

These instructions are provided as general guidelines only. 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. The manufacturer assumes no liability for personal injury or property damage resulting from improper or careless application of the described techniques.

For more information on Tando Composites® products, visit TandoComposites.com.





#### **GENERAL INFORMATION**

- 1-TandoStone® products are intended for use in a vertical placement only and are not designed or warranted for roofing or flooring applications.
- 2-TandoStone® products are designed as an exterior cladding, not as a weather resistant barrier. They are designed to allow the material underneath to breathe; therefore, they are not a watertight covering. To achieve designed performance, TandoStone® products must be installed over a weather resistant house barrier system, such as house wrap.
- 3-As with the majority of exterior building materials, TandoStone® will expand and contract with a change in temperature. Therefore, during installation it is necessary to position the TandoStone® properly to compensate for temperature effects.
- 4-It is essential to work over a smooth, flat, nailable wall surface, (i.e. minimum 7/16"(1.11cm) OSB board or plywood is recommended). If TandoStone® products are being installed over furring strips, furring strips must be installed on a 45° angle, spaced 8"(20.32cm) center to center, while ensuring that the side seams are supported by furring strips.
- 5-Fixtures cannot be installed directly onto TandoStone®; always use a wooden support or specifically designed mounting blocks to attach fixtures. Follow the mounting block manufacturer's installation instructions and ensure proper clearance to the TandoStone® (recommended minimum of 1/4"(0.64cm)) to allow room for expansion and contraction.
- 6-Corrosive resistant fasteners are required to secure the product and they must penetrate through the solid surface by at least  $1\,1/4$ " (3.18cm) and into a solid substrate that measures at least 7/16" (1.11cm).
- 7-Always begin the installation at the lowest point of the structure, work from left to right installing one row at a time, and completing one wall before beginning another.
- 8-Store product on edge (vertical), do not stack flat.
- 9-Keep the R-E-L number, located on the box of your products (ex: REL-123456) for future reference.
- 10-To cut the material, it is recommended to use a circular saw with a thin kerf finishing blade.
- 11-Some finish trims such as J-channel and Outside Corner Post, must be installed on wall prior to the installation of TandoStone®. Follow the finish trim manufacturer's instructions for proper installation.
- 12-Fastening TandoStone® should not restrict movement. Fasteners should be driven straight into the center of any nailing slot with the head of the fastener making light contact with the product, allowing the section to be hung. The center nail slot must always be securely fastened at both end to ensure that the section expands and contracts from the center out.
- 13-If a partial piece is used at either end, a new center hole should be created, by drilling a 1/8"(0.32cm) hole in the top flange, near the center of the section at the same height as the other installation holes.
- 14-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 thermal movement. The head can be covered with matching paint or caulk.
- 15-It is best to work with the product at waist-level, allowing the installer to inspect the back of the product, verifying that all fingers are properly engaged. Do not force product down onto the flange of the lower row, as this may damage the stop posts and/or will override the expansion joints and cause buckling.
- 16-Fitting product between windows and around openings requires a spacing of 1/4"(0.64cm) to allow for expansion.
- 17-Variations in shade and color are an inherent characteristic of TandoStone® color.



# TandoStone®

### **BASIC GUIDELINES**

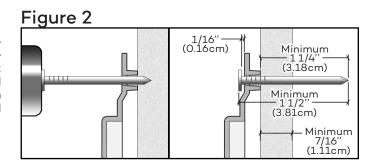
1-Always position the fasteners in the center of the installation holes, except for the central slot which must have fasteners installed at each end. For every complete section, install 7 fasteners distributed in the nailing channel, i.e. one fastener at each end, 2 in the central slot plus 3 others evenly spaced in the installation holes. Each fastener must be positioned at a maximum spacing of 8"(20.32cm) or less (Figure 1). If ProBrick is installed on walls with furring strips, the furring strips should be installed on a 45° angle, at 8"(20.32cm) center to center and a furring strip is required behind each fastener.

Central slot Installation hole

Maximum 8"
(20.32cm)

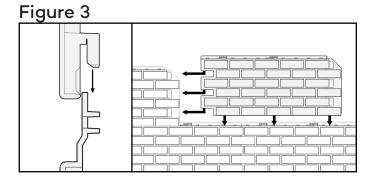
(20.32cm)

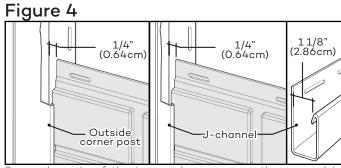
2-Never hammer or screw the fasteners in completely; leave a gap of 1/16"(0.16cm) between the nailing channel and the fastener's head (Figure 2). Always use corrosive resistant nails or screws with a head of 0.4"(1cm) in diameter and a body of 0.150"(0.38cm) in diameter. Penetrate through the solid surface by at least 11/4"(3.18cm) and into a solid substrate that measures at least 7/16"(1.11cm).



3-Make sure that all sections are properly joined together (3 side tabs and 9 hooks at the bottom) (Figure 3).

4-When using a finish trim (J-channel, Outside Corner Post, etc.), leave a space of 1/4"(0.64cm) between the inside edge of the corner post or trim and the ProBrick section (Figure 4). The required opening for finish trim is 1.1/8"(2.86cm).





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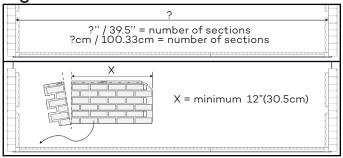


#### **INSTALLATION STEPS**

1-First install the starter strips at the lowest point of the structure. Make sure that the horizontal starting line is perfectly leveled and square with the wall. Leave a 2"(5.08cm) gap at each end of the wall for corner posts, corners or J-channels (1). If a floor is against the wall, install the top of the starter strips at 1 15/16"(4.92cm) above it in order to leave a gap of 1/16"(0.16cm) between starter strips and the floor (2). If there is no floor, starter strips should be flush with the base of the wall. Install fasteners in the starter strips at maximum spacing of 8"(20.32cm) or less. Install the next starter strip by pressing it against the previous (3) and fasten as mentioned above (Figure A). Be sure to align adjacent walls.

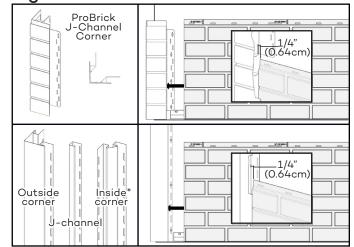
2-Determine the number of sections needed for the wall by dividing the total length of the wall, less the width of the corner pieces used, by 39 1/2"(100.33cm). Cut the left side of the first section in a straight line in order to avoid having a very small piece at the right end of the wall. Any installed sections should be at least 12"(30.48cm) long (Figure B).

Figure B



3-If using ProBrick Corners, Inside Corner Posts, Outside Corner Post, or J-Channel trims, install all those before installing the ProBrick sections. See "Decorative Corners Installation" on page 7 for more details about installation instructions for the ProBrick corners. After installing corners or trim items, insert the first section onto the starter strip and slide it leftward to assemble it with corners. If used with ProBrick J-Channel Corners, slide the section inside the corners by leaving a 1/4"(0.64cm) gap between its edge and the inside of the corners. When using any type of finish trims, insert the section into the trim while leaving a 1/4"(0.64cm) gap between the inside wall of the trim and the section (Figure C).

Figure C





<sup>\*</sup>Inside corner posts are not sold through Tando Composites®. Inside corner posts with a 3/4"(1.91cm) pocket can be sourced through other vendors and are compatible.

# Tando Stone 41 Brand of Composite Stone

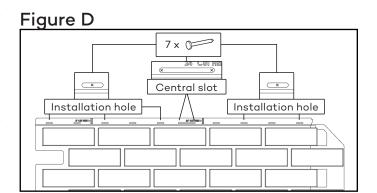
#### INSTALLATION STEPS (CONTINUATION)

4-On every section, fasten the central slot with a fastener at both ends, this will ensure even movement of section in both directions during expansion/contraction. Also place a fastener into the last hole on both ends of the product, plus 3 others evenly spaced on the nailing channel (Figure D). Fasteners should never be spaced more than 8"(20.32cm). Each full length section should be secured with a minimum of 7 fasteners in the nailing channel. Remember that fasteners must be placed in the center of the installation holes. Always use corrosive resistant fasteners penetrating into a solid substrate of no less than 7/16"(1.11cm) thick. When attaching the fasteners, be sure they only lightly touch the product allowing it to move with varying temperatures and they are installed flush with the section, so as not to interfere with the succeeding row.

- If product is installed on a furring wall, a furring strip is required behind each fastener.
- If a section does not have the initial center hole, drill a new center hole of 1/8"(0.32cm) diameter at the same height as the other installation holes.

5-Install the following section by hooking it onto the starter strip and sliding it to the left inserting the lateral tabs into the previous. Space the sections equally according to the outdoor temperature during the installation. If product is installed in an outdoor temperature from 30°F(-1°C) to 60°F(15°C), position the next section so mortar joint between sections is 5/8"(1.59cm) wide. For installations from 60°F(15°C) to 90°F(32°C), mortar joint should be 1/2"(1.27cm) wide. For temperatures over 90°F(32°C), space sections to create a 3/8"(0.95cm) mortar joint (Figure E). Once the section has been properly spaced, fasten it as previously indicated. Repeat this step until the end of the row.

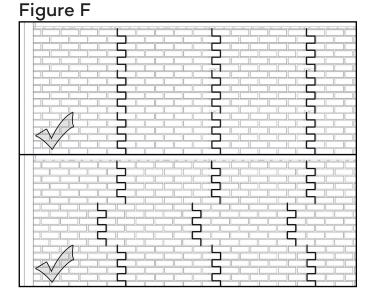
6-Begin the second row either by aligning the first section or cutting it with approximately 8"(20.32cm) increment from the cutting line of the first row. Hooking the section onto the top of previous row. Never force sections down on top of each other or into each other, left to right, or else risk breaking the stop posts on the back of the product. Set them into place gently, ensuring that all fingers and/or side locks are engaged, and allow the sections to seat themselves. The stop posts are designed to prevent buckling due to changing temperatures. In order to achieve a realistic brick look, make sure to match the brick pattern throughout each subsequent course by aligning or alternate the cut position by increments of 8"(20.32cm) (Figure F).



From 30°F to 60°F (-1°C to 15°C): 5/8" (1.59cm)

From 60°F to 90°F (15°C to 32°C): 1/2" (1.27cm)

Over 90°F (32°C): 3/8" (0.95cm)







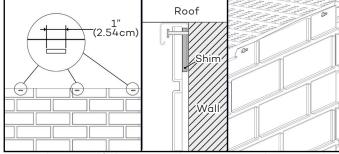
### **INSTALLATION STEPS (CONTINUATION)**

7-For the last row or places where you may need to attach product other than in installation holes, use a knife to create a new 1"(2.54cm) slot (Figure G); the slot must be wider than the fastener but not as wide as the fastener head. Although not set in installation holes, this type of cutting will allow the expansion/contraction movement of sections.

-Note: For proper installation & optimal appearance, shim as required to adjust the angle of the last row.

Reminder: Do not set accessories directly on the product. The fasteners must be fixed into a solid surface. If you need to set accessories over ProBrick, at a concealed spot on the product create a new 1"(2.54cm) slot larger than the fastener body but smaller than the fastener head to permit expansion/contraction of sections.

### Figure G



Some elements of the image above were partly removed to facilitate understanding.

#### SPECIAL SITUATIONS AND SUGGESTIONS

| SITUATION:   | ITEMS TO CHECK:   |
|--|---|
| - Sections won't lock together side to side.                   | The wall may not be level and flat. Check previous sections to ensure that all sections and installation fingers are properly seated. (See General Information) Use shims as needed to ensure a level wall surface. |
| - The bottom locking fingers won't lock onto the previous row. |   |
| - Sections are buckling on the wall.                           | Make sure the fasteners are not restricting product<br>movement. Check for proper spacing at side interlocks.<br>Make sure all fingers are properly engaged into previous<br>section.                               |
| - Sections are not laying flat against the wall.               |   |





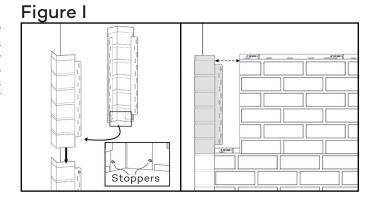
### **DECORATIVE CORNERS INSTALLATION**

Caution: ProBrick corners must be installed on wall corners prior to installing the ProBrick sections. It is recommended that no more than two corner pieces are installed at one time so that slight adjustments on corner height can be made to match the height of section rows if necessary.

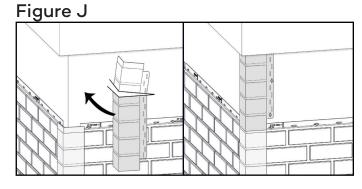
1-Position a first decorative corner at 3/32"(0.24cm) from the lowest point of the wall corner. Add a fastener in the center of the installation holes at both ends as well as in the center of the nailing channel on each side of the corner. Check the bricks alignment with a section temporarily placed on the starter strip and adjust corner height if necessary (Figure H).

Figure H

2-Install another corner overlapping the previous one by sliding it down to the bottom stoppers (located on back). Fasten the corner as previously indicated and start the sections installation. At every corner, verify the bricks alignment with section and adjust corner height as needed (Figure I). Repeat this step until the last corner installation.

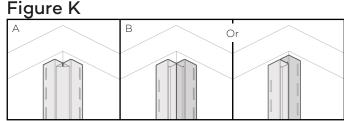


3-For the last corner, cut excess from part, then install on wall corner (Figure J). Fasten the corner as previously indicated and continue the installation of sections.



### **INSTALLATION TIP**

1-Many solutions are possible to finish an inside corner: Inside Corner Post (A) or two J-channels (B) (Figure K). It is important to seal the inside corner of the wall prior the installation of the trim.



For details, see the respective installation guide of each product.