



## Technical Data Sheet

RESISTANT Render-Pro is a high strength external board giving more impact and breaking strength in cases where it is used as a receiver board for acrylic and cementitious renders in weather exposed locations. Consisting of four layers of mesh, Render-Pro can provide the equivalent impact and wind-loading

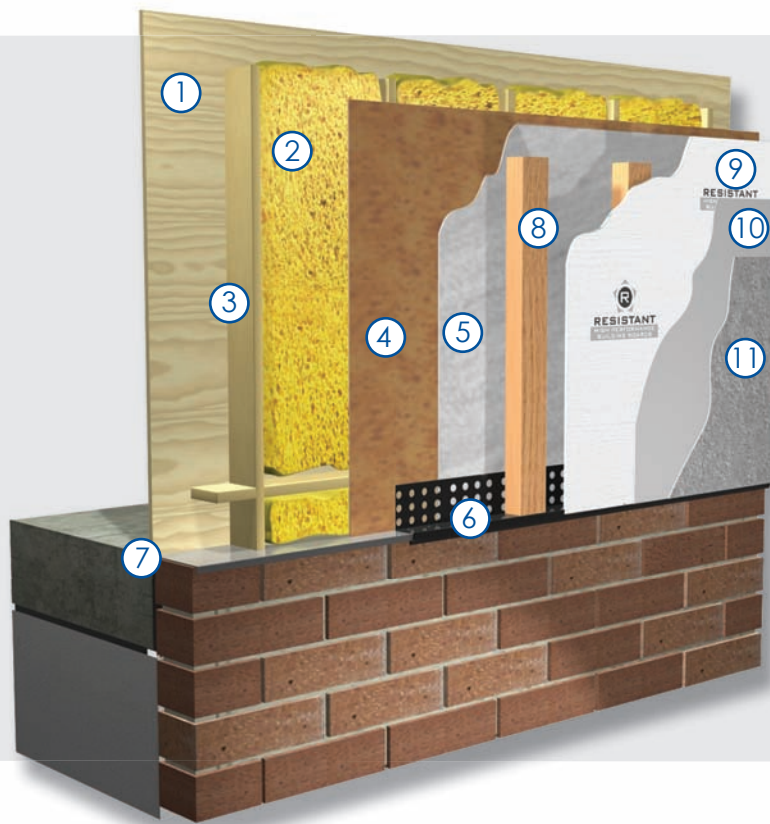
requirements with a thinner and lighter board compared to similar competitors products, giving it the ability to withstand harsher weather and working conditions. A vapour permeable A1 Non-Combustible board with excellent dimensional stability. Render-Pro is moisture, frost, mould and impact resistant.

### Render Carrier

detail on framed construction

#### Key:

- 1 Inner Backing
- 2 Insulation
- 3 Timber Frame Joist
- 4 OSB Sheathing
- 5 Breather Membrane
- 6 PVC Vent with Insect Mesh
- 7 Brick Foundation
- 8 Timber Batten
- 9 9mm Render-Pro
- 10 Exterior Basecoat
- 11 Exterior Finish Render



## MANUFACTURE

Resistant Render-pro is manufactured using inorganic substances, SiO<sub>2</sub>, CaCO<sub>3</sub>, MgO, MgCl<sub>2</sub>, and alkaline resistant fibreglass mesh.

The product is naturally cured using no energy through cold fusion unlike similar competitive products on the market which use autoclaving technology. This ensures that Resistant Render-Pro has a relatively low impact on the environment. Render-Pro achieves its superior strength and flexibility by the introduction of four layers of alkaline resistant glass fibre mesh. Consistent high quality of the product is maintained and monitored through a sophisticated digitally controlled process to ensure a superior finished board always reaches our commitment to quality assurance.

## TYPICAL USES

It is ideal for applications requiring a combination of these properties, for example:

- Render Carrier board for a range of Silicone, Acrylic, and Cementitious Render systems.
- Wall Cladding and infill Panels
- POD / modular construction
- Render Carrier for Timber / Steel frame structures
- Pre-fabricated caravan construction



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Technical SPECIFICATION

Test Subject	Test	Result
Density Dry (ex works)		1050 kg/m <sup>3</sup> (+/- 10%)
Modulus of Rupture	BSEN 310	17.7 Nmm <sup>2</sup> (across grain) 12.4 Nmm <sup>2</sup> (along grain)
Modulus of Elasticity	BSEN 310	6415 Nmm <sup>2</sup>
Impact Strength (Brinell)		34 Nmm <sup>2</sup>
Vapour Permeability	BSEN 12086	53 mg/m <sup>2</sup> /h
Thermal Conductivity at 50°	BSEN 594	0.26 w/m <sup>0</sup> k
Fire Test	A1 Euroclass	Class Non-Combustible
Change in thickness (After immersion in water)	BSEN 317	0 - 0.1% Nmm <sup>2</sup>
Tensile Strength (Perpendicular to plane)	BSEN 319	2.11 Nmm <sup>2</sup>
Screw Withdrawal Strength	BSEN 320	1.15 KN
Cyclic tests in humid conditions	BSEN 321	
Average Thickness Swelling	BSEN 321	0
Average Tensile Strength	BSEN 321	2.04 Nmm <sup>2</sup>
Moisture Content	BSEN 322	8.6%

### DIMENSIONS

RESISTANT Multi-Pro is supplied as a rectangular board with square edges and white in colour.

Thickness: 9 - 12 mm  
 Sizes: 1200 x 2400 mm

Special size requirements and thicknesses are also available upon request depending on quantity.

### ATTENTION

**SAND AND CEMENT RENDERS CANNOT BE USED DIRECTLY ONTO RESISTANT RENDER-PRO. THIS WILL RESULT IN THE MOISTURE BEING WITHDRAWN FROM THE SAND AND CEMENT LEADING TO CRACKING AND ULTIMATE FAILURE**

### TOLERANCES

Length and Width: + / - 2mm  
 Thickness: + / - 0.2mm  
 Edge Straightness: 1mm / metre  
 Squareness of edge: < 3mm

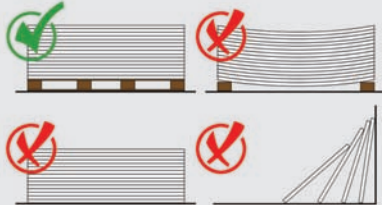
### PARTNERS

Render-Pro is an approved Render Carrier for the following systems and we continue to test with others:

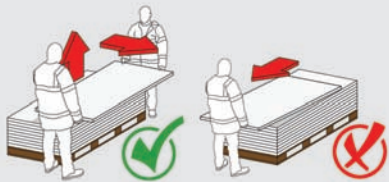




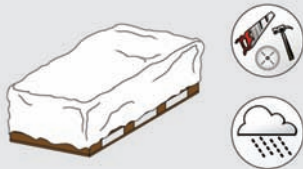
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RESISTANT boards should be stored flat, raised from the ground on a pallet, in dry conditions indoors and be under cover. Boards should not be leant upright for long periods of time



Boards should always be lifted by 2 people and not dragged across each other to prevent unnecessary scratching or damage



Any moisture allowed to infiltrate between the sheets will cause permanent surface staining. They should be protected from the weather and other trades on site at all times



Boards should be carried on edge and extra precaution should be taken to protect the visible front edge and corners

## SUPERIOR ATTRIBUTES

Apart from accepting a variety of painted/polished finishes, RESISTANT boards provide an excellent compatible surface to a wide range of finishing materials i.e. paints, tiles, veneers, laminates or indeed any finishing option that comes to the creative mind of an architect or interior designer. The acceptance of RESISTANT in the highly competitive international market stands testimony to its superior attributes



### Fire Rated, Non-Flammable , Non-Combustible

*Non-Combustible to BS 476 Part 4  
BS EN ISO 1182 - Euro Class A1*



### Thermal Insulation Properties

*Provides a high level of thermal movements during hot and cold cycles (Thermal Shock)*



### Impact Resistant

*An ability to withstand abuse, including surface impact - 34 N/mm*



### Low Carbon Manufacturing Process

*A natural cured process with a chemical reaction using low levels of heat and a lengthy drying out stage*



### Moisture & Water Resistant

*RESISTANT boards will not physically deteriorate when subjected to water or moisture.*



### Sound Insulation

*Provides excellent sound insulation for walls, floors and ceilings*



### Rodent Resistant

*Resistant to rodent infestation like mice, rats and insects*



### Easy and Fast to work

*Easy and simple to prepare and attach. Rough surface allows application of renders or direct paint / wallpaper*



### Mould Resistant

*Unlike paper faced/wood based products, RESISTANT does not contain cellulose, limiting mould growth*



### Breathability

*Ensures a healthy, durable working building with a natural ability to absorb and release moisture*



### Chemically Stable

*Produced from natural inorganic raw materials, resulting in a strong, durable chemically stable board*



### Non-Hazardous to health

*Will not cause harm to persons and/or the environment. Produced without asbestos or other inorganic fibres*