



# AFC Product Lines

Carbon (Stone+, Groove+, Lines+, Reflect+) · Lines+ · Sky · Nature (Matte & Glossy)

Technical data sheet.

All tests in accordance with EN 12467.

	Unit of measure	Value
<b>STANDARD DIMENSIONS</b>		
Length	mm	2500 3050
Width	mm	1250
Thickness	mm	All: 8, 10 Carbon <sup>Groove+</sup> : 10
Tolerances on nominal dimensions	Classification according to EN 12467:2018	Level 1
- on length	mm	± 2
- on width	mm	± 1
- on straightness of edges	%	0,1
- on squareness of edges	mm/m	2
- on thickness for smooth sheets	mm	± 0,5
Nominal weight	kg/m <sup>2</sup>	14,4 (t=8mm) 18,0 (t=10mm)
<b>PHYSICAL PROPERTIES</b>		
Density (dry)	kg/m <sup>3</sup>	1600 ± 50
<b>MECHANICAL PROPERTIES</b>		
E modulus of elasticity (dry)		
- longitudinal	GPa	14
- transversal	GPa	12
E modulus of elasticity (wet)		
- longitudinal	GPa	11
- transversal	GPa	9
Bending strength (wet)	MPa	≥ 24
Resistance (Charpy test)	According to EN 179-1:2010	
- longitudinal	kJ/m <sup>2</sup>	4,3
- transversal	kJ/m <sup>2</sup>	3,1

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<b>HYGROMETRICAL PROPERTIES</b>		
Natural humidity	%	10 ÷ 15
Max water absorption (wet over dry)	%	≤ 25
Moisture movement – Relative humidity change from 30% to 90%		
- longitudinal	mm/m	0,7
- transversal	mm/m	0,8
<b>THERMAL AND WATER VAPOUR PROPERTIES (untreated boards)</b>		
Vapor resistance factor, $\mu$ – according to EN 12572:2016	---	49
Thermal conductivity – according to EN 12664:2002	W/mK	0,42
Thermal expansion coefficient – according to EN 10545-8:2014		
- longitudinal	1/°C	1,71•10 <sup>-6</sup>
- transversal	1/°C	0,58•10 <sup>-6</sup>
<b>OTHER PROPERTIES</b>		
Superior calorific power	MJ/kg	≤ 1,3
Fire rating class	According to EN 13501-1	A2 s1 d0
Fire rating class	ASTM E136 & CAN/ULC S114	Pass
Freeze-thaw performance		RL ≥ 0,75
Durability classification	According to EN 12467:2018	category A
Strength classification	According to EN 12467:2018	class 5
CE marked product according to	---	EN12467

If not otherwise specified, the tests are in accordance with EN 12467.