

**SCH 52/100\_IFR**

27.08.2018 - Rev. 5

**MOLDED GRATINGS**

<b>Mesh</b>	mm <b>52 x 52</b> main	
	mm <b>26 x 26</b> secondary	
<b>Clear span</b>	mm <b>19 x 19</b>	
<b>Height</b>	mm <b>100</b>	
<b>Bearing bar thickness</b>	mm <b>10</b> upper part	
	mm <b>8</b> bottom part	
<b>Color</b>	<b>Grey RAL 7004</b> <i>indicative RAL reference</i>	

<b>Raw materials</b>	<b>Polyester Resin</b>
	<b>Roving glass fiber type "E"</b>
	<b>Inorganic fillers without halogens</b>

<b>Resin type</b>	<b>Modulus of elasticity</b>	<b>Ultimate stress</b>
<b>IFR</b>	15000 MPa	325 MPa

<b>Standard panels</b>	
mm <b>1010 x 1495</b>	
<b>Weight kg/m² 56</b>	
<b>tolerance</b>	± mm 5 panel dimensions ± 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>

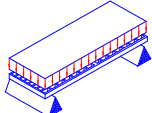
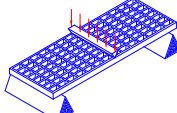
<b>Reaction to fire</b>	<b>Fire retardant</b>	<b>Spread ≤ 25 norm ASTM E84-98</b>
		<b>Level B<sub>f</sub>-S1 norm EN 13501-1</b>

<b>Ageing resistance</b>	<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</b> (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)
	<b>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</b>

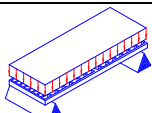
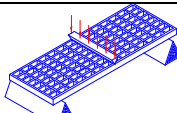
## LOADS

### MAXIMUM SUGGESTED LOADS

Type of support	<b>On the line of the two ends of the panel</b>
Limits determined by	<b>Deflection</b> (load sagging)
the <b>maximum deflection admitted</b> , 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 [cm]	Load with deflection equal to 1/200 [kg/m <sup>2</sup> ]		Load with deflection equal to 1/100	Distance between supports [cm]	Load with deflection equal to 1/200 [Kg/m]
	80	18700	37400	80	9350	18700
	100	9550	19150	100	5950	11950
	120	5500	11050	120	4150	8300
	140	3450	6950	140	3050	6100
All lighter loads are admitted						

Limits determined by	<b>Admitted stresses</b> (stress determined by the load)
the <b>maximum admitted stress</b> 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 [cm]	Maximum admitted load [kg/m <sup>2</sup> ]		Distance between supports [cm]	Maximum admitted load [kg/m]
	80	24750	80	9900	
	100	15800	100	7900	
	120	11000	120	6600	
	140	8050	140	5650	
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.