Wetwall™ Alloy Panel Technical datasheet

1. Material description and composition

Wetwall™ Alloy - Aluminium Composite shower panels are available in different variations & sizes with aluminium trims, that can be used in combination for wall lining a wide variety of kitchen design layouts.

The 4mm thick panel system is uniquely manufactured using a composite substrate.

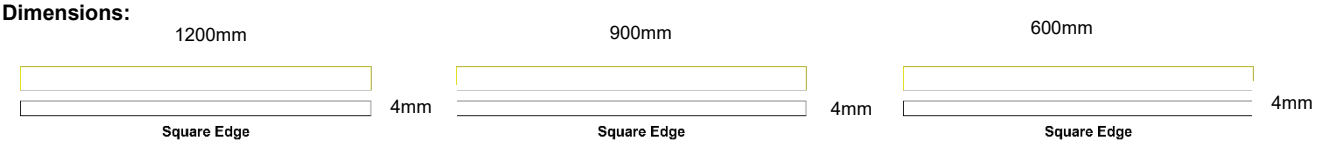
The panels are characterised by excellent rigidity and toughness but are light weight.
This material evidence's good dimensional stability and is not susceptible to decay, rotting and other degeneration processes.

2. Types

Finishes: Various Designs – Refer to product brochure

Textures: Matt, Gloss, and brushed Aluminium

Dimensions:



3. Technical data

DIMENSIONAL PROPERTIES		STRUCTURE	
Dimensions	Square edge 2440mm x 1200mm 2440mm x 900mm 2440mm x 600mm	**1**	**Décor side/Front face:** Aluminium sheet 0.3mm ± 0.05 mm
Panel thickness	4 mm		
Tolerances:	**Length:** ± 1.5 mm **Width:** ± 1 mm **Edge straightness:** ± 1.5 mm/m **Squareness:** ± 1.5 mm/m **Flatness:** ≤ 3 mm/m	**2**	**Core:** Composite core material 4 mm ± 0.2 mm
		3	**Rear face:** Aluminium sheet 0.3mm ± 0.05 mm

MECHANICAL PROPERTIES			
	STANDARDS TESTING METHOD	**UNIT**	**MINIMUM REQUIREMENT**
Weight		kg/m²	6.484 kg/m²
Heat Deflection Temperature	GB/T 17748-2016	°C	85
Flexural Bending Strength	ASTM C393-00	MPa	≥ 50
Flexural Elastic Modulus	GB/T 1456-2005	MPa	≥ 15000
Shear Strength by Punch	GB/T 17748-2016	MPa	≥ 15
Penetrating Resistance	GB/T 17748-2016	N	≥ 5000

Peel Strength 180°	GB/T 2790-1995	N/mm	≥ 5
Linear Thermal Expansion Coefficient (15°C – 45°C)	GB/T 17748-2016	°C-1	4.0*10-5
Temperature Resistance	GB/T 17748-2016	°C	-50°C to +80°C
Impact Resistance (Ball Drop) 20kg/cm	GB/T 1732		No split after reverse impact test with cross cutting
SURFACE PROPERTIES			
Salt Spray Resistance	ISO 7253:1996		5% Salt for 1500 hours, No change or blister
Solvent Resistance	GB/T 17748-2016		100 MEK Double Rubs, No change
Chemical Resistance	GB/T 17748-2016		2% HCL or 2% NaOH for 24 Hours, No Change
Boiling Water Resistance	GB/T 17748-2016		100°C (+/-2°C) for 2 hours
Cleaning Agent Resistance	GB/T 17748-2016		Isopropyl Alcohol, Ethanol Absolute 46.7%, No Change
Coating Thickness	ISO 2360:1982	µm	≥ 23
Gloss Level	ISO 2813:1994	%	≥ 90 Gloss ≥ 30/40 Matt
T-Bending	GB/T 17748-2016	T	3 = Gloss/Matt 2 = Brushed
Colour Variation Solid, Metallic and Brushed Colours		ΔE	≤ 3.5
Pencil Hardness	ISO 15184:1998		≥ 2H
Cross-cut test (Cross hatch)	ISO 2409:1992	Class	0
FIRE PERFORMANCE			
Reaction to fire classification	BS 476 Part 6&7	Rating	O
Reaction to fire classification	EN 13501-1	Rating	B-s1,d0
Reaction to fire classification	ASTM E84	Rating	Qualified
Reaction to fire classification	ASTM E119	Rating	2 hrs

4. Practical advice on the use of Wetwall™ Engineered Panel Solutions

4.1 General

Wetwall™ Alloy - Aluminium Composite Shower Panels are designed with decorative and functional properties for interior applications in in kitchens with hob panel, within residential areas.
Wetwall™ Alloy - Aluminium Composite Shower Panels must only be used indoors in normal conditions (18-25°C / 50-65% relative humidity).
The installation of **Wetwall™ Alloy,** Aluminium Composite Shower Panel is covered by specific installation instructions and guidelines. Installation instructions are packed with every panel and are available at the brands website.
The bonding side of panels, designed for gluing on wall substrates should be clean, dry, and free of dust, oil, and grease.
All **Wetwall™ Alloy,** Aluminium Composite Panel Shower Panels should be sealed where there is risk of water ingress reaching the wall surface.
The bonding to preliminary wall treatments is dependent on the type of treatment; always fully observe the instructions for use issued by the treatment manufacturer before applying **Wetwall™ Alloy,** Aluminium Composite Shower Panels.

4.2 Storage and transportation

Wetwall™ Alloy - Aluminium Composite Shower Panels must be stored on a horizontal, flat, level and sufficiently large base in a closed warehouse under normal indoor climatic conditions (-10 - +40°C and 50-65% relative humidity). In medium term storage the panels should

always be covered, for example with a 18mm particle board panel. In addition, the panels should be protected from moisture and mechanical damage.
Wetwall™ Alloy - Aluminium Composite Shower Panels should be transported on a horizontal, flat, level and sufficiently large base board with protection against slippage and side damage. In addition, the panels should be protected from moisture and mechanical damage. In terms of transportation conditions, **Wetwall™ Alloy,** Aluminium Composite Shower Panels are not deemed to be dangerous goods, so labelling is not necessary.

4.3 Conditioning

Before installing the panels, they should be stored for 24 hours at normal indoor temperature. (18 – 25°C; relative humidity 50-65%). These conditions should then be maintained in the room post installation and until the room is commissioned.

4.4 Wall conditioning

Walls must be dry, clean, stable, and flat.
Wetwall™ Alloy - Aluminium Composite Shower Panels can be bonded to various types of plaster, gypsum and cement, plasterboard, fibreboard, various types of wood-based panels such as particleboard, MDF and OSB.
On stone and ceramic surfaces: clean thoroughly and key the surface before applying the panels.

More detailed information for use of **Wetwall™ Alloy,** Aluminium Composite Shower Panels can be found in the installation instructions available packed with every panel or from the brands website.

4.5 Maintenance, Care and Cleaning

Wetwall™ Alloy - Aluminium Composite Shower Panels are robust and do not require special care thanks to the non-porous surface.
Panels are easy to maintain. On a day-to-day basis wipe, them down with a moist cloth and a mild detergent.
Do not apply waxes or polishing agents.
Do not use acidic, caustic, or abrasive cleaning detergents or materials to clean the Aluminium surface.
Aluminium panels must only be cleaned regularly with the recommended products.
Splashes, oil, and a buildup of grime should be removed and wiped clean.
Only use a soft microfiber cloth or a non-abrasive cloth.
Do not use; Detergent with bleach or home remedy solutions like baking soda or other stain removing powders.

4.6 Environmental and Health Aspects in Use

Observe normal health and safety rules when processing the panels in terms of weight, dust, and sharp edges.
After cutting, edges can be quite sharp, please ensure edges are deburred and wear appropriate PPE, when handling product.
During cutting there is a risk of sparks being generated when cutting. Please ensure appropriate measures are taken to prevent fire.

4.7 Waste disposal

Wetwall™ Alloy - Aluminium Composite Shower Panels waste is classified in accordance with the regulation of the European Waste Catalogue (EWC) to the six-digit waste code EWC 170 904 and the waste definition "mixed construction and demolition wastes" and may be disposed of as domestic waste or commercial waste.
Wetwall™ Alloy – Aluminium Composite Shower Panels is 100% recyclable after post consumption.

All the information contained in this technical data sheet is based on the latest technological know-how but does not constitute a guarantee. Indeed, we assume no guarantee of suitability for specific areas or purposes of application.