GlasRoc® Sheathing is a superior product for a flat ceiling entryway, exterior ceiling, or a soffit assembly, due to its ability to resist deteriorating effects of moisture and humidity.

Flat Ceiling Entryways, Exterior Ceilings & Soffits

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 C 79, ASTM C 931, ASTM C 1396, and ASTM C 1177. Of these, ASTM C 1177 has the most stringent requirements. Note how GlasRoc® Sheathing performs.

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 C 840. Finishing is accomplished with either; 1) Direct-Applied Exterior Finish System (DEFS) per the manufacturer’s specifications, or 2) applying 2” x 10 x 10 glass mesh drywall tape and 90 minute setting-type joint compound 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.

Referenced Standards

- ASTM C 514: Specification for Nails for the Application of Gypsum Board
- ASTM C 954: Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.33 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness
- ASTM C 1002: Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases
- ASTM C 1177: Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
- ASTM C 1397: Practice for Application of Class PB Exterior Insulation and Finish Systems
- ASTM E 96: Test Methods for Water Vapor Transmission of Materials

GlasRoc® Sheathing in Exterior Ceiling & Soffit Applications

<table>
<thead>
<tr>
<th>Properties</th>
<th>Electrode Shank</th>
<th>Electrode Shank</th>
<th>Electrode Shank</th>
<th>Electrode Shank</th>
<th>ASTM TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>Acrylic</td>
<td>Paper</td>
<td>Acrylic</td>
<td>Paper</td>
<td></td>
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<tr>
<td>Humidified Deflection (Sag)</td>
<td>1/16” (1.6 mm)</td>
<td>7/8” (22 mm)</td>
<td>1/64” (0.4 mm)</td>
<td>1/2” (13 mm)</td>
<td>ASTM C 473</td>
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<tr>
<td>Water Absorption % by Weight</td>
<td>&lt;10%</td>
<td>40%</td>
<td>&lt;10%</td>
<td>44%</td>
<td>ASTM C 473</td>
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<tr>
<td>Surface Water Absorption - grams</td>
<td>&lt;1.6</td>
<td>2.0</td>
<td>&lt;1.6</td>
<td>2.0</td>
<td>ASTM C 473</td>
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