

# TECHNICAL DATA

## SHALLOW RIBBED ROOF / CEILING PANEL (COOL STORE PROFILE)

Steel Skin - 0.60Mm Grade 400 Mpa Top And Bottom Limit State Factored Uniform Load Capacity (kN/m<sup>2</sup>):

THICKNESS	NO OF SPANS	LOAD	LENGTH (L) IN METERS														
			1.20	1.50	1.80	2.10	2.40	2.70	3.00	3.30	3.60	3.90	4.20	4.50	4.80	5.10	5.40
50	1	Down	6.71	3.79	2.19	1.38	0.92	0.65	-	-	-	-	-	-	-	-	-
		Up	6.71	3.79	2.19	1.38	0.92	0.65	-	-	-	-	-	-	-	-	-
	2	Down	6.71	4.30	2.98	2.19	1.68	1.33	1.07	0.86	0.66	-	-	-	-	-	-
		Up	6.71	4.30	2.98	2.19	1.68	1.33	1.07	0.86	0.66	-	-	-	-	-	-
	3	Down	8.39	5.37	3.73	2.60	1.74	1.23	0.89	0.67	-	-	-	-	-	-	-
		Up	8.39	5.37	3.73	2.60	1.74	1.23	0.89	0.67	-	-	-	-	-	-	-
75	1	Down	10.34	6.62	4.59	3.15	2.11	1.48	1.08	0.81	0.63	-	-	-	-	-	-
		Up	10.34	6.62	4.59	3.15	2.11	1.48	1.08	0.81	0.63	-	-	-	-	-	-
	2	Down	10.34	6.62	4.59	3.38	2.58	2.04	1.65	1.37	1.15	0.98	0.84	0.74	0.64	-	-
		Up	10.34	6.62	4.59	3.38	2.58	2.04	1.65	1.37	1.15	0.98	0.84	0.74	0.64	-	-
	3	Down	12.92	8.27	5.74	4.22	3.23	2.55	2.04	1.53	1.18	0.93	0.74	-	-	-	-
		Up	12.92	8.27	5.74	4.22	3.23	2.55	2.04	1.53	1.18	0.93	0.74	-	-	-	-
100	1	Down	13.77	8.81	6.12	4.50	3.44	2.66	1.94	1.46	1.12	0.88	0.71	-	-	-	-
		Up	13.77	8.81	6.12	4.50	3.44	2.66	1.94	1.46	1.12	0.88	0.71	-	-	-	-
	2	Down	13.77	8.81	6.12	4.50	3.44	2.72	2.20	1.82	1.53	1.30	1.12	0.98	0.86	0.76	0.68
		Up	13.77	8.81	6.12	4.50	3.44	2.72	2.20	1.82	1.53	1.30	1.12	0.98	0.86	0.76	0.68
	3	Down	17.21	11.01	7.65	5.62	4.30	3.40	2.75	2.28	1.91	1.63	1.33	1.08	0.89	0.74	0.63
		Up	17.21	11.01	7.65	5.62	4.30	3.40	2.75	2.28	1.91	1.63	1.33	1.08	0.89	0.74	0.63
125	1	Down	17.49	11.19	7.77	5.71	4.37	3.45	2.80	2.30	1.77	1.39	1.12	0.91	0.75	-	-
		Up	17.49	11.19	7.77	5.71	4.37	3.45	2.80	2.30	1.77	1.39	1.12	0.91	0.75	-	-
	2	Down	17.49	11.19	7.77	5.71	4.37	3.45	2.80	2.31	1.94	1.66	1.43	1.24	1.09	0.97	0.86
		Up	17.49	11.19	7.77	5.71	4.37	3.45	2.80	2.31	1.94	1.66	1.43	1.24	1.09	0.97	0.86
	3	Down	21.86	13.99	9.72	7.14	5.46	4.32	3.50	2.89	2.43	2.07	1.78	1.55	1.37	1.18	0.99
		Up	21.86	13.99	9.72	7.14	5.46	4.32	3.50	2.89	2.43	2.07	1.78	1.55	1.37	1.18	0.99
150	1	Down	21.11	13.51	9.38	6.89	5.28	4.17	3.38	2.79	2.35	2.00	1.62	1.32	1.09	0.91	0.76
		Up	21.11	13.51	9.38	6.89	5.28	4.17	3.38	2.79	2.35	2.00	1.62	1.32	1.09	0.91	0.76
	2	Down	21.11	13.51	9.38	6.89	5.28	4.17	3.38	2.79	2.35	2.00	1.72	1.50	1.32	1.17	1.04
		Up	21.11	13.51	9.38	6.89	5.28	4.17	3.38	2.79	2.35	2.00	1.72	1.50	1.32	1.17	1.04
	3	Down	26.39	16.89	11.73	8.62	6.60	5.21	4.22	3.49	2.93	2.50	2.15	1.88	1.65	1.46	1.30
		Up	26.39	16.89	11.73	8.62	6.60	5.21	4.22	3.49	2.93	2.50	2.15	1.88	1.65	1.46	1.30
200	1	Down	28.50	18.24	12.67	9.31	7.13	5.63	4.56	3.77	3.17	2.70	2.33	2.03	1.78	1.58	1.38
		Up	28.50	18.24	12.67	9.31	7.13	5.63	4.56	3.77	3.17	2.70	2.33	2.03	1.78	1.58	1.38
	2	Down	28.50	18.24	12.67	9.31	7.13	5.63	4.56	3.77	3.17	2.70	2.33	2.03	1.78	1.58	1.41
		Up	28.50	18.24	12.67	9.31	7.13	5.63	4.56	3.77	3.17	2.70	2.33	2.03	1.78	1.58	1.41
	3	Down	35.63	22.80	15.83	11.63	8.91	7.04	5.70	4.71	3.96	3.37	2.91	2.53	2.23	1.97	1.76
		Up	35.63	22.80	15.83	11.63	8.91	7.04	5.70	4.71	3.96	3.37	2.91	2.53	2.23	1.97	1.76

SEE NOTES IN NEXT PAGE

## SHALLOW RIBBED ROOF / CEILING PANEL (COOL STORE PROFILE)

Steel Skin - 0.60Mm Grade 400 Mpa Top And Bottom Limit State Factored Uniform Load  
Capacity (kN/m<sup>2</sup>):

### NOTATION

Down - Ultimate Limit state uniform pressure resulting to top steel skin at midspan to be in compression  
Up - Ultimate Limit state uniform pressure resulting to bottom steel skin at midspan to be in compression  
1 span - Denotes single span  
2 spans - Denotes two continuous span with the same length  
3 spans - Denotes three continuous span with the same length

### DESIGN CRITERIA

1. Capacity Table calculation is based on AS4600
2. The panel has been checked for serviceability criteria - maximum deflection of span /180
3. This table applies only for Non-Cyclonic Regions (Region A to Region B)
4. Roof density is 42 kg/m<sup>3</sup>, selfweight has not been included in calculation of the load capacity table and should be considered in panel
5. This table is based on the condition that the steel skin is fully bonded to insulation bond which ensures there are no lateral sliding of sheet
6. Support bearing width: minimum 50mm. Panel shall be fixed to support as per Tiger Modular Cold Room Joining Methods and Seals
7. The supporting member shall be designed by a certifying Structural Engineer