

Cladco Profiles Zed Purlins / Sheeting Rails

Cladco Profiles Ltd. manufacture cold rolled steel Zed purlins / sheeting rails that provide a horizontal structural support system for either roofing or vertical wall cladding. Our production system enables the accurate manufacture of purlins to virtually any length. This traditional well proven system of support offers a high degree of strength, flexibility and weight saving over timber or hot rolled steel sections with ease of handling on site and during installation at lower cost. Our Z purlin range consists of 175mm profiles made from 1.8mm thickness steel with 18mm pre-punched holes for fixing to cleats and sleeves with M16 bolts. Purlins are made from high tensile Z39 structural grade steel with a galvanised coating for long life so no additional finish is required. Our sections are designed to BS EN 1993-1-3:2006 using analysis and testing and satisfy the requirements of BS5950: Part 5 (1998). We supply sleeves for joining purlins together and cleats for joining purlins to rafters and anti-sag bars, all with compatible pre-punched holes for fixing minimising assembly time and errors. Our Z purlins can be produced for sleeved, double span sleeved, butted and over lapped purlin systems. This, combined with the simplicity of cleat details and ease of handling, make steel purlins suitable for most roof and wall structures.

Cladco			Section 175 Z 1.8										
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Butt load tables

Span (m)	Total Working U.D.L. (kN)	Working Loads						Deflection Span/180	Ultimate U.D.L. in kN / span			
		Allowable loading in kN/sq m							Gravity Load	Uplift - metal cladding		
		Purlin centres in millimetres								Number of anti sag rods		
		1000	1200	1500	1800	2100	2400		0	1	2	
4.00	13.30	3.32	2.77	2.22	1.85	1.58	1.38	14.56	19.94	15.20	19.94	19.94
4.50	11.50	2.56	2.13	1.70	1.42	1.22	1.06	11.50	17.73	12.87	17.47	17.73
5.00	9.32	1.86	1.55	1.24	1.04	0.89	0.78	9.32	15.96	11.15	14.75	15.96
5.50	7.70	1.40	1.17	0.93	0.78			7.70	14.50	9.84	12.68	14.50
6.00	6.47	1.08	0.90	0.72				6.47	13.30	8.81	11.08	13.30
6.50	5.51	0.85	0.71					5.51	12.27	7.97	9.81	12.27

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Double span load table													
Span (m)	Total Working U.D.L. (kN)	Working Loads						Deflection Span/180	Ultimate U.D.L. in kN / span				
		Allowable loading in kN/sq m							Gravity Load	Uplift - metal cladding			
Purlin centres in millimetres						0	1	2					
1000	1200	1500	1800	2100	2400								
4.00	13.30	3.32	2.77	2.22	1.85	1.58	1.38	30.70	19.94	19.94	19.94	19.94	
4.50	11.82	2.63	2.19	1.75	1.46	1.25	1.09	24.26	17.73	17.73	17.73	17.73	
5.00	10.64	2.13	1.77	1.42	1.18	1.01	0.89	19.65	15.96	15.96	15.96	15.96	
5.50	9.67	1.76	1.47	1.17	0.98	0.84	0.73	16.24	14.50	14.50	14.50	14.50	
6.00	8.86	1.48	1.23	0.98	0.82	0.70		13.65	13.30	13.30	13.30	13.30	
6.50	8.18	1.26	1.05	0.84	0.70			11.63	12.27	12.27	12.27	12.27	
7.00	7.60	1.09	0.90	0.72				10.03	11.40	11.40	11.40	11.40	
7.50	7.09	0.95	0.79					8.73	10.64	10.64	10.64	10.64	
8.00	6.65	0.83	0.69					7.68	9.97	9.97	9.97	9.97	

Cladco		Section 175 Z 1.8											
Sleeved load table													
Span (m)	Total Working U.D.L. (kN)	Working Loads						Deflection Span/180	Ultimate U.D.L. in kN / span				
		Allowable loading in kN/sq m							Gravity Load	Uplift - metal cladding			
		Purlin centres in millimetres						Number of anti sag rods					
		1000	1200	1500	1800	2100	2400						
4.00	16.62	4.15	3.46	2.77	2.31	1.98	1.73	21.83	24.93	24.93	24.93	24.93	
4.50	14.77	3.28	2.74	2.19	1.82	1.56	1.37	17.25	22.16	22.16	22.16	22.16	
5.00	13.30	2.66	2.22	1.77	1.48	1.27	1.11	13.97	19.94	19.94	19.94	19.94	
5.50	11.55	2.10	1.75	1.40	1.17	1.00	0.87	11.55	18.13	18.13	18.13	18.13	
6.00	9.70	1.62	1.35	1.08	0.90	0.77	0.67	9.70	16.62	16.26	16.62	16.62	
6.50	8.27	1.27	1.06	0.85	0.71			8.27	15.34	14.63	15.34	15.34	
7.00	7.13	1.02	0.85	0.68				7.13	14.25	13.31	14.25	14.25	
7.50	6.21	0.83	0.69					6.21	13.30	12.20	13.30	13.30	
8.00	5.46	0.68						5.46	12.46	11.27	12.46	12.46	