

# BASE **BOARD**



# Technical Data Sheet

Resistant Base Board is a high quality, high performance, A1 Non-combustible general purpose magnesium oxide building board. The boards are very robust, resistant to the effects of weather and dimensionally stable during the construction phase of the project. The board is dual faced (one side keyed / other side smooth) to increase flexibility of suitable applications.



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# **Key Benefits**

- Tested to BS 476 Part 4 Non-Combustible
- Weather Resistant during the construction phase
- Breathable and Vapour Permeable
- Robust & High Strength
- Excellent Dimensional Stability
- Easy to Handle
- Easy to Score & Snap or Machine Cut
- Good Edge Fixing Properties with Screw or Nail
- High Pull Out & Pull Through Strengths
- Low Carbon Manufacturing Process

#### Key:

- 1. Internal Lining Board (Multi-Pro).
- 2. Steel Frame.
- 3. Insulation.
- 4. Resistant Base Board 10/12.
- 5. Curtain Wall Bracket.
- 6. Steel or Timber Vertical Fixing Battens for External Render Carrier Board. (minimum 25mm Ventilated Cavity)
- 7. Rigid Insulation &/or 25mm clear Airspace for Render Carrier.

8. External Facade of Curtain Walling or Render Carrier. (Resistant Base Board 10/12)

## MANU FACTURE

Resistant Base Board is manufactured using inorganic substances, CaCO3, MgO, MgCl2 and alkaline resistant 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 Base Board has a relatively low impact on the environment. Base Board achieves its superior strength and flexibility with the introduction of alkaline resistant glass fibre mesh within the Board. Consistent high quality of the product is maintained through a sophisticated digitally controlled process to ensure a superior finished Board always reaches our commitment to quality assurance.

#### Typical Steel Frame Build Up. Also Ideal for Hybrid or Timber Frame Structures

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\*When fitting a 3-4mm gap should be left between boards. Joints should be taped over or sealant filled.\*

## TYPICAL USES

Ideal for applications such as;

- Non-Combustible Sheathing for SFS
- Volumetric Infill
- Suitable Substrate for Tiles
- SIPS
- Pre-Insulated Panels
- Off-Site Modular Systems Render Carrier Board
- \*Please note this is not a definitive list\*

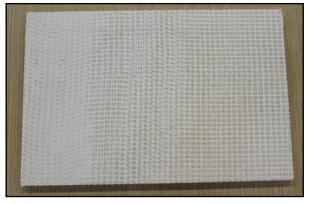
--<u>-</u>\_\_\_\_ nfo@resistant.co.ul 44 (0)28 9074 9400





# **Technical Data Sheet**

	Test Subject	Test	Result
Z	Density Dry (ex works)		1150 - 1200 Kg/m³
SPECIFIC ATION	Reaction to Fire	BS 476 Part 4	Non-Combustible
U E E	Thermal Conductivity at 50°C	BS EN 12664	0.307 W(m·K)
	Average Tensile Strength	BS EN 321	2.04 N/mm <sup>2</sup>
SPI	Tensile Strength (Perpendicular to plane)	BS EN 319	2.80 N/mm <sup>2</sup>
	Bending Modulus (Average)	BS EN 310	5656 N/mm <sup>2</sup>
Technical	Bending Strength (mor) - wet	BS EN 12467	10mm 10.59 MPa Class 2 12mm 9.69 MPa Class 2
chr	Impact Strength		34 mm/mm <sup>2</sup>
Te	Average Screw Withdrawal Strength	Brinell	81.9 N/mm <sup>2</sup>
	Vapour Permeability	BSEN 12086	53 g/m²/hour
	Change in thickness (Immersion in water 24hours)		0 - 0.2%
	Change in length (Immersion in water 24hours)		<1%



Base Board Keyed Surface

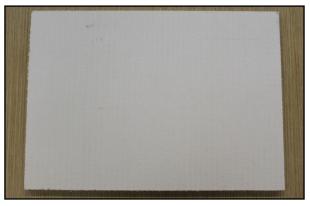
## DIMENSIONS

Base Board is supplied as a rectangular board with square edges and is white in colour.

Thickness: 10mm & 12mm

Sizes: 1200 x 2400mm

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



### Base Board Smooth Surface

## TOLERANCES

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







# **Technical Data Sheet**



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.

#### S UPERIOR A TTRIBUTES

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 to BS 476 Part 4



Thermal Insulation Properties Ability to withstand a high range of hot and cold cycles (Thermal Shock)



Impact Resistant An ability to withstand abuse, including surface impact - 34 N/mm2



Low Carbon Manufacturing Process A natural cured process with a chemical reaction using low levels of heat and a lengthy drying out stage



**Rodent Resistant** 

Resistant to rodent infestation like mice, rats and insects Easy and Fast to work



Simple to prepare and fix. Unique double faced (smooth or keyed) surfaces allow fast to fit of one board for Multiple

#### Applications 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.

Boards should always be primed with an acrylic based primer, then finished with a suitable weather protective coat for permanent exposure. For detailed fitting advice contact below.

