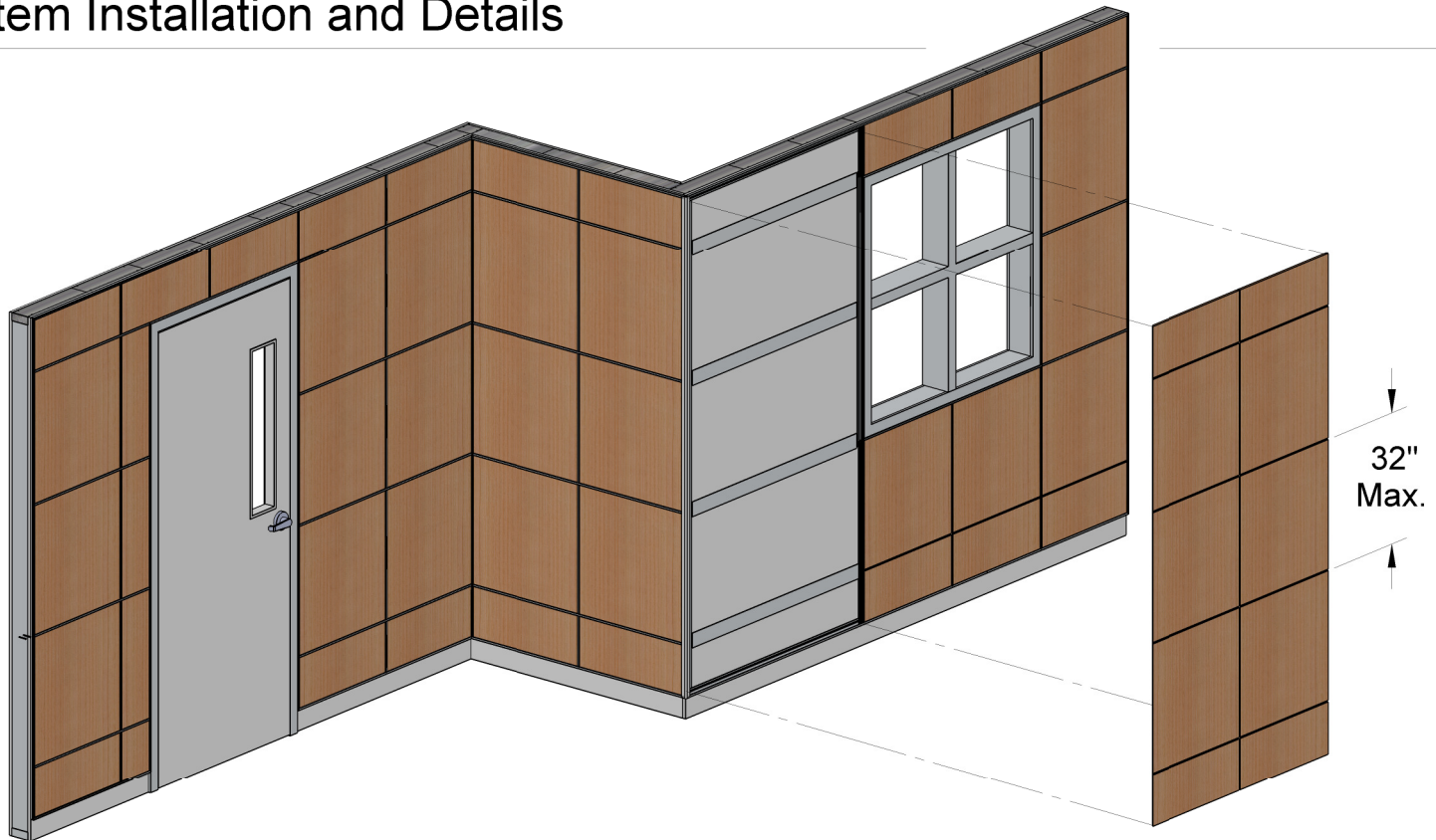


# INSTALLATION INSTRUCTIONS



## Connections 44

### System Installation and Details



Statements expressed in this technical bulletin are the recommendations for the application of Marlite 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 parts. If a part is defective, notify the Marlite Service Center nearest you at once. Failure to do so shall be at the sole risk of the installer.

#### System Overview

Connections is a durable high pressure laminate (HPL) wall panel system featuring 7/16" thick panels that can be scored in a variety of patterns. The panels are fastened to the wall with screws through the reveals which are then filled with trim batten inserts for a modular appearance. Large panel sizes install easily and economically to achieve a modular panel appearance.

Connections panels are fabricated utilizing 4' x 8', 4' x 10', 5' x 8', and 5' x 10' panels to accommodate specific requirements for each application (Class A components are available in 4' x 8' and 4' x 10' only).

The intent is to supply the installer with the largest possible panel size for quick and easy installation. Panel construction includes an HPL face, MDF core, and a backer.

#### Installation Overview

- Define the installation area
- Install the perimeter trim
- Install aluminum furring strips
- Install batten receivers
- Install the panels, secure with screws
- Install batten inserts and trim

#### Application

- Maximum recommended distance between horizontal reveals is 32" o/c
- Must be installed over solid, smooth substrate. Examples of suitable wall structures: drywall over metal studs (preferred) or 3/4" plywood sheathing over concrete/brick walls.

#### Safety

- Always wear proper safety glasses or goggles and hand protection. Be sure to use proper safety guards on tools and equipment.

#### Required Tools

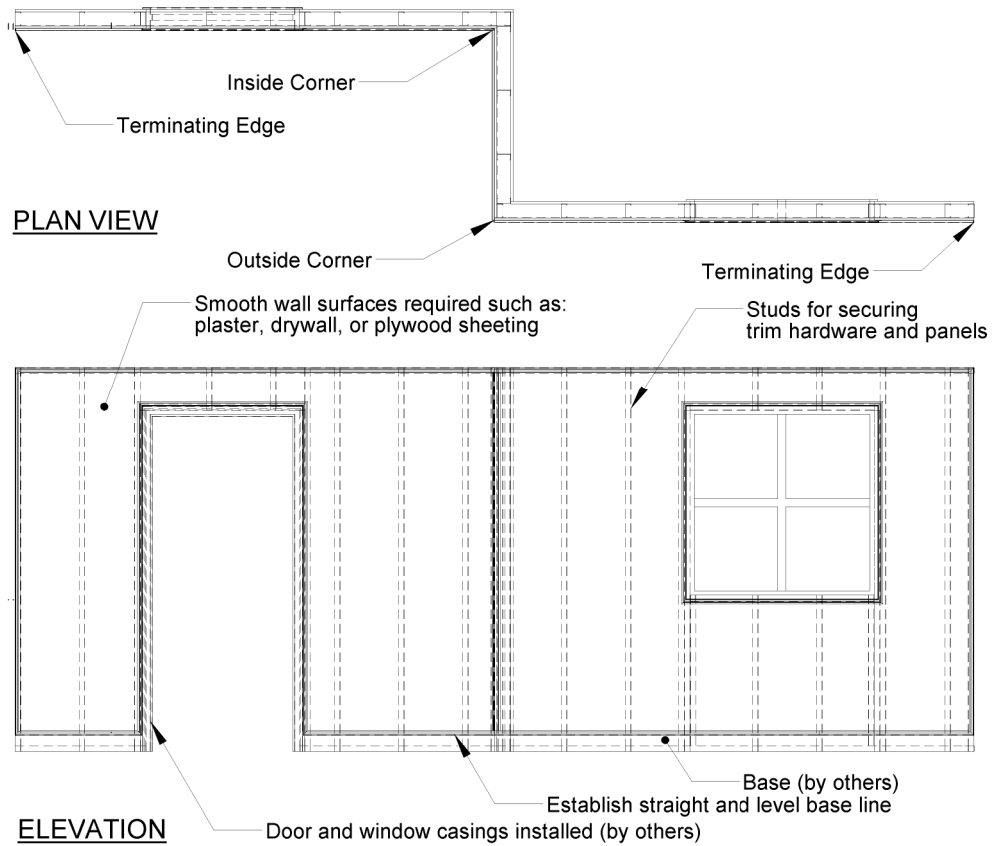
- Ordinary carpenter tools, laser level, chalk line
- Power drill, screw gun, driver bits
- Drill bits  $\phi 3/32"$ ,  $\phi 5/32"$ , and  $\phi 1/4"$
- Table saw or circular saw
- Power miter saw (fine tooth blade)
- Router, rabbeting bit, 1/8" kerf cutter
- Marlite C-109 construction adhesive and painter's tape

#### Preparation and Handling

- **Allow panels to equalize to room environment prior to installing. The area in which the panels are to be installed must be climate controlled; room temperature 70 °F and humidity levels 35% to 60%. Walls should be finished, dry, solid, and true.**
- Follow local building codes and procedures.
- Lift panels, do not slide, for they may scratch. Be careful of all edges and corners for they may be easily damaged and may be sharp.

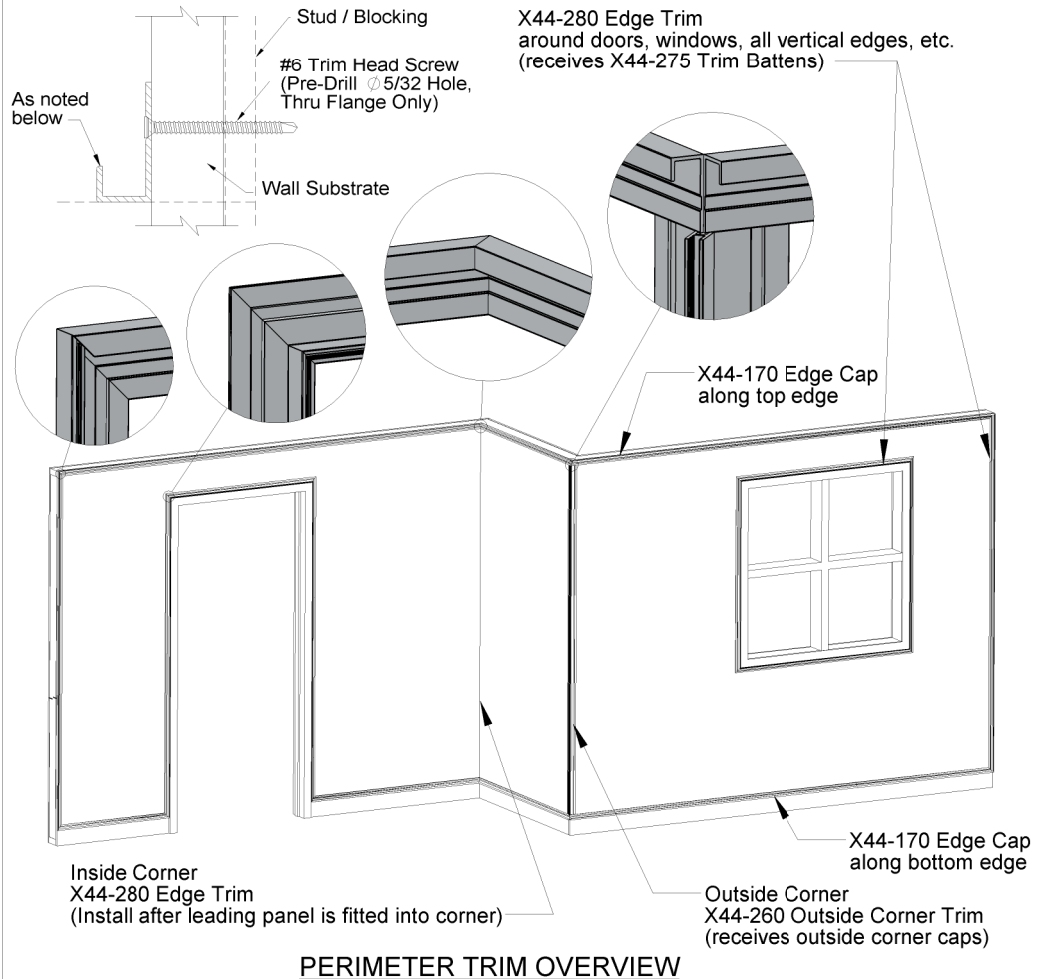
## Define the Installation Area

- Review the construction documents and determine the areas that will receive the Connections panels.
- It is the installers responsibility to determine the final scope and extent of the project and to make sure the system is installed with a finished quality appearance regardless of the field conditions.
- Verify installation area has adequate structural support and/or blocking behind the proposed Connections panel locations.
- Define an entire base line of this area with a level line.



## Step 1 - Install the Perimeter Trim

- Screws are to be located every 16" o/c both horizontally and vertically. Screws shall be anchored into a stud or other solid substrate. In cases where screws do not hit the studs, Marlite C-109 construction adhesive must be used to help secure the trim profiles to the wall.
- Pre-drill  $\varnothing 5/32$ " holes thru the screw channels located on the flanges of all perimeter trim hardware.
- Use a **#6 trim-head screw** to secure the trim extrusions to the wall. The head of the screw should be flush with the flange on the aluminum profile. In cases when other screws are being utilized, it will be necessary to drill a countersink for the screw head to seat flush with the flange.



**Layout and Installation**

**Step 2 - Install the aluminum furring strips**

– Aluminum furring strips are used to anchor panels in place and are required behind all horizontal reveal locations.

– Layout the location of the horizontal reveals on wall elevation.

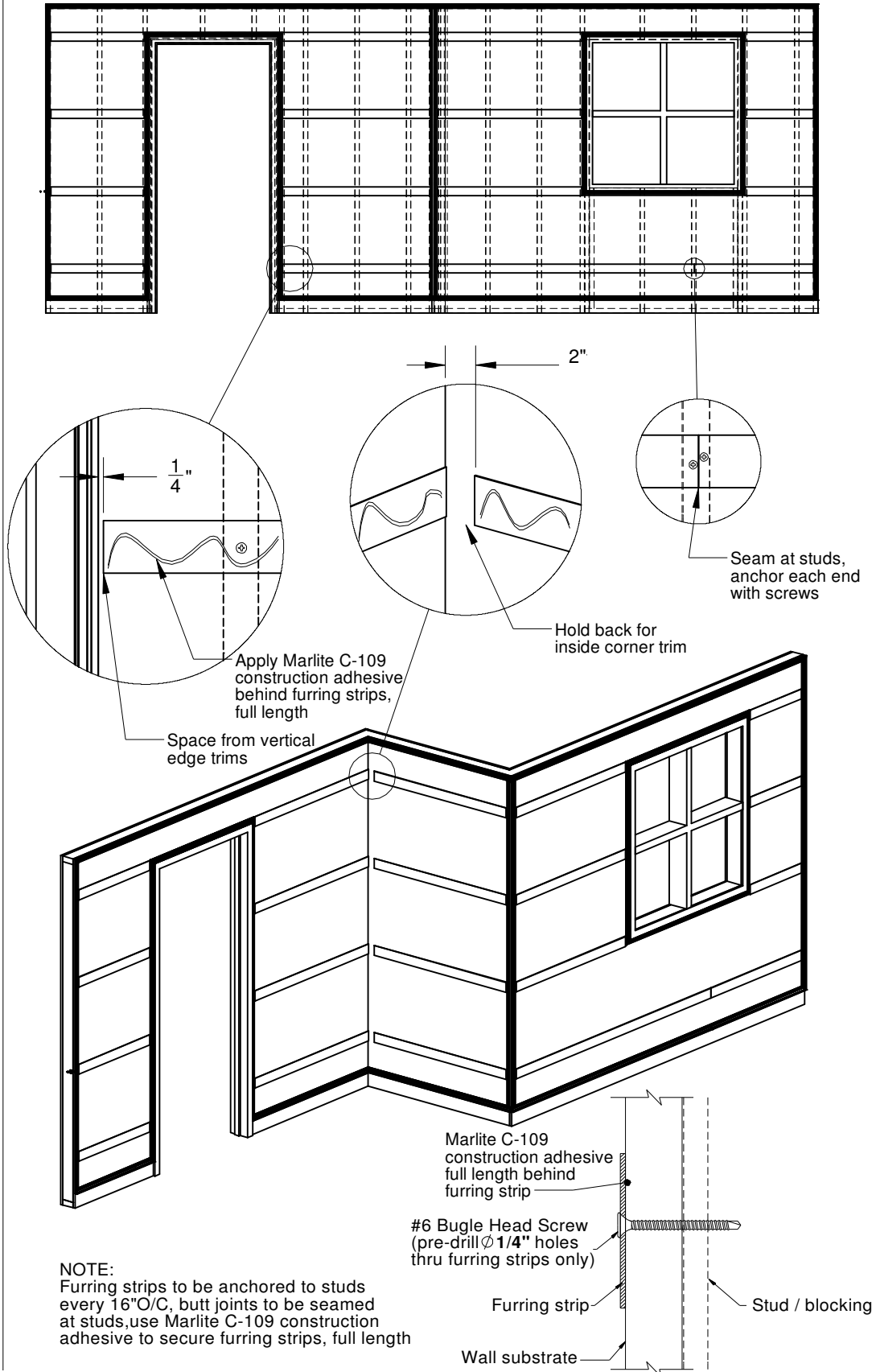
– Determine number of furring strips required. Cut furring strips to length as needed. When splicing end-to-end make sure splice is located at stud.

– Furring strips should be located approximately 1/4" away from all perimeter edge trim flanges. For inside corners, hold the furring strip back approximately 2". This will allow for installation of the vertical edge trim after the leading panel is installed.

– Layout and pre-drill  $\phi 1/4"$  holes thru the furring strips approximately 1/2" from each end and minimally every 16" o/c to receive #6 bugle head screw. Make sure pre-drilled holes fall on stud locations and hole is properly sized to provide minimal protusion of the screw head. (The  $\phi 1/4"$  pre-drill hole size is critical so that there is minimal protusion from the screw head allowing the panels to be installed properly. Screw heads other than bugle head screw provided for typical installation will require countersinking.

– Apply Marlite C-109 construction adhesive behind furring strips, full length

– Secure furring strips to the wall using #6 bugle head screw making sure that screws are anchored solid thru the sub-wall and into the framework.



**Layout and Installation**

**Step 3 - Trim the panels to height**

- First, determine the required panel height needed.

- Scribe the panel if needed to match the alignment of the trim. Continue by field cutting/trimming the panel(s) to the required height per your measurements. Make sure to trim from the top of the panel as it will make groove alignment easier since the panels rest on their bottom edge. It may also be necessary to scribe and field cut/route the vertical edge of the starter panel to match the line of the wall to ensure the panel edges are plumb and true for the remainder of the installation. Same goes for the last panel.

- Field cut as needed from full panels to fit around windows and doors.

Note: To avoid chipping on the face of the panels, always cut the panels face up on a table saw and face down when using a circular saw.

**Step 4 - Pre-install the midwall batten receivers into the panels**

- Midwall Receivers are utilized to bond Midwall Trim Battens instead of bonding directly to the panel. This allows the trim to remain unaffected by any expansion and contraction experienced by the panel itself.

- Prior to setting the panels in place, cut and insert 6" long sections of the **X44-325 Midwall Receiver** into the horizontal and vertical grooves. Use one 6" section every 24" horizontally and vertically, every vertical panel joint location, and at the end of each groove.

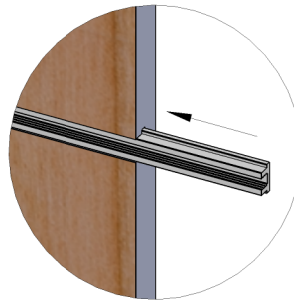
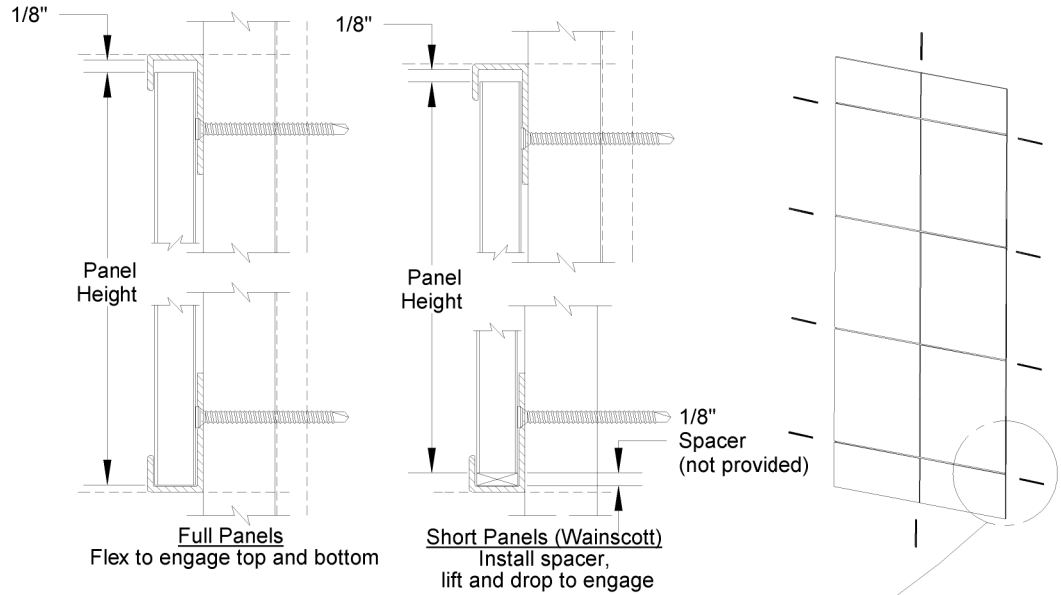
- It is critical that the Midwall Receivers are installed into the vertical grooves contained within the panel prior to placement onto the wall, because there will be no access to the open groove ends once the panel is set in place.

**Step 5 - Install the panels**

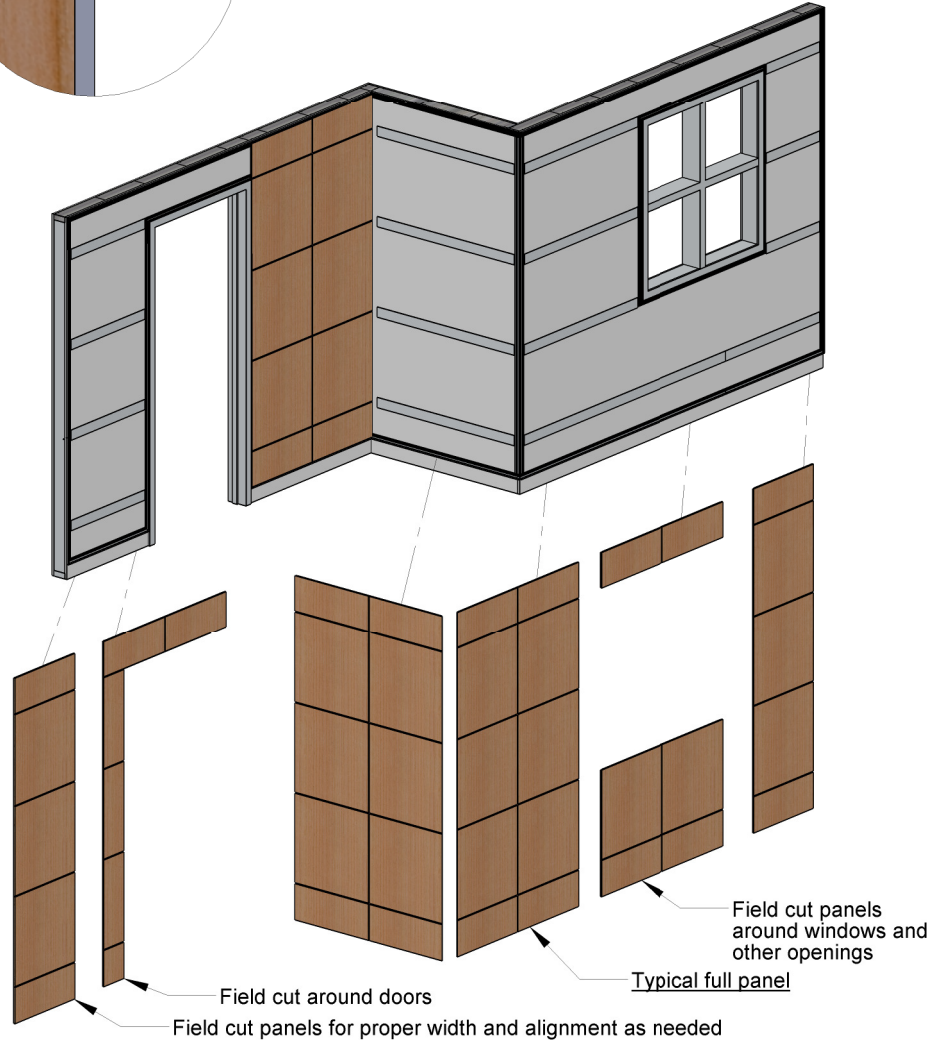
- Apply adhesive to back of panel.

- Set the first panel into the framework created by the Edge Trim. To do so, flex the panel in an arc top to bottom to allow it to slip behind the Top and Bottom Edge Trim. Short panels that will not flex will need to be cut shorter and installed with an **1/8" spacer (by others)** inside the bottom channel.

- Proceed per Step 6 and Step 7 for creating the proper vertical panel joint before placing the next panel in place .



Adhesive required on the back of all panels, MarliteC-109 construction adhesive with at least a 3/8" thick bead around entire perimeter and a serpentine pattern full height of panel



Layout and Installation

### Step 6 - Install Inside Corner Trims

- Once the leading panel is installed on any inside corner, make sure the next step is to install the Edge Trim in the inside corner for the adjacent panel before proceeding.

### Step 7 - Install X44-335 Joint Rail at vertical panel joints

- Prior to installing a subsequent panel the Joint Rail profile needs to be installed at the vertical panel joint.

-To do so, cut a length of the Joint Rail profile that is 3/8" less than the panel height. Place the Joint Rail at the vertical edge of the previous panel. Layout and mark locations of furring strips and the flanges of the Top and Bottom Edge Trims. Pre-drill  $\varnothing 5/32"$  diameter holes thru the Joint Rail profile only at these locations.

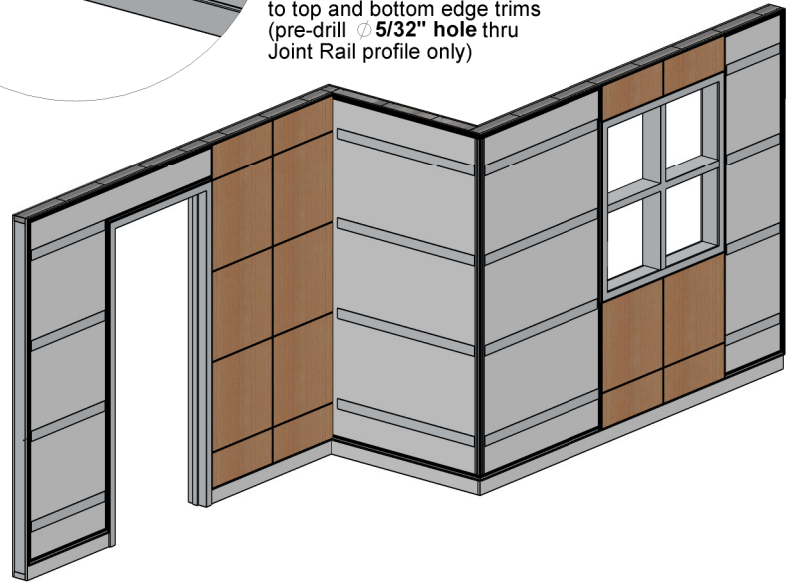
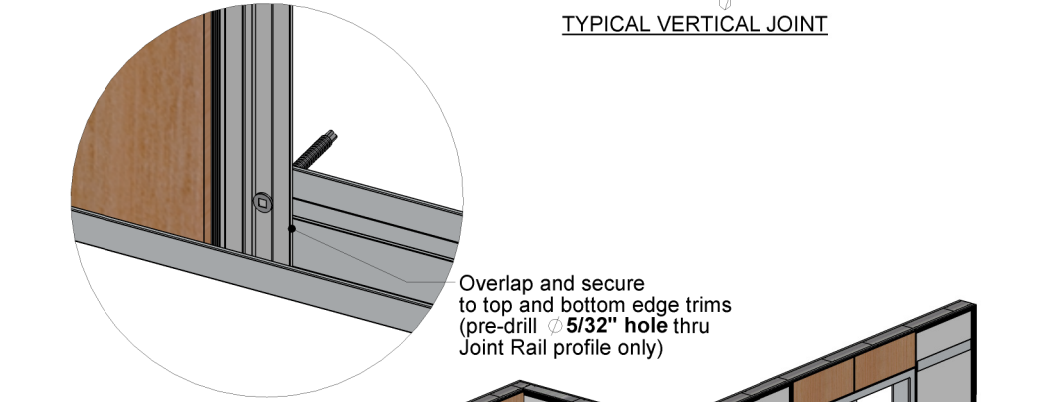
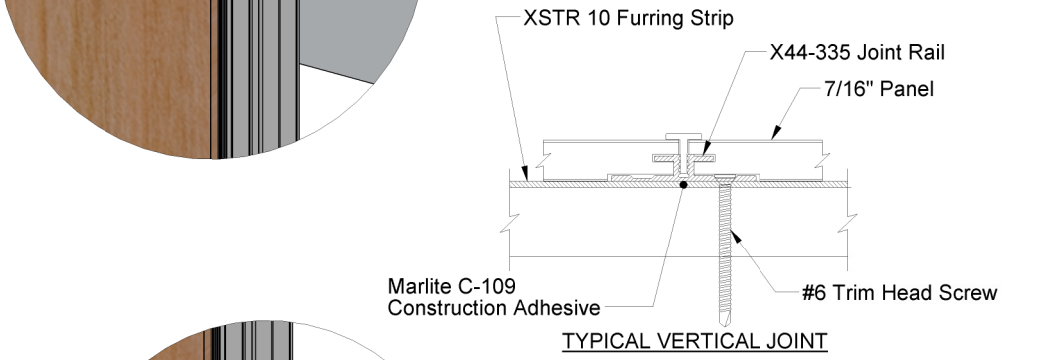
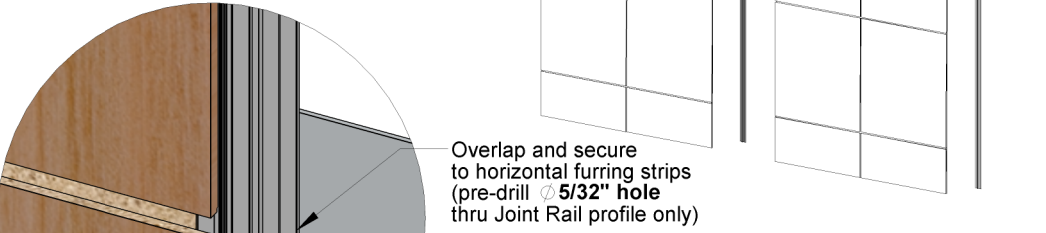
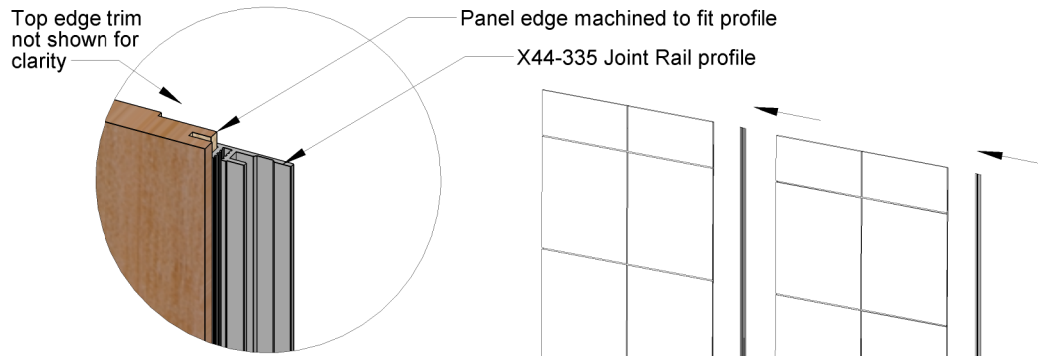
-Additionally, apply Marlite C-109 construction adhesive full length to the back of the Joint Rail to aid in securing to the wall.

- Now, engage the Joint Rail into the machined edge of the panel and screw the Joint Rail profile to the furring strips and the flanges of the Top and Bottom Edge Trims using #6 trim head screws.

- All vertical panel joints require the use of the **X44-335 Joint Rail and construction adhesive.**

### Special Conditions

- For terminating panels that are between a vertical joint rail and an edge trim it will be necessary to cut the back lip off of the panel and use construction adhesive to secure the edge of the panel to the joint rail.



## Layout and Installation

### Step 8 - Screw fasten the panels to the wall

- Secure the panels to the wall using **#6 trim head screws** installed through the horizontal grooves and anchored into the furring strips. Pre-drill a  $\varnothing 3/32$ " pilot holes through the panel and furring strip. Use a minimum of (5) screws per each horizontal panel groove. Ensure the panels pull down snugly and make sure that the screw heads are flush or just below the surface of the bottom groove.

- Slide the batten receivers inside the grooves as need to reach optimum screw locations, once screwed in place, bridge receivers across butt joints to lock panels together.

- Repeat **Steps 3-6** until elevation is complete.

### Step 9 - Install the Edge Trim Battens

- Field cut and dry fit **X44-275 Trim Battens** to fit Edge trim. Corners are typically miter cut and butt joints are flush cut. The Trim Battens are then bonded to the Edge Trim with Marlite C-109 construction adhesive. Lay down a thin bead of adhesive inside the groove and push the Trim Batten into place. Use painter's tape to temporarily hold the Trim Batten in place while the adhesive dries.

### Step 10 - Install the Horizontal Trim Battens

- Field cut and dry fit **X44-385 Midwall Trim Battens** to fit horizontal grooves. Make sure the Batten Receivers are in place, minimum of one 6" section every 24" horizontally and vertically, every vertical panel joint location, and at the end of each groove. Lay down a thin bead of adhesive inside the Midwall Receiver and push the Trim Batten into place. Use painter's tape to temporarily hold the Trim Batten in place while the adhesive dries.

### Step 11 - Install the Vertical Trim Battens

- Repeat Step 8 for all vertical grooves. Only this step will require additionally the use of the **X44-485 Trim Batten** at vertical panel joint locations.

### Step 12 - Cleanup

- Refere to Marlite's: Care and Cleaning of Wall Systems

