



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 start at the lowest point of the structure.
2. As with any composite plastic exterior building materials, Tando 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. Refer to installation steps seven and eight for installations at various temperature conditions.
3. After positioning the panel at the proper spacing for the installation temperature, install a fastener in the center hole of the panel. By attaching a fastener through the center hole, the panel will move equally in both directions from the center out.
4. If a partial panel is being used at either end, a new hole should be created by drilling a 1/8" hole into the top flange, near the center of the panel piece at the same height as the other installation holes.
5. Tando panels 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.
6. It is essential that you work over a smooth, flat, nailable wall surface, (i.e. Minimum 7/16" OSB board or plywood is recommended).
7. Non-corrosive fasteners are required to secure the panels and they must penetrate the solid substrate by at least 7/16".
8. If face nailing is employed, pre-drill a hole in an inconspicuous area, such as a shingle seam. 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.
9. Fastening the panels should not restrict panel movement. Fasteners should be driven straight into the hole with the head of the fastener 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 panel, verifying that all fingers are properly engaged.
10. Tando has been designed as an exterior cladding, not a weather resistant barrier. 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.

11. Store panels on edge; do not stack flat.
12. It is recommended to not install all corners at one time or you will lose the ability to adjust and properly align them to the panels. Install no more than two corners at a time.
13. Variations in shade and color are an inherent characteristic of Tando weathered colors. Weathered means the variegated cedar panels (see brochure for specific colors). Installed siding is considered acceptance of product and no claims for aesthetic concerns will be honored after installation.

INSTALLATION STEPS

STEP ONE: Install the starter strip (figures 1 and 2) 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 4" from the wall corner allowing for the width of the corner piece. Nail the starter strip every 12" as depicted in figure 2 ensuring that the starter strip remain level. A chalk line is recommended.



Figure 1

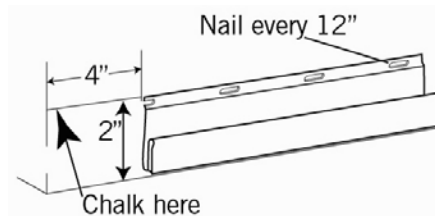


Figure 2

STEP TWO: 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 38 1/2". Cut the first panel so the left edge is flush. As you will need to cut the end panel, ensure that it remains at least 12" wide by reducing the size of the starting panel. The panel can be cut anywhere along the panel, however, do not overlap the seams of the panel below to ensure a pleasing and authentic shingle look is maintained. Do not cut more than one end piece at this time since adjustments will be required for succeeding rows.

STEP THREE: Working from left to right, install the first Hand-Split Shake corner approximately 1" below the bottom edge of the starter strip. Set the first panel onto the starter strip making sure to properly engage all installation fingers. Slide panels left. Fasten the center (pilot) hole first. The panel requires a minimum of six (6) fasteners per panel. For high velocity wind areas, a fastener is required in each nailing slot. Nailing of panels should not restrict panel movement.



Be sure to position the corner to the bottom of the middle shingle on the corner piece is level with the lowest point of any shingle.

Note: Do not follow these instructions for installing Tando's adjustable M Series™ corner with built-in J-Channel. If you are using the M Series™ corner, please follow the M-Series corner installation instructions.

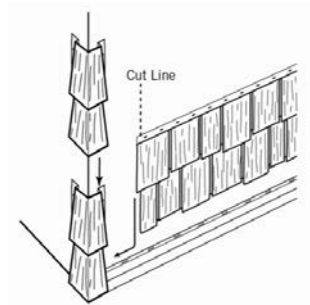
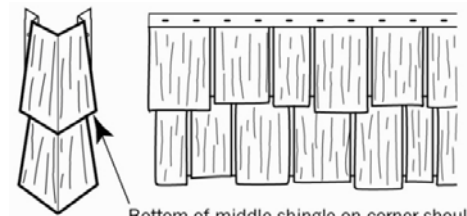


Figure 3



Bottom of middle shingle on corner should be level with the lowest shingle on panel.

Figure 4

STEP FOUR: For all succeeding panels of the present row, position the panel approximately 2" above the previous panel and slide downward (Figure 5). Engage the downward lock into the built-out pocket and ensure all fingers engage into the side-lock (Figure 6). Spacing between panels should be approximately 1/4".

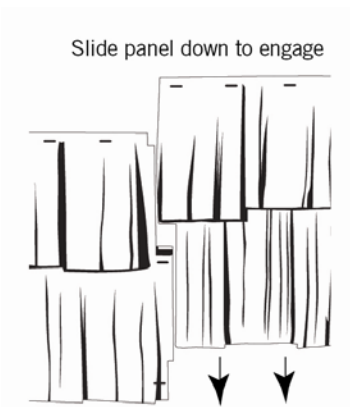


Figure 5

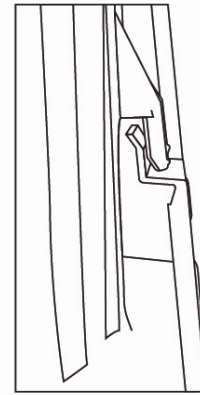


Figure 6

STEP FIVE: After positioning the panel at the proper spacing for the installation temperature, install a nail or fastener in the center (pilot) hole of the panel. By attaching a fastener through the center hole, the panel will move evenly in both directions from the center out. If a partial panel is used at either end, a new center hole should be created by drilling a 1/8" hole in the top flange, near the center of the partial panel at the same height as the other installation holes (figure 8).

STEP SIX: Tando provides expansion joints in the back next to the installation fingers. Do not force the panels beyond the expansion stops when installing succeeding rows of panels. The stops are designed to prevent buckling due to changing temperatures (figure 7). The panel requires a minimum of

six fasteners per panel as shown in figure 8. Additional fasteners are required for high velocity wind areas. The non-corrosive fasteners must be installed into a solid substrate of no less than 7/16" thick.

When installing the panel, be sure the fastener heads touch the panel lightly allowing the panel to move with varying temperatures. The fasteners must be installed flush with the panel, so as not to interfere with the succeeding row of panels.

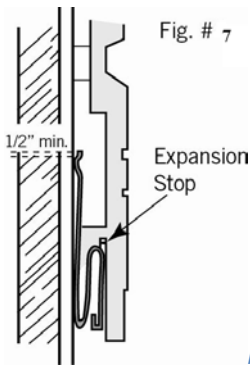


Figure 7

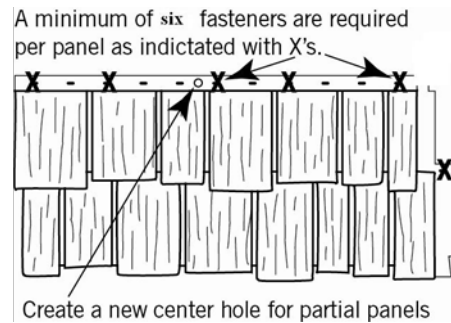


Figure 8

STEP SEVEN: For each successive course, alternate the size of the first panel to avoid seams lining up. Position the panel so that the left side is adjacent to the previous panel. Raise the right side of the panel about 45 degrees then gently lower the right side into the previous panel, eventually engaging all fingers onto the top flange of the row beneath. Do not force the panels beyond the stop posts.

Be sure to position panels correctly, leaving the correct space between shingles as described in step eight below.

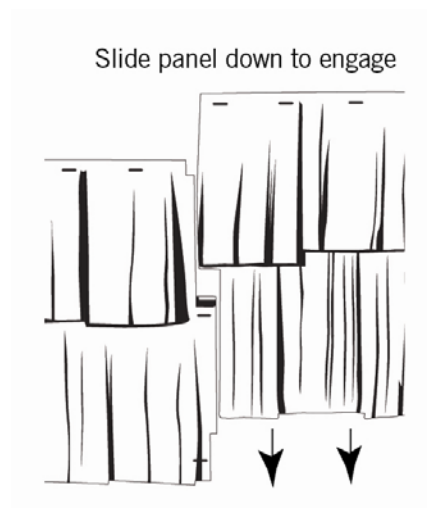


Figure 9

STEP EIGHT: Note that the average spacing between shingle seams within a panel is approximately $\frac{1}{2}$ ". If the temperature is below 60 degrees Fahrenheit, position the panels so the shingle seam between them is about $\frac{5}{8}$ " wide to allow for expansion in warmer weather. If the temperature is about 60 degrees F, decrease the spacing to about $\frac{1}{2}$ " thereby allowing for both expansion and contraction as the temperature changes. If the temperature is about 90 degrees F, decrease the spacing further to about $\frac{3}{8}$ " to allow for contraction in colder weather (Figure 10).

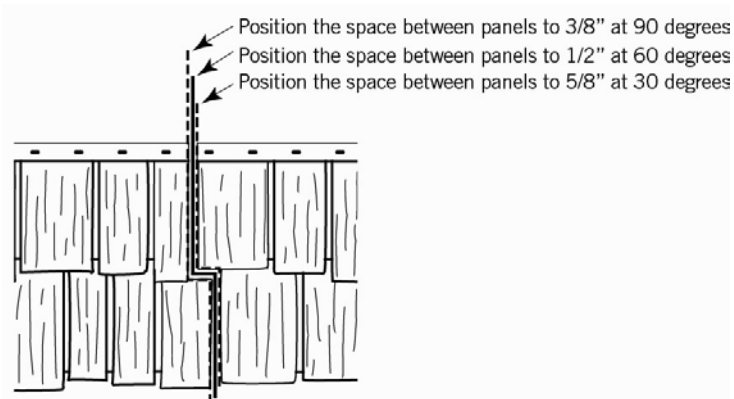


Figure 10

Note: For installation around 30 degrees F, also allow a $\frac{1}{8}$ " spacing around all opening.

STEP NINE: Repeat steps four through eight until the last two panels to the right are installed. Do not secure the last two panels until you have inserted the end piece into a corner piece or J-channel. Then reposition the last two panels to the proper shingle seam spacing and install the necessary fasteners.

STEP TEN: Tando 1- $\frac{1}{8}$ " J-channels may be used for inside corner treatments or you may scribe and cut panels to fit into the corner. It is recommended to sleeve the corner with vinyl or aluminum coil prior to installation of panels. Caulk corner after installation (Figures 11 and 12).

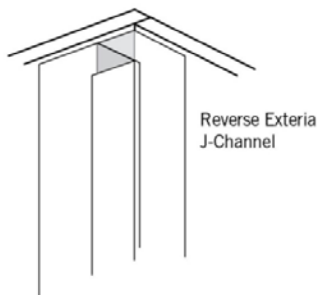


Figure 11

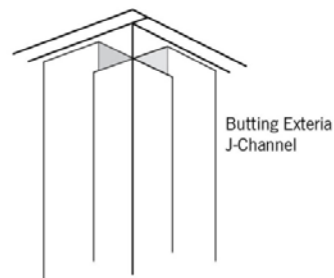


Figure 12

STEP ELEVEN: When completing a wall, face nailing may be required. If face nailing is employed, pre-drill a hole in an inconspicuous area, such as a shingle seam. 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.

REMINDERS:

Some adjustment may need to be made at the vertical overlap of two corners (as they are installed) in order to maintain the corner/panel horizontal alignment. There is approximately a ½” vertical adjustment available.

Fitting panels between windows or around openings requires a cut-back spacing of approximately 1/8” to allow for product expansion.

ATTACHING OBJECTS TO PANELS

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

SPECIAL SITUATIONS AND SUGGESTIONS

SITUATION

1. Panels won't lock together side to 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 between adjacent panels. Make sure all fingers are engaged into previous panel.