

Aqua Wall

Technical Data Sheet



Performance Characteristics

The following data is verified from independent laboratory testing. Full test reports are available upon request.

Surface Durability & Appearance

Test / Characteristic	Test Method	Key Result / Finding
Fungi Resistance	ISO 846	Grade 0 No growth detected after 28 days of exposure to five types of fungi. Ideal for wet areas.
Stain Resistance	ISO 26987	Index 0 - Unaffected Unaffected by 12 common household chemicals (bleach, acids, alcohol, oils) after 2 hours of contact.
Scratch Resistance	ISO 1518-1	Pass $\geq 20N$ (~2040g) Visible scratch on the surface, but no penetration to the substrate. High resistance to scratching.
Micro-Scratch Resistance	EN 16094	Classification MSR-B2 Indicates "only few scratches" were visible after 160 abrasive rubs. (Tested on Matt finish)
Colour Fastness to Light	ISO 105-B02	Grade 6 Excellent performance, ensuring the panel color will not fade when exposed to artificial light. (Tested on both Glossy & Matt finishes)
Shore D Hardness	ISO 868	≥ 55 A hard and durable surface, resistant to indentation.

Water & Moisture Resistance

Test / Characteristic	Test Method	Key Result / Finding
Water Absorption	ISO 62	Avg $\leq 0.7\%$ Extremely low water absorption after 24 hours, making the panel core virtually waterproof.
Thickness Swelling	ISO 24336	Avg. $\leq 0.7\%$ Minimal swelling after 24 hours of partial water immersion, confirming excellent water resistance.
Water Tightness (Joint)	Manufacturer's Protocol, Verified by Intertek	Pass No water leakage was observed through the T&G joint after 24 hours of continuous water exposure.
Dimensional Stability	ISO 23999	Avg. Shrinkage (Length): $\leq 0.15\%$ Excellent stability with negligible shrinkage after exposure to a temperature of 60°C for 6 hours.
Peel Resistance	ISO 24345	Avg. $\geq 170N/50mm$ Strong layer adhesion, preventing delamination over time. (Tested on Glossy finish)

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Fire Safety (CE Certified)

Test / Characteristic	Test Method	Key Result / Finding
Reaction to Fire	EN 13501-1	Class E Officially certified classification, confirming suitability for interior wall applications under European standards.
Burning Droplets	EN 13501-1	Pass The material does not produce burning droplets when exposed to flame.

Mechanical & Physical Properties

Test / Characteristic	Test Method	Key Result / Finding
Flexural Properties	ISO 178	Stress: ≥ 12 Mpa / Modulus: ≥ 1500 MPa High flexural strength and modulus, indicating the panels are strong, rigid, and resistant to breaking or bending under load.
Dimensions & Flatness	ISO 24337, ISO 10582	Pass Manufactured to tight tolerances for a seamless installation. Avg. Thickness 6 ± 0.2 mm; Max Length Dev. ≤ 3 mm; Squareness (q_{max}) ≤ 3.0 mm ; Straightness (S_{max}) ≤ 0.3 mm ; Max Openings ≤ 0.2 mm .
Density	ISO 1183-1	0.85 ± 0.10 g/cm³ Confirms a solid, high-quality, and robust core composition.

Health, Safety & Chemical Compliance

Test / Characteristic	Test Method	Key Result / Finding
Release of Heavy Metals	EN 12149	< LOQ (Below Limit of Quantification) Release of Antimony, Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, and Selenium are all below detectable limits and meet EN 15102 safety standards.
Release of VCM	EN 12149	< LOQ (Below Limit of Quantification) The release of vinyl chloride monomer is below detectable limits, meeting EN 15102 safety standards.
SVHC & RoHS Compliance	REACH & RoHS Screening	Pass / Not Detected The product is compliant with EU REACH and RoHS directives. All 242+ SVHC and 10 RoHS restricted substances were Not Detected (ND) above their respective reporting limits.
VOC Emissions	UL 2818	GREENGUARD Gold Certified Certified for low chemical emissions, ensuring healthier indoor air quality. Certificate Number: 351127-420.

This document is issued in good faith and is true to the best of our knowledge based on independent testing. It is valid for products manufactured from July 2025 onward, unless otherwise revised. The application, use, and processing of our products are beyond our control and therefore your own responsibility.