

**M.M. S.R.L.**Fiberglass Reinforced Polymer  
gratings and structuresVia Antonio Zanussi, 300/302  
33100 Udine - Italy  
Cap. Soc. EURO 100.000 i.v.P.Iva / C.F. 00477620306  
Reg. Imp. UD 00477620306  
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fax +39.0432.522253  
info@mmgrigliati.it**SCH 50/28\_VIN**

06.05.2011 - Rev. 4

## MOLDED GRATINGS

<b>Mesh</b>	mm 50 x 30	
<b>Clear span</b>	mm 42 x 22	
<b>Height</b>	mm 28	
<b>Bearing bar thickness</b>	mm 8 upper part	
	mm 7 bottom part	
<b>Color</b>	Natural translucent	

<b>Raw materials</b>	Vinylester Resin
	Roving glass fiber type "ECR"
	Without inorganic fillers

<b>Resin type</b>	<b>Modulus of elasticity</b>	<b>Ultimate stress</b>
VIN	12250 MPa	310 MPa

<b>Standard panels</b>	
mm 1000 x 2000	
<b>Weight kg/m<sup>2</sup> 15</b>	
<b>tolerance</b>	$\pm$ mm 5 panel dimensions $\pm$ mm 2 height

<b>Surface</b>	S	<b>Smooth</b>	<b>Antiskid level R10 V10 norm DIN 51130</b>
	M	<b>Meniscus</b>	<b>Antiskid level R13 V10 norm DIN 51130</b>
	A	<b>Quartz</b>	<b>Antiskid level R13 V10 norm DIN 51130</b>

<b>Ageing resistance</b>	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	<b>Deflection</b> (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			CONCENTRATED LOAD		
Distance between supports	Load with deflection equal to 1/200	Load with deflection equal to 1/100	Distance between supports	Load with deflection equal to 1/200	Load with deflection equal to 1/100
[cm]	[kg/m <sup>2</sup> ]		[cm]	[cm]	
50	1750	3500	50	500	1050
70	600	1250	70	250	550
90	300	600	90	150	300
110	150	300	110	100	200

All lighter loads are admitted

Limits determined by	<b>Admitted stresses</b> (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			CONCENTRATED LOAD		
Distance between supports	Maximum admitted load		Distance between supports	Maximum admitted load	
[cm]	[kg/m <sup>2</sup> ]		[cm]	[kg/m]	
50	6400		50	1600	
70	3250		70	1150	
90	1950		90	850	
110	1300		110	700	

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.