

TECHNICAL DATASHEET

STENI Protego

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 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		± 3	mm	STENI quality system
Diagonal deviation		≤ 3	mm	STENI quality system
SURFACE:				
Front side of panel: (electron beam cured acrylic with gloss)	HM (Half Matt)	6-20	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)	5 m distance 90° viewing with normal daylight without sun	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
Color-deviation between colour batches (Deviation from master)		3	ΔE	CIE 15:2004
Color-deviation within one colour batch		0,5	ΔE	CIE 15:2004
PHYSICAL DATA:				
Flexural strength		≥ 30	N/mm ²	CSTB method
Elasticity module		≥ 5000	N/mm ²	CSTB method
Impact strength		≥ 20	kJ/m ²	ISO 172-82
Tensile strength (length and width direction)		≥ 15	N/mm ²	ISO/R 527-66
Surface hardness:	Ball impression 250 N Permanent impression	0,14 0,03	mm	NT Build 059
Resistance of pull through panel (drilled hole 5,5mm) Steni fixing screw (4,8 * 51)		1,0	kN	EN 320:1993
Emission After 28 days (23 °C 50 % RH)	TVOC Formaldehyde ΣVOC carcinogenic	270 1 <1	μg/(m ² h)	EN ISO 16000-9:2006
Dimensional stability. Cumulative change max		0,04	%	NS EN 438-2:2005, part 18
THERMAL/MOISTURE PROPERTIES:				
Thermal conductivity λ _p		0,55	W/(m K)	SINTEF NBI
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 hour After 28 days	ca. 0,5 ca. 2,0	%	ASTM D-570
Frost resistance		> 300	Cycle	SINTEF NBI
FIRE RESISTANCE:				
Used as ventilated roof panel (rain screen)		B _{ROOF} (t2)	Euro Class	EN 13501-5:2005+A1:2009
ENVIRONMENTAL:				
Global warming potential		23,1	CO ₂ -eq/m ²	EDP-60640 (EN 15804+A2)
Total energy use		454	MJ/m ²	EDP-60640 (EN 15804+A2)