

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

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SCH 38/30CH_IFR 21.09.2017 - Rev. 0

MOLDED GRATINGS

Mesh	mm 38 x 38	
Thickness	mm 33	
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

Standard panel	
mm 1000 x 200	
mm 1000 x 403	0 8
mm 1220 x 360	0
Weight kg/m ² 2	
tolerance ± mm 5 par dimension ± mm 2 heig	

Surface	СН	checkered		Antiskid level R10 V4 norm DIN 51130
Departies to firm	Fire retardant		Spread ≤ 25 norm ASTM E84-98	
Reaction to fire			Level B _{ff} -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 neighboring joints between loaded and unloaded floor coverings may be no more than 4 mm.

DISTRIBUTED LOAD		
Distance between	Load with	Load with
supports	deflection equal	deflection equal
	to 1/200	to 1/100
[cm]	[k	g/m²]
50	4050	8100
70	1450	2950
90	650	1350
110	350	750

Limits determined by

	CONCENTRATED LOAD			
-	Distance between supports	Load with deflection equal to 1/200	Load with deflection equal to 1/100	
-	[cm] 50	1250	^{/m]} 2500	
ľ	70 90	600 350	1250 750	
	110	250	500	

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	6550	50	1600
70	3350	70	1150
90	2000	90	900
110	1350	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 always be verified by contacting M.M. technical department.

- In case of heavy duty load compressive strength must be verified.