



Aluminium Facing

(f) Panel Core Thickness (mm)	I x (cm ⁴) for 1m width	z top for 1m width cm ³	z bottom for 1m width cm ³	Moment kN m Top	Moment Bottom kN m
50	38	11	22	1.31	2.58
75	99	23	31	2.66	3.53
100	198	38	42	4.37	4.79

Based on 0.7 mm external and 0.5 mm internal Aluminium skin

(t) Panel Core Thickness (mm)	Allowable Uniform Loads kN/m ²																	
	1.0 m		1.5 m		2.0 m		2.5 m		3.0 m		3.5 m		4.0 m		4.5 m		5.0 m	
	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
50	10.47	14.46	4.65	4.28	2.62	1.81	1.68	0.93	1.16	0.54	0.85	0.34	0.65	0.23	0.52	0.16	0.42	0.12
75	21.28	37.86	9.46	11.22	5.32	4.73	3.40	2.42	2.36	1.40	1.74	0.88	1.33	0.59	1.05	0.42	0.85	0.30
100	34.92	76.06	15.52	22.54	8.73	9.51	5.59	4.87	3.88	2.82	2.85	1.77	2.18	1.19	1.72	0.83	1.40	0.61

f_y Al 170 N/mm² permissible span - deflection ratio = 100

G.I Facing

(f) Panel Thickness (mm)	I x (cm ⁴) for 1m width	z top for 1m width cm ³	z bottom for 1m width cm ³	Moment kN m Top	Moment kN m Bottom
50	31	9	21	1.46	3.53
75	84	18	30	3.01	5.05
100	170	29	41	4.91	6.96

Based on 0.5 mm external and 0.5 mm internal GI skin

(t) Panel Thickness (mm)	Allowable Uniform Loads kN/m ²																	
	1.0 m		1.5 m		2.0 m		2.5 m		3.0 m		3.5 m		4.0 m		4.5 m		5.0 m	
	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
50	11.70	34.27	5.20	10.16	2.92	4.28	1.87	2.19	1.30	1.27	0.95	0.80	0.73	0.54	0.58	0.38	0.47	0.27
75	24.10	93.85	10.71	27.81	6.03	11.73	3.86	6.01	2.68	3.48	1.97	2.19	1.51	1.47	1.19	1.03	0.96	0.75
100	39.32	191.01	17.47	56.59	9.83	23.88	6.29	12.22	4.37	7.07	3.21	4.45	2.46	2.98	1.94	2.10	1.57	1.53

Permissible span-deflection ratio = 100

f_y GI 250 N/mm²

t = Thickness S = Strength D = Deflection