Technical Data Sheet

Sheet No: LF-100.1 February 2013

## **FRP Grating Load Tables**

Span	Deflection Type	Load														Maximum Load
		3	5	8	10	13	15	20	25	39	50	60	70	80	90	
ISO /	VE25					DE	FLE	CTI	ON -	- MN	1					
400	Uniform	0.4	0.7	1.1	1.3	1.7	2.0	2.6	3.3	5.1	6.6	7.9	9.2	10.5	11.8	48
	Concentrated	1.6	2.6	4.2	5.3	6.8	7.9	10.5	13.1	-	-	-	-	-	-	9
600	Uniform	1.8	3.0	4.8	6.0	7.8	9.0	12.0	15.0	-	-	-	-	-	-	20
	Concentrated	4.8	8.0	12.8	16.0	-	-	-	-	-	-	-	-	-	-	6
800	Uniform	5.7	9.5	15.1	-	-	-	-	-	-	-	-	-	-	-	9
	Concentrated	11.3	-	-	-	-	-	-	-	-	-	-	-	-	-	3
1000	Uniform	13.9	-	-	-	-	-	-	-	-	-	-	-	-	-	5
ISO /	VE38					DE	FLE	СТІ	ON ·	- MN	1					
400	Uniform	0.1	0.2	0.4	0.5	0.6	0.7	0.9	1.2	1.8	2.3	2.8	3.3	3.7	4.2	100
	Concentrated	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
600	Uniform	0.6	1.0	1.6	2.0	2.6	3.0	3.9	4.9	7.7	9.9	11.8	13.8	15.8	-	45
	Concentrated	1.6	2.6	4.2	5.3	6.8	7.9	10.5	13.2	-	-	-	-	-	-	13
800	Uniform	1.8	3.0	4.7	5.9	7.7	8.9	11.8	14.8	-	-	-	-	-	-	26
	Concentrated	3.5	5.9	9.5	11.8	15.4	-	-	-	-	-	-	-	-	-	10
1000	Uniform	4.3	7.1	11.4	14.3	-	-	-	-	-	-	-	-	-	-	14
	Concentrated	6.9	11.4	-	-	-	-	-	-	-	-	-	-	-	-	7
1200	Uniform	8.9	14.8	-	-	-	-	-	-	-	-	-	-	-	-	9
	Concentrated	11.8	-	-	-	-	-	-	-	-	-	-	-	-	-	5
	1040	Uniform Load= KN/M <sup>2</sup>					Concentra Load = KN Width									

Notes

- The designer should not exceed maximum recommended load at any time. Maximum recommended load represents a 5:1 factor of safety on ultimate capacity.
- Ultimate capacity represents a complete and total failure of the grating
- Walking loads, typically 2.4 KN/m<sup>2</sup> is recommended for pedestrian traffic. Deflections for workers comfort are typical 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<sup>2</sup> load, limit deflection to 6mm or span divided by 200
- 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 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.
- All information is supplied by the manufacturer.