

# TECHNICAL DATASHEET

## STENI Vision

MATERIAL DATA (23 °C RF 45-60 %):		Value	Unit	Reference
Thickness		6,0 ± 0,6	mm	STENI quality system
Weight		12,0 ± 5 %	kg/m <sup>2</sup>	STENI quality system
Density		1960 ± 3 %	kg/m <sup>3</sup>	STENI quality system
Length and width		± 2	mm	STENI quality system
Edge straightness		± 1	mm	STENI quality system
Drilling position tolerance		± 3	mm	STENI quality system
Diagonal deviation		≤ 3	mm	STENI quality system
<b>SURFACE:</b>				
Front side of panel: (Digital print coated with electron beam cured acrylic with gloss)		M (Matt) HM (Half Matt) HG (High Gloss)	1-4 6-20 60-75	BYK 60° ISO 6504, ASTM standard
Front side quality of coat: (uniform surface expression free from surface defects such as stars, blisters, craters, pinholes and scratches)		<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	EN 12206-1:2004, 4.5.2
The coating shall be free from defects extending down to the substrate.			Not accepted	EN 12206-1:2004, 4.5.2
Edge of panel:	<i>Untreated;</i> (small defects adjoining to surface) <i>Treated;</i> (small defects without coating)		Accepted	STENI quality system
Back side of panel is untreated and partly calibrated by sanding. Minor defects.			Accepted	STENI quality system
<b>PHYSICAL DATA:</b>				
Flexural strength		≥ 30	N/mm <sup>2</sup>	CSTB method
Elasticity module		≥ 5000	N/mm <sup>2</sup>	EN ISO 178
Impact strength		≥ 20	kJ/m <sup>2</sup>	ISO 172-82
Tensile strength (length and width direction)		≥ 15	N/mm <sup>2</sup>	ISO/R 527-66
Critical radius		< 3,5	m	
Hard/soft body impact		Category 1		EAD-090062
Surface hardness:	Ball impression 250 N Permanent impression	0,14 0,03	mm	NT Build 059
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 ΣVOC carcinogenic	270 1 <1	µg/(m <sup>2</sup> h)	EN ISO 16000-9:2006
Thermal conductivity λ <sub>p</sub>		0,55	W/(m K)	SINTEF NBI
<b>THERMAL PROPERTIES:</b>				
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 <sup>10</sup>	(m <sup>2</sup> sPa)/kg	ASTM E 96-66
Water vapor resistance S <sub>d</sub>		58,5	M	SINTEF NBI
Permeability of water vapour		33 · 10 <sup>-13</sup>	kg/(m <sup>2</sup> 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
<b>FIRE RESISTANCE:</b>				
Used as ventilated facade panel (rain screen)		B-s1,d0	Euro Class	EN 13501-1
<b>ENVIRONMENTAL:</b>				
Global warming		17	CO <sub>2</sub> ekv/m <sup>2</sup>	SINTEF NEPD 0097E rev 1
Total energy		179	MJ/m <sup>2</sup>	SINTEF NEPD 0097E rev 1