# 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 |
| Angular deviation on L and U elements (100mm from corner) | | ± 3° | deg | STENI quality system |
| **SURFACE:** | | | | |
| Front side of panel: (electron beam cured acrylic with gloss) | M (Matt)<br>HM (Half Matt)<br>HG (High Gloss) | 1-4<br>6-20<br>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) | *Product for outside use;*<br>(5 m distance 90° viewing with normal daylight without sun)<br>*Product for inside use;*<br>(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;*<br>(small defects adjoining to surface)<br>*Treated;*<br>(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 | $N/mm^2$ | 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<br>Permanent impression | 0,14<br>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<br>Formaldehyde<br>∑VOC carcinogenic | 270<br>1<br><1 | µg/(m² h) | EN ISO 16000-9:2006 |
| Thermal conductivity $\lambda_p$ | | 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 | | $30 \cdot 10^{10}$ | $(m^2sPa)/kg$ | ASTM E 96-66 |
| Water vapor resistance $S_d$ | | 58,5 | M | SINTEF NBI |
| Permeability of water vapour | | $33 \cdot 10^{-13}$ | kg/(m²s Pa) | ASTM E 96-66 |
| Water absorption 1 m deep: (25 ºC 100% RH) | After 24 hours<br>After 28 days | ca. 0,5<br>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 potential | | 18,7 | $CO_2$-eq/m² | NEDP-2581-1309-EN |
| Total energy use | | 435 | MJ/m² | NEDP-2581-1309-EN |

This TDS replaces version STENI_20102_EN_0223