

## GRATING

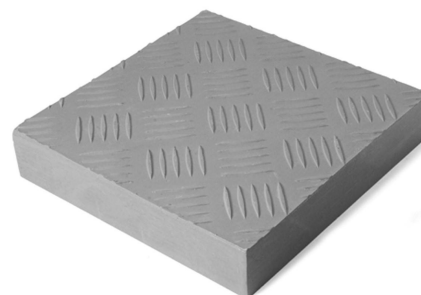
SCH38/25C IFR ST CH

TYPE: COVERED

GROUP

LINEA STANDARD

RESIN: Polyester self-extinguishing -- IFR  
REINFORCEMENT: Roving glass fiber type "E"  
PROCESS ADDITIVES AND REACTION PROMOTERS:  
Inorganic fillers without halogens  
PRODUCTION TECHNOLOGY:  
RTM resin transfer moulding  
NORM: DIN 24537-3



### MESH

|                |          |
|----------------|----------|
| MAIN MESH (M1) | mm 38x38 |
|----------------|----------|

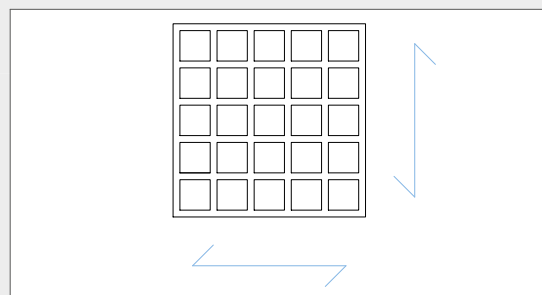
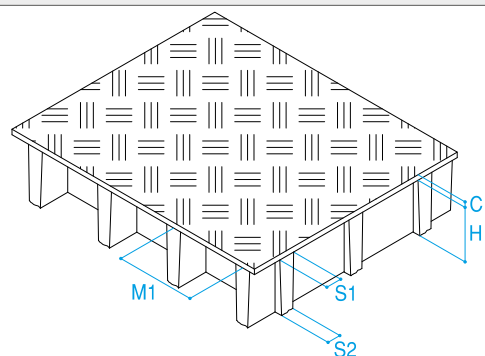
|                           |       |
|---------------------------|-------|
| HEIGHT (H, H+C1, H+C1+C2) | mm 28 |
|---------------------------|-------|

### BEARING BAR

|                  |      |
|------------------|------|
| UPPER PART (S1)  | mm 7 |
| BOTTOM PART (S2) | mm 5 |

### COVER THICKNESS

|                  |      |
|------------------|------|
| UPPER PART (C1)  | mm 3 |
| BOTTOM PART (C2) |      |



WEIGHT: 19 Kg/m<sup>2</sup>

PANEL'S BEARING DIRECTION: both

### STANDARD FINISHING

"Moulded covered drop style" finishing - Antiskid level R10 V4 norm DIN 51130

### STANDARD PANELS AND COLOURS (Indicative RAL reference)

1000x2000 GREY RAL 7004

1000x4038 GREY RAL 7004

1220x3660 GREY RAL 7004

TOLERANCE  $\pm 5$  mm panel dimensions,  $\pm 2/-2$  mm height,  $\pm 6\%$  weight.

All finishes different from the standard one (meniscus for gratings with open surface, quartz and chequered for gratings with covered surface) involve a surface processing of the grating that could result in a thickness and weight variation exceeding the indicated tolerances, while maintaining unchanged mechanical characteristics.

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### ELECTRICAL PROPERTIES

|                                                                       |                                                                           |                             |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------|
| Surface resistivity (Rs), transversal electric resistance (Rt)        | norm EN 61340-2.3 par. 8.1 e 8.2 con rif. a ISO 1853, IEC 60167, HD568 S1 | EXCELLENT INSULATOR         |
| Resistivity and safety electric resistance to ground human body model | norm IEC 61340-4-5 – CEI 64-4/8/6 Par. 6.12.5 – IEC 60167 – HD 568 S1     | EXCELLENT INSULATOR         |
| Dielectric strenght                                                   | norm ASTM D 149-97a                                                       | VERY LOW CURRENT ABSORPTION |

### 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

### REACTION TO FIRE - FLOORING

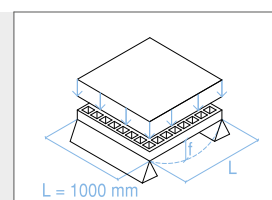
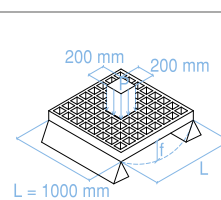
|                     |                 |                |
|---------------------|-----------------|----------------|
| B <sub>fl</sub> -s1 | norm EN 13501-1 | FIRE RETARDANT |
|---------------------|-----------------|----------------|

### SMOKE DENSITY AND TOXICITY

|    |                     |  |
|----|---------------------|--|
| F1 | norm AFNOR NF16-101 |  |
|----|---------------------|--|

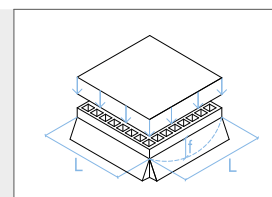
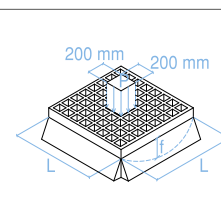
#### 2 SIDES BEARING (L=1000 mm)

| L (mm)    | 300 | 400  | 500  | 600  | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 |
|-----------|-----|------|------|------|-----|-----|-----|------|------|------|------|------|
| f (mm)    | 1,5 | 2,0  | 2,5  | 3,0  | 3,5 | 4,0 | 4,5 | 5,0  | 5,5  | 6,0  | 6,5  | 7,0  |
| G (Kg)    |     | 475  | 350  | 280  | 230 | 190 | 160 | 140  | 120  |      |      |      |
| D (Kg/m²) |     | 3500 | 1800 | 1050 | 660 | 440 | 315 | 230  | 175  |      |      |      |



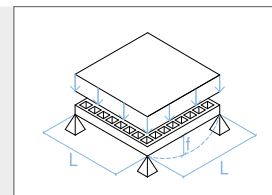
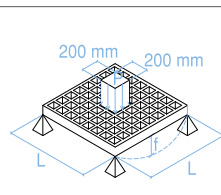
#### 4 SIDES BEARING (equal sides grating)

| L (mm)    | 300 | 400  | 500  | 600  | 700  | 800  | 900 | 1000 | 1100 | 1200 | 1300 | 1400 |
|-----------|-----|------|------|------|------|------|-----|------|------|------|------|------|
| f (mm)    | 1,5 | 2,0  | 2,5  | 3,0  | 3,5  | 4,0  | 4,5 | 5,0  | 5,5  | 6,0  | 6,5  | 7,0  |
| G (Kg)    |     | 620  | 450  | 355  | 295  | 255  | 220 | 195  | 180  | 160  | 150  | 140  |
| D (Kg/m²) |     | 8000 | 4100 | 2400 | 1500 | 1000 | 700 | 510  | 385  | 295  | 235  | 190  |



#### 4-POINT BEARING (equal sides grating)

| L (mm)    | 300  | 400  | 500  | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 |
|-----------|------|------|------|-----|-----|-----|-----|------|------|------|------|------|
| f (mm)    | 1,5  | 2,0  | 2,5  | 3,0 | 3,5 | 4,0 | 4,5 | 5,0  | 5,5  | 6,0  | 6,5  | 7,0  |
| G (Kg)    | 415  | 265  | 195  | 155 | 130 | 110 | 93  |      |      |      |      |      |
| D (Kg/m²) | 5900 | 2300 | 1150 | 610 | 375 | 245 | 170 |      |      |      |      |      |



**G** Concentrated load      **D** Distributed load

The previous tables report the accidental loads that, to vary the distance between supports (L), determine one of the following conditions: deflection equal to 1/200 of the distance between supports (L); reaching of the resistance limit (USL).

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

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.