



Installation Guidelines



Tando Building Products provides these instructions as general guidelines only. Tando Building Products neither installs exterior cladding nor has any control over any installation. The contractor and/or installer shall be responsible for ensuring that all applicable local building codes are followed, which may require modification of these general guidelines. Tando Building Products assumes no liability for personal injury or property damage resulting from improper or careless application of the described techniques.

For more information on Tando Building Products and its wide variety of state of the art products, please call us at 844.MY.TANDO (844-698-2636) or write: 1111 NW 165 Street, Miami, FL 33169-5819. Installation Guidelines can be downloaded from our website: www.Tandopb.com.



BASIC GUIDELINES

1. Always work from left to right, completing installation on one wall before beginning another. Always starting at the lowest point of the structure.
2. As with any plastic composite exterior building materials, Tando Building Products panels will expand and contract with a change in temperature. Therefore, during installation it is necessary to position the panels properly to compensate for temperature effects. Use caution not to force panels down onto the flange of the lower row, as this will override the expansion joints and may cause buckling. Storing panels in heated areas make them more pliable, allowing for easier installation in colder temperatures.
3. Store panels on edge, do not stack flat.
4. Tando products are intended for use in a vertical placement only, and are not designed or warranted for roofing or flooring applications. Mansard roofs with a 45/12 slope or greater are acceptable applications.
5. It is essential that you work over a smooth, flat, nailable wall surface, (i.e. Minimum 7/16" OSB board or plywood is recommended). Refer to the respective furring strip installation guidelines if furring strips are utilized.
6. Non-corrosive fasteners are required to secure the panels and they must penetrate the solid substrate by at least 7/16".
7. If face nailing is employed, pre-drill a hole in an inconspicuous area, such as a mortar joint. The hole must be larger than the shank of the nail or screw, but smaller than the head, to allow for possible expansion. The head can be covered with caulk.
8. Fastening the panels should not restrict panel movement. Fasteners should be driven straight into the center of any elongated hole making light contact with the panel, allowing the panel to be hung. It is best to work with the panels at waist-level, allowing the installer to inspect the back of the panels, verifying that all fingers are properly engaged.
9. Overriding the expansion stops may restrict panel movement and cause buckling. The panel requires a minimum of eight fasteners per panel. A closer spacing of fasteners is required for high velocity wind areas; for details refer to report ESR-3070, which can be downloaded from our website www.Tandobp.com.
10. Tando has been designed as an exterior cladding. Tando cladding allows the material underneath it to breathe; therefore, it is not a watertight covering. To achieve designed performance, Tando cladding must be installed over a weather resistant house barrier system such as house wrap.

INSTALLATION STEPS

STEP ONE Install the starter strip at the lowest point of the structure. The structure's solid substrate must be no less than 7/16" thick. The strip should be positioned 3 1/2" from the wall corner allowing for the width of the corner piece or molded corner. Nail the starter strip every 12". Make sure the starter strip remains level.

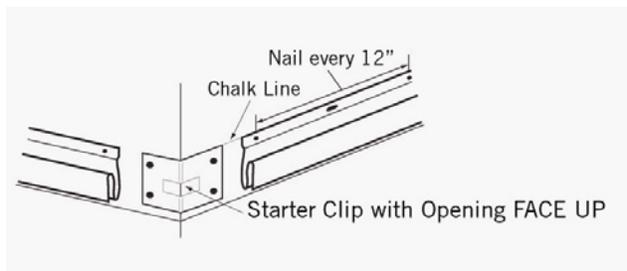
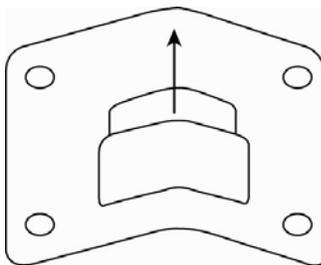


Figure 1

STEP TWO If using vinyl corner posts, install the post prior to installing any panels. When using the Creek Ledgestone molded corner, install a starter clip, open end UP (figure 2) and in-line with the starter strip (figure 1). Creek Ledgestone molded corners will be installed after panels from adjacent walls have been set. (See "Stacked Stone Molded Corner Installation" section below).



Starter Clip with Open End UP Figure 2

STEP THREE: It is recommended to determine the number of panels needed for the wall by measuring the total length of the wall in inches, subtracting the width of the corner pieces used and dividing by 40" (the width of one panel exposed to the weather). As you will need to cut the right end panel, ensure that it remains at least 12" wide by reducing the size of the starting panel. Be sure not to overlap the mortar joints of the panel below to ensure a pleasing and authentic stone look. Do not cut more than one end piece at this time since adjustments will be required for succeeding rows.

STEP FOUR: Working from left to right, slide the first panel left, butting it flush to the vinyl corner or for use with molded corners, leave a 2 1/2" to 3" gap from the corner of the wall to the edge of the installed panel (figure 3). Set the first panel gently onto the starter strip making sure to properly engage

all installation fingers. Do not override the functioning, positive stop posts that are in-line with the installation fingers on the back of the panel.

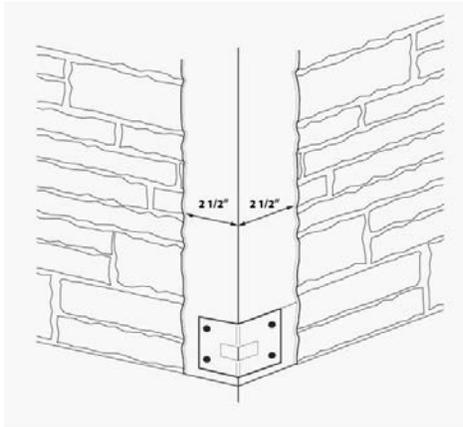


Figure 3

STEP FIVE Drive a fastener straight through the substrate while ensuring that the head only makes light contact with the panel. This allows the panel to move with varying temperatures. The panel requires a minimum of eight (8) fasteners per panel (figure 4). For high velocity wind areas, a fastener is required in each nailing slot.

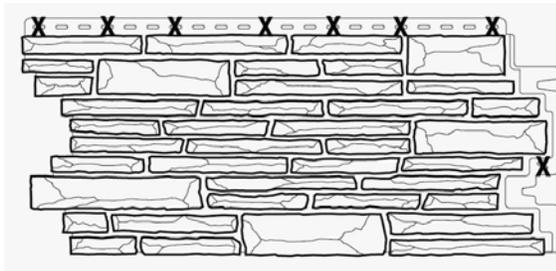


Figure 4

Hook the next panel into the starter strip and slide it into the first panel assuring the two (2) side locks engage with the slots from the preceding (installed) panel (figures 5 and 6).

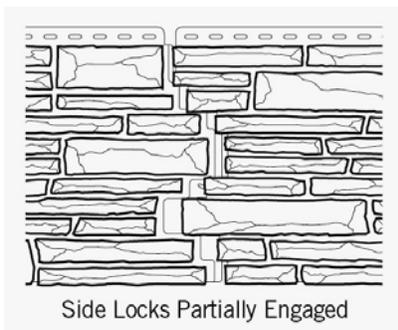


Figure 5

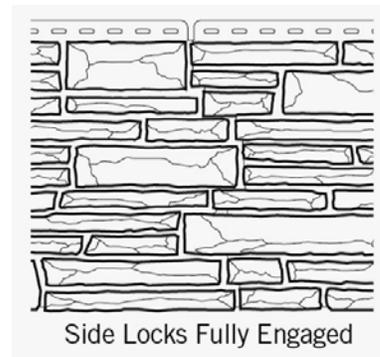


Figure 6

STEP SIX Install the remaining courses, repeating steps 1, 3, 4, and 5. The fastener must be flush with the panel, so as not to interfere with the succeeding row of panels. In order to achieve a realistic



Stacked Stone look, stagger each subsequent course in increments of 8" (figure 7). Never force panels down on top of each other or into each other, left to right, or else risk breaking the stop posts on the back of the panel. Set them into place gently, ensuring that all fingers and/or side locks are engaged, and allow the panels to seat themselves. The stop posts are designed to prevent buckling due to changing temperatures.

Reminder: Be sure all locking fingers are properly engaged.

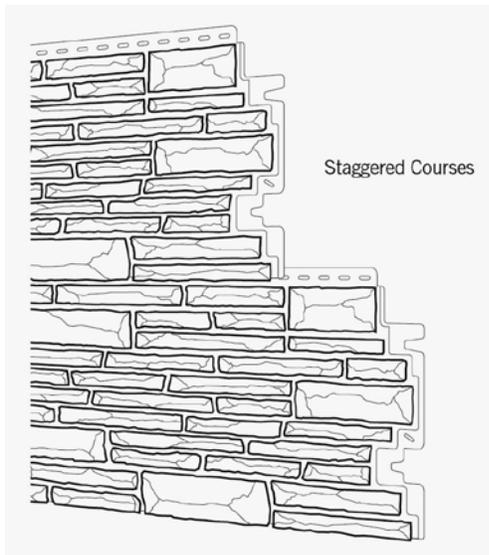


Figure 7

STEP SEVEN As with any plastic exterior building material, the Creek LedgeStone panel will expand and contract with a change in temperature. Therefore, during installation it is necessary to position the panels properly to compensate for temperature effects. When installing at panel temperatures from 30 to 100 degrees Fahrenheit, position the next panel so that the upper left corner of the panel's nailing hem is butted against the preceding (installed) panel (Figure# 8).

For installations at temperatures below 30 degrees F, position the next panel slightly right of the preceding panel's edge (e.g. 1/16"). For temperatures above 100 degrees F, position slightly left so the panel overlaps the preceding panel. Once the panel has been properly spaced, insert a fastener into the center hole of the panel.



Figure 8

STEP EIGHT Fitting panel pieces between windows or around openings requires a cut-back spacing of 1/8" when panels are installed in cold temperatures. Similar spacing may also be necessary when fitting panels into gable ends, over roof angles, around light blocks or any other place where adequate panel movement is prevented.

STEP NINE Tando J-channels may be used for inside corner treatments. Panels may be scribed and cut to fit into the corner (Figures #9 & 10). It is recommended to sleeve the corner with vinyl or aluminum coil prior to installation of panels. Caulk corner after installation.

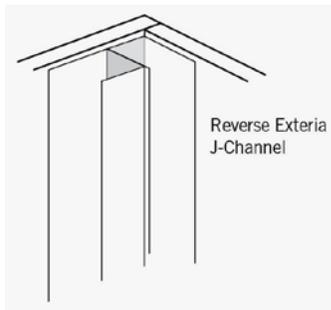


Figure 9

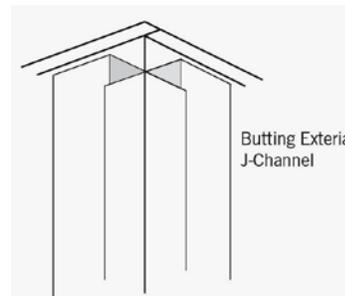


Figure 10

STEP TEN When completing a wall, face nailing may be necessary. If face nailing is employed, pre-drill a hole in an inconspicuous area, such as a mortar joint. The hole must be larger than the shank of the nail or screw, but smaller than the head, to allow for possible expansion. The head can be covered with matching paint.

STACKED STONE INDIVIDUAL MOLDED CORNER INSTALLATION

The exterior cladding must be installed on adjacent walls PRIOR to installing corners.

STEP ONE Be sure the starter clip is affixed at the bottom of the wall's corner. Slide your first Stacked Stone molded corner over the panel and engage it into the starter clip. The corner offers two (2) pairs of fastening positions to choose from. For fasteners, galvanized screws are recommended. Once positioned properly, insert one (1) fastener on each side (Figure #11).

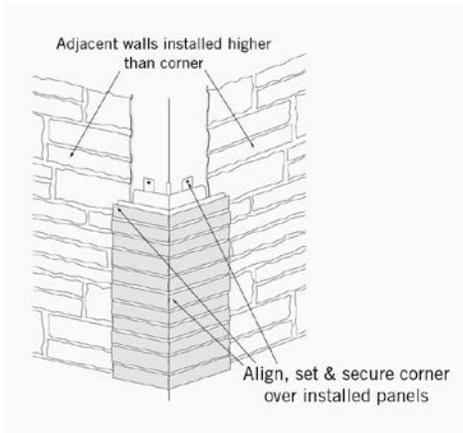


Figure 11

STEP TWO Take the next corner and engage it into the corner below. Some adjustment may need to be made at the vertical overlap of two (2) corners (as they are installed) in order to maintain the corner/panel horizontal alignment. There is approximately a 1/2" vertical adjustment available. Gently tug the bottom of the corner to ensure it is properly engaged. Repeat this step until the corner installation is complete. Note: The last molded corner to be installed in a column may need to be cut to fit the remaining space in that column.

INSTALLING STONE LEDGE TRIM

Stone ledge trim installs over the top course of panels

BENDING LEDGE TRIM

Stone ledge trim can be installed around a corner. Because of the different shape of the ledge trim, a v-notch must first be cut at the point where you plan on bending it (Figure #12). Once the v-notch has been cut, the trim may be heat-bent and installed. We also provide pre-manufactured corners to make installation easier (Figure 13).

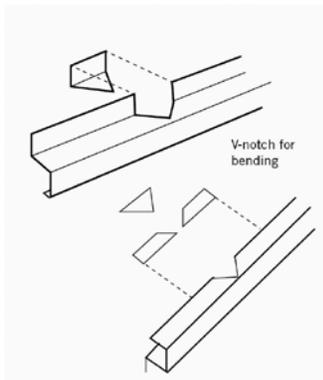


Figure 12

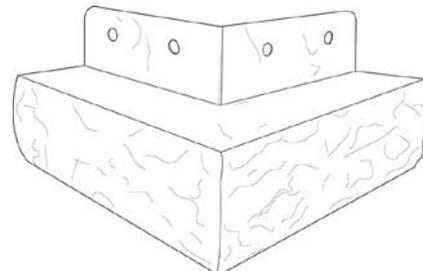


Figure 13

SPECIAL SITUATIONS AND SUGGESTIONS



SITUATION

1. Panels won't lock together side by side.
2. The bottom locking fingers won't lock into the previous row.
3. Panels are buckling on the wall
4. Panels are not laying down flat

ITEMS TO CHECK

The wall may not be level and flat. Check previous panels to ensure that all panels and installation fingers are properly seated. (See Basic Guidelines)

Make sure the nails are not restricting panel movement. Check for proper spacing at side interlocks. Make sure all fingers are engaged into previous panel

ATTACHING OBJECTS TO PANELS

Never attach fixtures directly to panels. When attaching fixtures, use a block and follow the fixture manufacturer's installation instructions.