

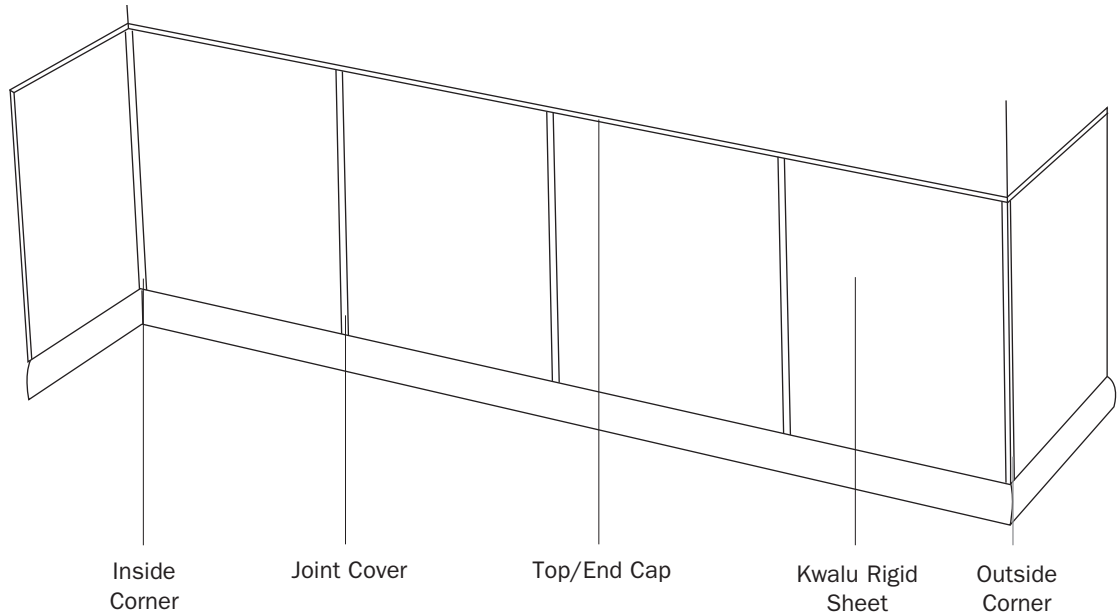
## Installation Instructions

### Rigid Wall Covering



1-877-MY-KWALU (695-9258) • [kwalu.com](http://kwalu.com)

Note: Installation of Kwalu rigid wall covering generally requires at least two people working together.



#### Materials (supplied with order):

- Rigid Sheet Wall Covering
- Water-Based Mastic Adhesive
- Adhesive Trowel
- Optional Trim Accessories\*
- Optional Color-Matched Caulk\*
- Extension Pressure Roller\*

\* These accessories are optional and may not be included in your wall covering order. Refer to Kwalu quotation for bill of materials included.

#### Required Tools (supplied by Installer):

- Laser Level
- 4' or Larger Straight Edge
- Pencil/Felt Tip Marker
- Drop Cloth
- Tape Measure
- Chalk Line
- Utility Knife
- Plexiglas Cutter
- Masking Tape
- Damp Cloth or Sponge Pad
- Water Bucket
- Mild Detergent

#### Delivery, Storage and Handling:

1. All materials will be delivered to the jobsite in original unopened factory packaging. Upon delivery, carefully inspect all packages to ensure that all required materials have been delivered in acceptable condition.
2. Store all materials flat in a dry, environmentally controlled area between 65°F and 80°F, and protected from direct sunlight and the elements.
3. Do not install wall covering until all facility finish work has been completed, including painting.

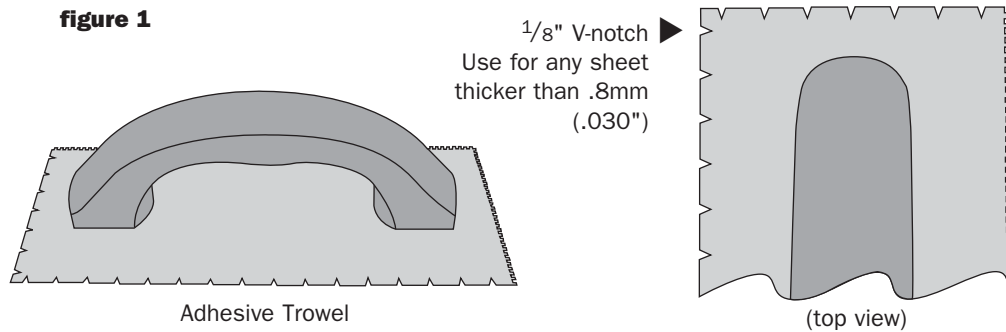
4. All materials must be acclimated to installation conditions at least 24 hours before installation is to begin.

**Preparation:**

1. Ensure that all wall surfaces and wall protection system components are free from moisture, dust, dirt, wax, grease, and wet, loose or chipping paint, etc., and are sealed with primer.
2. Glossy wall surfaces should be roughed up with sandpaper or coated with primer to ensure maximum adhesion.
3. Wipe the back sides of all wall covering sheets with a clean, damp cloth, to remove all dust and dirt, and allow to dry prior to installation.
4. Protect all surrounding areas from excess adhesive by using drop cloths on floors, and taping off all door and window frames. Also, remove all cover plates at units such as electrical switches and outlets, and thermostats.
5. Remove protective cover applied to each sheet of wall covering material before installation.
6. Allow at least 24 hours before installing rigid wall covering over newly primed or painted walls.

**Special Instructions:**

1. Always be sure to orient the wall covering sheet with the wood grain pattern in the direction desired. Typically, Kwalu wall covering is installed with a vertical wood grain pattern, but horizontal wood grain may also be desirable in some applications.
2. Kwalu rigid wall covering will expand and contract slightly with changes in temperature. Installation is not recommended in any area with an expected temperature variation of more than 20°F (11°C).
3. Application in corridors with glazed walls in which direct sunlight would be in contact with rigid wall covering will cause noticeable expansion and contraction in material, and is not advisable.
4. Installation of rigid wall covering over any existing adhered wall finishes, like vinyl wallpaper, is not recommended. Application of rigid wall covering over insufficiently or inconsistently adhered material may cause failure of the original adhesive. Kwalu will not warranty the performance of rigid wall covering installed over existing wallpaper. If such an installation is to be attempted, carefully inspect the entire wall surface for areas that are not securely bonded to the underlying wall surface. Any loose areas must be cut away, repaired to a smooth surface, and primed. All existing wall covering must then be cleaned with a mild detergent and wiped dry.
5. Use the supplied adhesive trowel to apply mastic adhesive to the wall only. When installing any sheet thicker than .8mm, use  $\frac{1}{8}$ " V-notches with  $\frac{1}{2}$ " spacing to apply mastic adhesive. Use of trowels with different notch sizes or patterns will affect the square-footage yield of the adhesive. Typical coverage of mastic adhesive should be approximately 125 square feet per gallon. (**See figure 1**)
6. Make sure to achieve 100% coverage on the wall area where wall covering is to be installed. Insufficient coverage will cause incomplete adhesion and may result in bubbling or loose areas in wall covering sheet.
7. Do not use any adhesive other than the recommended mastic adhesive product. Kwalu will not warranty the performance of rigid wall covering installed with non-recommended adhesive.
8. Do not allow adhesive to dry on any tools. Wipe tools clean regularly to prevent clogging or build-up of adhesive.



### Working with Rigid Wall Covering:

1. Kwalu rigid wall covering can be cut by scoring the cut line using several passes with a standard Plexiglas acrylic sheet cutting tool, then breaking the sheet along the line. For best results breaking the material, place a  $\frac{3}{4}$ " or larger dowel under the score line and apply hand pressure to both sides of the line.
2. Rigid wall covering can also be cut with standard woodworking power saws, including circular saws, jigsaws, and saber saws. The optimum tool for each cut will depend on the nature of the cut. Standard high-speed steel saw blades designed for cutting cabinet-grade plywood are recommended. Carbide-tipped blades can produce excessive chipping of sheet edges, particularly with thinner gauge material.
3. Rigid wall covering can be drilled with standard high-speed power drills using moderate, steady pressure. Brad point wood bits will produce the best results.
4. Mishandling of Kwalu rigid wall covering may result in damage to the material. For best installation results and minimizing damage, it is strongly recommended that two people be used to handle and install all sheets.

### Installation with Mastic Adhesive:

1. For full-height installations, establish a plumb line where the edge of the first sheet of wall covering is to be located. Align the edge of the first sheet installed with this plumb line to ensure that each succeeding sheet is installed plumb and straight. Establish a new plumb line for every distinct run of material. Do not rely on wall corners or door frames to be plumb.
2. For wainscot-height applications, establish a level line over each entire run at the specified height. The top edge of each wall covering sheet will be installed at this line. A level line must be set at every distinct run of material.
3. Before working on each sheet of Kwalu wall covering, be sure to orient the wood grain pattern in the desired direction. Typically, Kwalu wall covering is installed with the wood grain in the vertical direction, but horizontal wood grain may be desirable in some applications (**see figure 2**).
4. Prepare each sheet by first making any necessary cutouts or scribed edges. Always allow a  $\frac{1}{16}$ " gap around all door and window frames, and at ceilings and baseboards.
5. Place the sheet on a clean, flat surface, with the back side facing up, and wipe the surface clean of all dust and dirt.
6. Use the supplied adhesive trowel and the appropriate notch pattern ( $\frac{1}{8}$ " V-notch with  $\frac{1}{2}$ " spacing) to apply mastic adhesive to the wall surface only. Apply an even coat of adhesive to the entire wall surface to be covered, taking care not to spread excess adhesive outside the covered area. Apply adhesive only to the area that can be covered with sheet before the adhesive over-cures. To help

figure 2



Horizontal

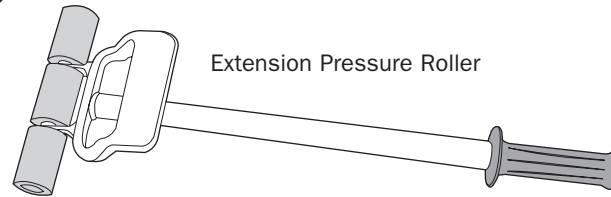


Vertical

minimize spreading of adhesive outside of the area to be covered, apply removable painter's tape to all outer edges of the application area, including any ceilings, floors, base board, door and window frames, wall surfaces, outlets, switches, fire extinguisher cabinets, etc.

7. Adhesive must then be allowed to "set up," or partially cure. Under ideal conditions, this will take approximately 30 minutes, but time will vary depending upon the temperature, humidity and porosity of the substrate. On porous substrates, such as drywall or plaster, the mastic should cure in about 30 minutes. On non-porous surfaces, such as heavy vinyl wallpaper, painted metal or stainless steel, curing may take 60 minutes or more. When applied, the adhesive is white and milky, but as it cures, it becomes translucent and tacky. On porous surfaces, it is best to apply the wall covering sheet when the adhesive is tacky, but does not transfer to your finger when you touch it. On non-porous surfaces, adhesive must cure more fully, being firm to the touch, but still without transferring to your finger when you touch it. Non-porous materials prevent moisture evaporation. If excess moisture is trapped behind the wall covering, it will prevent proper curing of the adhesive, and may cause bubbling or delamination of the rigid wall covering. **DO NOT ALLOW ADHESIVE TO OVER-CURE.**
8. Once adhesive has cured properly, apply the rigid sheet. Start at either the plumb line (for full-height applications) or level line (for wainscot applications) created earlier. Take care not to apply sheet to the adhesive until it is in the correct position. With two people holding the sheet in position, begin applying pressure a few inches inside the start line. Do not apply firm pressure all the way out to any edges that are to be fitted with trim accessories. If at any time it becomes apparent that the sheet requires re-positioning, do so immediately, before any more of the sheet is adhered. Repositioning becomes increasingly difficult as more of the sheet is pressed into the adhesive. Continue pressing and smoothing the sheet across to the other side until the entire sheet is well adhered to the wall. Use of extension pressure roller is recommended and will help ensure adequate pressure and a smooth, bubble-free installation (**see figure 3**).
9. Be sure to remove any excess adhesive immediately, before it cures any further. Additional curing will make it increasingly difficult to clean adhesive from any uncovered surfaces.
10. Where top cap and joint cover trim accessories are to be used, slide them onto each sheet as it is installed and press firmly into place. The adhesive already applied to the wall should be sufficient for adequate bonding of trim accessories, but if additional adhesive is required, it can be carefully

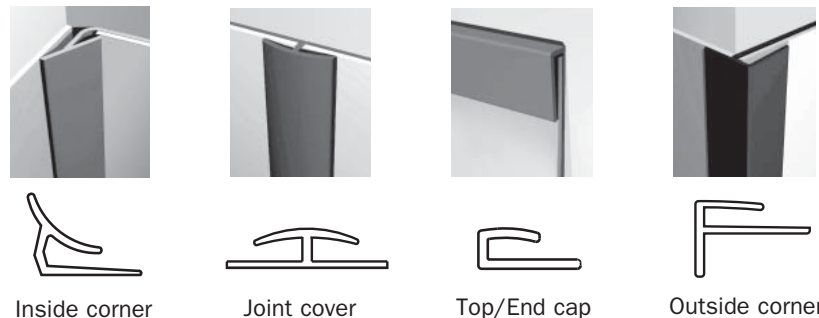
figure 3



applied to the back of the trim strips. Do not install the trim pieces tight against the sheet edges. Leave a slight gap to allow for thermal movement of the material. After all trim pieces are installed, apply firm pressure to all edges of the sheet.

11. Where inside corner trim accessories are to be used (**see figure 4**), cut the first rigid sheet so that there is a  $\frac{1}{16}$ " gap before the corner. When the second sheet is ready to be installed, slip the inside corner trim over the edge to be placed in the corner, remembering to leave a  $\frac{1}{16}$ " gap inside the trim piece for expansion of the sheet material. Align the sheet on the wall so that the corner trim adequately overlaps the first sheet, and press into place.

figure 4  
Trim Accessories



12. At outside corner applications, Kwalu recommends the use of a corner guard such as a tape-on or adhesive applied rigid corner guard for additional protection. If outside corner trim accessories are to be used, cut the first sheet applied  $\frac{1}{16}$ " before the apex of the wall corner. When the second sheet is ready to be installed, slip the outside corner trim over the edge to be placed in the corner, remembering to leave a  $\frac{1}{16}$ " gap inside the trim piece for expansion of the sheet material. Align the sheet on the wall so that the corner trim adequately overlaps the first sheet, and press into place.
13. Uncovered butt joints should only be used in temperature controlled environments. Seal all butt joints with Kwalu color-matched caulk. A gap of  $\frac{1}{16}$ " to  $\frac{1}{4}$ " is required for a clean application of color-matched caulk and to allow for thermal expansion of the sheet. For the cleanest application, apply masking tape to both edges of the joint to be caulked. Fill joint fully with caulk. Gaps in caulk application will result in uneven curing of the caulk, and an uneven finished surface. Press the caulk into the joint and wipe off any excess caulk by using a clean putty knife, leaving a smooth caulk surface that is flush with surrounding rigid sheet. Caulk can also be wiped away with a clean, damp cloth, but this will typically remove caulk below the surrounding surfaces of the wall covering.