Panel Face: a³ CeramicSteel – 0.56 mm of steel enameled in porcelain with one finished side 0.84 mm total thickness
Panel Core: Cement Bonded Particle Board – 8 mm of cement bonded particle board
Panel Back: Galvanized Steel – 0.4 mm thick cold rolled galvanized steel
Adhesive: Hot Melt Polyurethane
Edge Treatment: None

Panel Property | Testing Standard | Unit | Value
--- | --- | --- | ---
Panel thickness | EN 438-2:5 | mm | 9.4 ± 0.4
Length tolerance | EN 438-2:6 | mm | 0.1%
Width tolerance | EN 438-2:6 | mm | 0.1%
Squareness | Measured difference in diagonals on a 3050 x 1200 mm panel | mm | ± 3
Minimal edge covering (framing system) | | mm | 6
Flatness | EN ISO 28722 (§5.7) | | Max. 0.15% deflection on the largest diagonal or to the diameter of the panel
Weight | kg/m² | 18
Density | g/cm³ | 2.0

a³ CeramicSteel Surface | Testing Standard | Unit | Value
--- | --- | --- | ---
Gloss – Type G | ISO 2813 ASTM D 523 | Gloss units (GU) | 65 ± 10 GU (20°)
Gloss – Type M | ISO 2813 ASTM D 523 | Gloss units (GU) | 60 ± 10 GU (60°)
Color tolerance | ISO 7724 ASTM D 2244-02 | ΔE<sup>94</sup> | ΔE<sup>94</sup> ≤ 1.5 (compared to reference sample)
Reflectance | ISO 7724 ASTM D 2244-02 | % | Y-Value up to 93%, depending on color
Orange peel | ISO 2813 ASTM D 523 | | Short wave (SW) ≤ 55
| | | Long wave (LW) ≤ 25
| | | Distinctness of image (DOI) ≥ 60
Defect appearance | EN 438-2:4 | | Free from defects liable to change the general appearance of the panel
Mohs hardness | EN 15771 | | Min. 5
Scratch resistance | ISO 15695 | N | Min. 7
Pencil hardness | ASTM D-3363 | | > 9H
Wear resistance | ASTM C501 | g | Max. 0.1 (abrasive S33 1 kg/1000 rev)
Impact | ISO 4532 | | No damage over 2 mm after 24 h (20 N load)
Coating adhesion | EN 10209 Annex D | | Min. class 2
Porosity | EN14430 | m³/m² | < 10 (1800 V)
Cold acid resistance | ISO 28706-1-9 | | Min. class A
Boiling acid resistance | ISO 28706-2-10 | g/m² | Max. 18.5
UV resistance | ISO 4892-3 (cycle 2) | ΔE<sup>94</sup> | ΔE<sup>94</sup> ≤ 0.5 (2000 h)
Color stability | ASTM C 538 | ΔE<sup>94</sup> | ΔE<sup>94</sup> ≤ 5 (24 h)
Graffit resistance | EN ISO 28722 (§7) | | No color or gloss change after cleaning

This panel conforms to the following internationally recognized standards:
ISO 28722, Vitreous and porcelain enamels – Characteristics of enamel coatings applied to steel panels intended for architecture
European Enamel Authority, EEA 7.13, 7.14 – Quality requirement for architectural panels
European Normalization, EN 14431 – Vitreous and porcelain enamels – Characteristics of the enamel coatings applied to steel panels intended for architecture
Porcelain Enamel Institute, PEI 1001 – Specifications for architectural porcelain enamel

polyvision.com
©2017 PolyVision Corporation. All rights reserved. Trademarks used herein are the property of PolyVision Corporation or of their respective owner. PolyVision Corporation reserves the right to make changes in product design, construction, or detail, and to discontinue any product or material without notice.
08-14-17 ENG