



HOME of MAGNUM BOARD®

“The New Generation **GREEN** Building Material”

“Install It for Health-Install It for Life”

Sheathing & Siding Products

TECHNICAL BULLETIN No.:	062515-1324
Subject:	Installation Instructions Magnum Board® Sheathing – Walls and Ceilings
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1.0 PURPOSE

- 1.1 To provide installation instructions for Magnum Board® sheathing materials.
- 1.2 Square edge Magnum Board® sheathing and Magnum 111 vertical sheathing are generally used for exterior applications.
- 1.3 Tape relief edge Magnum Board® sheathing is generally used for interior sheathing applications where joint finishing is required prior to applying your selected finish.
- 1.4 All Magnum® MgO Building Materials are manufactured using the same formulation. All our building materials are good for interior and exterior applications when used according to MBP installation procedures.

2.0 GENERAL

- 2.1 Always follow Magnum Board® Storage and Handling Instructions.

3.0 RESPONSIBILITY

- 3.1 It is the responsibility of the installer to ensure the framing to which the Magnum Board® is affixed is square. If using wood framing, always be sure wood is dry before installing Magnum Board®. If using wood framing, MBP recommends using kiln dried lumber to help reduce potential expansion and contraction.

- 3.2 Out of square framing, instable framing or installing Magnum Board® over wood framing with excess moisture may lead to board and / or joint cracking due to stress.
- 3.3 If problems exist, notify the owner / general contractor prior to the installation of Magnum Board® and insist on corrective action.

4.0 MATERIAL HANDLING REQUIREMENTS

- 4.1 Marshal or stage materials as close to the point of installation as possible. Ensure relative humidity is $\leq 55\%$ before and during installation process. To minimize board expansion or contraction which could result in joint cracks, before installing Magnum Board®, remove the packaging and allow the panels to acclimate to the room temperature and humidity for 48 hours. Replicating your finished room operating temperature and humidity conditions is ideal.
- 4.2 Always store Magnum Board® sheathing flat and protect it from weather and jobsite dirt before, during and after installation.
- 4.3 Always protect the corners of Magnum Board® building materials prior to and during installation.
- 4.4 **DO NOT STACK OTHER MATERIALS ON TOP OF MAGNUM BOARD® SHEATHING.**

5.0 MATERIAL AND TOOL REQUIREMENTS

- 5.1 Premium-grade, high performance, moisture cured, 1-component, polyurethane based non-sag, non-shrink elastomeric sealant / adhesive such as “Sikabond Construction Adhesive”, LOCTITE PL® PREMIUM® Construction Adhesive or equal.
- 5.2 Putty knife.
- 5.3 High quality joint compound
- 5.4 Fiba tape for cement board, 2” width.

6.0 INSTALLATION PROCEDURE

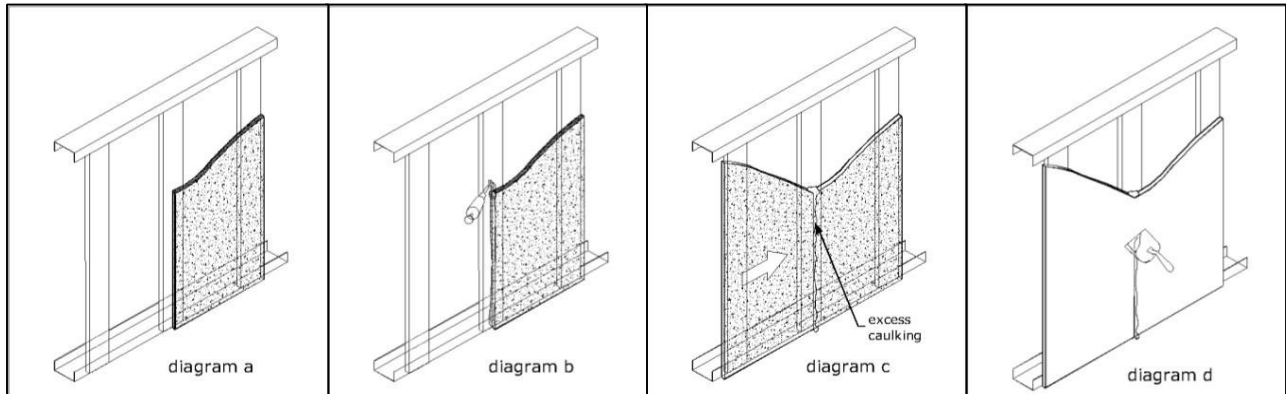
- 6.1 CUTTING MAGNUM BOARD® Sheathing

- 6.1.1 Use a carbide tipped scoring knife or a power saw equipped preferably with a cement board saw blade. We recommend using a T-square to help ensure cuts are straight and even.
 - 6.1.2 Make circular cuts and irregular angle cuts with a Jig Saw Roto-Zip, Dremel or equivalent type power tool equipped with a cement board bit or carbide tipped bit.
- 6.2 INSTALLING MAGNUM BOARD® SHEATHING
- 6.2.1 Always start your project with proper framing ensuring studs are straight and square to allow for adequate fastening surface at adjoining walls and flat stress-free installation of Magnum Board® sheathing
 - 6.2.2 Always fasten Magnum Board® to solid wood or metal studding. Backer board may be used as a minimum, but the impact strength in those areas may be reduced and susceptible to cracking if impacted.
 - 6.2.3 Install first sheet of Magnum Board® Sheathing or Magnum 111 vertical siding flush with the vertical stud to which it is being fastened. Reference diagram A.
 - 6.2.4 Follow the fastener guideline below.
 - 6.2.5 Always install fasteners straight, not at an angle.
 - 6.2.6 Apply a generous amount of the selected Sealant / Adhesive to the exposed edge of the installed sheet. Refer to Material Requirements section above Reference diagram B.
 - 6.2.7 Install the next sheet of Magnum Board® sheathing butting joints together tightly. A small amount of Sealant / Adhesive” should squeeze to the surface along the entire seam. Reference diagram C.
 - 6.2.8 Using a putty knife, remove excess Sealant / Adhesive from butt joint leaving a smooth “seamless” appearing surface between the two-(2) installed sheets of Magnum Board® Sheathing.
 - 6.2.9 Clean putty knife after smoothing every joint to eliminate buildup of putty on the putty knife.
 - 6.2.10 Countersink all fasteners unless otherwise instructed by manufacturer of product to be applied to Magnum Board® Sheathing as a final finish.
 - 6.2.11 If fasteners are countersunk, using a putty knife, apply selected joint compound to all fastener countersinks ensuring the application is smooth and blends into the flat

surface of the Magnum Board® Sheathing. This will help ensure a level “5” smooth painted finish.

6.2.12 If necessary to sand the fastener countersink areas on Magnum Board® sheathing, use a lightweight sandpaper to ensure a smooth finish for painting.

6.2.13 Always ensure Sealant / Adhesive is completely dry before sanding and painting.



6.3 INSTALLING MAGNUM BOARD® ON EXTERIOR WALLS WHERE FINAL FINISH IS SPECIFIED AS OTHER THAN PAINT

6.3.1 Consult with your installer or the manufacturer of the product that is specified as your final finish seeking instructions on how to prep the fastener countersinks and joints to properly apply the specified final finish.

6.4 INSTALLING MAGNUM BOARD® ON INTERIOR / EXTERIOR CEILINGS

6.4.1 As with wall sheathing, always start with proper framing ensuring studs are straight and square to allow for adequate fastening surface at adjoining walls and flat stress-free installation of Magnum Sheathing.

6.4.2 Ensure relative humidity is $\leq 55\%$ humidity before and during installation process.

6.4.3 When stalling Magnum Board® sheathing to ceilings, use a panel lifter, “T” Brace or similar device as a safety measure to hold the Magnum Board® panels in place while fastening.

6.4.4 Start with installing Magnum Board® ceiling panels at right angles to joists.

6.4.5 Stagger butt end joints so joints do not extend across the ceiling. It is recommended that you not place a butt end next to a tapered end.

6.4.6 We recommend butt joints be staggered and not run seams lineally across the ceiling.

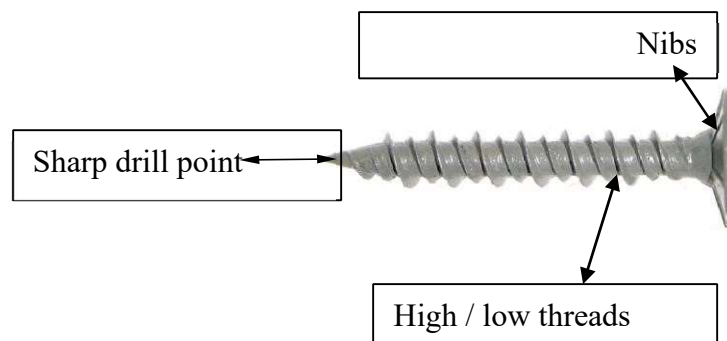
- 6.4.7 Always install long sides of Magnum Board® to framing to achieve best stability and joint finishing.
- 6.4.8 Apply a generous amount of selected Sealant / Adhesive to the exposed edge of the installed sheet of Magnum Board®. Refer to “Materials Required” section above.
- 6.4.9 Install next sheet of Magnum Board® sheathing butting joints together tightly. A small amount of Sealant / Adhesive should squeeze to the surface along the entire seam. Remove this material with a putty knife.
- 6.4.10 Follow the fastener guideline below.
- 6.4.11 Slightly countersink each fastener to allow for proper finishing.
- 6.4.12 Refer to section “8” for joint finishing.

7.0 **FASTENING**

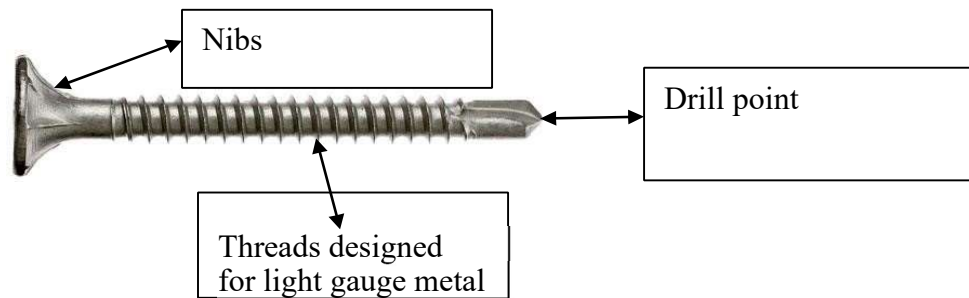
7.1 MgO board is slightly corrosive by nature to certain types of metal fasteners. Magnum Board® Fiber Reinforced MgO Products requires the use of 316-stainless or titanium material for all fasteners. Magnum Board Products takes no responsibility if installer uses of anything, but the materials recommended herein.

7.2 Fastening with screws:

7.2.1 Fastening to wood studs with screws: Utilize a #8 or thinner shank flat head fastener with high/low threads and a sharp drill point.



7.2.2 Fastening to metal, 18 gauge or heavier, with screws: Utilize a #8 or thinner shank flat head screw with nibs under the head for countersinking into the Magnum Board®, and a self-drilling point for penetrating the light gauge metal.



7.2.3 When fastening to light gauge materials lighter than 18 gauge, it may be necessary to utilize pneumatic fastening. Fasteners shown in 7.2.2 above may strip out lighter gauge studding prior to countersinking the head of the fastener into the Magnum Board® Fiberglass Reinforced MgO sheathing.

7.3 Fastening with pneumatic pins.

7.3.1 Use hardened stainless steel or titanium pins.

7.3.2 Pneumatic pressures vary depending on board thickness and stud material used. Always test pressures on a small sampling of Magnum Board® sheathing to assure proper set pressure based on countersinking needs.



7.4 Magnum Fiberglass Reinforced MgO Building Materials can be fastened direct to block. Check with your local fastener expert or call Magnum Board® Products, Tampa FL office for installation details.

7.5 Installing Fasteners:

7.5.1 ≥ 4 " from corners.

7.5.2 Approximately 9/16" from the board edge.

7.5.3. 12" apart along perimeter edges and joist lines.

8.0 JOINT FINISHING

8.1 MBP recommends that Magnum Board® be installed butt jointed; however, if Magnum Board® is installed with a space between the joints, BASF states that "the optimal depth of

a sealant joint should not exceed half the sealants depth". If the depth exceeds the width by more than one half, always fill the space with the appropriate backer rod prior to applying selected joint compound. If backer rod is not used and the entire cavity is not filled, as the joint compound dries it may sink resulting in a joint reveal.

- 8.2 Consult with your finish product manufacturer for instructions on preparing butt joints prior to applying final finish to Magnum Board® exteriors .

9.0 **BOARD SURFACE FINISHING**

- 9.1 Magnum Board® is a fiber reinforced MgO Cement Board that can be finished with most any type of product including, but not limited to paint, lime-based products, clay based products, stone, brick Portland based and synthetic type stuccos and much more.
ALWAYS consult with your finish material manufacturer / supplier for their updated application guidelines prior to beginning your project.

10.0 **IMPORTANT NOTES / PRECAUTIONS**

- 10.1 Following good material preservation and construction practices, Magnum® MgO Building Materials are not recommended for prolonged direct exposure to rain or weather.
- 10.2 Always begin fastening at one side and proceed to fasten across the board to the other side to avoid stress.
- 10.3 Magnum® MgO Building Materials contain no carcinogenic material; however, a dust mask is always recommended during routing, cutting, and/or sanding operations. Refer to MBP MSDS for additional safety information.
- 10.4 Installation must comply with all applicable local, state, and federal codes and should also follow good installation practices.
- 10.5 Depending on your jobsite location and if you are utilizing galvanized steel framing, the chlorides in some MgO sheathing used to ward off insects and prevent the feeding of mold and mildew, may experience a reaction. Due to Magnum® Fiberglass Reinforced MgO Building Materials special chemistry, no such reaction has been reported when using Magnum® MgO Building Materials; however, to help prevent the possibility of such a reaction, especially in extreme high humidity areas, before installing Magnum Board® sheathing to metal framing, a barrier of some type must be applied to the light gauge

material to eliminate direct contact between Magnum Board® and the framing. Suggested barriers include, but are not limited to, paint and fire tape. In lieu of a barrier between Magnum Board and the light gauge steel framing, GAL 90 light gauge is recommended.

10.6 **ALWAYS** follow finish manufacturers recommendations for application on Magnum. MgO Building Materials.

10.7. From time to time, Magnum Board Products may update their installation guidelines. It is the responsibility of the Architect and / or Installer to confirm they are designing and working with the latest guidelines available. Contact Magnum Board Products at their St. Petersburg, FL offices to request the current installation guidelines before commencing your project.

11.0 **AVAILABLE PRODUCT DIMENSIONS**

11.1 Widths: 4' (1.2M)

11.2 Lengths: 8' (2.4M), 9' (2.7M), 10' (3.0M) and 12' (3.6M)

11.3 Thickness: 3mm to 20mm

11.4 Special order sizes are available within the above width and overall length dimensions. Call for pricing and delivery information.

12.0 **SQUARE EDGE PROFILE**



14.0 TAPE RELIEF EDGE PROFILE



CAUTION:

Because materials expand and contract at different rates and under different conditions, no one, including Magnum Board® Products, can guarantee crack free joints. The reports we have received from our customers indicate many types of joint compounds have been used successfully. Customers do tell us they have had good luck using fiba tape joint tape and we pass this on for your information. We are happy to discuss with you the joint compound you intend to use and provide to you any feedback we may have received on the specific type; and, we are happy to tell you what our customers have had success with in the past. Please call us at your convenience.

Please visit our web-site at www.magnumbp.com to view more information about this **“GREEN”** sheathing material including install guidelines and pictures of installations around the World.



On Behalf of
Mother - Nature
THANK YOU



“GOTTA GO GREEN”