

TECHNICAL DATASHEET

STENI Nature FM

MATERIAL DATA (23 °C RF 45-60 %):		Value	Unit	Reference
Thickness		5,5 ± 0,6	mm	STENI quality system
Weight		11,0 ± 10 %	kg/m ²	STENI quality system
Density		1960 ± 3 %	kg/m ³	STENI quality system
Length and width		± 2	mm	STENI quality system
Edge straightness		± 1	mm	STENI quality system
Drilling position tolerance		± 5	mm	STENI quality system
Diagonal deviation		≤ 3	mm	STENI quality system
SURFACE:				
Front side of panel: (Untreated natural aggregate)	Aggregate size	1,2 – 1,8	mm	STENI quality system
Front side quality: Uniform surface expression without craters and lack of aggregate)	<i>Product for outside use;</i> (5 m distance 90° viewing with normal daylight without sun) <i>Product for inside use;</i> (3 m distance 90° viewing with normal illumination)	Not visible		STENI quality system
Edge of panel:	<i>Untreated;</i> (small defects adjoining to surface)	Accepted		STENI quality system
Back side of panel is untreated. Minor defects.		Accepted		STENI quality system
PHYSICAL DATA:				
Flexural strength		≥ 30	N/mm ²	CSTB method
Elasticity module		≥ 5000	N/mm ²	EN ISO 178
Impact strength		≥ 17	kJ/m ²	ISO 172-82
Tensile strength (length and width direction)		≥ 13	N/mm ²	ISO/R 527-66
Critical radius		< 3,5	m	
Resistance to strong impact	Maximum height of ball drop	3,5	m	NT Build 066
Resistance of pull through panel (drilled hole d=5,5mm) Steni fixing screw (4,0 * 28/ 33)		1,0	kN	EN 320:1993
Emission After 28 days (23 °C 50 % RH)	TVOC Formaldehyde Σ VOC carcinogenic	540 3 <1	µg/(m ² h)	EN ISO 16000-9:2006
Thermal conductivity λ _p		0,55	W/(m K)	SINTEF NBI
THERMAL PROPERTIES:				
Dimensional stability. Cumulative change max		0,04	%	NS EN 438-2:2005, part 18
Temperature expansion (-20 °C to +65 °C)		0,021- 0,026	mm/(m K)	SINTEF NBI
Water vapor resistance		30 · 10 ¹⁰	(m ² sPa)/kg	ASTM E 96-66
Water vapor resistance S _d		58,5	m	SINTEF NBI
Permeability of water vapour		33 · 10 ⁻¹³	kg/(m ² s Pa)	ASTM E 96-66
Water absorption 1 m deep: (25 °C 100% RH)	After 24 hours After 28 days	ca. 0,5 ca. 2,0	%	ASTM D-570
Frost resistance		> 300	Cycle	SINTEF NBI
FIRE RESISTANCE:				
Used as ventilated facade panel (surface)		B-s1,d0	Euro Class	EN 13501-1
ENVIRONMENTAL:				
Global warming		14	CO ₂ ekv/m ²	SINTEF NEPD 0097E rev 1
Total energy		141	MJ/m ²	SINTEF NEPD 0097E rev 1