Class 1
COATING /FINISH	G90 (275 grams/m2 Zinc Coating)
MINIMUM SPECIFIED YIELD STRENGTH FY	340 N/mm²
MATERIAL THICKNESS	1.5 mm ,1,75 mm, 2.0 mm, 2.5 mm, 3.0 mm
DEPTHS (D)	122 mm to 342 mm
NOTES	a) Design of Purlins is based on AISI- 2012
	(ASD-Allowable Stress Design Method)
	b) Sag rods are located at equal spacing



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Cold Formed C—Purlin

Profile Technical

TECHNICAL DATA SHEET												
Section	General Properties						Section Properties					
	Weight Kg/m	Area cm2	Depth (D)mm	Flange (B)mm	Lip (C) mm	Thick (T) mm	Ix cm4	Iy cm4	Sx cm3	Sy cm3	rx cm	ry cm
142 C15	3.22	3.96	142	50	21	1.5	119	14	16.76	3.88	5.47	1.88
142 C17	3.64	4.64	142	50	21	1.75	138.5	16.5	19.5	4.67	5.46	1.89
142 C20	4.29	5.27	142	50	21	2	156.7	18.5	22.07	5.25	5.44	1.87
142 C25	5.36	6.63	142	50	21	2.5	194.6	23.5	27.41	6.89	5.41	1.88
172 C15	3.49	4.44	172	55	17	1.5	193.3	16.9	20.81	3.95	6.6	1.95
172 C17	4.08	5.2	172	55	17	1.75	225.3	20	25.39	4.78	6.58	1.96
172 C20	4.64	5.91	172	55	17	2	255.4	22.5	29.23	5.46	6.57	1.95
172 C25	5.83	7.44	172	55	17	2.5	318.4	28.7	37.03	7.2	6.54	1.96
202 C15	3.92	5.01	202	60	16	1.5	296.5	21.5	26.02	4.38	7.69	2.07
202 C17	4.6	5.86	202	60	16	1.75	345.8	25.3	31.9	5.31	7.68	2.08
202 C20	5.23	6.68	202	60	16	2	392.3	28.5	37.31	6.08	7.66	2.07
202 C25	6.54	8.39	202	60	18	2.5	490	36.4	48.51	8.04	7.64	2.08
232 C15	4.54	5.94	232	75	17	1.5	475.5	39.9	31.45	6.37	8.94	2.59
232 C17	5.29	6.95	232	75	17	1.75	554.8	47	40.9	7.71	8.93	2.6
232 C20	6.05	7.92	232	75	17	2	630	53	47.84	8.88	8.91	2.59
232 C25	7.56	9.94	232	75	17	2.5	787.2	67.5	64.71	11.73	8.9	2.6
252 C15	4.77	6.1	252	70	17	1.5	554.5	34.4	33.8	5.74	9.54	2.38
252 C17	5.59	7.13	252	70	17	1.75	647.1	40.5	44.3	6.95	9.53	2.39
252 C20	6.36	8.12	252	70	17	2	735	45.7	53.2	8	9.51	2.38
252 C25	7.95	10.19	252	70	17	2.5	919	58.3	70.25	10.58	9.5	2.39
252 C30	9.7	12.15	252	70	17	3	1089.2	68.1	84.9	12.62	9.47	2.37
302 C17	6.82	8.7	302	90	17	1.75	1157.7	79.9	53.74	10.27	11.54	3.03
302 C20	7.78	9.92	302	90	17	2	1316.4	90.4	67.24	11.86	11.52	3.02
302 C25	9.72	12.44	302	90	19	2.5	1646.4	115	96.2	15.72	11.51	3.04
302 C30	11.87	14.91	302	90	19	3	1966.2	137.7	121.67	19.35	11.49	3.04
342 C17	7.68	9.79	342	100	18	1.75	1665.8	109.9	62	12.4	13.05	3.35
342 C20	8.75	11.16	342	100	18	2	1895.2	124.4	77.19	14.33	13.03	3.34
342 C25	10.94	13.99	342	100	20	2.5	2370.6	158.1	116.58	18.98	13.02	3.36
342 C30	13.28	16.71	342	100	20	3	2819.2	186.1	147.36	22.95	12.99	3.34

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Cold FormedProfile C—Purlin

Technical DataSheet

Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn		Total Uplifting Loads in KN		
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection		[Metal cladding] No of Anti sag Rods		
			1000	1200	1500	1800	2000	Span/ 180	0	1	2	3
Span 3.50 M												
142C15	3.22	7	2	1.67	1.33	1.11	1	8.4	5.53	7	-	-
142C17	3.64	8.68	2.48	2.07	1.65	1.38	1.24	9.77	6.36	8.15	-	-
142C20	4.29	10.25	2.93	2.44	1.95	1.63	1.46	11.09	7.28	9.36	-	-
142C25	5.36	12.92	3.69	3.08	2.46	2.05	1.85	13.79	9.06	11.76	-	-
Span 4.00 M												
142C15	3.22	6.12	1.53	1.27	1.02	0.85	0.77	6.4	4.84	5.74	-	-
142C17	3.64	7.6	1.9	1.58	1.27	1.06	0.95	7.47	5.56	6.65	-	-
142Z20	4.29	8.96	2.24	1.87	1.49	1.24	1.12	8.5	6.38	7.64	-	-
142C25	5.36	11.28	2.82	2.35	1.88	1.571	1.41	10.55	7.92	9.68	-	-
172C15	3.44	7.36	1.84	1.53	1.23	1.02	0.92	9.99	5.59	7.35	-	-
172C17	4.08	9.24	2.31	1.93	1.54	1.28	1.15	12.18	6.81	9	-	-
172C20	4.64	11.04	2.76	2.3	1.84	1.53	1.38	13.7	7.84	10.3	-	-
172C25	5.83	15.12	3.78	3.15	2.52	2.1	1.89	17.27	9.78	13.14	-	-
Span 4.50 M												
142C15	3.22	5.45	1.21	1.01	0.81	0.67	0.61	5.17	4.3	4.66	-	-
142C17	3.64	6.75	1.5	1.25	1	0.83	0.75	5.84	4.93	5.43	-	-
142C20	4.29	7.97	1.77	1.48	1.18	0.98	0.89	6.75	5.67	7.94	-	-
142C25	5.36	10.04	2.23	1.86	1.49	1.24	1.12	8.32	7.04	8	-	-
172C15	3.49	6.53	1.45	1.21	0.97	0.81	0.73	8.2	4.97	6.12	-	-
172C17	4.08	8.19	1.82	1.52	1.21	1.01	0.91	9.61	6.05	7.42	-	-
172C20	4.64	9.81	2.18	1.82	1.45	1.21	1.09	10.92	6.97	8.43	-	-
172C25	5.83	13.46	2.99	2.49	1.99	1.661	1.5	13.52	8.83	10.77	-	-
202C15	3.92	7.74	1.72	1.43	1.15	0.96	0.86	12.7	6.21	7.76	-	-
202C17	4.6	9.86	2.19	1.83	1.46	1.22	1.1	14.42	7.57	9.63	-	-
202C20	5.23	11.84	2.63	2.19	1.75	1.46	1.32	16.32	8.9	11.14	-	-
202C25	6.54	16.52	3.67	3.06	2.45	2.04	1.84	20.54	11.57	14.56	-	-

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Cold Formed Profile — C—Purlin

Technical Data Sheet

Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Anti sag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Span 5.00 M												
172C15	3.49	5.9	1.18	0.98	0.79	0.66	0.59	7.25	6.7	4.99	5.88	-
172C17	4.08	7.4	1.48	1.23	0.99	0.82	0.74	7.88	-	6.03	7.38	-
172C20	4.64	8.8	1.76	1.47	1.17	0.98	0.88	8.84	6.27	6.85	8.51	-
172C25	5.83	12.1	2.42	2.02	1.61	1.34	1.21	11	7.72	8.85	10.74	-
202C15	3.92	7	1.4	1.17	0.93	0.78	0.7	10.14	-	6.62	6.98	-
202C17	4.6	8.85	1.77	1.48	1.18	0.98	0.89	11.77	6.84	7.96	8.85	-
202C20	5.23	10.65	2.13	1.78	1.42	1.18	1.07	13.28	8	9.24	10.64	-
202C25	6.54	14.9	2.98	2.48	1.99	1.66	1.49	16.63	10.42	12.98	14.41	-
232C15	4.54	8.65	1.73	1.44	1.15	0.96	0.87	15.5	-	8.65	8.65	-
232C17	5.29	11.05	2.21	1.84	1.47	1.23	1.11	18.24	6.76	11.05	11.05	-
232C20	6.05	13.3	2.66	2.22	1.77	1.48	1.33	21.5	6.31	13.3	13.3	-
232C25	7.56	18.8	3.76	3.13	2.51	2.09	1.88	27.25	8.55	18.6	18.8	-
Span 5.50 M												
172C17	4.05	6.71	1.22	1.02	0.81	0.68	0.61	6.44	-	4.95	6.4	
172C20	4.64	8.03	1.46	1.22	0.87	0.81	0.73	7.28	5.701	5.7	7.29	-
172C25	5.83	11	2	1.67	1.33	1.11	1	9.11	7.23	7.24	9.26	-
202C15	3.92	6.33	1.15	0.96	0.77	0.64	0.58	8.36	-	5.5	6.35	-
202C17	4.6	8.03	1.46	1.22	0.97	0.81	0.73	9.71	6.19	6.56	8.05	-
202C20	5.23	9.68	1.76	1.47	1.17	0.98	0.88	11,00	7.28	7.66	9.57	-
202C25	6.54	13.53	2.46	2.05	1.64	1.37	1.23	13.78	9.47	9.96	12.47	-
232C15	4.54	7.87	1.43	1.19	0.95	0.79	0.72	13.47	-	7.86	7.86	-
232C17	5.29	10.01	1.82	1.52	1.21	1.01	0.91	15.78	-	10.04	10.04	-
232C20	6.05	12.1	2.2	1.83	1.47	1.22	1.1	17.87	5.74	12	12.1	-
232C25	7.56	17.1	3.11	2.59	2.07	1.73	1.56	22.55	7.75	16.06	17.1	-
252C15	4.77	8.47	1.54	1.28	1.03	0.86	0.77	15.47	-	8.46	8.46	-
252C17	5.59	10.78	1.96	1.63	1.31	1.09	0.98	18.49	5.32	10.81	10.81	-
252C20	6.36	13.04	2.37	1.98	1.58	1.32	1.19	21	6.39	12.82	13.03	-
252C25	7.95	18.48	3.36	2.8	2.24	1.87	1.68	26	8.44	16.77	18.46	-

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Cold Formed Profile — C—Purlin

Technical Data Sheet

Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Anti sag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Span 6.00 M												
172C20	4.64	7.32	1.22	1.02	0.81	0.68	0.61	6.11		5.23	6.25	-
172C25	5.83	10.08	1.68	1.4	1.12	0.93	0.84	7.65		6.62	7.98	-
202C17	4.6	7.38	1.23	1.03	0.82	0.68	0.61	8.12		5.7	7.27	-
202C20	5.23	8.88	1.48	1.23	0.99	0.82	0.74	9.23		6.67	8.3	-
202C25	6.54	12.36	2.06	1.72	1.37	1.14	1.03	11.52		8.68	10.83	-
232C15	4.54	7.2	1.2	1	0.8	0.67	0.6	11.4		7.2	7.2	-
232C17	5.29	9.18	1.53	1.28	1.02	0.85	0.76	13.31		8.86	9.2	-
232C20	6.05	11.1	1.85	1.54	1.23	1.03	0.93	15.12		10.44	11.1	-
232C25	7.56	15.6	2.61	2.17	1.73	1.44	1.3	18.9		13.83	15.66	-
252C15	4.77	7.74	1.29	1.08	0.86	0.72	0.65	12.99		7.51	7.76	-
252C17	5.59	9.4	1.65	1.38	1.1	0.92	0.83	15.32		9.3	9.95	-
252C20	6.36	11.94	1.99	1.66	1.33	1.11	1	17.34		10.79	11.95	-
252C25	7.95	16.92	2.82	2.35	1.88	1.57	1.41	21.72		14.32	16.9	
Span 6.50 M												
202C20	5.23	8,19	1.26	1.05	0.84	0.7	0.63	8		6.16	7.2	-
202C25	6.54	11.44	1.76	1.47	1.170.98	0.98	0.88	10		8.01	9.38	-
232C17	5.29	8.5	1.31	1.09	0.871	0.73	0.65	11.38		7.64	8.5	-
232C20	6.05	10.21	1.57	1.31	1.05	0.874	0.79	12.87		9.03	10.23	-
232C25	7.56	14.43	2.22	1.85	1.48	1.23	1.11	16.12		11.9	14.46	-
252C17	5.59	9.16	1.41	1.17	0.94	0.78	0.71	12.96		7.8	9.15	-
252C20	6.34	11.05	1.7	1.42	1.13	0.94	0.85	14.8		9.03	11.04	-
252C25	7.95	15.6	2.4	2	1.6	1.33	1.2	18.46		12.01	15.22	-
302C17	6.82	11.51	1.77	1.42	1.18	0.98	0.89	23.36		11.55	11.55	
302C20	7.78	14.04	2.16	1.8	1.44	1.2	1.08	26.6		14	14	
302C25	9.72	20.15	3.1	2.58	2.07	1.72	1.55	33.14		20.12	20.12	

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Cold Formed Profile — C—Purlin

Technical Data Sheet

Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Anti sag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Span 7.00 M												
202C25	6.54	10.64	1.52	1.27	1.01	0.84	0.76	8.64		7.43	8.11	
232C17	5.29	7.89	1.12	0.94	0.75	0.63	0.57	9.73		6.59	7.89	
232C20	6.05	9.52	1.36	1.13	0.91	0.76	0.68	11.06		7.70	9.52	
232C25	7.56	13.44	1.92	1.6	1.28	1.07	0.96	13.86		10.22	12.88	
252C17	5.59	8.47	1.21	1	0.81	0.67	0.61	11.19			8.5	
252C20	6.36	10.22	1.46	1.22	0.97	0.81	0.73	12.75		7.46	10.25	
252C25	7.95	14.49	2.07	1.73	1.38	1.15	1.04	16		9.96	13.49	
302C17	6.82	10.71	1.53	1.27	1.02	0.85	0.77	20.09		10.71	10.71	
302C20	7.78	13.02	1.86	1.55	1.24	1.03	0.93	22.9		13.01	13.01	
302C25	9.72	18.69	2.67	2.23	1.78	1.48	1.34	28.52		18.18	18.67	
Span 7.50 M												
202C25	6.54	9.9	1.32	1.1	0.88	0.73	0.66	7.4		6.95	6.97	9.16
232C20	6.05	8.85	1.18	0.98	0.79	0.66	0.59	9.67		6.41	8.68	8.88
232C25	7.56	12.52	1.67	1.39	1.11	0.93	0.84	12.07		8.7	11.47	12.52
252C20	6.36	9.6	1.28	1.07	0.85	0.71	0.64	11.25		6.20	9.14	9.57
252C25	7.95	13.5	1.8	1.5	1.2	1	0.9	13.8		8.18	12	13.54
302C17	6.82	9.98	1.33	1.11	0.88	0.73	0.67	17.52		9.63	9.99	9.99
302C20	7.78	12.15	1.62	1.36	1.08	0.9	0.81	20		11.68	12.14	12.14
302C25	9.72	17.48	2.33	1.94	1.55	1.29	1.17	25		16.06	17.44	17.44

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Technical Data Sheet

Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Anti sag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Span 8.00 M												
202C25	6.54	9.28	1.16	0.97	0.77	0.64	0.58	6.64		-	6,51	8.26
232C25	7.56	11.76	1.47	1.23	0.98	0.82	0.74	10.64		-	10.28	11.76
252C25	7.95	12.72	1.59	1.33	1.06	0.88	0.8	12.46		-	10.6	12.68
302C20	7.78	11.36	1.42	1.18	0.95	0.79	0.71	17.85	-	10.23	11.28	11.38
302C25	9.72	16.32	2.04	1.7	1.36	1.13	1.02	22.32	-	14.13	16.36	16.36
302C30	11.87	21.52	2.69	2.24	1.79	1.24	1.35	26.65	-	17.28	21.5	21.5
Span 8.50 M												
232C25	7.56	11.05	1.3	1.08	0.87	0.72	0.65	9.45		-	9.16	11.05
252C25	7.95	11.99	1.41	1.18	0.94	0.78	0.72	11		-	9.27	11.89
302C20	7.78	10.71	1.26	1.05	0.84	0.7	0.63	15.8		8.9	10.7	10.7
302C25	9.72	15.39	1.81	1.51	1.21	0.67	0.91	19.5		12.2	15.4	15.4
302C30	11.87	20.23	2.38	1.98	1.59	1.32	1.19	23.57		15.02	19.81	20.23

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Technical Data Sheet

Simple Span												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Antisag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Working Loads												
Span 9.00 M												
232C25	7.56	10.44	1.16	0.96	0.77	0.64	0.58	8.4		-	-	10.36
252C25	7.95	11.25	1.25	1.04	0.83	0.69	0.63	10		-	-	10.9
302C20	7.78	10.08	1.12	0.93	0.75	0.62	0.56	14		-	-	10.11
302C25	9.72	14.49	1.61	1.34	1.07	0.89	0.81	17.1		10.43	14.4	14.54
302C30	11.87	19.08	2.12	1.77	1.41	1.18	1.06	21		13	17.93	19.11
342C20	8.75	11.97	1.33	1.11	0.89	0.74	0.67	20		10.9	11.94	11.94
342C25	10.94	17.19	1.91	1.59	1.27	1.06	0.96	25		15	17.21	17.21
342C30	13.28	22.32	2.48	2.07	1.65	1.38	1.24	30		18.52	22.33	22.33
Span 9.50 M												
302C20	7.78	9.5	1	0.83	0.67	0.56	0.50	12.6		-	-	9.58
302C25	9.72	13,78	1.45	1.21	0.97	0.81	0.73	15.6		-	13.12	13.8
302C30	11.87	18.15	1.91	1.59	1.27	1.06	0.96	18.8		11.3	16.21	18.1
342C20	8.75	11,31	1.19	0.99	0.79	0.66	0.6	18		9.59	11.31	11.31
342C25	10.94	16.34	1.72	1.43	1.15	0.96	0.86	22		13.27	16.3	16.3
342C30	13.28	21.18	2.23	1.86	1.49	1.24	1.12	26		16.16	21.16	21.16

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Cold Formed Profile — C—Purlin

Technical Data Sheet

Simple Span												
Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Antisag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Span 10.00 M												
342C20	8.75	10.8	1.08	0.9	0.72	0.6	0.54	16.4		-	10.75	10.75
342C25	10.94	15.5	1.55	1.29	1.03	0.86	0.78	20.5		11.66	15.48	15.48
342C30	13.28	20.1	2.01	1.67	1.34	1.12	1.01	24.33		14.03	19.72	20.12
Span 10.5 M												
342C20	8.75	10.29	0.98	0.82	0.65	0.46	0.49	14.91		-	10.16	10.23
342C25	10.94	14.7	1.4	1.17	0.93	0.78	0.7	18.58		10.14	14.48	14.75
342C30	13.28	19.22	1.83	1.53	1.22	1.02	0.92	22.15		12.25	18.13	19.16
Span 11.0 M												
342C25	10.94	14.08	1.28	1.07	0.85	0.71	0.64	16.94	-	-	13.28	14.09
342C30	13.28	18.26	1.66	1.38	1.11	0.92	0.83	20.13	-	10.79	16.64	18.3
402C20	9.89	11.99	1.09	0.91	0.73	0.61	0.55	22.84				11.96
402C25	12.3	16.61	1.51	1.26	1.00	0.84	0.76	24.75			14.63	16.62
402C30	14.7	21.67	1.97	1.64	1.31	1.09	0.99	29.7		12.95	19.32	22.31

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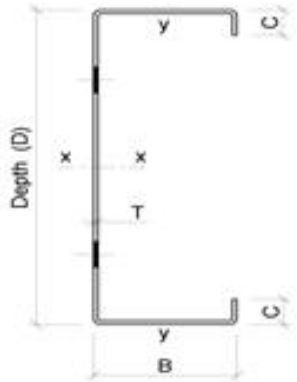
C-PURLIN: GRADE G450

Cold Formed Profile	C Section

PRODUCT & MATERIAL SPECIFICATIONS	
MATERIAL	AS 1397-2001, G450
COATING /FINISH	G90 (275 grams/m2 Zinc Coating)
MINIMUM SPECIFIED YIELD STRENGTH FY	450 N/mm²
MATERIAL THICKNESS	1.5 mm ,1,75 mm, 2.0 mm, 2.5 mm, 3.0 mm
DEPTHS (D)	122 mm to 342 mm
NOTES	a) Design of Purlins is based on AISI- 2012
	(ASD-Allowable Stress Design Method)
	b) Sag rods are located at equal spacing



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Cold Formed C—Purlin

Profile Technical

TECHNICAL DATA SHEET												
Section	General Properties						Section Properties					
	Weight Kg/m	Area cm2	Depth (D)mm	Flange (B)mm	Lip (C) mm	Thick (T) mm	Ix cm4	Iy cm4	Sx cm3	Sy cm3	rx cm	ry cm
142 C15	3.22	3.96	142	50	21	1.5	119	14	16.16	3.82	5.47	1.88
142 C17	3.64	4.64	142	50	21	1.75	138.5	16.5	19.5	4.60	5.46	1.89
142 C20	4.29	5.27	142	50	21	2	156.7	18.5	22.07	5.25	5.44	1.87
142 C25	5.36	6.63	142	50	21	2.5	194.6	23.5	27.41	6.89	5.41	1.88
172 C15	3.49	4.44	172	55	17	1.5	193.3	16.9	19.72	3.88	6.6	1.95
172 C17	4.08	5.2	172	55	17	1.75	225.3	20	24.18	4.70	6.58	1.96
172 C20	4.64	5.91	172	55	17	2	255.4	22.5	28.46	5.38	6.57	1.95
172 C25	5.83	7.44	172	55	17	2.5	318.4	28.7	37.03	7.11	6.54	1.96
202 C15	3.92	5.01	202	60	16	1.5	296.5	21.5	23.71	4.30	7.69	2.07
202 C17	4.6	5.86	202	60	16	1.75	345.8	25.3	30.3	5.21	7.68	2.08
202 C20	5.23	6.68	202	60	16	2	392.3	28.5	35.62	5.97	7.66	2.07
202 C25	6.54	8.39	202	60	18	2.5	490	36.4	46.84	7.92	7.64	2.08
232 C15	4.54	5.94	232	75	17	1.5	475.5	39.9	28.25	6.23	8.94	2.59
232 C17	5.29	6.95	232	75	17	1.75	554.8	47	36.85	7.56	8.93	2.6
232 C20	6.05	7.92	232	75	17	2	630	53	45.83.	8.70	8.91	2.59
232 C25	7.56	9.94	232	75	17	2.5	787.2	67.5	61.12	11.54	8.9	2.6
252 C15	4.77	6.1	252	70	17	1.5	554.5	34.4	30.42	5.62	9.54	2.38
252 C17	5.59	7.13	252	70	17	1.75	647.1	40.5	39.56	6.82	9.53	2.39
252 C20	6.36	8.12	252	70	17	2	735	45.7	49.51	7.84	9.51	2.38
252 C25	7.95	10.19	252	70	17	2.5	919	58.3	68.01	10.40	9.5	2.39
252 C30	9.7	12.15	252	70	17	3	1089.2	68.1	82.95	12.44	9.47	2.37
302 C17	6.82	8.7	302	90	17	1.75	1157.7	79.9	48.25	10.05	11.54	3.03
302 C20	7.78	9.92	302	90	17	2	1316.4	90.4	60.00	11.61	11.52	3.02
302 C25	9.72	12.44	302	90	19	2.5	1646.4	115	90.27	15.41	11.51	3.04
302 C30	11.87	14.91	302	90	19	3	1966.2	137.7	115.45	19.02	11.49	3.04
342 C17	7.68	9.79	342	100	18	1.75	1665.8	109.9	55.27	12.13	13.05	3.35
342 C20	8.75	11.16	342	100	18	2	1895.2	124.4	69.14	14.02	13.03	3.34
342 C25	10.94	13.99	342	100	20	2.5	2370.6	158.1	103.24	18.60	13.02	3.36
342 C30	13.28	16.71	342	100	20	3	2819.2	186.1	140.60	22.52	12.99	3.34

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Cold FormedProfile C—Purlin

Technical DataSheet

Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn		Total Uplifting Loads in KN		
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection		[Metal cladding] No of Anti sag Rods		
			1000	1200	1500	1800	2000	Span/ 180	0	1	2	3
Span 3.50 M												
142C15	3.22	8.40	2.40	2.00	1.60	1.33	1.20	8.4	7.00	8.40	-	-
142C17	3.64	10.43	2.98	2.48	1.99	1.66	1.49	10.04	8.44	10.08	-	-
142C20	4.29	12.36	3.53	2.94	2.35	1.96	1.77	11.09	9.52	11.34	-	-
142C25	5.36	16.70	4.77	3.98	3.18	2.65	2.39	13.79	11.80	14.35	-	-
Span 4.00 M												
142C15	3.22	7.32	1.83	1.53	1.22	1.02	0.92	6.4	6.08	6.70	-	-
142C17	3.64	9.12	2.28	1.90	1.52	1.27	1.14	7.47	7.33	8.06	-	-
142Z20	4.29	10.84	2.71	2.26	1.81	1.51	1.36	8.5	8.32	9.00	-	-
142C25	5.36	14.60	3.65	3.04	2.43	2.03.	1.83	10.55	10.32	11.48	-	-
172C15	3.44	8.70	2.18	1.81	1.45	1.21	1.09	9.99	6.91	8.45	-	-
172C17	4.08	10.99	2.75	2.29	1.83	1.53	1.37	12.18	8.47	10.35	-	-
172C20	4.64	13.18	3.29	2.75	2.20	1.83	1.65	13.7	9.98	11.96	-	-
172C25	5.83	18.29	4.57	3.81	3.05	2.54	2.29	17.27	12.97	15.49	-	-
Span 4.50 M												
142C15	3.22	6.53	1.45	1.21	0.97	0.81	0.73	5.17	5.40	5.40	-	-
142C17	3.64	8.10	1.80	1.50	1.20	1.00	0.90	5.84	6.54	6.54	-	-
142C20	4.29	9.63	2.14	1.78	1.43	1.19	1.07	6.75	7.40	7.40	-	-
142C25	5.36	13.01	2.89	2.41	1.93	1.61	1.45	8.32	9.18	9.18	-	-
172C15	3.49	7.74	1.77	1.43	1.15	0.96	0.86	8.2	6.14	6.78	-	-
172C17	4.08	9.77	2.17	1.81	1.45	1.21	1.09	9.61	7.53	8.26	-	-
172C20	4.64	11.70	2.60	2.17	1.73	1.44	1.30	10.92	8.86	9.53	-	-
172C25	5.83	16.25	3.61	3.09	2.41	2.00	1.81	13.52	11.52	12.32	-	-
202C15	3.92	9.14	2.03	1.69	1.35	1.13	1.02	12.7	7.38	8.85	-	-
202C17	4.6	11.65	2.59	2.16	1.73	1.44	1.30	14.42	9.43	11.0	-	-
202C20	5.23	14.04	3.12	2.60	2.08	1.73	1.56	16.32	9.43	12.70	-	-
202C25	6.54	19.80	4.4	3.67	2.93	2.44	2.20	20.54	14.58	16.92	-	-

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Cold Formed Profile — C—Purlin

Technical Data Sheet

Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Anti sag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Span 5.00 M												
172C15	3.49	6.95	1.39	1.16	0.93	0.77	0.69	7.25	5.52	5.52	6.96	-
172C17	4.08	8.8	1.76	1.47	1.17	0.98	0.88	7.88	6.78	6.78	8.66	-
172C20	4.64	10.55	2.11	1.76	1.41	1.17	1.06	8.84	7.98	7.98	9.95	-
172C25	5.83	14.65	2.93	2.44	1.95	1.63	1.47	11	10.38	10.38	12.90	-
202C15	3.92	8.20	1.64	1.37	1.09	0.91	0.82	10.14	6.64	7.10	8.22	-
202C17	4.6	10.5	2.10	1.75	1.40	1.17	1.05	11.77	8.49	8.80	10.48	-
202C20	5.23	12.60	2.52	2.10	1.68	1.40	1.26	13.28	9.95	10.07	12.60	-
202C25	6.54	17.8	3.56	2.97	2.37	1.98	1.78	16.63	13.10	13.45	17.20	-
232C15	4.54	10.15	2.03	1.69	1.35	1.13	1.02	15.5	-	10.15	10.15	-
232C17	5.29	13.0	2.60	2.17	1.73	1.44	1.30	18.24	6.35	12.99	12.99	-
232C20	6.05	15.7	3.14	2.62	2.09	1.74	1.57	21.5	7.90	15.7	15.7	-
232C25	7.56	22.35	4.47	3.73	2.98	2.48	2.24	27.25	10.5	21.9	22.35	-
Span 5.50 M												
172C17	4.05	8.00	1.45	1.21	0.97	0.81	0.73	6.44	6.16	6.16	7.30	
172C20	4.64	9.58	1.74	1.45	1.16	0.97	0.87	7.28	7.25	7.25	8.41	-
172C25	5.83	13.30	2.42	2.01	1.61	1.34	1.21	9.11	9.43	9.43	10.85	-
202C15	3.92	7.48	1.36	1.13	0.91	0.76	0.68	8.36	6.00	6.00	7.48	-
202C17	4.6	9.52	1.73	1.44	1.15	0.96	0.87	9.71	7.71	7.71	9.53	-
202C20	5.23	11.50	2.09	1.74	1.39	1.16	1.05	11,00	9.07	9.07	11.16	-
202C25	6.54	16.17	2.94	2.45	1.96	1.63	1.47	13.78	11.9	11.9	14.57	-
232C15	4.54	9.19	1.67	1.39	1.11	0.93	0.84	13.47	-	9.00	9.21	-
232C17	5.29	11.83	2.15	1.79	1.43	1.19	1.08	15.78	5.78	11.50	11.81	-
232C20	6.05	14.25	2.59	2.16	1.73	1.44	1.3	17.87	7.17	13.53	14.28	-
232C25	7.56	20.35	3.70	3.08	2.47	2.06	1.85	22.55	9.57	18.50	20.35	-
252C15	4.77	9.90	1.80	1.50	1.20	1.00	0.90	15.47	-	9.18	9.90	-
252C17	5.59	13.20	2.40	2.00	1.60	1.33	1.20	18.49	6.20	11.94	12.70	-
252C20	6.36	15.35	2.79	2.33	1.86	1.55	1.40	21	7.75	14.02	15.34	-
252C25	7.95	21.89	3.98	3.32	2.65	2.21	1.99	26	10.61	18.60	21.89	-

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Cold Formed Profile C—Purlin

Technical Data Sheet

Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Anti sag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Span 6.00 M												
172C20	4.64	8.78	1.46	1.22	0.98	0.81	0.73	6.11		6.65	7.03	-
172C25	5.83	12.2	2.03	1.69	1.36	1.13	1.01	7.65		8.65	9.08	-
202C17	4.6	8.76	1.46	1.22	0.97	0.81	0.73	8.12		7.07	8.19	-
202C20	5.23	10.5	1.75	1.45	1.17	0.97	0.88	9.23		8.31	9.42	-
202C25	6.54	14.82	2.47	2.06	1.65	1.37	1.24	11.52		10.92	12.51	-
232C15	4.54	8.46	1.41	1.18	0.94	0.78	0.71	11.4		7.74	8.46	-
232C17	5.29	10.8	1.80	1.50	1.20	1.00	0.90	13.31		9.65	10.83	-
232C20	6.05	13.08	2.18	1.82	1.45	1.21	1.09	15.12		11.34	13.08	-
232C25	7.56	18.66	3.11	2.59	2.07	1.73	1.56	18.9		15.42	18.66	-
252C15	4.77	9.06	1.51	1.26	1.01	0.84	0.76	12.99		7.74	9.09	-
252C17	5.59	11.64	1.94	1.62	1.29	1.08	0.97	15.32		9.80	11.64	-
252C20	6.36	14.10	2.35	1.96	1.57	1.31	1.18	17.34		11.49	14.10	-
252C25	7.95	20.1	3.35	2.79	2.23	1.86	1.68	21.72		15.33	20.1	
Span 6.50 M												
202C20	5.23	9.69	1.49	1.24	0.99	0.83	0.75	8		7.67	7.89	-
202C25	6.54	13.65	2.10	1.75	1.40	1.17	1.05	10		10.07	10.53	-
232C17	5.29	9.99	1.54	1.28	1.02	0.85	0.77	11.38		8.00	9.99	-
232C20	6.05	12.09	1.86	1.55	124	1.03	0.93	12.87		9.45	12.09	-
232C25	7.56	17.16	2.64	2.20	1.76	1.47	1.32	16.12		12.74	17.03	-
252C17	5.59	10.75	1.65	1.38	1.10	0.92	0.83	13.32		8.00	10.75	-
252C20	6.34	13.00	2.00	1.67	1.33	1.11	1.00	14.8		9.16	13.00	-
252C25	7.95	18.53	2.85	2.38	1.9	1.58	1.43	18.46		12.35	17.61	-
302C17	6.82	13.47	2.07	1.73	1.38	1.15	1.04	23.36		13.03	13.82	
302C20	7.78	16.38	2.52	2.10	1.68	1.4	1.26	26.6		16.25	16.38	
302C25	9.72	23.4	3.6	3.00	240	2.00	1.80	33.14		23.01	23.71	

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Cold Formed Profile — C—Purlin

Technical Data Sheet

Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Anti sag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Span 7.00 M												
202C25	6.54	12.74	1.82	1.52	1.21	1.01	0.91	8.64		9.38	9.38	
232C17	5.29	7.89	1.12	0.94	0.75	0.63	0.57	9.73		6.59	7.89	
232C20	6.05	9.52	1.36	1.13	0.91	0.76	0.68	11.06		7.70	9.52	
232C25	7.56	13.44	1.92	1.6	1.28	1.07	0.96	13.86		10.22	12.88	
252C17	5.59	8.47	1.21	1	0.81	0.67	0.61	11.19			8.5	
252C20	6.36	10.22	1.46	1.22	0.97	0.81	0.73	12.75		7.46	10.25	
252C25	7.95	14.49	2.07	1.73	1.38	1.15	1.04	16		9.96	13.49	
302C17	6.82	10.71	1.53	1.27	1.02	0.85	0.77	20.09		10.71	10.71	
302C20	7.78	13.02	1.86	1.55	1.24	1.03	0.93	22.9		13.01	13.01	
302C25	9.72	18.69	2.67	2.23	1.78	1.48	1.34	28.52		18.18	18.67	
Span 7.50 M												
202C25	6.54	9.9	1.32	1.1	0.88	0.73	0.66	7.4		6.95	6.97	9.16
232C20	6.05	8.85	1.18	0.98	0.79	0.66	0.59	9.67		6.41	8.68	8.88
232C25	7.56	12.52	1.67	1.39	1.11	0.93	0.84	12.07		8.7	11.47	12.52
252C20	6.36	9.6	1.28	1.07	0.85	0.71	0.64	11.25		6.20	9.14	9.57
252C25	7.95	13.5	1.8	1.5	1.2	1	0.9	13.8		8.18	12	13.54
302C17	6.82	9.98	1.33	1.11	0.88	0.73	0.67	17.52		9.63	9.99	9.99
302C20	7.78	12.15	1.62	1.36	1.08	0.9	0.81	20		11.68	12.14	12.14
302C25	9.72	17.48	2.33	1.94	1.55	1.29	1.17	25		16.06	17.44	17.44

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Cold Formed Profile — C—Purlin

Technical Data Sheet

Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Anti sag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Span 8.00 M												
202C25	6.54	9.28	1.16	0.97	0.77	0.64	0.58	6.64		-	6,51	8.26
232C25	7.56	11.76	1.47	1.23	0.98	0.82	0.74	10.64		-	10.28	11.76
252C25	7.95	12.72	1.59	1.33	1.06	0.88	0.8	12.46		-	10.6	12.68
302C20	7.78	11.36	1.42	1.18	0.95	0.79	0.71	17.85	-	10.23	11.28	11.38
302C25	9.72	16.32	2.04	1.7	1.36	1.13	1.02	22.32	-	14.13	16.36	16.36
302C30	11.87	21.52	2.69	2.24	1.79	1.24	1.35	26.65	-	17.28	21.5	21.5
Span 8.50 M												
232C25	7.56	11.05	1.3	1.08	0.87	0.72	0.65	9.45		-	9.16	11.05
252C25	7.95	11.99	1.41	1.18	0.94	0.78	0.72	11		-	9.27	11.89
302C20	7.78	10.71	1.26	1.05	0.84	0.7	0.63	15.8		8.9	10.7	10.7
302C25	9.72	15.39	1.81	1.51	1.21	0.67	0.91	19.5		12.2	15.4	15.4
302C30	11.87	20.23	2.38	1.98	1.59	1.32	1.19	23.57		15.02	19.81	20.23

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Cold Formed Profile — C—Purlin

Technical Data Sheet

Simple Span												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Antisag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Working Loads												
Span 9.00 M												
232C25	7.56	10.44	1.16	0.96	0.77	0.64	0.58	8.4		-	-	10.36
252C25	7.95	11.25	1.25	1.04	0.83	0.69	0.63	10		-	-	10.9
302C20	7.78	10.08	1.12	0.93	0.75	0.62	0.56	14		-	-	10.11
302C25	9.72	14.49	1.61	1.34	1.07	0.89	0.81	17.1		10.43	14.4	14.54
302C30	11.87	19.08	2.12	1.77	1.41	1.18	1.06	21		13	17.93	19.11
342C20	8.75	11.97	1.33	1.11	0.89	0.74	0.67	20		10.9	11.94	11.94
342C25	10.94	17.19	1.91	1.59	1.27	1.06	0.96	25		15	17.21	17.21
342C30	13.28	22.32	2.48	2.07	1.65	1.38	1.24	30		18.52	22.33	22.33
Span 9.50 M												
302C20	7.78	9.5	1	0.83	0.67	0.56	0.50	12.6		-	-	9.58
302C25	9.72	13,78	1.45	1.21	0.97	0.81	0.73	15.6		-	13.12	13.8
302C30	11.87	18.15	1.91	1.59	1.27	1.06	0.96	18.8		11.3	16.21	18.1
342C20	8.75	11,31	1.19	0.99	0.79	0.66	0.6	18		9.59	11.31	11.31
342C25	10.94	16.34	1.72	1.43	1.15	0.96	0.86	22		13.27	16.3	16.3
342C30	13.28	21.18	2.23	1.86	1.49	1.24	1.12	26		16.16	21.16	21.16

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Technical Data Sheet

Simple Span												
Working Loads												
			Allowable downward loads in Kn/m2					Total UDL Kn	Total Uplifting Loads in KN			
Section Ref	Weight Kg/m	Total UDL KN	[Purlin Centers in mms]					Deflection	[Metal cladding] No of Antisag Rods			
			1000	1200	1500	1800	2000	Span/180	0	1	2	3
Span 10.00 M												
342C20	8.75	10.8	1.08	0.9	0.72	0.6	0.54	16.4		-	10.75	10.75
342C25	10.94	15.5	1.55	1.29	1.03	0.86	0.78	20.5		11.66	15.48	15.48
342C30	13.28	20.1	2.01	1.67	1.34	1.12	1.01	24.33		14.03	19.72	20.12
Span 10.5 M												
342C20	8.75	10.29	0.98	0.82	0.65	0.46	0.49	14.91		-	10.16	10.23
342C25	10.94	14.7	1.4	1.17	0.93	0.78	0.7	18.58		10.14	14.48	14.75
342C30	13.28	19.22	1.83	1.53	1.22	1.02	0.92	22.15		12.25	18.13	19.16
Span 11.0 M												
342C25	10.94	14.08	1.28	1.07	0.85	0.71	0.64	16.94	-	-	13.28	14.09
342C30	13.28	18.26	1.66	1.38	1.11	0.92	0.83	20.13	-	10.79	16.64	18.3
402C20	9.89	11.99	1.09	0.91	0.73	0.61	0.55	22.84				11.96
402C25	12.3	16.61	1.51	1.26	1.00	0.84	0.76	24.75			14.63	16.62
402C30	14.7	21.67	1.97	1.64	1.31	1.09	0.99	29.7		12.95	19.32	22.31

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