

MATERIAL'S FEATURES GREENWOOD

Mechanical properties

Flexural elastic modulus	UNI EN ISO 178:2003	3300 Mpa
Flexural strength	UNI EN ISO 178:2003	25 Mpa
Elastic tensile modulus	EN ISO 527:1996	3300 Mpa
Tensile strength	EN ISO 527:1996	12 Mpa
Elongation at break	EN ISO 527:1996	0,78 %
Charpy impact resistance	EN ISO 179-1:2007	5,65 KJ/m ²
Coefficient of linear thermal expansion longitudinal (from -10 °C to 45 °C)	TMA ASTM E 831/2005	33,3 x10 ⁻⁶ m/(m°C)

Reaction to fire

Reaction to fire (critical flux)	UNI EN 9239-1:2006	2,24 kW/ m ²
----------------------------------	--------------------	-------------------------

Chemical and biological features

Mold/mildew resistance	ASTM G21:2009	Fungal growth: no visible growth
------------------------	---------------	----------------------------------

Surface characteristics

Slip resistance, USRV coefficient	UNI ENV 12633:2006	> 52
Friction coefficient	B.C.R.A. Rep. CEC. 6/81	> 0.4



The values shown are indicative and not binding. Test reports available upon request.
 The natural aging of the material and temperature variations may cause deviations from the values indicated above.
 The product is protected by a warranty in line with legal requirements: for more information see the SPECS on www.woodn.com

MATERIAL'S FEATURES WOODN

Mechanical properties

Elasticity (bending)	UNI EN ISO 178	@23 °C @65 °C
Yield strenght (flexural)	UNI EN ISO 178	@23 °C @65 °C
Water absorbption and humidity	ASTM D1037	absorption 0,07%
Dynamic- Mechanical analysis of transition temperature	ASTM D4065/95	78.8 °C
Linear thermal expansion coefficient (from -10 °C to 70 °C)	TMA ASTM E 831/2006	longitudinal $46,9 \times 10^{-6} \text{ m}/(\text{m}^{\circ}\text{C})$ trasversal $48 \times 10^{-6} \text{ m}/(\text{m}^{\circ}\text{C})$
Tensile strenght and tensile strenght after accelerated weathering (exposure to xenon lights)	ASTM D638-10 (tensile test) ASTM G155-050	difference after 2 months of exposure ~5,21% difference after 3 months of exposure ~6,9% (meet the requirements to comply with Miami Dade and Florida Building Code 2014)

Reaction to fire

Flammability	UL94 AS 3959-2009	V-0 Class BAL-29
Flame spread index Smoke developed index	ASTM E84	Class A
Ignition temperature	ASTM D1929	476 °C
Average critical radiant flux of floor	AS ISO 9239 ASTM E648	$\geq 11 \text{ kW}/\text{m}^2$ $> 1,03 \text{ W}/\text{cm}^2$ (class I as per NFPA 101)
Ignitability, flame propagation, heat release and smoke release	AS/NZS 1530.3:1999	Ignitability (0-20) = 8 Spread of Flame (0-10) = 0 Heat Evolved (0-10) = 0 Smoke Developed (0-10) = 7

Chemical and biological features

Evaluation of the action of microorganisms (scale from 0 to 5)	EN ISO 846:97	Test result: 1
Heavy metal content (Pb, Ge, Cr, Hg)	GB18584-2001 GB18580-2001	< 0,5 ppm
Formaldehyde emission	EN 717-2:1994	0,1 mg HCHO/(m ² h)



The values shown are indicative and not binding. Test reports available upon request.
The natural aging of the material and temperature variations may cause deviations from the values indicated above.
The product is protected by a warranty in line with legal requirements: for more information see the SPECS on www.woodn.com