WE SUPPORT YOUR NEEDS

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

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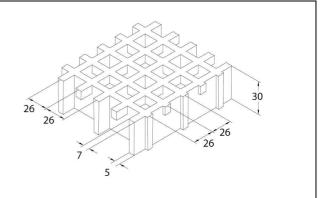


SCH 52/30\_ISO 06.05.2011 - Rev. 4

Raw materials

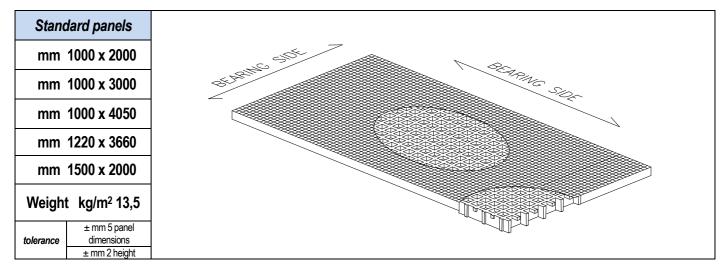
## MOLDED GRATINGS

Mesh	<b>mm 52 x 52</b> main	
mcon	mm 26 x 26 secondary	
Clear span	mm 19 x 19	
Height	mm 30	
Bearing bar	mm 7 upper part	
thickness	mm 5 bottom part	
Color	Translucent green	



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

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



	S	Smooth	Antiskid level R10 V10 norm DIN 51130
Surface	М	Meniscus	Antiskid level R13 V10 norm DIN 51130
	А	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			
		1	
Distance between	Load with	Load with	
supports	deflection equal	deflection equal	
	to 1/200	to 1/100	
[cm]	[kg/m <sup>2</sup> ]		
50	1300	2650	
70	450	950	
90	200	450	
110	100	200	

Limits determined by

CONCENTRATED LOAD			
Distance between supports	Load with deflection equal to 1/200	Load with deflection equal to 1/100	
[cm] 50	[kg/m] 400 800		
70	200	400	
90	100	250	
110	50	150	

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]
50	3700	50	900
70	1900	70	650
90	1150	90	500
110	750	110	400

## 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.