

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 38/38CH\_IFR 21.09.2017 - Rev. 0

## MOLDED GRATINGS

Mesh	mm 38 x 38		
Thickness	mm 42		
Cover thickness	mm 3		
Bearing bar thickness	mm 7 upper part		
	mm 5 bottom part		
Color	Grey RAL 7004 indicative RAL reference		

		Polyester Resin
Raw materials	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

Stand	dard panels	. 7
mm	1000 x 3660	
mm	1225 x 3660	
Weig	ht kg/m² 25	
tolerance	± mm 5 panel dimensions	
terenanoo	± mm 2 height	n and a second sec

Surface	СН	checkered	ł	Antiskid level R10 V4 norm DIN 51130	
Departien to fine	Fire retardantSpread ≤ 25 norm ASTM E84-98Level B <sub>ft</sub> -S1 norm EN 13501-1		<b>F</b> ire and and as t		Spread ≤ 25 norm ASTM E84-98
Reaction to fire			Level B <sub>ff</sub> -S1 norm EN 13501-1		
Ageing resistance	g alte	geing 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 <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 neighboring joints between loaded and unloaded floor coverings may be no more than 4 mm.

DISTRIBUTED LOAD		THE
Distance between	Load with	Load with
supports	deflection equal	deflection equal
	to 1/200	to 1/100
[cm]	[k	g/m²]
50	7900	15800
70	2850	5750
90	1350	2700
110	700	1450

Limits determined by

CONCENTRATED LOAD		
Distance between supports	Load with deflection equal to 1/200	Load with deflection equal to 1/100
[cm] 50	2450	/m] 4900
70 90	1250 750	2500 1500
110	500	1000

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	and the second s	CONCENTRATED LOAD	
Distance between supports	Maximum admitted load	Distance between supports	Maximum admitted load
[cm]	[kg/m²]	[cm]	[kg/m]
50	10400	50	2600
70	5300	70	1850
90	3200	90	1400
110	2100	110	1150

## 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 always be verified by contacting M.M. technical department.
- In case of heavy duty load compressive strength must be verified.