



## HOME of FRAMING

“The New Generation **GREEN** Building Material”  
“Install It for Health-Install It for Life”  
Sheathing & Siding Products

TECHNICAL BULLETIN No.:	051617.1343
Subject:	Installation Instructions for Magnum Roofing and Flooring Substrate
Issue Date:	May 21, 2019
Issue No.:	4: 072322

### 1.0 PURPOSE

1.1 To provide instructions for installing Magnum® Substrate.

### 2.0 GENERAL

2.1 Magnum Board Products, LLC- (hereinafter, MBP).

2.2 For Technical Information, refer to Magnum® “CSI” format product specifications, Magnum Engineering Specifications, and Magnum® Certified Test Summary.

2.3 If problems exist, notify the owner / general contractor prior to the installation of Magnum®® Flooring Substrate and insist on corrective action before moving forward with flooring installation.

2.4 Always follow MBP “Storage and Handling” Instructions.

### 3.0 RESPONSIBILITY

3.1 It is the responsibility of the installer to ensure the framing to which Magnum® Substrate is affixed is square. If using wood framing, ensure wood is dry, preferably kiln dried, before installing Framing.

### 4.0 MATERIAL HANDLING REQUIREMENTS

4.1 Marshal material as close to the point of installation as possible and for interior installations, always in a location where the relative humidity (RH) is  $\leq 55\%$ .

- 4.2 Always store Magnum® Substrate flat and protect it from weather and jobsite dirt before, during and after installations. Refer to MBP “Storage and Handling Instructions”.
- 4.3 Always protect the corners of Magnum® Substrate prior to and during installation.
- 4.4 **DO NOT STACK OTHER MATERIAL ON TOP OF MAGNUM® ROOFING OR FLOORING SUBSTRATE.**
- 4.5 For Magnum® Roofing and Flooring Substrate either directly or indirectly exposed to the elements, code requires an application of a prime coat of acrylic-siloxane waterproofing sealant, or equal, followed by painting in accordance with MBP paint instructions, or equal.
- 4.6 Wear gloves to avoid abrasion injuries.

## 5.0 MATERIAL AND TOOL REQUIREMENTS

- 5.1 Premium-grade, high performance, moisture cured, 1-component, polyurethane based non-sag elastomeric sealant / adhesive such as “Sika PRO Select Construction Adhesive” or equal.
- 5.2 Putty knife.
- 5.3 Sawhorses
- 5.4 Square
- 5.5 Saw equipped with carbide cutters.

## 6.0 INSTALLATION PROCEDURES

### 6.1 CUTTING ROOFING AND FLOORING SUBSTRATE

- 6.1.1 Cut flooring with a power saw equipped with a carbide blade. Blades designed specifically for cement board works best. 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, Oscillating Tool, Roto Zip, Dremel or equivalent type tool, preferably equipped with a cement board bit or carbide tipped bit.

## 6.2 INSTALLING SUBSTRATE

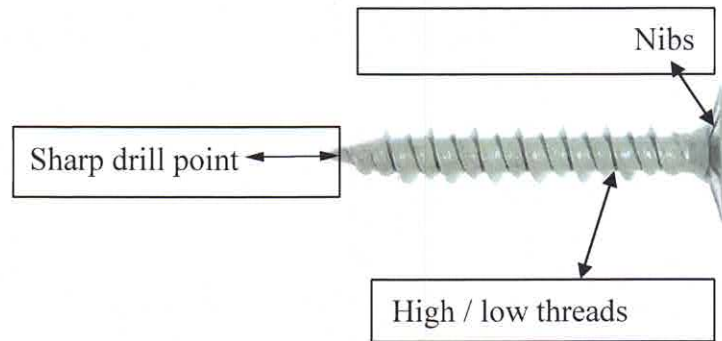
- 6.2.1 Start with proper framing - straight and square - to allow for adequate fastening surface at butt joints.
- 6.2.2 Lay out Magnum® substrate, minimizing the number of cuts, before fastening to framing. For flooring substrate, Plan the layout so that the cut edges are against the perimeter of the room, if possible, and make sure the sheets are spaced evenly and butted together tightly.
- 6.2.3 Ensure relative humidity is  $\leq 55\%$  before and during installation process. For flooring substrate, to minimize board expansion or contraction, before installing, remove from packaging and allow Magnum® Substrate to acclimate to room temperature and humidity for 48 hours. Replicating your finished room operating temperature and humidity conditions is ideal.
- 6.2.4 Reference span chart, Exhibit A and attached hereto.
- 6.2.5 Always support Magnum® Roofing and Flooring Substrate edges over framing.
- 6.2.6 Slightly countersink each fastener.
- 6.2.7 Specific for Flooring Substrate Installation:
  - 6.2.7.1 Leave about 1/8<sup>th</sup> inch between the perimeter walls and the flooring to allow for expansion.
  - 6.2.7.2 After installing the initial sheet of flooring, apply a generous amount of “Sika PRO Select Construction Adhesive”, or equal, to the exposed edge of the installed flooring. Refer to Material Requirements section above.
  - 6.2.7.3 Install the next sheet of flooring, offset and butting joints together tightly. A small amount of “Sika PRO Select Construction Adhesive”, or equal, should squeeze to the surface along the entire seam.
  - 6.2.7.4 Using a putty knife, remove excess “Sika PRO Select Construction Adhesive” from the butt joint.

## 7.0 FASTENING

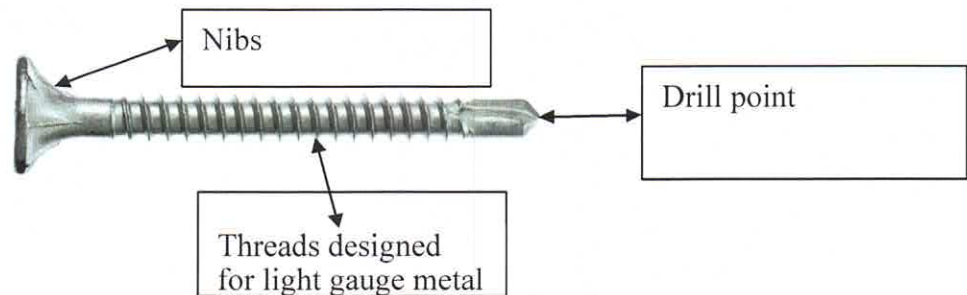
- 7.1 MgO board is slightly corrosive by nature to certain types of fasteners. MBP recommends using 316-stainless steel or titanium material for all fasteners.

7.2 Fastening with screws:

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



7.1.2 Fastening to metal, 18 gauge or heavier, with screw: Utilize a #8 flat head screw with nibs under the head for countersinking into the Framing, and a self-drilling point for penetrating the light gauge metal.



7.1.3 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 Framing.

7.2 Fastening Pneumatically

7.2.2 Use hardened stainless steel or titanium pins.

- 7.2.3 Pneumatic pressures vary depending on board thickness and framing materials used. Always set pressure based on countersinking needs. MBP recommends for a 12mm sheathing, begin testing at about 130 PSI and adjust accordingly to achieve the appropriate counter sink.



- 7.3.4 **ALWAYS INSTALL FASTENERS AS STRAIGHT AS POSSIBLE. ANGLES MAY DAMAGE SHEATHING.**

## 8 IMPORTANT NOTES / PRECAUTIONS

- 8.1 Always begin fastening at one side and proceed to fasten across the board to the other side to avoid stress.
- 8.2 Flooring contains no carcinogenic material; however, a dust mask is always recommended during routing, cutting and / or sanding operations.
- 8.3 Installation must comply with all applicable local, state and federal codes and should also follow good installation practices.

## 9 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: 18mm Structural Sheathing
- 11.4 Call for pricing and delivery information on special sizes within the above envelope dimensions.
- 12.0 From time to time, MBP may update their installation instructions. It is the responsibility of the Architect, General Contractor, Installer, and / or Owner to ensure they are using the latest

installation instructions. Contact MBP to obtain a copy of the latest issue of installation instructions.

**CAUTION:**

- Because materials expand and contract at different rates and under different conditions Magnum Board® Products does not guarantee crack free joints.
- Please visit our web-site at [www.Magnum@bp.com](http://www.Magnum@bp.com) to view more information about this **"GREEN"** sheathing material including install guidelines and pictures of installations around the World.

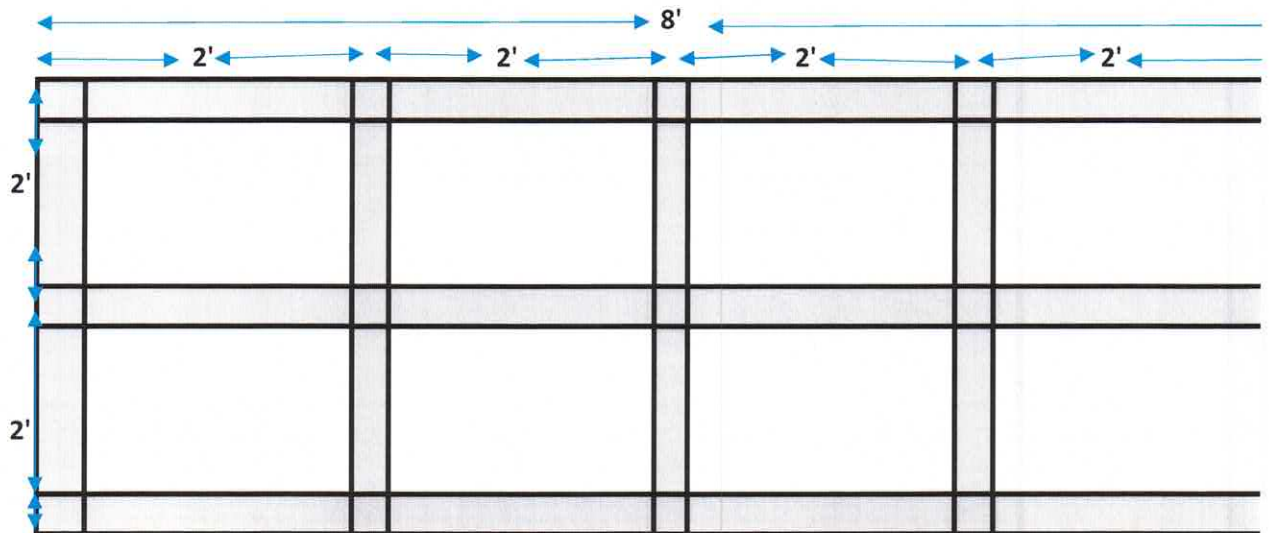


On Behalf of  
Mother - Nature  
**THANK YOU**



**"GOTTA GO GREEN"**

## MAGNUM ROOFING AND FLOORING SPAN CHART



### FASTENING PROFILE

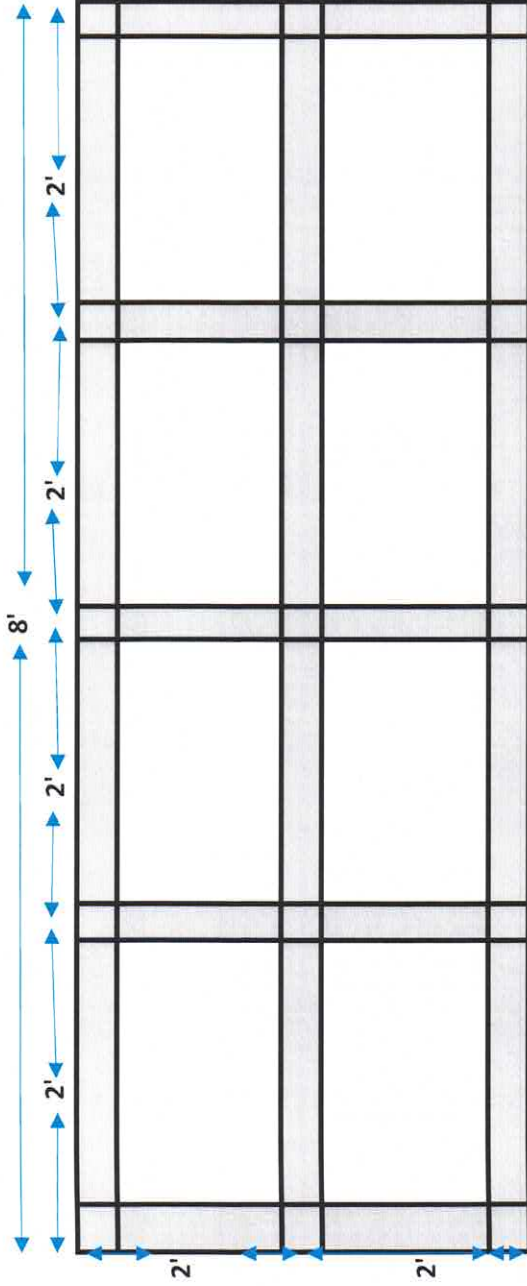
≥ 4" from corners

9/16" from roofing and flooring edges

12" apart along perimeter edges and joist lines.

**EXHIBIT A**

**MAGNUM ROOFING AND FLOORING SPAN CHART**



**FASTENING PROFILE**

- ≥ 4" from corners
- 9/16" from roofing and flooring edges
- 12" apart along perimeter edges and joist lines.