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BAZ-45/150 Profiled Aluminium Sheeting - Properties & Load Tables

* Material: ASTM AA3105, H16 ($F_y=18.0 \text{ KN/cm}^2$).

* 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 mm	Weight Kg/m ²	Area cm ²	Top in Compression				Bottom in Compression				Shear Va KN
			Ix cm ⁴	Sx Topcm ³	Sx Bottomcm ³	Ma KN-m	Ix cm ⁴	Sx Topcm ³	Sx Bottomcm ³	Ma KN-m	
0.50	1.84	6.77	17.02	6.42	9.05	0.69	17.90	7.92	7.88	0.85	5.37
0.60	2.20	8.13	22.16	8.81	10.97	0.95	22.05	9.58	9.86	1.03	9.29
0.70	2.57	9.48	26.48	10.65	12.87	1.15	26.25	11.24	11.89	1.21	14.77
0.80	2.94	10.84	30.91	12.59	14.75	1.36	30.53	12.89	13.99	1.39	21.69
0.90	3.31	12.19	35.31	14.51	16.64	1.56	34.83	14.54	16.11	1.57	27.43
1.00	3.67	13.54	39.38	16.22	18.44	1.75	39.12	16.18	18.24	1.74	31.19

Allowable Uniform Load Capacities (KN/m ²)											
Thickness mm	No. of Spans No's	Load Case	Span in Meters								
			1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
0.50	upto 2 spans	D + L	5.54	3.54	2.46	1.81	1.38	1.09	0.89	0.71	0.55
		Uplift	6.79	4.35	3.02	2.22	1.70	1.34	1.09	0.90	0.75
	3 or more spans	D + L	6.92	4.43	3.08	2.26	1.73	1.37	1.11	0.92	0.77
		Uplift	8.49	5.44	3.77	2.77	2.12	1.68	1.36	1.12	0.94
0.60	upto 2 spans	D + L	7.59	4.86	3.37	2.48	1.90	1.50	1.21	0.92	0.71
		Uplift	8.26	5.28	3.67	2.70	2.06	1.63	1.32	1.09	0.92
	3 or more spans	D + L	9.49	6.07	4.22	3.10	2.37	1.87	1.52	1.25	1.05
		Uplift	10.32	6.61	4.59	3.37	2.58	2.04	1.65	1.36	1.15
0.70	upto 2 spans	D + L	9.18	5.88	4.08	3.00	2.30	1.81	1.47	1.11	0.85
		Uplift	9.69	6.20	4.31	3.16	2.42	1.91	1.55	1.28	1.08
	3 or more spans	D + L	11.48	7.35	5.10	3.75	2.87	2.27	1.84	1.52	1.28
		Uplift	12.11	7.75	5.38	3.95	3.03	2.39	1.94	1.60	1.35
0.80	upto 2 spans	D + L	10.85	6.95	4.82	3.54	2.71	2.14	1.72	1.29	0.99
		Uplift	11.12	7.12	4.94	3.63	2.78	2.20	1.78	1.47	1.24
	3 or more spans	D + L	13.57	8.68	6.03	4.43	3.39	2.68	2.17	1.79	1.51
		Uplift	13.90	8.90	6.18	4.54	3.48	2.75	2.22	1.84	1.54
0.90	upto 2 spans	D + L	12.51	8.00	5.56	4.08	3.13	2.47	1.96	1.47	1.13
		Uplift	12.54	8.03	5.57	4.10	3.14	2.48	2.01	1.66	1.39
	3 or more spans	D + L	15.63	10.01	6.95	5.10	3.91	3.09	2.50	2.07	1.74
		Uplift	15.68	10.03	6.97	5.12	3.92	3.10	2.51	2.07	1.74
1.00	upto 2 spans	D + L	13.99	8.95	6.22	4.57	3.50	2.76	2.19	1.64	1.27
		Uplift	13.95	8.93	6.20	4.55	3.49	2.75	2.23	1.84	1.55
	3 or more spans	D + L	17.49	11.19	7.77	5.71	4.37	3.45	2.80	2.31	1.94
		Uplift	17.43	11.16	7.75	5.69	4.36	3.44	2.79	2.31	1.94

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)