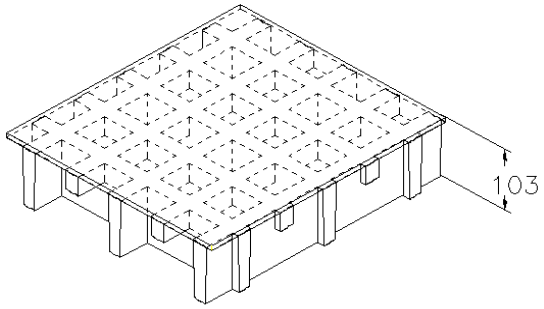
M.M. S.R.L.
Fiberglass Reinforced Polymer gratings and structures
Via Antonio Zanussi, 300/302
33100 Udine - Italy
Cap. Soc. EURO 100.000 i.v.
P.Iva / C.F. 00477620306
Reg. Imp. UD 00477620306
R.E.A. UD-138461
ph. +39.0432.522970
fax +39.0432.522253
info@mmgrigliati.it

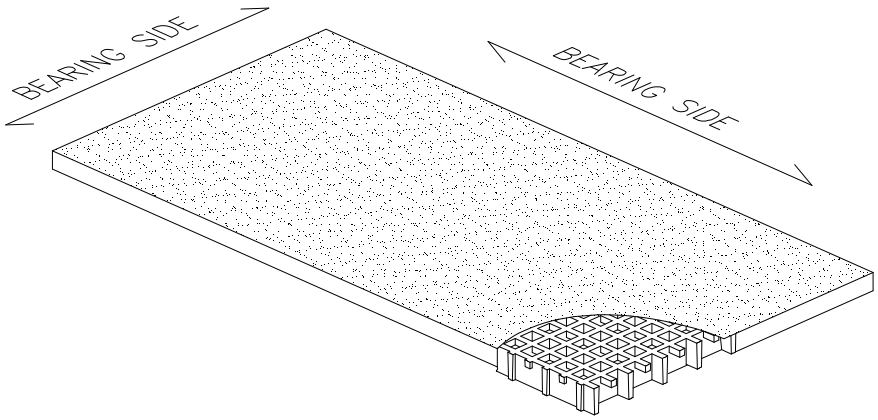
SCH 52/100C_IFR
06.05.2011 - Rev. 4

MOLDED GRATINGS

Mesh	**mm 52 x 52** main	
	mm 26 x 26 secondary	
Thickness	**mm 103**	
Cover thickness	**mm 3**	
Bearing bar thickness	**mm 10** upper part	
	mm 8 bottom part	
Color	**Grey RAL 7004** *indicative RAL reference*	

Raw materials	***Polyester Resin***
	Roving glass fiber + Mat and Woven Fabric type"E"
	Inorganic fillers without halogens

Resin type	***Modulus of elasticity***	***Ultimate stress***
IFR	15000 MPa	250 MPa

Standard panels		
mm 1005 x 1510		
Weight kg/m² 63		
tolerance	± mm 5 panel dimensions	
	± mm 2 height	

Surface	A	**Quartz**	***Antiskid level R13 V4 norm DIN 51130***

Reaction to fire	***Fire retardant***	**Spread ≤ 25 norm ASTM E84-98**
		Level B_{fl}-S1 norm EN 13501-1

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/m²)
	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

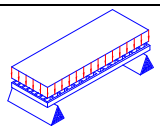
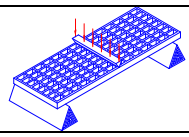
MAXIMUM SUGGESTED LOADS

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

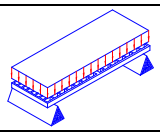
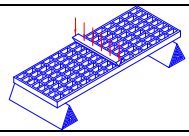
According to the standard DIN 24537-3 deviation due to the load may be no more than 1/200 of the land width and the difference in height between neighbouring joints between loaded and unloaded floor coverings may be no more than 4 mm.

DISTRIBUTED LOAD				**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/m²]			[cm]	[cm]	
80	24800	49600		80	12400	24800
100	12700	25400		100	7900	15850
120	7350	14700		120	5500	11000
140	4600	9250		140	4050	8100

All lighter loads are admitted

Limits determined by	**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			**CONCENTRATED LOAD**		
Distance between supports	Maximum admitted load		Distance between supports	Maximum admitted load	
[cm]	[kg/m²]		[cm]	[kg/m]	
80	23900		80	9550	
100	15300		100	7650	
120	10600		120	6350	
140	7800		140	5450	

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.