

MADA PLUS FIRE & MOISTURE RESISTANT PLASTERBOARD

Technical Data Sheet

TDS-PB-R01-Rev2 Mada Plus Fire & Moisture Resistant - 2024



Advantage



Light weight construction, easy & fast installation



Sound & thermal insulation



Improved strength & sag resistant



Fire protection



Easy finishing



Mold resistance

Product Description

Mada Plus Fire & Moisture Plasterboards are the lightweight solution for most standard internal wall and ceiling applications where Fire and Moisture Resistant properties are required. The high purity gypsum core utilizes fiberglass for increased strength and improved sag-resistance, which is then sheeted with the highest quality paper lining for a superior finish.

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Field of Application

- Residential buildings.
- Commercial buildings.
- Hospitals.
- Airports.
- Educational settings.
- Light industrial and manufacturing projects.

Manufacturing Standards

- Mada Plus Fire & Moisture Resistant Plasterboards are designed and produced to ASTM C1396 / C1396M Type X and EN 520 Type H1 and F standards.
- Mada Plus Fire & Moisture Resistant Plasterboard has been tested in accordance with ASTM E84 and ASTM C473.
- Fire Rating (Mada System application) - Tested as per ASTM E119.
- Acoustic Rating (Mada System application) - Tested as per ASTM E90.
- Robustness of wall - Tested as per BS 5234-2:1992.
- Volatile Organic Compound (VOC) - Tested as per CDPH Standard Method v1.2.



CERTIFIED
CLEAN AIR GOLD



Tested and Certified as part of complete Mada System to ASTM E119 for Fire Rated Systems

Product Characteristics

- Length: Standard length is 2400mm, 2440mm & 3000mm. Special length is 1800mm to 4500mm.
- Width: 1200mm & 1220mm.
- Thickness: 12.5mm, 16mm. Special thickness: 15mm.
- Edge: Tapered, square, beveled.
- Color: Green / Grey.

Note: For customized product requirements, contact Mada technical department.

Technical Specification

Parameters	Applicable Standard	Plasterboard Thickness		
		12.5mm	15mm*	16mm
Weight (kg/m ²)	± 0.2	10.7	13.9	13.9
Board Density (kg/m ³)	Minimum	840	913	856
Flexural Strength (N) (Longitudinal))	ASTM C1396	≥ 476	≥ 585	≥ 654
	EN 520	≥ 550	≥ 650	≥ 688
Flexural Strength (N) (Transverse)	ASTM C1396	≥ 157	≥ 193	≥ 207
	EN 520	≥ 210	≥ 250	≥ 269
Nail Pull Resistance (N)	ASTM C1396	≥ 327	≥ 374	≥ 390
Water Absorption (%)	ASTM C1396	≤ 5		
	EN 520	H1		
Asbestos (% by weight)	-	No asbestos fibers detected		

*Special Requirements



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Test Data

Property		ASTM Test Method	Requirement	Mada Plasterboard
Noncombustibility		E136	Noncombustible	Meets
Surface-Burning Characteristics	Flame spread	E84	Flame spread index, not greater than 25	15
	Smoke developed	E84	-	0
	Class A	E84	Flame spread not greater than 25 and smoke developed not greater than 450	Meets
Core Hardness	Field	C473 (B)	Not less than 49 N	Meets
	End	C473 (B)	Not less than 49 N	Meets
	Edge	C473 (B)	Not less than 49 N	Meets
Flexural Strength	Transverse	C473 (B)	Not less than 157 N*	Meets
	Longitudinal	C473 (B)	Not less than 476 N*	Meets
Humidified Deflection	Wallboard	C473	Not greater than 32 mm*	Meets
	Ceiling board	C473	Not greater than 8 mm*	Meets
Nail Pull Resistance		C473 (B)	Not less than 327 N*	Meets

* Per ASTM C1396 for 12.5mm gypsum wallboard and gypsum ceiling board

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.

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 Plus 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 exposure to sustained temperatures exceeding 52°C.
- Avoid exposure to excessive, repetitive or continuous moisture before, during and after installation. Eliminate sources of moisture immediately.



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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.
- Plasterboards will not support body weight between rafters, joists, and framing members.
- Manual handling – Plasterboard 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

Store on pallets supplied in dry conditions to separate product from ground surface. Always place pallets on firm level ground and ensure that stacks are both level and vertical.

Board width (mm)	Board length (mm)	Pallet stack height pack
1200	2400, 3000	4

Material Packing Details

Thickness	12.5mm	16mm
Boards per pallet	72	54

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