

# MADA FIRE RESISTANT PLASTERBOARD

## Technical Data Sheet

TDS-PB-R10-Rev1 Mada Fire Resistant - May 2022



### Advantage



Light weight construction, easy & fast installation



Sound & thermal insulation



Easy finishing



Mold resistance

### Product Description

Mada Fire Resistant Plasterboards are produced from high purity natural gypsum core with fibre glass for increased strength and improved sag-resistance, as well as additives and binders for fire resistance. Perfect for use in internal wall and ceiling applications where fire resistance is a requirement.

### Field of Application

Mada Fire Resistant Plasterboards are used in Residential and Commercial Buildings, Hospitals, Airports, Educational Institutions and other such applications.



# TECHNICAL DATA SHEET

## Manufacturing Standards

|                      | Board Thickness | ASTM C1396 / C1396M | EN 520 Type F |
|----------------------|-----------------|---------------------|---------------|
| Fire Resistant Board | 12.5mm          | √                   | √             |
|                      | 15mm*           | √                   | √             |
|                      | 16mm            | √                   | √             |
|                      | 18mm            | √                   | √             |

\*Special Requirements

## Product Characteristics

- Length: 2400mm.
- Width: 1200mm.
- Thickness: 12.5mm, 16mm, 18mm. Special thickness: 15mm.
- Edge: Tapered, Square, Beveled.
- Color: Pink / Grey.

Note: For customized product requirement, please contact Mada technical department.

## Technical Specification

| Parameters                               | Applicable standard | Plasterboard Thickness      |       |       |       |
|--|---------------------|-----------------------------|-------|-------|-------|
|  |                     | 12.5mm                      | 15mm* | 16mm  | 18mm  |
| Weight (kg/m <sup>2</sup> )              | ± 0.2               | 9                           | 11.8  | 11.8  | 13.3  |
| Board Density (kg/m <sup>3</sup> )       | Minimum             | 704                         | 773   | 725   | 728   |
| Flexural Strength (N)<br>(Longitudinal)) | ASTM C1396          | ≥ 476                       | ≥ 585 | ≥ 654 | ≥ 717 |
|  | EN 520              | ≥ 550                       | ≥ 650 | ≥ 688 | ≥ 774 |
| Flexural Strength (N)<br>(Transverse)    | ASTM C1396          | ≥ 157                       | ≥ 193 | ≥ 207 | ≥ 235 |
|  | EN 520              | ≥ 210                       | ≥ 250 | ≥ 269 | ≥ 302 |
| Nail Pull Resistance (N)                 | ASTM C1396          | ≥ 327                       | ≥ 374 | ≥ 390 | ≥ 420 |
| Flame Spread Index                       | ASTM E84            | 25 or less                  |       |       |       |
| Smoke Developed Index                    | ASTM E84            | 450 or less                 |       |       |       |
| Asbestos (% by weight)                   | -                   | No asbestos fibers detected |       |       |       |

\*Special Requirements

## Finishing

For the highest quality finish, we recommend Mada finishing products.

All painting products and systems must follow the recommendations and requirements outlined in the Appendices of ASTM C840. For priming, texture, paint, and wallcovering finishes, always follow manufacturer's directions for proper use.

All surfaces and applied jointing compound must completely dry, dust free, and gloss-free. Prime surfaces with an undiluted, high-solids content, interior flat latex paint, and allow to dry thoroughly before painting or applying other finishes.



# TECHNICAL DATA SHEET

## Finishing

Where gypsum panel walls and ceilings are subject to critical natural or artificial lighting, skimming the entire wall surface with jointing compound can improve fastener concealment. Skimming before painting will equalize the tension and suction differences between the paper and the jointing compound.

## Handling and Storage

- Mada Plasterboards must be stored on a firm, dry, and structurally sound flooring assembly, using pallets or board packs to avoid direct contact with the floor and moisture sources.
- Never stack Plasterboard pallets higher than 4 pallets in height.
- Do not store other materials on top of Plasterboard pallets.
- Protect Plasterboards from direct rain, wind, sunlight, or other inclement weather conditions.

## Limitations

- Avoid Plasterboard exposure to sustained temperatures above 52°C (125°F).
- Avoid excessive, repetitive, or continuous exposure to moisture before, during, and after installation. Eliminate moisture sources immediately.

## Precautions for safe handling

- Minimize dust generation for sawing or sanding purposes in poorly ventilated areas.
- When working with individual sheets, always work from a single pallet, do not pull from stacks.
- Avoid eye contact – refer to Safety Data Sheet for hazard identifications and personal protective equipment.
- Will not support body weight between rafters, joists, and framing members.
- Manual handling – sheets can be awkward without using an appropriate lifting technique. The weight of each sheet can vary based on different size and thickness factors.
- Mechanical handling – Pallet dimensions will vary, depending on the size of the plasterboards. To avoid overloading the lift truck, always check the palletized load weight provided within the weight tables.

## Conditions for safe storage, including any incompatibilities

Storage - Store on pallets supplied in dry conditions. To maintain stability place pallets on firm level ground and ensure that stacks are both level and vertical.

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

| Board width (mm) | Board length (mm) | Pallet stack height pack |
|------------------|-------------------|--------------------------|
| 1200             | 2400              | 4                        |

## Material Packing Details

| Thickness         | 12.5mm | 16mm | 18mm |
|-------------------|--------|------|------|
| Boards per Pallet | 72     | 54   | 54   |

Note: Pallet weight may vary depending on packing (protection board, spacers ...).