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BAZ-45/250 Profiled Aluminium Sheeting - Properties & Load Tables

* Material: ASTM AA3105, H16 (Fy=18.0 KN/cm²).

* Aluminium Sheets available in Polyester Colour coated.

* Paint applied is Polyester coated 25 to 30 microns on the exposed surface and 5 to 7 microns epoxy on inner surface.

* Colours available as per BAZ RAL Colour chart (subject to the availability).

Section Properties (per meter of coverage width)											
Thickness	Weight	Area	Top in Compression				Bottom in Compression				Shear
mm	Kg/m ²	cm ²	Ix cm ⁴	Sx Topcm ³	Sx Bottomcm ³	Ma KN-m	Ix cm ⁴	Sx Topcm ³	Sx Bottomcm ³	Ma KN-m	Va KN
0.50	1.65	6.09	12.75	3.70	11.71	0.40	11.60	4.99	5.26	0.54	3.33
0.60	1.98	7.31	16.83	5.04	14.04	0.54	14.46	6.06	6.71	0.65	5.76
0.70	2.31	8.53	21.17	6.51	16.37	0.70	17.38	7.15	8.22	0.77	9.14
0.80	2.65	9.75	25.80	8.14	18.71	0.88	20.40	8.25	9.83	0.89	13.41
0.90	2.98	10.97	30.61	9.87	21.03	1.06	23.51	9.35	11.51	1.01	16.88
1.00	3.31	12.19	34.57	11.22	23.33	1.21	26.69	10.46	13.28	1.13	19.24

Allowable Uniform Load Capacities (KN/m ²)											
Thickness	No. of Spans	Load	Span in Meters								
Mm	No's	Case	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
0.50	upto 2 spans	D + L	3.19	2.04	1.42	1.04	0.80	0.63	0.51	0.42	0.35
		Uplift	4.30	2.75	1.91	1.40	1.08	0.85	0.69	0.57	0.48
	3 or more spans	D + L	3.99	2.55	1.77	1.30	1.00	0.79	0.64	0.53	0.44
		Uplift	5.38	3.44	2.39	1.76	1.34	1.06	0.86	0.71	0.60
0.60	upto 2 spans	D + L	4.35	2.78	1.93	1.42	1.09	0.86	0.70	0.57	0.48
		Uplift	5.23	3.35	2.32	1.71	1.31	1.03	0.84	0.69	0.58
	3 or more spans	D + L	5.43	3.48	2.41	1.77	1.36	1.07	0.87	0.72	0.60
		Uplift	6.54	4.18	2.90	2.13	1.63	1.29	1.05	0.86	0.73
0.70	upto 2 spans	D + L	5.62	3.59	2.50	1.83	1.40	1.11	0.90	0.74	0.62
		Uplift	6.16	3.94	2.74	2.01	1.54	1.22	0.99	0.81	0.68
	3 or more spans	D + L	7.02	4.49	3.12	2.29	1.76	1.39	1.12	0.93	0.78
		Uplift	7.70	4.93	3.42	2.51	1.93	1.52	1.23	1.02	0.86
0.80	upto 2 spans	D + L	7.02	4.49	3.12	2.29	1.75	1.39	1.12	0.93	0.78
		Uplift	7.11	4.55	3.16	2.32	1.78	1.40	1.14	0.94	0.79
	3 or more spans	D + L	8.77	5.61	3.90	2.86	2.19	1.73	1.40	1.16	0.97
		Uplift	8.89	5.69	3.95	2.90	2.22	1.76	1.42	1.18	0.99
0.90	upto 2 spans	D + L	8.51	5.45	3.78	2.78	2.13	1.68	1.36	1.13	0.95
		Uplift	8.06	5.16	3.58	2.63	2.02	1.59	1.29	1.07	0.90
	3 or more spans	D + L	10.64	6.81	4.73	3.47	2.66	2.10	1.70	1.41	1.18
		Uplift	10.08	6.45	4.48	3.29	2.52	1.99	1.61	1.33	1.12
1.00	upto 2 spans	D + L	9.68	6.20	4.30	3.16	2.42	1.91	1.55	1.28	1.08
		Uplift	9.02	5.77	4.01	2.94	2.25	1.78	1.44	1.19	1.00
	3 or more spans	D + L	12.10	7.74	5.38	3.95	3.03	2.39	1.94	1.60	1.34
		Uplift	11.27	7.21	5.01	3.68	2.82	2.23	1.80	1.49	1.25

Notes:

1. Design of Sheeting is based on equations of AISI-2001 (ASD-Allowable stress design).
2. D + L = Dead + Live Load (Deflection Limitation: Span / 180)
3. Wind Uplift (Deflection Limitation: Span / 120)