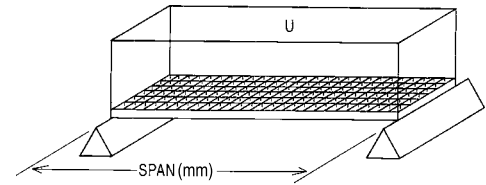
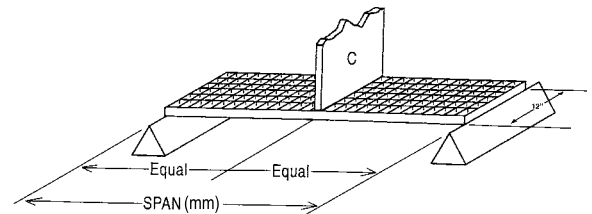


HLC Grating Load Charts



Uniform Line Load Table - Deflection in Millimetres

Span (mm)	Style		UNIFORM LOAD (kN/m ²)										MAXIMUM RECOMMENDED LOAD (kN/m ²)	ULTIMATE CAPACITY (kN/m ²)	
	Depth (mm)	Mesh (mm)	5	7	10	15	20	25	30	35	40	45			
400	38	25 x 51	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	0.3	0.3	0.3	0.5	751	1876
	51	25 x 51	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	832	2075
600	38	25 x 51	< 0.3	< 0.3	0.5	0.7	1.0	1.3	1.6	1.9	2.2	2.5	337	843	
	51	25 x 51	< 0.3	< 0.3	0.3	0.5	0.6	0.8	0.9	1.0	1.2	1.3	444	1109	
800	38	25 x 51	0.9	1.2	1.7	2.5	3.4	4.2	5.0	5.9	6.7	7.4	189	469	
	51	25 x 51	0.4	0.6	0.9	1.4	1.8	2.3	2.8	3.2	3.7	4.1	251	629	
1000	38	25 x 51	1.9	2.7	3.9	5.9	7.8	9.5	11.5	--	--	--	100	256	
	51	25 x 51	1.2	1.6	2.3	3.4	4.6	5.7	6.8	8.0	9.1	10.3	160	398	



Concentrated Line Load Table - Deflection in Millimetres

Span (mm)	Style		Concentrated Line LOAD (kN/m of width)										MAXIMUM RECOMMENDED LOAD (kN/m of width)	ULTIMATE CAPACITY (kN/m of width)
	Depth (mm)	Mesh (mm)	1.5	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0	85.0		
400	38	25 x 51	< 0.3	0.5	0.5	1.2	1.8	1.8	2.2	2.6	3.0	4.1	157	471
	51	25 x 51	< 0.3	< 0.3	0.3	0.6	0.8	1.1	1.3	1.6	1.8	2.2	178	536
600	38	25 x 51	< 0.3	0.8	1.5	2.9	4.3	5.7	7.1	8.5	10.0	--	101	303
	51	25 x 51	< 0.3	0.4	0.7	1.5	2.3	3.1	3.9	4.7	5.5	6.7	130	393
800	38	25 x 51	0.5	1.7	3.4	6.7	10.1	--	--	--	--	--	75	227
	51	25 x 51	0.3	1.0	1.9	3.7	5.6	7.5	9.3	11.2	--	--	102	308
1000	38	25 x 51	1.0	3.2	6.3	12.5	--	--	--	--	--	--	60	181
	51	25 x 51	0.6	1.9	3.6	7.2	10.9	--	--	--	--	--	77	233

NOTES:

1. ULTIMATE CAPACITY represents a complete and total failure of the grating. Values are provided to illustrate the reserve strength of the grating at a given span and are NOT to be used for design. Functionality of grating is limited to MAX RECOMMENDED LOAD.
2. The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact conditions should be a maximum of ONE-HALF the values 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. For applications at elevated temperatures, consult factory. The designer is further referenced to ASCE Structural Plastics Design Manual.
3. Fibergate recommends a maximum deflection of 6.4mm for this product under normal loading conditions. The use of L/500 may be required by certain construction codes. Check code requirements to determine design criteria.
4. All gratings were tested in accordance with the ANSI Standard: GRP Composites Grating Manual for Pultruded and Moulded Grating, and Stair Treads.