

FIRE PROTECTION AND PERFORMANCE DRY LINING BOARD

Magply

01621 776252 01621 776688 sales@magply.co.uk www.magply.co.uk

Magply Fire Protection Board

Magply Fire board is a technically advanced magnesium oxide construction panel that provides exceptional performance in building applications combining superior reaction to fire performance, resilience, resistance to moisture and mould with some sound insulation. Magply can be used as an alternative to wood, plywood, gypsum and cement based particle boards. It provides a dimensionally stable and reliable material with impressive fire performance for constructional uses.

MANUFACTURING

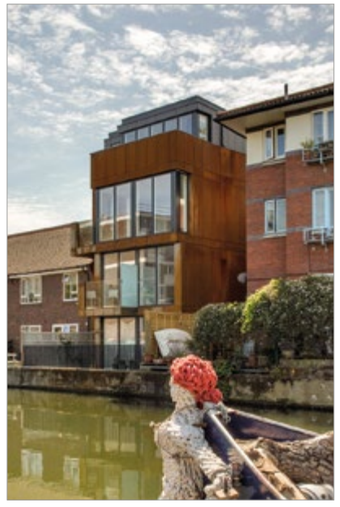
Magply Boards are manufactured from naturally occurring materials, which are combined with alkaline resistant glass fibres for strength and integrity in a manufacturing process that produces very little in the way of CO2 emissions. Magply is naturally air cured ensuring low impact on the environment.

Magply is manufactured in a process controlled in the ISO9001 quality management system standard, ensuring a consistently high quality product.









PASSIVE FIRE PROTECTION

Whether specifying for domestic, commercial new build or refurbishment, passive fire protection is a major consideration. Magply's incredible fire performance, high strength and low carbon footprint makes it the perfect choice for:

- Passive fire protection for walls
- Fire resistant stud partitions
- Fire resistant ceilings
- Fire resistant floors
- Fire doors
- Volumetric or modular pods
- Non-combustible sheathing & infill boards
- Sandwich panels
- Fire safe OSM for timber frame
- Park homes
- Soffit linings
- Tile backer
- Column Fire protection
- Open or closed cell timber frame and SIPS sheathing
- Boiler / woodburner backing board
- Prison buildings
- Anti-Vandal units
- Render boarding
- Lift shaft lining
- Door linings
- All applications requiring non-combustible boards

BENEFITS

Fire classification: EN-13501 Euroclass A1, Non Combustible *1

High Strength *2

Very strong composite panel ensuring suitable fixing points

Exceptional edge fixing with Nails, screws or staples

High impact resistant, able to withstand surface impacts

Breathable, ensuring a healthy environment that naturally absorbs and releases moisture

Easy to use, cut, work, and fix

Unaffected by moisture content and will not deteriorate, expand or contract even with prolonged exposure

Resistant to mould and insects, will not encourage mould growth or vermin

Kind to the environment *3

HETAS approved

STA Category C Compliant

1. *Euro Class A1, BS EN ISO 1182, BS EN 1716, BS EN 476 Class 0 surface spread of flame, BS EN 476 (Part 22).*
2. *Tested to BS EN 594 achieving category 1 racking resistance.*
3. *Magply is biodegradable, compostable and can be recycled.*

01621 776252 01621 776688 sales@magply.co.uk www.magply.co.uk

Fixing Instructions

HIGH PERFORMANCE DRY-LINING AND FIRE RESISTANT WALLS

- Magply Boards must be fixed to vertical and horizontal Studs on each side of a partition wall and attached vertically to the substrate/frame using Stainless Steel fixings.
- For General purpose use, apply 300mm (fig.1) maximum centres vertically and 600mm maximum centres horizontally.
- For the purpose of Timber Frame Sheathing and high performance dry-lining, apply 150mm (fig.2) centres around the edge of the board and 300mm centrally.
- Fixings must be spaced a minimum of 12mm (fig.3) from the edge and 20mm from the corner of the board.
- Fix boards starting at the middle and work outwards.
- Boards should always be offset (staggered) during installation ensuring that four corners do not meet at one point.
- For Timber Frame, 2mm gap should be made between boards and 5 mm above a finished floor level to allow for settlement of the timber structure.
- If no settlement is expected then butt jointing is acceptable.
- All joints must be sealed (not required for non fire resistant walls) using Magply intumescent sealant in line with your requirements.
- Magply should always be primed with a recommended primer prior to painting, papering or plastering.
- When being fixed to Steel frame or C section then fixings must be used in accordance with the frame manufacturers recommendation.
- For breathable walls the use of a breathable paint is recommended.

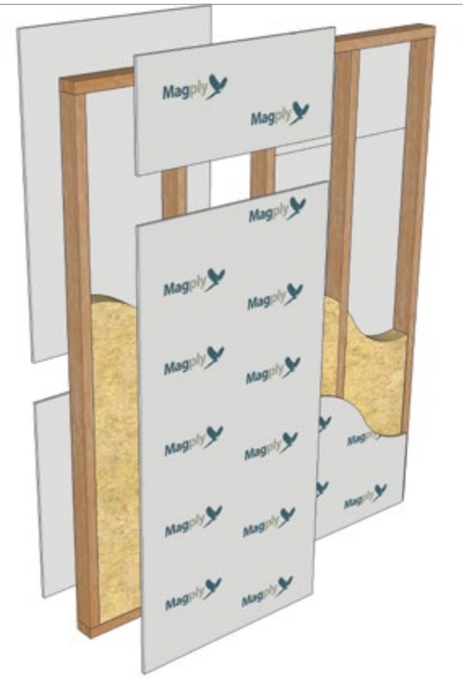


Fig1



Fig2



HIGH PERFORMANCE DRY-LINING

Magply is the perfect high performance solution for all dry-lining applications that require non-combustibility with high impact strength, sound insulation, moisture resistance and exceptional screw holding ability.

FLOORS

- Before fixing Magply to existing floors, always check the substrate is free from debris and damage. The fixing surface should be as even and level as possible to ensure a flat finish.
- Always stagger the joints of the Magply boards and prevent four corners meeting at one point.
- Ensure that the Magply joints do not align with any joints in the fixing surface.
- Install Magply to an existing substrate with an evenly applied layer of tile adhesive (cement based) using the correct application tool or suitable trowel and then nail or screw at 300mm centres ensuring a countersunk finish.
- For new floors, fix with appropriate screws or nails at 300mm centres ensuring a countersunk finish.
- Check moisture levels of wooden substrate floors for damp problems which must be resolved prior to installation.

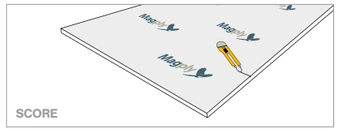


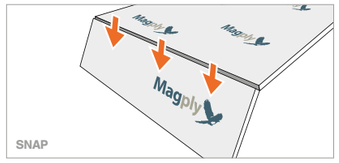
01621 776252 01621 776688 sales@magply.co.uk www.magply.co.uk

Fixing Instructions

CUTTING

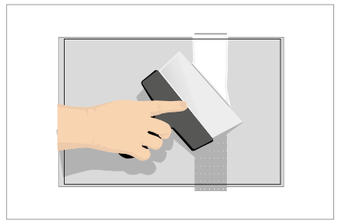
Magply can be easily cut to size on site using the score and snap method. Using a pencil, mark the required size and score along the pencil line using a utility knife and straight edge ensuring you cut through the reinforcing mesh.





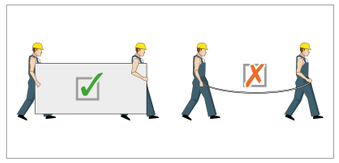
FIXINGS

- Timber Frame, stainless steel wood screws or nails are recommended.
- Timber Stud, stainless steel woodscrews or self tapping screw with countersunk head.
- Metal Stud, case hardened stainless steel or self tapping screw with countersunk head.
- Stainless steel screws are recommended for use in all applications.



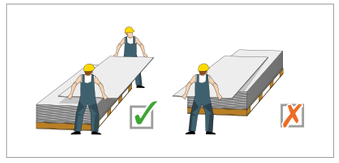
FINISHING

- The surface of Magply is smooth,flat and pre-prepared to receive all forms of decoration after a primer has been applied. Although Magply can be plastered/skimmed, the surface is perfectly suitable to paint, wallpaper or tile without further preparation.
- Joints should be sealed with Magply sealant to suit your application and a 50mm Alkaline resistant jointing tape can be applied to increase the strength of your installation.
- When tiling walls and floors, Magply should be sealed with an approved primer and a flexible cement based tile adhesive should be used in accordance with the manufacturers recommendations.
- Magply can be painted after priming with both emulsion and oil based paints in accordance with the paint manufacturers recommendations.
- When installing shelving or fixing objects to the wall, care should be taken to fix only into timber studs or pre-installed noggins.



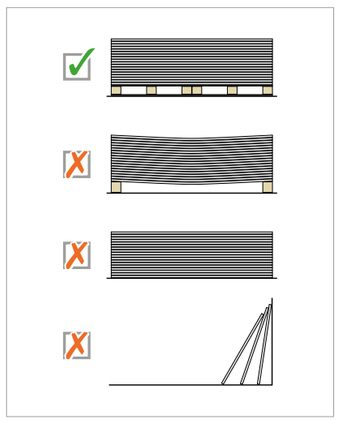
DELIVERY AND HANDLING

- Magply is stacked on timber pallets and each pallet is labelled with thickness, length, width and number of boards.
- Magply must always be stored horizontally (flat) in a dry and ventilated environment under cover and protected from the weather.
- Magply should always be lifted by a minimum of two people and should be lifted clear of the board directly underneath to prevent surface damage.
- Magply should be carried on its edge by two people taking care not to damage edges or corners.



EXPOSURE TO WEATHER

- Magply must not be left exposed to directly to the weather. If Magply is allowed to absorb moisture then ensure it is allowed to dry out before installation of any final surface finish.



Physical attributes

MAGPLY BOARD ATTRIBUTES COMPARISON

Attributes	Magply	Gypsum Board	Plywood /OSB	Cement Board
Fire Resistant	Yes	X	X	Yes
Non-Combustible	Yes	X	X	Yes
Water & Moisture Resistant	Yes	X	X	Yes
Mould & Mildew Free	Yes	X	X	Yes
Insect Resistant	Yes	X	X	Yes
Nail pull resistance	Yes	Yes	Yes	Yes
Cut/Saw – No special tools	Yes	Yes	Yes	X
Wallpaper over	Yes	Yes	X	X
Paint over	Yes	Yes	Yes	Yes
Tile Backer	Yes	X	X	Yes
Insulation Sound & Heat	Yes	X	X	Yes
Strong & Durable	Yes	X	Yes	Yes
Light Weight	Yes	Yes	Yes	X
Recyclable	Yes	X	X	X

MAGPLY BOARD PHYSICAL CHARACTERISTICS

Value	Magnesium oxide board
Bending strength, MPa	18
Density, kg/m³	1,100
Thermal conductivity, (W/(m.K))	0.19
Combustibility	Non combustible
Thermal linear expansion coefficient	0%
Facial surface hardness, MPa	6
Moisture content normal conditions	< 8%
Nail pull strength from face	6 N/mm

WEIGHTS

Thickness	Dimensions, mm	Weight of board, kg
3mm	2,400 x 1,200	6.5
6mm	2,400 x 1,200	13
9mm	2,400 x 1,200	26
12mm	2,400 x 1,200	39
20mm	2,400 x 1,200	58

Certification & Approvals

According to BS 5268-6.11, a Category 1 material (9.5mm plywood, 9.0mm medium board, 12.0mm chipboard, 9.0mm OSB) nailed at a maximum spacing of 150mm on perimeter and 300mm on internal studs should give a Racking resistance of 1.68kN/m. 9mm thick Magply sheathed timber frame panels nailed at 150mm centres to the perimeter and 300mm centres to the internal studs achieved calculated test racking resistance values of 1.72kN/m with no vertical load and a value of 1.69kN/m with 5kN per stud applied vertical load.

We are members of the STA (Structural Timber Association). Magply has been confirmed by Martin Milner associates to be suitable for purpose in accordance with Product paper 4.

BS EN 476

(Part 22 timber frame) 91 minutes integrity and 86 minutes fire insulation with 9mm board

BS EN ISO 1182, BS EN 1716

Reaction to fire

BS EN 476

(parts 6&7) Class 0 surface spread of flame

EN 13501

(European classification system) Euro class A1 Non-combustible

BS EN 594

Racking strength for Timber structures

HETAS APPROVED





Magply

01621 776252 sales@magply.co.uk

01621 776688 www.magply.co.uk

Bradwell Hall, Bradwell on Sea, Essex, CM0 7HX

Black Mountain NATURAL PRODUCTS

A subsidiary of IP Product Limited

STRUCTURAL TIMBER ASSOCIATION Member

Exova

LUCIDEON Insight creating advantage