



PULTRUDED PROFILES

Profile type "C" HANDRAIL (53C605051)

Height	mm 60	
Width	mm 50	
Thickness 1	mm 5	
Thickness 2	mm 5	
Standard Color	Yellow RAL 1018 Grey RAL 7035	
Standard Length	mm 6000 (± mm 10)	

J_x (mm⁴)	J_y (mm⁴)	Area (mm²)	σ_{amm} (kg/cm²)	τ_{amm} (kg/cm²)	Weight (kg/m)
181.848	413.772	728,75	480	100	1,27

Fibreglass content (%)	60	ASTM D 792 / UNI 7092	Elongation to break (%)	1.5	ASTM D638 / UNI 5819
Water absorption (%)	0.4	ISO 1172	Flexural strength (MPa)	350	ASTM D790 / UNI 7219
Barcol hardness	50	ASTM 2583	Flexural modulus (MPa)	14000	ASTM D790 / UNI 7219
Impact strength (Charpy) (kJ/m²)	180	ASTM D 256 / UNI 6062	Full- Bending flexural modulus (MPa)	-	-
Tensile strength (MPa)	400	ASTM D638 / UNI 5819	Compression strength (MPa)	220	ASTM D695 / UNI 4279
Tensile modulus (MPa)	26000	ASTM D638 / UNI 5819	Compression modulus (MPa)	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 according 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.

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

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 are no evidence of defects



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WITH QUALITY MANAGEMENT
SYSTEM CERTIFIED BY DNV
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