Statements expressed in this technical bulletin are recommendations for the application of Marlite brand products as outlined and illustrated under normal conditions of installation. The recommendations provided in the bulletin represent our best judgment based on our experience with normal applications. Unless prior approval is obtained in writing from Marlite, any deviation from these recommended procedures shall be at the sole risk of the installers. Carefully inspect all panels. If a panel is defective, notify the Marlite Service Center or Distributor nearest you at once. Failure to do so shall be at the sole risk of the installer. Do not store Marlite FRP Panels outside exposed to the weather and its elements.

Important – Read complete instructions carefully before beginning installation.

Total System Components – Nominal 3/32” thick, 4’ wide panels, harmonizing FRP Trim Molding, adhesives, silicone sealant, Marlite brand patented FRP Base Molding System.

Tools Required – Table saw or circular saw with fine-tooth blade, caulking gun, rule/tape, drill, file, hammer, plumb line/level, horses/support.

Caution – Use a damp cloth, mild soap or detergent to clean panels. Use mineral spirits to remove excess adhesive before it dries. Do not use abrasive cleaners. FRP Panels can be spray washed provided Marlite brand Silicone Sealant is used in all Trim Molding channels.

Open package – Carefully inspect all panels. Due to texture and manufacturing techniques, some panels may possess minor variations in color consistency and pattern.

Installation Tips

1. Install FRP Panels when room and material temperature are approximately 70°F.
2. Application is recommended over a solid backing, such as drywall or plywood. Surface to be covered must be clean, dry, solid, straight, and free from drywall dust, bumps, projections, loose plaster, loose paint, or any unsealed joint compound wider than 3”. For seams with excessive joint compound wider than 3”, seal drywall joint using a 50/50 mixture of latex paint and water applied lightly over the drywall compound only.
3. Maintain plumb vertical edges with plumb lines or level.
4. Do not position FRP Panel joints directly over drywall or plywood joints.
5. Cut FRP Panels face up using a table saw or face down using a circular saw.
6. When using Marlite brand C-551 FRP Adhesive, use only unfinished, untreated plywood or unfinished, untreated drywall. Sealing drywall compound can be accomplished using a 50/50 mixture of latex paint and water applied lightly over the drywall compound only.
7. For grooved Panels, proper panel orientation is required to ensure groove alignment.
**Condition Panels**

FRP Panels should be allowed to acclimate to the room environment prior to installation. After unpacking, place panels in the room where they will be installed for at least 48 hours prior to installation.

**Important! Regarding High Humidity Areas:**

For applications that require silicone sealant, we recommend the use of Marlite brand Silicone Sealant, available in clear (MS 250) and white (MS 251). In high moisture or wet areas, Trim Molding should surround all panels and be properly sealed with a continuous bead of sealant.

**Installation Steps for FRP Trim Molding**

1. **Proper Wall Layout**
   - End Panels Trimmed
   - For a balanced appearance, establish a center line of area to be covered and install Division Trim Molding and work toward corners. (see illustration 1)

2. **Trim Molding**
   - Trim Molding must be applied using pin tacks or staples and/or adhesive. Do not pin tack or staple through FRP Panels.
   - Trim Molding should surround all edges of every FRP Panel.
   - Do not fit panels too tightly into Trim Molding. Allow at least 1/8” space in all channels for panel expansion after installation is completed. (see illustration 2)
Silicone Sealant is best applied to Trim Molding prior to application to the wall. It is important that a continuous, non-broken bead of sealant is applied. Excess sealant “squeeze-out” should be promptly cleaned off with mineral spirits. It is suggested that a sealant be applied to all exposed edges of molding, electric plates and other covers after installation. Allow 24 hours drying time for sealant. Rough cut FRP Panel edges can be smoothed with sandpaper or a file.

Where steam cleaning is required, and high moisture conditions are prevalent; all Trim Molding and FRP Panels must be sealed with Marlite brand Silicone Sealant to ensure a watertight seal. (see illustrations 3 – 6)
**Application at Tile Curb, Floor, Base Molding and Ceiling Line**

Curb must be installed first. Apply a continuous bead of silicone sealant to the top of curb or floor line and in the Trim Molding channel. Set Edge Trim Molding in place and fasten to the sub wall. Slip FRP Panel into Edge Trim Molding. Allow for 1/8” expansion space and sealant “squeeze-out”. Execute similar application at ceiling line.
(see illustration 7)

**Application at Inside Corners**

Apply a continuous bead of silicone sealant in the corner and in the Inside Corner Trim Molding channel. Secure Inside Corner Trim Molding to cover bead.
(see illustration 8)

**Application at Outside Corners**

First, cut the FRP Panel on the preceding wall flush to the outside corner and install. Apply a continuous bead of silicone sealant to both Outside Corner Trim Molding channels. Secure into place and slip in the next FRP Panel.
(see illustration 9)

M961 Outside Corner Guards and F560SS snap on Stainless Steel Corner Guards are also available for areas requiring greater durability.
Application at Panel Divisions

Apply a continuous bead of silicone sealant to both Division Trim Molding channels. Slip under preceding FRP Panel and secure to sub wall. Then, continue with the next FRP Panel. (see illustration 10)

Use pin tacks or staples and/or adhesive on Division Trim Molding flanges. Ensure an 1/8” expansion space between the FRP Panel and Division Trim Molding center strip.

Flanges and posts of Division Trim Molding must be cut away ¾” if it butts to already applied Trim Molding. (see illustration 11)

Application of Patented FRP Base Molding

For perspective of application, see illustration 1.

Locate the highest point of the floor and mark a level reference line around the room to guide the installation.

Start at door opening.
Apply a ¼" bead of silicone sealant to the bottom of the Base Molding. A sufficient amount of sealant must be applied, creating some “squeeze out” when Base Molding is set in place. Set Base Molding in place using silicone sealant and nail through the back flange every 24" using 1-3/8" drywall nails.

Continue to install Base Molding using silicone sealant to attach Butt Joint Connectors, Inside Corners and Outside Corners. Apply a ¼" bead of silicone sealant to the face, top and bottom of all male connectors.

(see illustrations 3 – 5)

**Cutting FRP Panels**

Cut FRP Panels face up with a table saw or face down with a circular saw using a fine-tooth blade. For cutouts, drill four holes and radius all corner cuts to avoid chipping. For small jobs, FRP Panels can be cut using a strong pair of cutting shears.
Application of Adhesive

Always apply Marlite brand C-551 FRP Adhesive, Marlite brand C-915 Construction Adhesive or Advanced Polymer Adhesive to the FRP Panel back. Be sure the existing sub wall is porous, straight, clean, and dry. Apply over plywood or drywall that is void of excessive joint compound.

If the sub wall is non-porous, Marlite brand 915 Construction Adhesive or Advanced Polymer Adhesive must be used. Perform a trial to ensure acceptable adhesion and performance. Adhesive is easiest to spread at approximately 70°F. FRP Panels must be installed while the adhesive is fresh, within 5 minutes of application. Adhesive on the FRP Panel face should be removed promptly using mineral spirits. Adhesive coverage is 210 square feet per 3.5 gallon can.

Apply adhesive to the entire back of the FRP Panel using a notched spreader or trowel. Trowel size is 3/16” wide x ¼” deep x ½” c-c notch.

100% coverage over the entire FRP Panel back is required except approximately 1” at edges. Use the notches in the spreader to achieve the exact depth of adhesive. The spreader end must be kept at 90° to the panel surface. Avoid too heavy a coat. To assure proper ridges when spreading adhesive, keep notches of the spreader clean by placing it in a pail of water when not in use. (see illustration 1-A). Once FRP Panel is adhered to wall, apply pressure by rolling. Be sure of 100% adhesive transfer.

Special hints –

- Use Marlite brand C-551 FRP Adhesive (sub wall must be porous) or the Advanced Polymer Adhesive to satisfy low VOC requirements.
- Pouring a layer of water on top of the Marlite brand C-915 Construction Adhesive pail helps keep the adhesive fresh, reduce solvent odor, extend open time and make the adhesive easier to spread.

Note – The use of cartridge adhesives will not ensure panels stay flat and tight to the wall. DO NOT USE.
Mechanical Fasteners

Unusual situations may require drive rivets. Work from the top to bottom or middle to edges. Drill holes for fasteners 1/8” oversize to allow for FRP Panel expansion. For best bonding, arrange fasteners on 16” centers with outer fasteners about 1” from the FRP Panel edge. Where FRP Panels come together, fasteners should be staggered to ensure a flat seam.

Excessive Drywall Compound

If using Marlite brand C-551 FRP Adhesive, seal excessive drywall compound (see page 1 installation tip #2). Walls that have excessive joint compound wider than 3” should be sealed with a 50/50 mixture of latex paint and water prior to installing FRP Panels. Walls should not be painted. Failure to follow these requirements may result in installation failure.

Application of Seam Joint
(most commonly used with Artizan™ FRP and Symmetrix™ FRP Panels)

1. Use a 6-penny nail for FRP Panel spacing. Dry fit before gluing to ensure groove alignment. If grooves fail to align, flip panel top to bottom.

2. After adhesive sets, remove nails and apply a 2” or wider strip of masking tape. Trim out groove with a sharp utility knife using the panel edges as guides.

3. Apply a bead of harmonizing Marlite brand Silicone Sealant.

4. Finish the joint with a plastic spoon or finder tip. Wait one hour before removing tape. Remove excess silicone sealant.