MADA GYPSUM

DRY LINING SYSTEM DOT & DAB

NON-FIRE RESISTANT

INSTALLATION MANUAL

Edition 01. 2026

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RISK ASSESSMENT
RECOMMENDATIONS*

Hazard	Safety Controls
General health and safety	1. Installers should be informed of specific health and safety requirements during site induction.
Hand tools	1. All workers should be properly trained regarding tools and provided with hand tools that meet relevant safety requirements. 2. Tools should be inspected by supervisors at regular intervals and damaged or defective tools should be taken out of use immediately. 3. The installer is instructed by joining instructions and provided with all necessary PPE.
Power tools	1. Site supervisor to provide training and demonstration on power tools operation and safety. 2. Cables should be routed away from aisles and walkways where they could create trip hazards to other persons. 3. Periodically check power tools and their cables for damage/defects and where necessary take out of action and label "Do not use".
Manual handling	1. All materials to be stored in approved and agreed locations within a working area. 2. Forklift truck/pallet truck to be provided for transport of large pallets and waste skips. 3. PPE should be worn when mixing plaster, including goggles, a dust mask, overalls, and safety shoes. 4. Use Cut 5 resistance gloves specially when working with metal profiles.
Working at height	1. Demonstration by a certified individual in the safe use of: erection, securing, stabilizing steps, hop ups, trestles. 2. Provision of safe means of access to steps, hop ups, trestles. 3. Use of warning signs at all access points to the work area where work is being carried out above ground level.
Materials	1. All materials are stored in an approved location within a working area. 2. SDS to be displayed in the storage area. 3. Site supervisor to instruct / explain the safe handling of materials. 4. The worker informed of personal hygiene requirements, wash hands after use/contact and before eating, drinking, and smoking.
General housekeeping	1. Worker given verbal instructions to maintain clean/tidy up individual workplaces during and after work times. 2. Tools/equipment to be stored in lockable toolbox. 3. Wet/damp sweeping techniques to be used for general cleaning of work area to control dust levels.
Site suitability	1. Mada Gypsum systems are intended for use as internal construction systems (unless stated otherwise). As a result, construction of Mada Gypsum elements should commence only when the perimeter of the build is sufficiently sealed as to provide appropriate levels of weather resistance. 2. Additionally, if the project site is located in an environment that can cause abnormal conditions (such as corrosive sprays), please contact the Mada Technical team for additional guidance.

* It is the sole responsibility of the contractor to conduct an appropriate risk assessment for the site.

STORAGE
RECOMMENDATIONS

Mada Plus Plasterboards shall be stored in a warehouse or other suitable structure where they will not be exposed to inclement weather or to temperatures that frequently exceed 52°C. Stacks of Mada Plus Plasterboards shall be stored supported evenly on a firm, dry, level, and structurally sound floor. Gypsum board shall always be stored flat. Stacks of Mada Plus Plasterboards shall be limited to a maximum height of 5 m (or max. of 4 bundles separated by riser or spacers).

The risers/spacers shall be of uniform size and shall be positioned as per the recommendations mentioned in GA 801 ie the risers shall be aligned vertically so that the load is transferred to the floor.

Mada Plus Plasterboards shall not be stored in areas of excessive humidity nor shall they be stored beneath overhead equipment which may have a tendency to drip grease, oil, or water. Mada Plus Plasterboards shall not be left in heavy traffic areas or where they can be damaged by lift trucks and other warehouse equipment, nor shall they be stored at aisle intersections. If Mada Plus Plasterboards are stored at aisle junctions, corner protectors constructed of sheet metal or similar suitable materials shall be used.

Most plasterboard panels are sensitive to moisture and should not be stored outdoors without complete protection from the weather conditions.

The plastic covering provided for product protection during shipment on flatbed trucks is not suitable for storage of the Mada Plus Plasterboards and shall be removed upon arrival at the destination prior to warehouse storage. Failure to remove this plastic covering can result in damage to the Mada Plus Plasterboards due to moisture, condensation, wet product, and/or mold.

Storing gypsum board on Job sites

- Mada Plus Plasterboards placed on a job site shall be separated by type (place the type of products near areas where it will be installed. This system of placement reduces the chance that the wrong type of Mada Plus Plasterboards will be installed and applicators / installers will have easy access to the stocked products.)
- Do not place longer-length Mada Plus Plasterboards sizes on top of shorter lengths.
- Mada Plus Plasterboards shall be stocked out of the way of construction traffic.
- Special care shall be taken to ensure that the Mada Plus Plasterboards don't damage the exposed studs, windows, door frames, etc.
- Mada Plus Plasterboards shall be stockpiled so as not to hinder the work of construction tradesmen.
- Mada Plus Plasterboards on a job site shall never have any other materials stored or stacked on top of them.
- Mada Plus Plasterboards shall be stockpiled so their weight is evenly distributed, and the floor is not overloaded.
- Mada Plus Plasterboards shall not be stacked high enough to pose a danger from toppling.
- Mada Plus Plasterboards stored in unenclosed buildings shall be placed far enough inside so that they are not exposed to inclement weather, such as wind blown rain or snow.
- Special care is necessary when stockpiling boards on the upper floors of open buildings during periods of high winds.

Adhesive storage

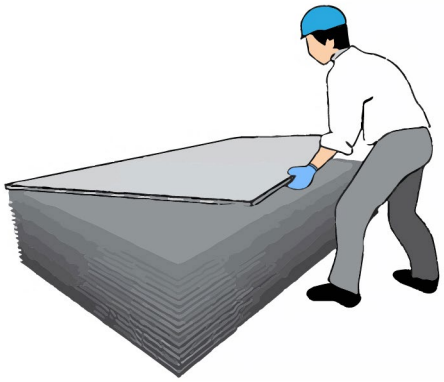
- Mada French Adhesive are supplied in bags on pallets. The bags/pallets should be handled in accordance with the recommendations of Health and Safety at Work Principles and Practice.
- Store them in dry environment, protected from direct sunlight and moisture.
- Where mechanical lifting or moving equipment is required, trained and licensed operators are to be used.
- Mada French Adhesive should be protected from continuous exposure to moisture. Prolonged or repeated exposure to moisture may cause loss of strength. Use pallets when storing products on concrete floors.

MATERIAL HANDLING

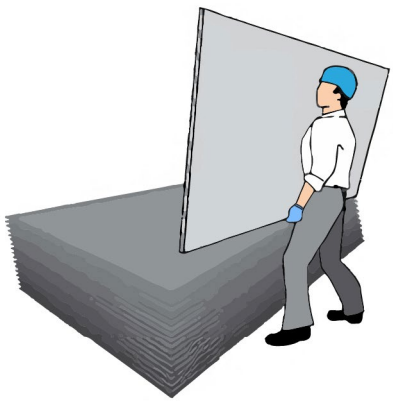
Handling Boards

One person

- Eye protection, hard hat, gloves and safety shoes required
- Pull the board in towards yourself
- Bend your knees for low level work
- Lift by pushing with your legs

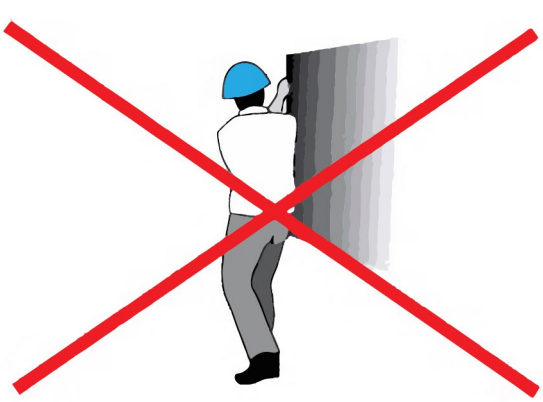


- Carry the board in a balanced manner (for large boards, you can support the board on the top of the chest / shoulder)
- Only lift what you feel you can manage
- If necessary, seek assistance



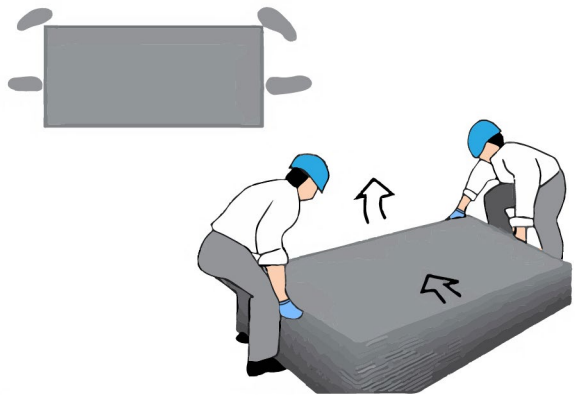
- Carry in a balanced manner across your body
- If walking backwards, ensure it is over the shortest possible distance and clear the route beforehand.

DO NOT CARRY HEAVY OBJECTS ON ONE SIDE



Two people

- Operate from the corners of the stack
- Bend your knees for low level work
- Lift board together to vertical position
- Only lift what you feel you can manage



MATERIAL HANDLING

Lifting Plasterboards Into Place

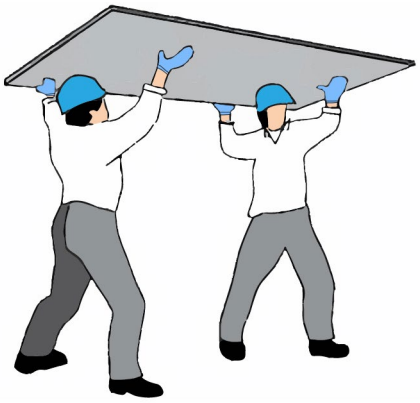
Two person operation

- Eye protection, hard hat, gloves and safety shoes required
- Communicate
- Work together
- Take a firm grip of the board in both hands



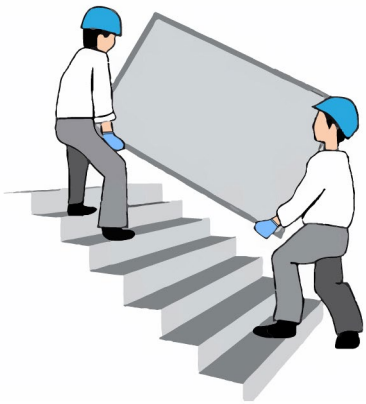
Bend your knees to place board in position

- Always work in front of the body



Carrying board up / downstairs

- Eye protection, hard hat, gloves and safety shoes required
- Whether going up or down stairs, place one foot forward then bring both feet together on each step
- Keep the boards in a balanced manner
- Place both feet on each step before moving off to improve control and balance through-out the lift
- Work together in synergy
- Stop whenever necessary (if steps are in poor condition or have a deeper drop, you may need to place the load down first)
- Only lift what you feel you can manage



MATERIAL
HANDLING

Dabs Preparation and Application

- Eye protection, hard hat, gloves and safety shoes required
- Use proper mixing tools and trowels
- Always work in a balanced position
- Keep the body upright
- Always use appropriate platforms where necessary



DAB
LAYOUT

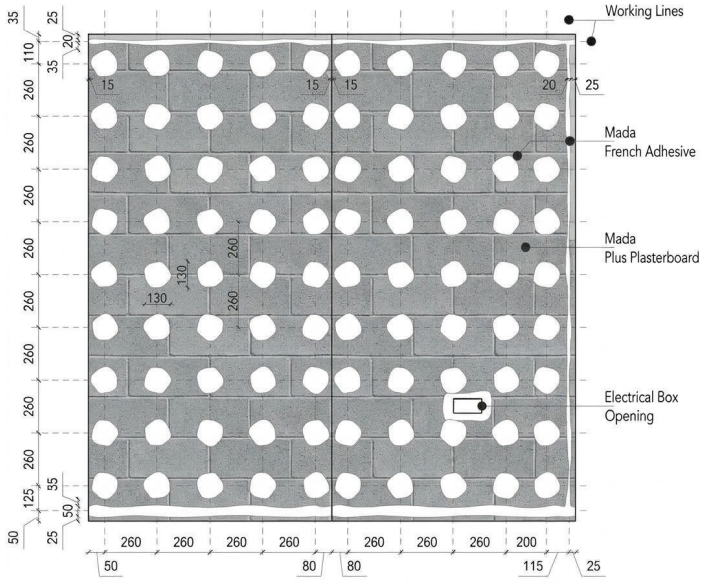
1. Dabs

a. For a typical 1200mm x 2400mm board, we recommend 45 circular dabs, each spreading to approximately 130mm diameter when flattened to ensure overall adhesive contact to cover a minimum of 20% of the total back area of the board.

b. To achieve the board leveling, the dab thickness to be maintained between 10 - 25 mm

c. The recommended distance between dabs shall be 260mm horizontally and vertically and this should not exceed 300mm.

d. The position of the dabs from the board edges shall be maximum 25mm.



Adhesive Pattern

2. Continuous ribbon

a. 50mm wide continuous ribbon of board adhesive to be provided 25mm from base of board to support skirting fixing.

b. 20mm wide continuous ribbon of board adhesive to be provided, 25mm from head of the board and around perimeter of walls to ensure airtightness and provide robust fixing for trims.

c. Socket boxes and other openings such as door/ windows to be surrounded by 20mm wide continuous ribbon of board adhesive.

d. Continuous ribbon of 50mm width to be formed along each face of the substrate at the internal or external corners.

e. This serves as critical fire-stopping (preventing draft-fueled fire spread behind the cavity) and protects acoustics and airtightness.

3. Only single layer boarding is allowed, though up to 16mm thick boards can be used.

4. No more than 2 board height should be line using this dab method.

5. The upper board requires a row of horizontal dabs just above the cut edge butt joint.

SEQUENCE OF INSTALLATION

Direct Lining Installation - Dabs

Environmental & Site Conditions

- Temperature: The room must stay at or above 10°C starting 48 hours before installation begins, throughout the application process, and continuously afterward until the adhesive has fully cured and dried.
- Ventilation: Ensure sufficient airflow to carry away moisture released as the adhesive dries. Avoid direct, concentrated drafts aimed at the work area, as these can dry the adhesive unevenly.
- M&E runs and other penetrating services to be completed prior to start of lining.

Step 1 – Prepare the substrate

Direct lining system using board adhesive is suitable for most level, masonry substrates.

Dryness & Soundness

The masonry or concrete base wall must be completely dry, structurally sound, and free of efflorescence, grease, dust, oil, or concrete form-release agents.

Suction/Porosity

High-suction masonry blocks can quickly sap water from the adhesive mix, weakening the bond. Mist the wall slightly with water or apply a compatible primer/PVAC bonding agent to control suction. Very low suction will require mechanical fixings.

Alignment Check

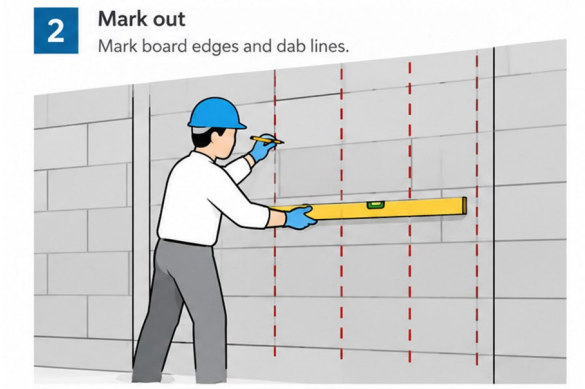
Use a plumb line or laser to identify the high and low spots on the wall. This establishes the maximum thickness needed for your adhesive dabs to bring the final gypsum board face flat and plumb.



SEQUENCE OF INSTALLATION

Step 2 – Marking for board and dab locations

Once the substrate preparation is complete, the wall needs to be marked with the intended location for the boards. Within each board marking, mark the location to receive the dab & continuous ribbon application, based on the conditions set out in the Dab layout.



Step 3 - Adhesive Preparation

Use Mada French Adhesive as the dabbing compound. Before mixing, please ensure that the mixing equipment and bucket used are clean. Contamination from previous mixes adversely affects the setting time and strength. In a clean bucket, gradually addr Mada French Adhesive into cool, clean water (not vice versa) at a ratio of 1.8 kg: 1L(powder to water). Mix manually or with mixer. Allow the mixture to settle for 3-5 mins.

Consistency

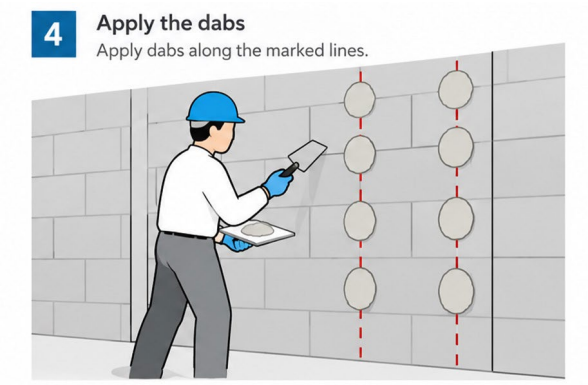
Mix to a thick, creamy paste following exact powder to water specifications. It should stand firmly on a hawk or trowel without slumping or sliding off. Check the consistency of the mixture and add slightly more water if still thick, or more plaster if too liquid. Prepare only the quantity required for dabbing and boarding within 45 minutes.



SEQUENCE OF INSTALLATION

Step 4 – Dabs Application

Select the area that you need to apply the adhesive. Ensure the quantity of adhesive prepared is sufficient for this area. First apply the continuous ribbon to the selected area as per markings done in Step 2. Then, apply hemispherical adhesive dabs, 55–65 mm in diameter, at the marked positions across the central field. Each dab should spread to approximately 130 mm in diameter when the plasterboard is pressed into position.



Step 5 – Positioning and Leveling of the Boards

Start from one corner and from the bottom of the wall.

Floor Clearance

Boards to be cut 15mm less than the board to ceiling height. Never allow the gypsum board to touch the floor directly. Place temporary spacers or offcuts on the floor to lift the board approximately 5–8mm. This isolates the gypsum core from wicking up ground moisture.

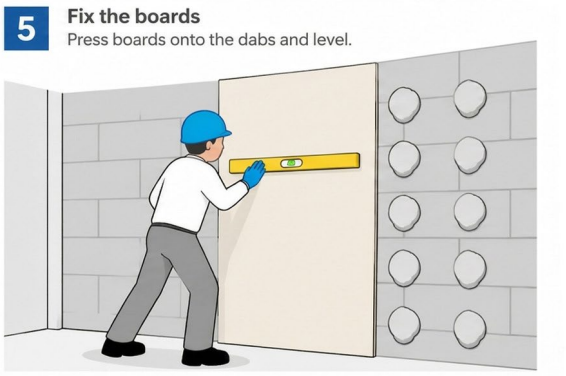
Offering Up & Taping

Lift the board to the wall and firmly push it against the fresh dabs. Use a long spirit level or aluminum featheredge across the face to tap the board level and plumb. Adjust and line it up perfectly flush with adjacent boards before the adhesive begins its initial set (usually within 40 minutes).

Curing Time

Allow the boards to sit completely undisturbed for a minimum of 24 to 48 hours to fully cure before starting any joint taping, skimming, or finishing steps. Begin dabbing and boarding the upper level only after the lower level has cured.

SEQUENCE OF INSTALLATION



Step 6- Other activities

Perimeter sealant

Apply a bead of sealant around the perimeter of the wall sealing the gap between the board and the peripheral structure. Though optional for the non-fire rated and non-acoustic rated linings, it is highly recommended for all linings as it provides the necessary smoke seal between two spaces.

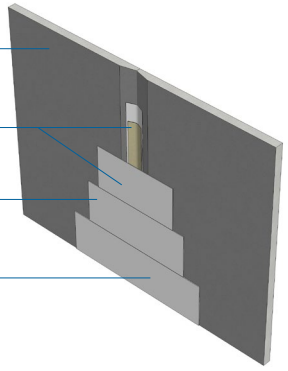
Jointing and Taping

Follow steps as per "Joint and finishing works" to complete the lining installation.



JOINTING & FINISHING WORKS

Tapered Edge Board Jointing



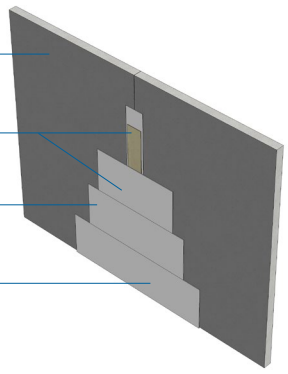
Mada Plus Plasterboard

Bedding coat (150mm wide) using Mada tape bedded into Mada All-Purpose Jointing Compound

Second coat (200mm wide) of Mada All-Purpose Jointing Compound feathered out 50mm to 60mm beyond bedding coat

Third coat (250mm wide) of Mada All-Purpose Jointing Compound feathered out 50mm to 60mm beyond second coat

Square Edge Board Jointing

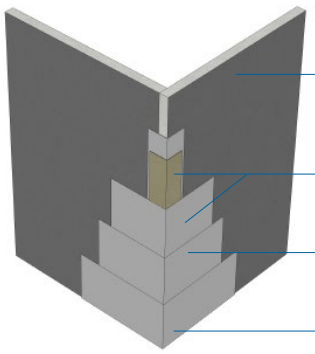


Mada Plus Plasterboard

Bedding coat (250mm wide) using Mada tape bedded into Mada All-Purpose Jointing Compound

Second coat (350mm wide) of Mada All-Purpose Jointing Compound feathered out 100mm to 110mm beyond bedding coat

Third coat (450mm wide) of Mada All-Purpose Jointing Compound feathered out 100mm to 110mm beyond second coat



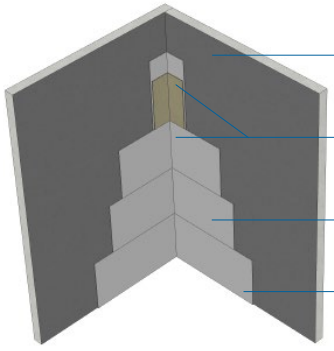
External Corner Joints

Mada Plus Plasterboard

Bedding coat (150mm each side) using Mada Metal Corner Tape or Mada External Corner bead bedded into Mada All-Purpose Jointing Compound

Second coat (200mm each side) of Mada All-Purpose Jointing Compound feathered out 50mm to 60mm beyond bedding coat

Third coat (250mm wide) of Mada All-Purpose Jointing Compound feathered out 50mm to 60mm beyond second coat



Internal Corner Joints

Mada Plus Plasterboard

Bedding coat (100mm each side) using Mada Metal Corner Tape or Mada Internal Corner bead bedded into Mada All-Purpose Jointing Compound

Second coat (125mm each side) of Mada All-Purpose Jointing Compound feathered out 25mm to 30mm beyond bedding coat

Third coat (150mm each side) of Mada All-Purpose Jointing Compound feathered out 25mm to 30mm beyond second coat

MADA GYPSUM

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