EXTERIOR ARCHWAYS, EXTERIOR CONCAVE AND CONVEX SURFACES

GlasRoc® Sheathing is engineered for use in curved exterior gypsum board applications. There is no need to score or moisten the board to bend it. To prevent flat areas in the curved surface, framing should be positioned at a maximum spacing of 6" (152 mm).

Consult the Gypsum Association document GA-226 for framing recommendations.

APPLICATION TO ARCHWAYS

GlasRoc Sheathing can be installed in an archway or on a concave or convex surface by applying pressure onto the board to fit the radius and then holding it firmly in place while fastening it to the framing members. To best seat the product in tight radius applications, temporarily install a stop at one end of the framed radius to serve as a restraint support. Install the product with coated side out with one of the width ends placed flush against the temporary stop and secure with fasteners, one framing member at a time. Repeat until the product has been secured to all framing members. Fasteners should be spaced no greater than 8" (200 mm) apart.

REFERENCED STANDARDS

- ASTM C954: Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.33" (8.4 mm) to 0.112" (2.84 mm) in Thickness
- ASTM C1002: Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases
- ASTM C1177: Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
- ASTM C1280: Standard Specification for Application of Gypsum Sheathing
- ASTM C1397: Practice for Application of Class PB Exterior Insulation and Finish Systems
- ASTM E96: Test Methods for Water Vapor Transmission of Materials

REFER TO FINISH SYSTEM MANUFACTURER FOR GLASS MESH REINFORCEMENT REQUIREMENTS.

RECOMMENDED LENGTHWISE BENDING RADII

<table>
<thead>
<tr>
<th>Sheathing Board Thickness</th>
<th>Tested - Bent Lengthwise Radii</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot; (12.7 mm) GlasRoc® Sheathing</td>
<td>6' - (1829 mm)</td>
</tr>
<tr>
<td>5/8&quot; (15.9 mm) GlasRoc® Sheathing Type X</td>
<td>8' - (2438 mm)</td>
</tr>
</tbody>
</table>
GlasRoc® Sheathing is a superior product for a flat ceiling entryway, exterior ceiling or a soffit assembly, due to its ability to resist the deteriorating effects of moisture and humidity.

INSTALLATION RECOMMENDATIONS FOR EXTERIOR CEILINGS & SOFFITS

Use GlasRoc Sheathing in exterior ceiling and soffit systems where weather-resistant performance is critical, including but not limited to ceilings/soffits with finished joints and ceilings/soffits without insulation. Install the product like a standard gypsum exterior soffit board. Fasten the product to the framing members using the recommendations specified in GA-216 and ASTM C840. Finishing is accomplished with either 1) Direct-Applied Exterior Finish System (DEFS) per the manufacturer’s specifications, or 2) applying nominal 2” glass mesh drywall tape and 90-minute setting-type joint compound, such as M2Tech 90, HD 90, or Lite Sand Plus 90, on the board joints, skim-coating the entire surface of the ceiling soffit with a setting-type compound and priming and painting with exterior grade primer and paint per the manufacturer’s recommendations.

REFERENCE STANDARDS

- ASTM C514: Specification for Nails for the Application of Gypsum Board
- ASTM C954: Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.33” (8.4 mm) to 0.112” (2.84 mm) in Thickness
- ASTM C1002: Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases
- ASTM C1177: Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
- ASTM C1397: Practice for Application of Class PB Exterior Insulation and Finish Systems
- ASTM E96: Test Methods for Water Vapor Transmission of Materials

FLAT CEILING ENTRYWAYS, EXTERIOR CEILINGS, SOFFITS, CANOPIES, CARPORTS, AND PARKING GARAGES

The industry defines the amount of permissible sagging in a horizontal application as humidified deflection. There are several ASTM standard specifications that define a maximum allowable humidified deflection including ASTM C1396 and ASTM C1177. Of these, ASTM C1177 has the most stringent requirements. Note how GlasRoc® Sheathing performs.

GLASROC® SHEATHING IN EXTERIOR CEILING & SOFFIT APPLICATIONS

<table>
<thead>
<tr>
<th>Properties</th>
<th>1/2&quot; (12.7 mm) GlasRoc Sheathing</th>
<th>1/2&quot; (12.7 mm) Gypsum Soffit Board</th>
<th>5/8&quot; (15.9 mm) GlasRoc Sheathing Type X</th>
<th>5/8&quot; (15.9 mm) Gypsum Type X Soffit Board</th>
<th>ASTM TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>Glass Mat</td>
<td>Paper</td>
<td>Glass Mat</td>
<td>Paper</td>
<td>C473</td>
</tr>
<tr>
<td>Humidified Deflection (Sag)</td>
<td>3/32&quot; (2.38 mm)</td>
<td>7/8&quot; (22 mm)</td>
<td>1/16&quot; (0.4 mm)</td>
<td>1/2&quot; (13 mm)</td>
<td></td>
</tr>
</tbody>
</table>