



MOLDED GRATING (Metric units)

CONCENTRATED LINE LOAD TABLES - DEFLECTION IN MILLIMETERS

SPAN IN mm	STYLE	LOAD IS KN/m OF WIDTH (CONCENTRATED)													MAXIMUM RECOMMENDED	APPARENT EI x 10 ⁶ N-mm ² /m		
		3	5	8	10	13	15	20	25	39	50	60	70	80			90	
400	1" x 1" x 4" RM	1.2	2.0	3.2	4.1	5.3	6.1	8.1	10.1	15.8							9	3.290
	1" X 1 1/2" SM	1.6	2.6	4.2	5.3	6.8	7.9	10.5	13.1								9	2.538
	1 1/2" x 1 1/2" SM	0.6	0.9	1.5	1.9	2.4	2.8	3.7	4.7	7.3	9.3	11.2	13.1	14.9			19	7.144
	2" x 2" SM	0.3	0.6	0.9	1.1	1.5	1.7	2.3	2.8	4.4	5.7	6.8	7.9	9.1	10.2		30	11.750
600	1" x 1" x 4" RM	3.7	6.1	9.8	12.3	16.0											6	3.666
	1" X 1 1/2" SM	4.8	8.0	12.8	16.0												6	2.820
	1 1/2" x 1 1/2" SM	1.6	2.6	4.2	5.3	6.8	7.9	10.5	13.2								13	8.554
	2" x 2" SM	0.9	1.5	2.4	3.0	3.9	4.5	6.1	7.6	11.8	15.1						21	14.852
800	1" x 1" x 4" RM	8.5	14.2														4	3.760
	1" X 1 1/2" SM	11.3															3	2.820
	1 1/2" x 1 1/2" SM	3.5	5.9	9.5	11.8	15.4											10	9.024
	2" x 2" SM	1.9	3.2	5.2	6.4	8.4	9.7	12.9									12	16.544
1000	1 1/2" x 1 1/2" SM	6.9	11.4														7	9.118
	2" x 2" SM	3.7	6.1	9.8	12.2	15.9											10	17.014
1200	1 1/2" x 1 1/2" SM	11.8															5	9.118
	2" x 2" SM	6.2	10.4														8	17.296
1400	2" x 2" SM	9.8															5	17.578

NOTES

1. The designer should not exceed MAXIMUM RECOMMENDED load at any time. MAXIMUM LOAD represents a 5:1 factor of safety on ULTIMATE CAPACITY.
2. ULTIMATE CAPACITY represents a complete and total failure of the grating.
3. Walking loads, typically 2.4 kN/M², is recommended for pedestrian traffic. Deflections for worker comfort are typically limited to 9mm or SPAN divided by 120 under full live load.
For a firmer feel under full live load or a 3.6 kN/M load, limit deflection to 6 MM or SPAN divided by 200.
4. The allowable loads are for STATIC LOAD CONDITIONS at ambient temperatures. Allowable loads for impact or dynamic loads should be a maximum of ONE-HALF the value shown.
Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance.
5. For applications at elevated temperatures, consult your manufacturer.