MAGNUM BOARD® PRODUCTS
Interior Exterior Sheathing – Ceiling Board - Backer/Underlayment - Trim – Siding Materials
Specification – 120209-1400, Issue 5

PART 1 GENERAL

1.1 SECTION INCLUDES
A. Magnum® wall board
B. Magnum® veneer wood paneling
C. Magnum® ceiling board
D. Magnum® backer board & underlayment
E. Magnum® trim
F. Magnum® “one hour” area separation wall
G. Magnum® sheathing board
H. Magnum® soffit, ventilated and non ventilated
I. Magnum® siding
J. Magnum® drop ceiling panels

NOTE: ALL MAGNUM® MATERIALS ARE HIGH ABUSE, HIGH IMPACT.

1.2 RELATED SECTIONS
A. Section 05400 – Cold Formed Metal Framing
B. Section 06100 – Rough Carpentry: Wood Framing.
C. Section 06100 – Rough Carpentry: Sheathing
D. Section 06200 – Finish Carpentry: Adjacent Work to receive fire treated sheathing.
E. Section 06400 – Architectural Woodwork: Adjacent Work to receive fire treated sheathing.
F. Section 07210 - Insulation: Exterior wall insulation
G. Section 07900 – Sealant: Joint sealant and acoustical sealant
H. Section 08100 – Metal Support Assemblies
1.3 REFERENCES

A. AC386 Acceptance criteria for fiber-reinforced magnesium-oxide based sheets

B. ASTM International (ASTM):
   1. ASTM C1185-03 Flexural Strength.
   2. ASTM C1325-04 Dimensions and Tolerances
   3. ASTM C1186-02 Moisture Movement
   4. ASTM C1186-02 Water Absorption
   5. ASTM C1325-04 Compression Indentation
   6. ASTM C1325-04 Nail Head Pull-Through
   7. ASTM C1325-04 Falling Ball Impact
   8. ASTM C1325-04 Shear Bond Strength
   9. ASTM C1396-06a Humidified Deflection
   10. AC376 and ASTM E72 section 15 Wet Racking Shear
   11. ASTM G155 Zenon Arc Accelerated Weathering
   12. ASTM E84-05 Surface Burning Characteristics
   13. ASTM E136-04 Behavior of Materials in a Vertical Tube at 750°C
       Decomposition Products – Toxicity Test
   15. ASTM C1185 Frost Resistance (Freeze / Thaw)
       and Materials
   17. ANSI / UL263 (ASTM E119 and NFPA 251) Underwriters Laboratory Standard
       Test Method for Building Construction and Materials– One Hour Wall Rating
   18. ASTM G21 Standard Practice for Determining Resistance of Synthetic
       Polymeric Materials to Fungi

C. Fire Rated Assemblies: Provide materials and construction identical to those tested in fire
   endurance rated assemblies by an independent testing agency acceptable to the authorities having
   jurisdiction.
   1. Test method: ASTM E 119 / UL 263
   2. Test method: CAN / ULC-S101M
   3. Ratings: As indicated on the drawings; designations listed are from:
      a. UL Fire Resistance Directory
b. ULC Fire Resistance Directory

1.4 SUBMITTALS
A. Submit under provisions of 01300.
B. Product Data:
   1. Manufacturers data sheets on each product to be used
   2. Storage and handling requirements and recommendations
   3. Installation methods
C. Closeout Submittals:
   1. Warranty: Manufacturer’s standard warranty document executed by authorized company official. Manufacturer’s warranty is in addition to, and not a limitation of, other rights owner may have under Contract Documents.

1.5 QUALITY ASSURANCE
A. Installer Qualifications: Installer specializing in performing Work of this section with minimum three-(3) years of experience.
B. Follow good construction installation practices and Magnum Building Products® Installation Guidelines as applicable.

1.6 DELIVERY, STORAGE AND HANDLING
A. Deliver and store Magnum Board® in accordance with this procedure
B. Ship materials on sturdy pallets and well covered to keep from weather, damage and dirt.
C. Keep material dry prior to and during installation.
D. Stack flat on dun-age – do not allow material to bow, or to sit directly on the ground.
E. Do not stack other materials on top of Magnum Board®.
F. Protect Magnum Board® from jobsite dirt.
G. Protect edges, ends and faces of Magnum Board® from damage.
H. Store Magnum Board® inside and protected from damage by weather and direct sunlight.

PART 2 PRODUCTS

2.1 Manufacturers
2.2 Magnum Board – All Products / Applications

A. Sheathing
1. Sizes
   a. Lengths: 8’, 9’, 10’ and (special order 12’)
   b. Widths: 4’ standard (other available on special order)

2. Thicknesses
   a. 1/8” (3MM)
   b. 3/32” (4MM)
   c. 1/5” (5MM)
   d. ¼” (6MM)
   e. 5/16” (8MM)
   f. 11/32” (9MM)
   g. 3/8” (10MM)
   h. 7/16” (11MM)
   i. 15/32” (12MM)
   j. 17/32” (14MM)
   k. 5/8” (15MM)
   l. 23/32” (18MM)
   m. ¾” (19MM)
   n. 25/32” (20MM)
   o. 1” (24MM)

3. Edges
   a. Square
   b. Taper: 8MM thicknesses to 19MM thicknesses (other by special order)

4. Physical Characteristics
   b. Flexural Strength:
      6MM
      Machine = 2296 PSI
      Cross = 2054 PSI
      12MM
      Machine = 1038 PSI
Cross = 1508 PSI
Meets all requirements of AC386 and ASTM C1185

c. Wet Racking Shear Strength:

<table>
<thead>
<tr>
<th>Test Number</th>
<th>Ultimate Load (lbf)</th>
<th>lbf/lineal ft.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>3600</td>
<td>450</td>
</tr>
<tr>
<td>2</td>
<td>3600</td>
<td>450</td>
</tr>
<tr>
<td>3</td>
<td>2900</td>
<td>363</td>
</tr>
<tr>
<td>Average</td>
<td>3367</td>
<td>421</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>404</td>
<td>51</td>
</tr>
</tbody>
</table>

d. Fungus / Mold: Non-nutrient when tested in accordance with ASTM G21

2.3 ACCESSORIES
A. Screws: SG#8 Hilti or equivalent
B. Pins: ETF AKN-100-1050A or equivalent
NOTE: Fastener length depends on thickness of Magnum Board® Product being installed.

PART 3. EXECUTION

3.1 EXAMINATION
A. Verify site conditions are ready to receive work and framing and opening dimensions as indicated on the Drawings.
B. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION
A. Clean surfaces thoroughly prior to installation.
B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the Magnum Board Product being installed and under the project conditions.

3.3 INSTALLATION

A. Magnum® wall board
   1. Install in accordance with manufacturer’s written instructions - Technical Bulletin No.: 090509-1405.

B. Magnum® veneer wood paneling
   1. Install in accordance with manufacturer’s written instructions – Technical Bulletin No.: 100109-0900

C. Magnum® ceiling board
   1. Install in accordance with manufacturer’s written instructions – Technical Bulletin No.: 090509-1405

D. Magnum® backer board & Underlayment
   1. Install in accordance with manufacturer’s written instructions – Technical Bulletin No.: 090508-1545

E. Magnum® trim
   1. Install in accordance with manufacturer’s written instructions – Technical Bulletin No.: 100209-0930

F. Magnum® “one hour” area separation wall
   1. Install in accordance with underwriters laboratories written instructions – Follow link: http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/showpage.html?name=BZXX.R26120&ccnshorttitle=Building+Units&objid=1080304183&cfgid=1073741824&version=versionless&parent_id=1073984868&sequence=1

G. Magnum® sheathing board
   1. Install in accordance with manufacturer’s written instructions – Technical Bulletin No.: 111309-1108

H. Magnum® soffit, ventilated and non ventilated
   1. Install in accordance with manufacturer’s written instructions – Technical Bulletin No.: 112809-1202

I. Magnum® Lap Siding
   1. Install in accordance with manufacturer’s written instructions – Technical Bulletin No.: 112809-1203

J. Finishing:
1. Interior and Exterior Applications can be finished with most any material including, but not limited to:
   a. Exterior
      i. Paint: Reference manufacturer’s written instructions – Technical Bulletin No.: 071509-1236, or equivalent
      ii. Portland type stucco
      iii. Synthetic stucco
      iv. Tile
      v. Brick
      vi. Stone
   b. Interior
      i. Paint: Reference manufacturer’s written instructions - Technical Bulletin No.: 071509-1235, or equivalent.
      ii. Wall paper
      iii. Cloth or other similar finish
      iv. Tile
      v. Brick
      vi. Stone
      vii. Plaster

3.4 PROTECTION
   A. Protect installed products until completion of project and acceptance of work.
   B. Touch-up, repair or replace damaged products before Substantial Completion.

3.5 CLEANUP
   A. Upon completion and acceptance of installed work, remove surplus materials, excess materials, rubbish, tools and equipment.
   B. Always follow local, State, and Federal guidelines for disposing of waste materials.

Magnum Board® Products are non-toxic, mineral, green building products.

END OF SECTION