

M.M. S.R.L. Fiberglass Reinforced Polymer gratings and structures

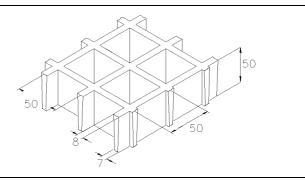
Via Antonio Zanussi, 300/302 33100 Udine - Italy Cap. Soc. EURO 100.000 i.v. P.lva / C.F. 00477620306 Reg. Imp. UD 00477620306 R.E.A. UD-138461 ph. +39.0432.522970 fax +39.0432.522253 info@mmgrigliati.it



SCH 50/50\_ISO\_HDL 20.07.2015 - Rev. 5

## **MOLDED GRATINGS**

Mesh	mm	50 x 50
Clear span	mm	42 x 42
Height	mm	50
Bearing bar	mm	8 upper part
thickness	mm	7 bottom part
Color	Translucent green	



	ISOPHTALIC Polyester Resin
Raw materials	Roving glass fiber type "E"
	Without inorganic fillers

Resin type	Modulus of elasticity	Ultimate stress
ISO	12250 MPa	310 MPa

Stand	dard panels	Sht A
mm	1100 x 2000	
Weigl	ht kg/m <sup>2</sup> 21	
tolerance	± mm 5 panel dimensions	
	± mm 2 height	

Surface	S	Smooth	Antiskid level R10 V10 norm DIN 51130
Sunace	A	Quartz	Antiskid level R13 V10 norm DIN 51130

Ageing resistance	Ageing test made with UV lamp according to ASTM G154-06 and passed with 5 points on the gray range and without evident defects (test made with 1500 hours of exposure to 4 hours alternate cycles at a UV temperature of 60°C and 4 hours at a condensed temperature of 50°C irradiated by UVB 313 nm lamp, radiance 0,71 W/m <sup>2</sup> )
	After the exposure to heat, cold and humidity cycles according to UNI EN ISO 9142/04 norm (n° 21 cycles type D3) there is no evidence of defects



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LOADS

## MAXIMUM SUGGESTED LOADS

Type of support	On the line of the two ends of the panel
Limits determined by	Deflection (load sagging)

the **maximum deflection admitted**, is 1/200 of the distance between the supports According to the standard DIN 24537-3 deviation due to the load may be no more than 1/200 of the land width and the difference in height between neighbouring joints between loaded and unloaded floor coverings may be no more than 4 mm.

DISTRIBUTED LOAD	and the second s	
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Distance between	Load with	Load with
supports	deflection equal	deflection equal
	to 1/200	to 1/100
[cm]	[kg/m²]	
70	2200	4450
90	1050	2100
110	550	1150
130	350	700

Limits determined by

CONCENTRATED LOAD			
Distance between supports	Load with deflection equal	Load with deflection equal	
[cm]	to 1/200 to 1/100		
70	950	1950	
90	550	1150	
110	350	750	
130	250	550	

All lighter loads are admitted

Admitted stresses (stress determined by the load)

## the **maximum admitted stress** is 1/5 of the ultimate stress (safety factor is equal to 0.20 – the ultimate stress is 5 times the specified load)

DISTRIBUTED LOAD	A REAL PROPERTY AND A REAL	CONCENTRATED LOAD	
Distance between supports	Maximum admitted load	Distance between supports	Maximum admitted load
[cm]	[kg/m <sup>2</sup> ]	[cm]	[kg/m]
70	6450	70	2250
90	3900	90	1750
110	2600	110	1400
130	1850	130	1200

## All lighter loads are admitted

- The above characteristics are meant as reference values for standard material in ambient working temperature. Even if they are not to be considered as guaranteed characteristics they are based on our experience and are supplied in good faith.

According to the standard DIN 24537-3 the conversion safety factor should be 0.75 for internal environmental exposure conditions, 0.65 for external exposure conditions, and 0.50 for aggressive exposure conditions.

- No matter which are the exposure conditions, chemical resistance must be always verified by contacting M.M.technical department.

- In case of heavy duty load compressive strength must be verified.