

# TL-0002 — Substrate Preparation for Application of PERM-A-BARRIER® Products to Glass-Mat Faced Gypsum Sheathing Technical Letter

Glass-mat faced gypsum sheathing is used for direct mechanical application to structural framing as a backing for a variety of exterior claddings or as a soffit material. Its unique glass mat facing provides greater resistance to rain, heat and wind than regular paper-faced gypsum sheathing. The following are recommendations for substrate preparation when applying GCP's PERM-A-BARRIER® products to glass-mat faced gypsum sheathing. Full membrane application guidelines are described on the product data sheets available for download at [www.gcpat.com](http://www.gcpat.com).

## PERM-A-BARRIER® Fluid Applied Membranes

When installing PERM-A-BARRIER® fluid applied membranes over glass-mat faced gypsum sheathing, no surface treatment is required. PERM-A-BARRIER® fluid applied membranes have excellent adhesion to the surface of the glass-mat faced gypsum sheathing. In order to ensure a quality application, we recommend of the following joint treatment option:

- To avoid deflection of glass-mat faced gypsum sheathing at panel joints, fasten corners and edges with appropriate screws as per manufacturer's recommendations.
- Completely fill the sheathing joint with S100 Sealant and then install a scratch coat (approx. 15-30 mils) of S100 Sealant with a margin trowel or similar onto the face of the sheathing approximately 1 in. (25 mm) on each side of the sheathing joint, ensuring the edges are tapered to prevent shadowing of the spray application.
- Once the sealant is tack free, the PERM-A-BARRIER® fluid applied membrane may be applied.
- This is the preferred joint treatment for all PERM-A-BARRIER® fluid applied membranes.

## PERM-A-BARRIER® Wall Membrane

## PERM-A-BARRIER® VPS

## PERM-A-BARRIER® Aluminum Wall Membrane

## PERM-A-BARRIER® Wall Flashing

## PERM-A-BARRIER® Aluminum Flashing

## PERM-A-BARRIER® Detail Membrane

In order to ensure a quality application we recommend the following:

- To avoid deflection of glass-mat faced gypsum sheathing at panel joints, fasten corners and edges with appropriate screws as per manufacturer's recommendations.
- Gaps, voids, or sheathing joints exceeding 1/4" should first be repaired with a compatible sealant. Refer to Technical Letter 1: Chemical Compatibility of PERM-A-BARRIER® Self-Adhered Membranes with Other Materials for guidance.
- When installing PERM-A-BARRIER® membranes, the surface of the sheathing must first be primed with PERM-A-BARRIER® WB Primer by roller, PERM-A-BARRIER® Primer Plus by spray, brush or roller, or PERM-A-BARRIER® Adhesive by roller. Coverage rates are recommended in the following table and may vary depending on substrate and/or substrate roughness.
- When installing PERM-A-BARRIER® VPS over glass-mat faced gypsum sheathing including DensGlass Gold, GlasRoc, e2XP or Securock, the surface of the sheathing must first be primed with 1 coat of PERM-A-BARRIER® Primer Plus or PERM-A-BARRIER® Adhesive. Additional primer may be required for CMU and Securock. Allow PERM-A-BARRIER® Primer Plus to dry for a minimum of 1 hour (longer at low temperatures). PERM-A-BARRIER® Adhesive will have faster dry times in comparison to PERM-A-BARRIER® Primer Plus.
- PERM-A-BARRIER® Primer Plus is a water-based primer while PERM-A-BARRIER® Adhesive introduces a solvent based option. Both will impart an aggressive, high tack finish on the glass mat substrate of the sheathing. They are packaged ready to use and are specifically designed to facilitate tenacious adhesion of PERM-A-BARRIER® VPS to glass-mat surfaces. Apply PERM-A-BARRIER® Primer Plus by spray, brush or roller at a coverage rate of approximately 450-500 ft<sup>2</sup>/gal (11-12 m<sup>2</sup>/L). Apply PERM-A-BARRIER® Adhesive by roller or brush at a coverage rate of approximately 250-300 ft<sup>2</sup>/gal (6-7 m<sup>2</sup>/L). Coverage rates may vary depending on substrate and or substrate roughness.

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