

EXP 45/150 DATA SHEET



NMSS GROUP

Engineering & Construction

Nominal Thickness (T) (mm)	Cover Width (mm)	Nominal Weight (kg/m ²)	Area (cm ²)	Full Sect. Ia (cm ⁴)	Elastic Modulus (E) (N/mm ²)	Top in Compression				Bottom in Compression			
						I _{xx} (cm ⁴)	I _{xx} -Top (cm ⁴)	I _{xx} -Bot (cm ⁴)	M _y by (kNm)	I _{yy} (cm ⁴)	I _{yy} -Top (cm ⁴)	I _{yy} -Bot (cm ⁴)	M _x by (kNm)
0.40	900	4.36	5.43	16.78	20000	14.87	5.85	9.07	0.79	13.10	6.31	5.31	0.72
0.50	900	5.52	6.79	20.97	20000	19.42	7.76	5.47	1.06	17.23	8.06	7.14	0.97
0.60	900	6.38	8.04	25.16	20000	24.12	9.81	11.49	1.33	21.59	9.83	9.15	1.24
0.70	900	7.45	9.50	29.34	20000	28.88	11.86	15.50	1.61	26.12	11.82	11.26	1.55
0.80	900	8.51	10.86	33.55	20000	33.25	13.70	19.42	1.87	30.83	13.43	13.49	1.83
0.90	900	9.58	12.21	37.75	20000	37.60	15.53	23.54	2.11	35.76	16.97	16.91	2.08
1.00	900	10.64	13.58	41.91	20000	41.91	17.30	27.26	2.36	40.77	19.11	19.39	2.33
1.20	900	12.77	16.28	50.29	20000	50.29	20.68	33.00	2.81	50.29	20.70	23.00	2.81
STEEL: PERMISSIBLE SPAN (MM)													
Nominal Thickness (T) (mm)	No. of Spans	Load Case	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00		
0.70	1	D+L	12.89	8.25	5.73	4.21	3.18	2.23	1.63	1.22	0.94		
0.70	1	WS	12.27	7.85	5.45	4.01	3.07	2.23	1.63	1.22	0.94		
0.70	2	D+L	11.93	7.71	5.38	3.97	3.04	2.41	1.95	1.62	1.36		
0.70	2	WS	12.49	8.08	5.65	4.17	3.20	2.53	2.05	1.70	1.43		
0.70	3	D+L	14.73	9.56	6.69	4.94	3.79	3.00	2.44	2.02	1.70		
0.70	3	WS	15.42	10.02	7.02	5.18	3.98	3.15	2.56	2.05	1.58		
0.80	1	D+L	14.93	0.56	6.64	4.88	3.63	2.55	1.86	1.40	1.08		
0.80	1	WS	14.67	9.39	6.52	4.79	3.63	2.55	1.86	1.40	1.08		
0.80	2	D+L	14.30	9.24	6.45	4.75	3.64	2.88	2.34	1.93	1.62		
0.80	2	WS	14.55	9.40	6.56	4.83	3.71	2.93	2.38	1.97	1.65		
0.80	3	D+L	17.69	11.46	8.02	5.92	4.54	3.60	2.92	2.41	2.03		
0.80	3	WS	17.99	11.66	8.16	6.02	4.62	3.66	2.97	2.42	1.87		
0.90	1	D+L	16.89	10.81	7.51	5.51	4.09	2.87	2.09	1.57	1.21		
0.90	1	WS	16.62	10.64	7.39	5.43	4.09	2.87	2.09	1.57	1.21		
0.90	2	D+L	16.20	10.46	7.30	5.38	4.13	3.27	2.65	2.19	1.84		
0.90	2	WS	16.45	10.63	7.42	5.47	4.19	3.32	2.69	2.23	1.87		
0.90	3	D+L	20.04	12.99	9.08	6.70	5.15	4.07	3.30	2.73	2.28		
0.90	3	WS	20.33	13.19	9.22	6.81	5.23	4.34	3.36	2.78	2.16		
1.00	1	D+L	18.84	12.06	8.38	6.15	4.54	2.19	2.32	1.75	1.34		
1.00	1	WS	18.67	11.95	8.30	6.10	4.54	1.19	2.32	1.75	1.34		
1.00	2	D+L	18.39	11.75	8.20	6.04	4.64	3.67	2.97	2.46	2.07		
1.00	2	WS	18.35	11.85	8.28	6.10	4.68	3.70	3.00	2.48	2.09		
1.00	3	D+L	22.48	14.58	10.20	7.52	5.78	4.57	3.71	3.07	2.54		
1.00	3	WS	22.68	14.71	10.29	7.59	5.83	4.62	3.75	3.10	2.47		
1.20	1	D+L	22.49	14.39	10.00	7.34	5.44	3.82	2.79	2.09	1.61		
1.20	1	WS	22.49	14.39	10.00	7.34	5.44	3.82	2.79	2.09	1.61		
1.20	2	D+L	21.90	14.15	9.88	7.28	5.58	4.42	3.58	2.96	2.49		
1.20	2	WS	21.90	14.15	9.88	7.28	5.58	4.42	3.58	2.96	2.49		
1.20	3	D+L	27.07	17.56	12.28	9.06	6.96	5.51	4.47	3.70	3.04		
1.20	3	WS	27.07	17.56	12.28	9.06	6.96	5.51	4.47	3.70	3.04		

Notes: 1. Design of Sheeting is based on equations of AISI -2001 (ASD - Allowable Stress design).

2. DL = Dead + Live Load (Deflection Limitation: Span / 180) 3. Wind Uplift (Deflection Limitation : Span / 120)