



# PULTRUDED PROFILES

## Profile type "G" SHAPED (53G1505I)

|                        |                                  |  |
|------------------------|----------------------------------|--|
| <b>Height</b>          | mm 150                           |  |
| <b>Width</b>           | mm 5 - 10                        |  |
| <b>Standard Color</b>  | Yellow RAL 1018<br>Grey RAL 7035 |  |
| <b>Standard Length</b> | mm 6000 (± mm 10)                |  |

| $J_x$ (mm <sup>4</sup> ) | $J_y$ (mm <sup>4</sup> ) | Area (mm <sup>2</sup> ) | $\sigma_{amm}$ (kg/cm <sup>2</sup> ) | $\tau_{amm}$ (kg/cm <sup>2</sup> ) | Weight (kg/m) |
|--------------------------|--------------------------|-------------------------|--------------------------------------|------------------------------------|---------------|
| 5.686                    | 1.440.519                | 789,48                  | 480                                  | 100                                | 1,30          |

|  |       |                       |   |       |                      |
|--|-------|-----------------------|---|-------|----------------------|
| <b>Fibreglass content (%)</b>                      | 60    | ASTM D 792 / UNI 7092 | <b>Elongation to break (%)</b>              | 1.5   | ASTM D638 / UNI 5819 |
| <b>Water absorption (%)</b>                        | 0.4   | ISO 1172              | <b>Flexural strength (MPa)</b>              | 350   | ASTM D790 / UNI 7219 |
| <b>Barcol hardness</b>                             | 50    | ASTM 2583             | <b>Flexural modulus (MPa)</b>               | 14000 | ASTM D790 / UNI 7219 |
| <b>Impact strength (Charpy) (kJ/m<sup>2</sup>)</b> | 180   | ASTM D 256 / UNI 6062 | <b>Full- Bending flexural modulus (MPa)</b> | -     | -                    |
| <b>Tensile strength (MPa)</b>                      | 400   | ASTM D638 / UNI 5819  | <b>Compression strength (MPa)</b>           | 220   | ASTM D695 / UNI 4279 |
| <b>Tensile modulus (MPa)</b>                       | 26000 | ASTM D638 / UNI 5819  | <b>Compression modulus (MPa)</b>            | 20000 | ASTM D695 / UNI 4279 |

Tolerances on the above values ± 10 % - UV protection on the surface – dimension tolerances according to ASTM D3917 norm – Surface according to ASTM D 2563 norm level II

The information specified in the above table is to be considered as an average value referred to tests carried out accordingly to the glass fiber direction and are meant as reference values for standard material. Even if they are not to be considered as guaranteed characteristics they are based on our experience and are supplied in good faith

|  |   |
|--|---|
| <b>Raw materials</b>   | <b>Isophthalic polyester resin</b>  |
|  | <b>Roving glass fiber type "E" – Continuous strand mat – Polyester surface veil</b> |
| <i>For other colors, resins or reinforcements contact M.M. S.r.l. directly</i> |   |

|                          |   |
|--------------------------|---|
| <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 (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>)</b> |
|                          | <b>After the exposure to heat, cold and humidity cycles according to UNI EN ISO 9142/04 norm (n° 21 cycles type D3) there are no evidence of defects</b>  |



**M.M. S.r.l.**

Via A. Zanussi 300 / 302, 33100 Udine (Italy)

Tel. +39 0432.602218 / 522970 - Fax. +39 0432.522253

[info@mmgrigliati.it](mailto:info@mmgrigliati.it) - [www.mmgrigliati.it](http://www.mmgrigliati.it)

**53G1505I**

07.04.2008

Rev. 1

COMPANY  
WITH QUALITY MANAGEMENT  
SYSTEM CERTIFIED BY DNV  
**ISO 9001:2000**