TECHNICAL DATASHEET

LASTING EXPRESSIONS

STENI Colour

MATERIAL DATA (23 °C RF 45-60 %):		Value	Unit	Reference
Thickness		6,0 ± 0,6	mm	STENI quality system
Weight		12,0 ± 5 %	kg/m²	STENI quality system
Density		1960 ± 3 %	kg/m³	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)	M (Matt) HM (Half Matt) HG (High Gloss)	1-4 10-35 65-75	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)	*Product for outside use;* (5 m distance 90° viewing with normal daylight without sun) *Product for inside use;* (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:	*Untreated;* (small defects adjoining to surface) *Treated;* (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 batches		3	ΔE	CIE 15:2004
Color-deviation within one batch		0,5	ΔE	CIE 15:2004
PHYSICAL DATA:				
Flexural strength		≥ 40	N/mm^2	CSTB method
Elasticity module		≥ 5000	N/mm^2	EN ISO 178
Impact strength		≥ 20	kJ/m^2	ISO 172-82
Tensile strength (length and width direction)		≥ 15	N/mm^2	ISO/R 527-66
Critical radius		< 3,5	m	
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 (TVOC): (23 °C 25 % RH)	After 3 days After 28 days	140 50	$\mu g/(m^2\ h)$	prEN 13419-2
Thermal conductivity λ_D		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		$30 \cdot 10^{10}$	$(m^2 s Pa)/kg$	ASTM E 96-66
Water vapor resistance S_d		58,5	M	SINTEF NBI
Permeability of water vapour		$33 \cdot 10^{-13}$	$kg/(m^2 s\ Pa)$	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 facade panel (rain screen)		B-s1,d0	Euro Class	EN 13501-1
ENVIRONMENTAL:				
Global warming		17	CO_2 ekv/m^2	SINTEF NEPD 0097E rev 1
Total energy		179	MJ/m^2	SINTEF NEPD 0097E rev 1