



Gyproc M2TECH

Technical Datasheet



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Product Datasheet



Introduction

Characteristics

Gyproc M2TECH boards are specially formulated with biocide and other additives in the core, encased in a green face paper for applications where enhanced moisture and mold resistance is required.

M2TECH boards are available across the complete range of Gyproc plasterboards and are suitable for most system applications where normal fire, structural and acoustic levels are specified. Suitable for direct decoration.

Applications

Our M2TECH boards for wall linings and ceilings are ideally suited for use in hospital treatment rooms, school locker rooms and all types of wet areas. They are suitable for most system applications where normal fire, structural and acoustic levels are specified. MTECH boards must be jointed using Gyproc Moisture and Mold Resistant Jointing Compound and Gyproc Mold Resistant Fibre Tape.

Board colour

- Green face paper
- Green reverse side paper

Board printing

Reverse - Standards, date, board dimensions, edge type, company name and logo.

Finishing

Board types

T/E - with Gyproc jointing materials for taped and filled joints

S/E - with Gyproc jointing materials for taped and filled joints

Jointing

Gyproc jointing materials (Gyproc Moisture and Mold Resistant Jointing Compound and Gyproc Mold Resistant Fibre Tape) should always be used for jointing Gyproc M2TECH boards. They produce durable joint reinforcement and a smooth, continuous, crack-resistant surface ready for priming and final decoration. A number of jointing specifications are available to suit the board type, method of application and site preference.

Plastering

Gyproc M2TECH boards can be plastered using Gyproc GypFine – Board Skim, which provides a seamless Q4 / L5 finishes to plasterboard surfaces as a base for final decoration and wall finishes. Since M2TECH boards and Moisture Resistant Boards are intended for use in environments of higher than normal humidity, they must be pre-treated using a PVA bonding agent, which must be applied before the application of Gyproc GypFine – Board.

N.B. Plaster should only be applied to the face of Gyproc M2TECH and Moisture Resistant Boards.

Decoration

After the joint treatment has dried, decoration including any decorator's preparatory work should follow.

Board range*

| Width mm | Length mm* | Edge Type |
|--------------|-------------|--|
| 12.7mm board | | $\text{Kg/m}^2 = 9.35$ R ($\text{m}^2\text{K/W}$) = 0.07 |
| 1200 | 2400 | T/E S/E |
| 1200 | 3000 | T/E S/E |
| 15.9mm board | | $\text{Kg/m}^2 = 11.7$ R ($\text{m}^2\text{K/W}$) = 0.08 |
| 1200 | 2400 | T/E S/E |
| 1200 | 3000 | T/E S/E |

T/E = Tapered Edge S/E = Square Edge

* Other lengths available on request

*Gyproc M2TECH is also available in FireStop, DuraLine, CoreBoard and ActivAir variant

Repair

Minor damage - Lightly sand the surface to remove burrs and fill flush with two applications of Gyproc Moisture and Mold Resistant Jointing Compound. When dry decorations including any decorator's preparatory work should follow.

Deep indents resulting from impact - Check the plasterboard core to ensure that it is not shattered. If intact, apply a coat of Gyproc Moisture and Mold Resistant Jointing Compound, followed by the procedure for repairing minor damage, once set/dry.

Damaged core and/or broken edges (non-fire rated or non-high impact situations only) - Remove the damaged area of core. Score the liner approximately 10mm away from the undamaged core around the damaged area, and peel the paper liner away. Apply PVA to seal the core and surrounding liner. Bulk fill the hole with Gyproc Moisture and Mold Resistant Jointing Compound, and strike off flush. Once the filler is set/dry, follow the procedure for repairing minor damage.

Extensive damage - When the damage is more extensive, it may be necessary to replace that area of plasterboard. It is important that the replacement board is of the same type as specified and installed. Cut out the affected area back to the nearest framing member. Replace the plasterboard accurately cutting and fixing the same type and thickness of Plasterboard. Fill edge joints, then tape using Gyproc Mold Resistant Fibre Tape and finish in recommended way. When dry, decoration including any decorator preparatory works should follow.

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Standards

The M2TECH boards achieve the highest possible test ratings of '10' and '0' as per ASTM D3273 and ASTM G21, the industry standard tests for moisture and mold resistance.

Type A: Gypsum plasterboard.

Plasterboard with a face to which suitable decoration may be applied.

Type H1: Plasterboard with reduced water absorption rate.

Boards which have additives to reduce the water absorption rate. They may be suitable for special applications in which reduced water absorption properties are required to improve the performance of the board. For the purposes of identification, these boards are designated Type H1, H2 and H3, with different water absorption performance.

BS1230: PART 1: 1985 Specification for plasterboard excluding materials submitted to secondary operation.

Type 3: Gypsum Moisture Resistant Wallboard: Linings where there is risk of limited exposure of the board to moisture.

Type 4: Gypsum Moisture Repellent Wallboard: Linings where there is risk of limited exposure of the board to moisture on the surface of the board.

ASTM C1396: Standard Specification for Gypsum Board Section 7: Water-resistant gypsum backing board.

Board Performance

Fire protection

Plasterboard linings provide good fire protection owing to the unique behaviour of the non-combustible gypsum core when subjected to high temperatures.

Fire resistance

Please refer to the appropriate Middle East WHITE BOOK product or systems section for information on the fire resistance of building elements lined with Gyproc M2TECH boards.

Reaction to fire test performance

| Standard | Performance |
|---|---|
| BS 476: Part 6: 1989 Method of test for fire propagation for products. | Index of performance (I) not exceeding 12 and a sub-index (i1) not exceeding 6. |
| BS 476: Part 7: 1997 Surface spread of flame tests for materials. | Class 1 (both sides) |
| EN 520: 2004 | Classified without further testing as A2-s1, d0 |

Thermal conductivity

Gyproc M2TECH boards - 0.19W/mK

Effect of temperature

Gyproc M2TECH boards are unsuitable for use in areas subject to continuously damp or humid conditions and must not be used to isolate dampness. Plasterboards are not recommended to be stored in for use in temperatures above 49°C but can be subjected to freezing conditions without risk of damage.

Effect of condensation

Designers should take care to eliminate all possibility of problems caused by humidity and condensation, particularly in refurbishment projects.

Installation

General

It is important to observe appropriate health and safety legislation when working on site i.e. personal protective clothing and equipment etc. The following notes are intended as general guidance only. In practice, consideration must be given to design criteria requiring specific project solutions.

Handling

Manual off-loading of this product should be carried out with care to avoid unnecessary strain. For further information please refer to the Manual Handling section of the Middle East WHITE BOOK.

Cutting

The product may be cut using a plasterboard saw or by scoring with a sharp knife and snapping the board over a straight edge. When cutting

boards, power and hand tools should be used with care and in accordance with the manufacturer's recommendations. Power tools should only be used by people who have been instructed and trained to use them safely. Appropriate personal protective equipment should be used.

Fixing

Fix boards with decorative side out to receive joint treatment. Lightly butt boards together. Never force boards into position. Install fixings not closer than 13mm from cut edges and 10mm from bound edges. Position cut edges to internal angles whenever possible, removing paper burrs with fine sandpaper. Stagger horizontal and vertical board joints between layers by a minimum of 600mm. Locate boards to the centre line of framing where this supports board edges or ends.

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Health & Safety

1. Identification of the substances / preparation and company

Gyproc Plasterboards

Gyproc Regular
 Gyproc Moisture Resistant
 Gyproc DuraLine
 Gyproc FireStop
 Gyproc FireStop^{MR}
 Gyproc CoreBoard
 Gyproc Activ'Air
Gyproc M2TECH

Supplier
 Saint-Gobain Gyproc Emirates Industries LLC
 ICAD 1
 Mussafah, Abu Dhabi
 United Arab Emirates
 P.O. Bx 38983
 Free Phone: 800 GYPROC (497762)

Recommended uses: Gyproc Plasterboards are used as internal linings in building. This information reflects typical values and is not a product specification.

2. Composition / information on ingredients

Calcium sulphate hemihydrate and limestone, natural constituents may include minor amounts of quartz. Calcium sulphate dihydrate encased in paper liners, natural constituents may include minor amounts of quartz. Small quantities of chopped glass fibre, microsilica and vermiculite may be added, with starch, foam and dispersants. Any board may contain small quantities of chopped man-made mineral fibre and microsilica.

Certified as Asbestos free by Al Hoty - Stanger Laboratories
 Certificate: A10 - 141656

3. Hazards identification

These products are not classified as dangerous according to CHIP. CHIP is the law that applies to suppliers of dangerous chemicals. Its purpose is to protect people and the environment from the effects of those chemicals by requiring suppliers to provide information about the dangers and to package them safely.

Dust from sawing or sanding may irritate the respiratory system, skin & eyes.

4. First aid measures

- Eye contact** Wash eyes with clean water.
- Skin contact** Wash thoroughly with soap and water.
- Ingestion** DO NOT INDUCE VOMITING. Rinse out mouth thoroughly and give plenty of water.
- Inhalation** If irritation occurs, remove person to fresh air.
- General** Seek medical attention if any symptoms persist.

5. Fire fighting measures

The products do not pose a fire hazard. However, some packaging materials may burn.

Suitable extinguishing media – water, foam, carbon dioxide or dry powder.

6. Accidental release measures

Control dust formation, vacuum or sweep up and put into bags. Prevent products from blocking drains and watercourse as a powder or slurry. (Refer to section 13 Disposal considerations).

7. Handling and storage

Use – Minimise dust generation when sawing or sanding in poorly ventilated places Avoid eye contact - see Section 8 for recommended personal protective equipment and Section 3 for hazards identification.

Plasterboards will not support body weight between rafters, joints or frame members.

Manual handling – Sheets of plasterboard can be unwieldy, use an appropriate lifting technique. The weight of each sheet can vary between products. For manual handling purposes assume the following:

Gyproc M2TECH weights

| Board | Board thickness mm | Board width mm | Board length mm | Board weight kg | Pallet weight tonnes |
|---------------|--------------------|----------------|-----------------|-----------------|----------------------|
| Gyproc M2TECH | 12.7 | 1200 | 2400 | 26.93 | 2.078 |
| | | | 3000 | 33.66 | 2.052 |
| T/E & S/E | 15.9 | 1200 | 2400 | 33.70 | 1.972 |
| | | | 3000 | 42.12 | 2.122 |

NB: All weights are approximate.

Mechanical handling – The dimensions of the pallet vary depending on the product size. To avoid potentially overloading a lift truck, it is important that any effect on load centres is considered. The nominal weight of each palletised load is given within the weights table in this section of this document.

Storage – Store plasterboard as supplied in dry conditions. To maintain stability, place the stack on firm level ground, and ensure that stacks are both level and vertical.

NB: When working with individual boards, only work from a single pallet, not a stack.

Pallet stacking heights

The maximum stack heights on level concrete floors and vertical stacks are as follows:-

| Board width mm | Board length mm | Pallet stack height packs |
|----------------|-----------------|---------------------------|
| 1200 | 2400 | 4 |
| | 3000 | 4 |

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8. Exposure control / personal protection

Workplace exposure limit

| Substance | Total inhalable | Respirable |
|---------------------------------|---|------------------------------|
| Plaster | 10mg/m ³ 8hr TWA | 4mg/m ³ 8hr TWA |
| Quartz (silica) | 0.3mg/m ³ 8hr TWA | 0.1mg/m ³ 8hr TWA |
| Man Made Mineral Fibres (MMMMF) | 5mg/m ³ 8hr TWA (gravimetric method) | - |

NB: HSE guidance – control exposure to <0.1mg/m³ (8hr TWA)

Personal protection

Respiratory Use in a well ventilated area. Where practicable use engineering methods to control dust levels. If the exposure standards could be exceeded use a disposable face mask complying with EN 149 FFP2.

Skin Wear appropriate clothing to protect against repeated or prolonged skin contact.

Eye If there is a risk of material entering the eye, wear eye protection to BS EN 166.

9. Physical and chemical properties

Flat sheet boards in different widths and thicknesses, with a square or tapered edge.

10. Stability and reactivity

No special physical conditions need to be avoided. No specific restrictions regarding incompatible materials.

11. Toxicology information

No known toxicological effects.

12. Ecological information

Stable product with no known adverse environmental effects.

13. Disposal consideration

Waste from gypsum plasterboard products is normally classified as 'non-hazardous' but should not be co-disposed with municipal waste. Dispose at an authorized landfill site in accordance with the local waste management regulation.

14. Transport information

Not classified as hazardous for transportation.

15. Regulatory information

Not classified under the CHIP regulations.

16. Other information

Regulation no. EI004 Soild Hazardous materials 1st Edition January 2010 Abu Dhabi Environment, Health and Safety Manegment System Regulations Framework (ADEHSMS)

The Gyproc website: www.gyproc.ae

The Middle East WHITE BOOK

Note to User:

This Product Data Sheet does not constitute a workplace risk assessment for COSHH.

There are a number of situations where the approach to manual handling of Gyproc products should be considered. For further guidance, please refer to the Manual Handling section of the Middle East WHITE BOOK which can be downloaded from www.gyproc.ae.

www.gyproc.ae

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Gyproc reserves the right to revise product specifications without notice. The information in this document was correct to the best of our knowledge at the time of publication. It is the user's responsibility to ensure that it remains current prior to use. The information in this document is for guidance only and should not be read in isolation. Users should read and familiarize themselves with all the information contained in this document and ensure that they are fully conversant with the products and systems being used, before subsequent specification or installation.



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