

VERSETTA STONE®

MANUFACTURER'S INSTALLATION INSTRUCTIONS WITH UNIVERSAL CORNER

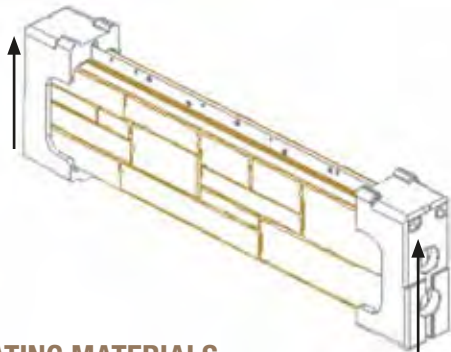
Building code requirements vary and it is suggested that you check with local authorities to determine requirements for your area. Carefully read all installation instructions before proceeding with installation. Observe all safety precautions.

Versetta Stone® mortarless stone veneer panels are designed for application over wood framing, spaced 16" on center and covered by a code approved, nailable sheathing product. Currently, Boral requires a minimum 7/16" OSB or 1/2" plywood sheathing beneath the Versetta Stone product. Wall framing should be designed to limit out-of-plane wall deflection to a minimum of L/240. At a minimum, the building's corners should be sheathed to meet local building code requirements and to mitigate the effects of wall racking. Roofing and interior wallboard should be installed prior to starting installation. Walls are to be plumb within 1/4" per 10 lineal feet. Expansion joints for the Versetta Stone product should be provided as specified by the registered design professional. Testing and evaluations for this product apply to applications up to 30' in height. Installations above 30' must be approved by the design professional. Provide a means for drainage and ventilation at all horizontal terminations. This is typically achieved by using Starter Strip and J Channel in conjunction with flashing products and generally accepted practices.

HANDLING AND STORAGE

The product should be transported and stored in the original shipping package until ready to use. When sub packs are removed, transport and store with top (nailing flange) up. See Figure 1.

FIGURE 1 - STORAGE



ESTIMATING MATERIALS

1. Determine the net wall area to be covered. Do this by multiplying the wall width (in feet) by the wall height (in feet). Subtract the area of windows, doors or any other area that will not be covered. This is your net wall area.

2. Universal Corners (UC) are used to finish outside corners, inside corners or to provide an attractive end of wall termination. Each end of the Universal Corner will provide 8" of height coverage for a total 16" per panel (8" x 2 ends). Multiply the total height (in feet) of total wall terminations by 0.75 to calculate the number of Universal Corners panels needed. Don't forget to add a few for scrap.

Important Note: Each Universal Corner Panel will provide one left and one right after cutting the panel into two pieces.

3. In addition, using an entire Universal Corner Panel provides 2 ft.² of wall area coverage. This coverage will be subtracted from the Total Wall Area to determine the number of Flat Panels needed.

Formulas

Net Wall Area = width × height (in feet)

of Universal Corners = Corner Height (in feet) × 0.75

Universal Corner Coverage = # of Universal Corners × 2

Flat Panel Area = Net Wall Area – Universal Corner Coverage

of Flat Panels = Flat Panel Area ÷ 2

A factor for scrap should be included, and it is suggested you start with 5–10% Universal Corners. As you become more familiar with the product you will be able to drive this requirement lower.

Fasteners

Each full Flat Panel requires a minimum of 4 fasteners. Install 4 fasteners per panel when the length is greater than 18". Panels greater than 18" should have 2 of the 4 fasteners into framing. Add one additional fastener if only one framing location occurs behind the panel. For more information refer to the 'Special Applications' section.

Starter Strip

Starter Strip requirements are equal to base wall width measured in feet and rounded up to the nearest 10 foot increment. See Figure 2.

J Channel

J Channel requirements are determined by measuring the perimeter of window and door openings, trim material transitions, cladding transitions and any control joints. See Figure 3.

FIGURE 2 - STARTER STRIP

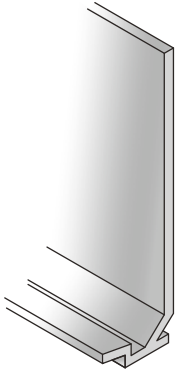
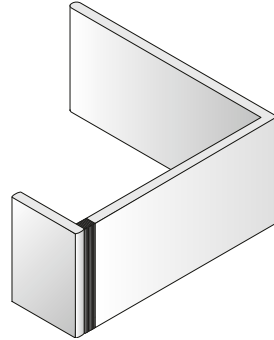


FIGURE 3 - J CHANNEL



Tools

Hammer, circular saw, hand grinder, chop saw (ex. 10" sliding compound miter with a segmented diamond blade) or wet saw with continuous diamond turbo blade* (**see Cleaning on pg. 7**), level, laser level (optional), chalk line, tape measure, screw gun or pneumatic roofing nail gun, tin snips, 5/16" rod or dowel (optional), brush, small screwdriver. Follow the tool manufacturer's safety instructions.

Versetta Stone Textured Finishing Adhesive

Versetta Stone™ Textured Finishing Adhesive is the recommended adhesive for Versetta Stone. It may be used to conceal any supplementary fasteners or odd material terminations, and to install accessories and partial panels. Likely areas where partial panels will be installed include: under windows, eave terminations, and at horizontal material transitions. Each 10 fl. oz. cartridge will adhere approximately 4 partial panels. Determine estimated length of these areas and divide by 3 and then by 4. This will provide an estimated number of 10 oz. tubes you may need.

Personal Protective Equipment

Safety glasses or goggles, ANSI Z87.1 Grinding Face Shield, a properly fitted NIOSH approved N-95 series disposable particulate filtering facepiece respirator (formerly referred to as "dust masks"), gloves, ear plugs or muffs, steel toe boots and hard hat.

SUNDRY MATERIAL REQUIREMENTS

Water Resistive Barrier (WRB)

Minimum one layer of Grade D building paper or other WRB material meeting the requirements of ICC Acceptance Criteria #38 or ASTM E 2556/E 2556M. #15 felt provides a dark background that helps conceal any area where texture or installation allow the WRB to show. Local building code or climate may require 2 layers of WRB.

Fasteners

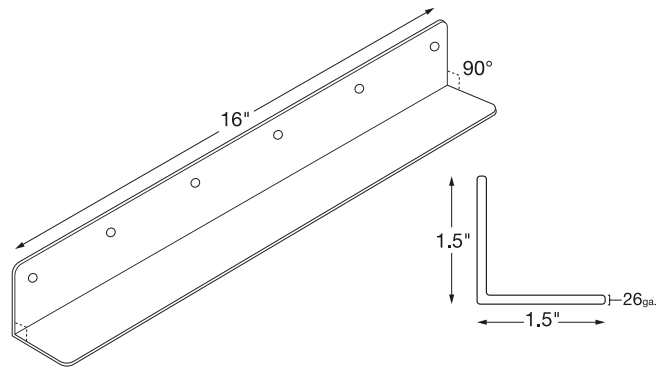
Fasteners must be corrosion-resistant galvanized roofing nails or screws with head diameter 3/8" minimum and shank 1/8", and length suitable to penetrate framing material minimum 1". Electro-galvanized are acceptable but may exhibit premature corrosion. Boral Stone Products recommends the use of quality, hot-dipped galvanized nails or screws. Boral is not responsible for the corrosion resistance of fastener.

Important Note: Treated lumber may react with metal or coating of fastener. Determine material compatibility when selecting fasteners.

L Bracket

Some sill applications will require the use of a support bracket. You may purchase the bracket from Boral or source or fabricate a bracket to the specifications shown in Figure 4. Material of "L" shape shall be galvanized to G90 and be of minimum 26 gauge thickness.

FIGURE 4 - L BRACKET



BEFORE YOU BEGIN

Inspect the area of installation to determine that framing has been done 16" on center and that the sheathing material is minimum 7/16" OSB or minimum 1/2" plywood. Verify that an appropriate water resistive barrier, flashing and caulking have been installed, or that they are part of your installation package. Check walls for plumb and square and identify any defects or protrusions. Contact the builder, registered design professional or contractor to correct any deficiencies before you proceed.

SURFACE PREPARATION

Water Resistive Barrier (WRB) Application

Cover sheathing with minimum one layer of WRB, following the installation instructions provided by the manufacturer and local building code requirements. Wrap WRB minimum 16" past all inside and outside corners to ensure no vertical seam is present at the corner. A second layer of WRB extending 16" past each corner is recommended for additional protection.* Integrate WRB with all flashing. Do not fasten bottom 12" at this time.

* Application of second layer must meet all WRB manufacturer's installation guidelines.

Wall Layout

Marking Framing Locations

Mark vertical framing locations with pencil or chalk line. It may also be helpful to mark horizontal framing locations in areas around windows, doors and wall terminations.

PRODUCT DIMENSIONS AND SPECIFICATIONS

(SUBJECT TO NORMAL MANUFACTURING TOLERANCES)

FIGURE 5 - FLAT PANEL

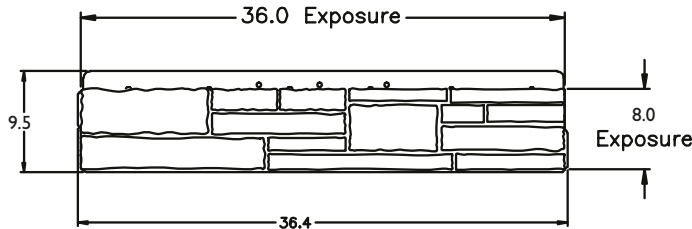


FIGURE 6 - WAINSCOT CAP

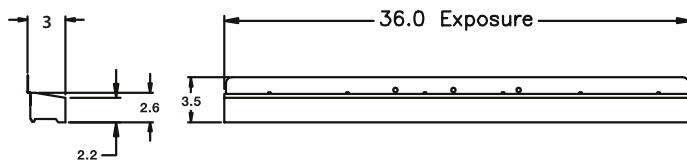


FIGURE 7 - UNIVERSAL CORNER (UN-CUT)

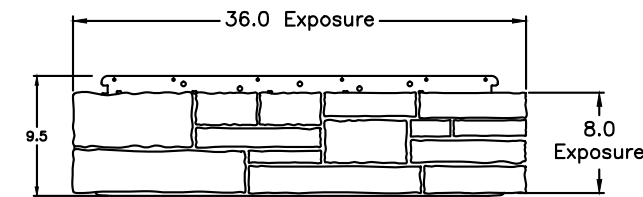
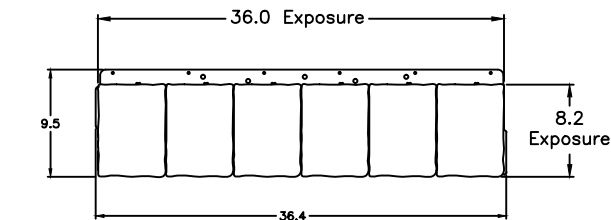


FIGURE 8 - TRIM PANEL



DETERMINE AND MARK YOUR STARTING POINT

The product must maintain a clearance from grade of a minimum 4" if soil and 2" if a hard surface such as paving or concrete. It is critical that your starting line be a level line and positioned so that appropriate clearance from grade is achieved. This location will also determine the size of partial units when you reach penetrations like windows and doors. Take time to plan a location that optimizes panel usage above and below windows and doors. Product dimensions have been provided to assist you with this step. See Figures 5–8.

Verify that your intended starting line provides an equal height distance to overhang, trim or cladding. Once a starting location has been determined, tack or tape up WRB and mark on sheathing. Account for Starter Strip nailing flange, so that bottom of Starter Strip lands on your desired starting location. Extend a chalk line or pencil line across the entire surface to be covered.

Markings to Stay Level

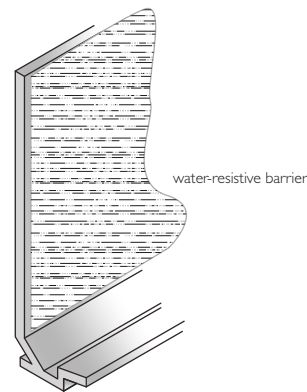
Panels are designed to help maintain level and plumb courses but it is also advised that you mark level lines periodically up the wall as a reference. A level line every 24" is recommended. This allows you to quickly measure to the line to verify panels are still running level. Adjusting panel spacing to catch up distance or level can be done, but this must be done in 1/16" or less increments.

INSTALLATION

Starter Strip

Install Starter Strip perfectly level at your starting point line. Fasten with roofing nails or screws every 8"-10". Fasteners should be placed in the center of nail slots and driven straight. Fasteners should not be driven tight. Allow 1/32" gap between fastener head and strip. Additional fasteners may be added to assure strip does not easily pull away from wall at bottom edge. Allow 1/4" clearance at material butt joints and 1/2" clearance at corners and end wall terminations to allow for proper alignment of panels. Lap WRB over starter strip nail flange. See Figure 9.

FIGURE 9 - WATER RESISTIVE BARRIER



J Channel

Install J Channel at windows, doors, material transitions, penetrations or terminations. Fasten with roofing nails or screws every 8"-10". Fasteners should be placed in the center of nail slots and driven straight. Fasteners should not be driven tight. Allow 1/32" gap between fastener head and channel. Allow 1/4" clearance at material butt joints. When used in horizontal applications, drill 3/8" drain holes every 12" in trim channel.

Installing Panels: General Rules and Tips for Installation

- Panels are installed from bottom to top.
- Panels are lapped in shingle fashion, so that tongue seats completely in groove.
- Panels should be staggered from one row to the next to avoid the alignment of vertical joints. Corners will provide stagger if used. See important note in the 'Installing Universal Corners' section.
- Fasteners should be driven straight and flush.
- Pneumatic nails or screws should be driven directly through nail flange.
- Panels and corners must be installed level and plumb.

Versetta Stone panels may be hand nailed or applied with pneumatic nail gun or screw gun. Fasteners should be a minimum of ½" from any edge of the panel, and into framing as detailed later in these instructions.

CUTTING AND MODIFICATIONS

Always follow safe tool operation instructions provided by tool manufacturer. Always wear eye protection, hearing protection and a dust mask while cutting or trimming†.

Use of additional face protection provided by a full face shield is recommended and required with some cutting tools. Consult specific tool manufacturer for details.

Do not cut more than one panel at a time. Straight and angle cuts can be made with any of the cutting tools outlined in the tool section of this document. Tools with a fence provide a clean and fast cut, i.e. table saw or miter saw. Cut panels with the tongue facing the fence. If making a miter cut (45° or 22 ½°), cut on the same location of the stone panel so that the grout lines line up. Trimming and staggered cuts are best made with a hand grinder utilizing a masonry blade. Holes can be made with a masonry hole saw, drill or grinder with a masonry blade. Always safely support and stabilize the panel during modification.

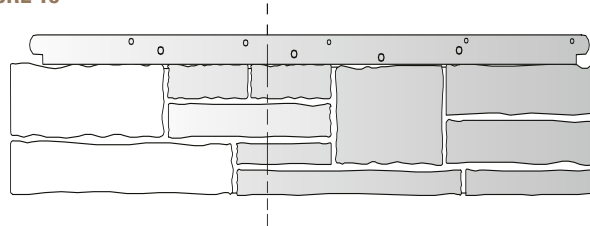
†**CAUTION:** Contains Crystalline Silica. Dusts from cutting or sawing may create possible cancer hazard. Dusts of this product may cause irritation of the nose, throat and respiratory tract. Avoid prolonged or repeated inhalation of dusts from this product. Refer to OSHA cutting standards for further information.

A properly fitted NIOSH approved N-95 series disposable particulate filtering face piece respirator (formerly referred to as "dust masks") should be used when mechanically altering this product (e.g., sawing, cutting, drilling or similar dust generating processes). Wear long-sleeved shirt, long pants, gloves and safety glasses with side shields when handling and installing material. Wash hands and face with soap and warm water immediately after handling this product.

INSTALLING UNIVERSAL CORNERS

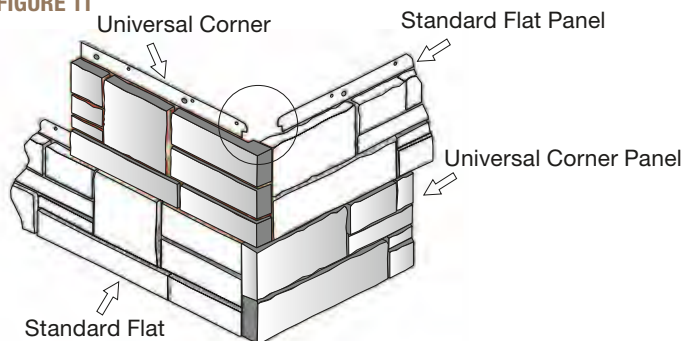
Important Note: Universal Corners must be cut into 2 pieces to create left and right. Ideally you want to cut random lengths to assist with wall staggered appearance and avoid pieces shorter than 8". See Figure 10.

FIGURE 10



Used as Outside Corner

FIGURE 11



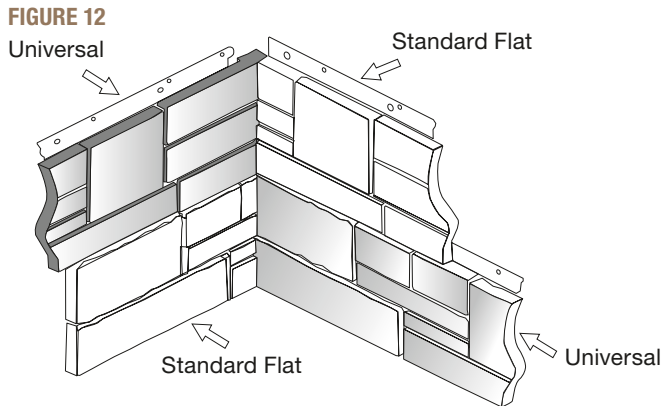
Start at bottom of wall and position one half of a Universal Corner, nail flange up, cut edge away from corner, into the Starter Strip. Set a standard Flat Panel into the Starter Strip on the adjacent wall. Slide the Universal Corner to extend past the wall edge and slide the standard Flat Panel to intersect with the Universal Corner. See Figure 11. The standard Flat Panel side tongue will need to be removed. The Flat Panel can then tightly seat against the back of the Universal Corner. Fine tune the corner appearance with slight adjustments of both pieces until you get the best fit. Fasten the Universal Corner per the instructions for Flat Panels which appear later in this document. Each Universal Corner will require a minimum of 2 fasteners when length is 18" or less, with at least 1 into framing. Install 4 fasteners per panel when the length is greater than 18". Panels greater than 18" should have 2 of the 4 fasteners into framing. Add one additional fastener if only one framing location occurs behind the panel. Alternate the use of left and right end of the Universal Corner Panel on each course.

Used as Inside Corner

The Universal Corner is manufactured so that 2" at each end of the panel has minimal texture. This minimal texture provides a superior fit when a standard Flat Panel is terminated into the face of the Universal Corner. Use of the Universal Corner here translates to smaller gaps and superior appearance.

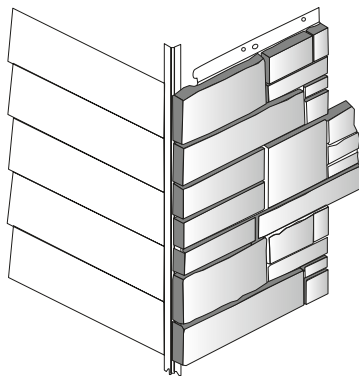
Start at bottom of wall and position one half of a Universal Corner, nail flange up, cut edge away from corner, into the Starter Strip. The Universal Corner panel must be pushed all the way into the corner before proceeding. See Figure 12. Install a standard Flat Panel into the Starter Strip of the adjacent wall and butt into the face of the Universal Corner. If you are using un-cut standard Flat Panel, it will be necessary to remove the side tongue from the standard Flat Panel on the end that will butt into the face of the Universal Corner. Fasten the Universal Corner per the instructions above for use as outside corner. Fasten the standard Flat Panel per the instructions for Flat Panels. Start the next course inside corner with the remaining half of your original Universal Corner Panel. This step will enable the courses to alternate providing a woven inside corner. Continue up the wall following the same steps.

Important note: The Universal Corner Panel must be pushed all the way into the corner before installation of adjacent Flat Panel. See Figure 12.



Used as End Wall Termination

FIGURE 13



In applications where the Versetta Stone System will terminate without a corner return, the Universal Corner can be used to create an attractive finished end. Keep in mind, once cut, your Universal Corner provides you both Left and Right ends. If your termination application is only on one end of the wall, you will not be able to utilize both ends of the Universal Corner Panel.

Start the installation as you would a standard Flat Panel or outside corner application. The cut edge of the Universal Corner will face away from the termination point. You have the option to extend the Universal Corner beyond the wall termination up to 3" to achieve the best transition to the adjoining wall covering. For best appearance align all courses to have a similar overhang. See Figure 13.

INSTALLING FLAT PANELS

Flat Panels

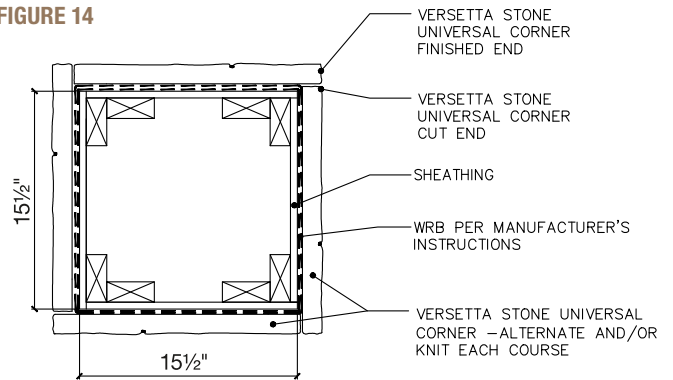
Starting at the bottom of the wall, position first panel, with nailing flange up, and tongue into the Starter Strip. Fasten panel with total of 4 fasteners in the top nailing flange. A minimum of 2 fasteners must penetrate framing, end fasteners must be located within 3" of the end of the panel. Next, position second panel into the Starter Strip and slide to nest end tabs with edge of the first panel. Install fasteners as you did for the first panel. Continue down the wall repeating this procedure until you reach the end. Before next course clean any debris from first course groove. A brush or small screwdriver works well for cleaning grooves. If Universal Corners are not being used, start next course with the leftover piece from the end cut, so long as it exceeds 8". Each course should have a minimum of 8" stagger between courses.

An automatic stagger is created by the long and short leg of Universal Corner Panel. Therefore, a half panel every other course is not required when Universal Corner Panels are used.

Used in Column Applications

Versetta Stone can be used to create square columns. To build an easy 18" finished column using only Universal Corner Panels, start by framing out the column so that each side measures no more than 15.5" from sheathing to sheathing. The Universal Corners in this application will all be cut in half so that each half measures 18" in length. See Figure 14. Starting at the base of the column, position the left half

FIGURE 14



of a Universal Corner Panel into the Starter Strip with the finished end extending roughly 1.5" past the left edge of the column. Next, position another left half of a Universal Corner Panel on the other three sides of the column. Panels may be cut and adjusted for length so that joints are tight. On the next course, repeat the same process using the right halves of the Universal Corner Panels. Alternate the

direction of finished ends on each course as you work your way up the column. Finishing a column in this manner will require two bundles of Universal Corner Panels for every 16" in height.

PARTIAL PANELS AND ACCESSORIES

Important Note: Versetta Stone Textured Finishing Adhesive is the recommended adhesive for Versetta Stone. If using another adhesive, reference the manufacturer's application guidelines specific to that product.

Throughout the project full panels will need to be cut and modified to fit. In some cases flanges will be removed. Products without nail flanges must be fastened using adhesive. Adhesive can not be expected to hold if bonded directly to water resistive barrier. In order to achieve good bond and mechanical connection to framing, a material must be first nailed to framing in the area where adhesive will bond. Non-painted, clean metal flashing or expanded metal lath, fastened 16" on center into framing provides an adequate bonding surface. After bonding surface has been prepared, apply quarter-sized dabs of adhesive a minimum of ½" tall, every 3"-4" to the wall, the back of the partial panel or accessory, or both. Install partial panel and press into adhesive to assure complete contact. It may be necessary to insert a wedge or shim between partial panel and trim to hold during curing. If the partial panel or accessory will not be retained by Versetta Stone J Channel or other wood/composite trim material, or the partial panel is more than 4 feet above ground, supplementary fasteners are required to hold panel during adhesive curing. Screws are the fastener of choice for this step. As a general rule, one additional fastener every 16" will be sufficient to supplement the adhesive. The Versetta Stone panel or accessory will need to be pre-drilled with a masonry drill bit of an appropriate size, as recommended by the fastener manufacturer. See "Sundry Material Requirements" section for fastener requirements. The head of this fastener will likely be visible when the installation is complete. To conceal it, we recommend a dab of Versetta Stone Textured Finishing Adhesive. Fasteners are easier to conceal in shaded or darker areas of the stone, but may crack a panel if installed in the simulated mortar joints. Do not over tighten fasteners. Use enough force to pull the panel into the adhesive and maintain substantial contact during curing.

INSTALLING VERSETTA STONE WAINSCOT CAP PRODUCT IN A WAINSCOT APPLICATION

Place the Versetta Stone Wainscot Cap product on top of previously installed Versetta Stone panel application with tongue on back of sill into groove of Versetta Stone Flat Panels below. Fasten with a minimum of 4 fasteners through the nailing flange. A minimum of 2 fasteners must penetrate framing. End fasteners must be located within 3" of the end of the nail flange. If desired, you may supplement the application with adhesive as outlined in the "Partial Panels

and Accessories" section of these instructions. "L" brackets are not required when using this method.

INSTALLING VERSETTA STONE WAINSCOT CAP PRODUCT IN A WINDOW SILL APPLICATION

In applications where the Versetta Stone Wainscot Cap will be used under an existing window or opening, removal of the exposed portion of the nailing flange is necessary. Utilize a grinder with appropriate wheel or metal snips to remove the nailing flange. CAUTION: THIS STEP MAY PRODUCE SHARP EDGES WHICH SHOULD BE AVOIDED. HANDLE WITH CARE AND WEAR CUT RESISTANT GLOVES. Once the nailing flange has been removed, follow the "Partial Panels and Accessories" section of these instructions. In some cases, "L" brackets may be needed to provide additional support. See "Sundry Material Requirements" section for "L" Bracket requirements. To facilitate proper fit of the bracket, a portion of the backside tongue will need to be removed in the locations the bracket will contact the sill. Utilize hand grinder to remove the tongue in these locations. Brackets will be mounted at framing locations and should be spaced to allow 2 brackets per Versetta Stone Wainscot Cap. Following the application instructions for "Partial Panels and Accessories" and install metal flashing or metal lath material at location where Versetta Stone Wainscot Cap will be installed. Hold Versetta Stone Wainscot Cap under window and mark bottom location. Next mark framing locations and install "L" brackets, with screws that penetrate framing minimum 1", at locations marked. Apply adhesive in quarter-sized dabs, a minimum of ½" tall, every 3"- 4" to the wall, the back of the sill or both. Adhesive should extend onto both surfaces of the "L" bracket. Note: The "L" bracket's vertical surface is an acceptable mounting location for adhesive and can act as the mechanical connection to framing discussed in the "Partial Panels and Accessories" section of these instructions. Place Versetta Stone Wainscot Cap into place, level, and press firmly into adhesive. It is important to maintain full adhesive contact. Shim the Cap or bend "L" brackets to achieve full adhesive contact and level status.

Additional temporary support such as clamps, shims, or supplemental fasteners may be needed to maintain full adhesive contact until adhesive cures.

INSTALLING VERSETTA STONE WAINSCOT CAP PRODUCT USING A COMBINATION METHOD

In some applications the Versetta Stone Wainscot Cap product will extend beyond the jamb of a window and a combination of both methods above may be used. Hold the Versetta Stone Wainscot Cap under window and determine how much of it will extend beyond the window jamb. Mark and remove the appropriate portion of the nail flange as outlined in the "Installing Versetta Stone Wainscot Cap Product in a Window Sill Application" section of these instructions. Follow the instructions in that section to prepare the surface with metal flashing or metal lath and "L" brackets. See "Sundry Material Requirements"

section for "L" Bracket requirements. Extend this treatment behind entire Versetta Stone Wainscot Cap mounting location. Apply adhesive as directed to the entire mounting location. Place Versetta Stone Wainscot Cap into place, level, and press firmly into adhesive. It is important to maintain full adhesive contact. Shim the Cap or bend "L" brackets to achieve full adhesive contact and level status. Install fasteners through available nail flange as outlined in the "Installing Versetta Stone Wainscot Cap Product in a Wainscot Application" section of these instructions.

Additional temporary support may be needed to maintain full adhesive contact until adhesive cures.

INSTALLING VERSETTA STONE TRIM STONE

Prepare the surface as outlined in the "Partial Panels and Accessories" section of these instructions. Apply quarter-sized dabs of adhesive a minimum of ½" tall, every 3"- 4" to flashing/lath, back of trim stone or both. Note: It is critical that the adhesive bead be large enough to create contact between stone and flashing. Place trim stone tight to adjacent window/door/trim and press firmly into adhesive. Continue trim stone installation by attaching stone to wall, with 6 screws through pre-drilled nailing flange holes. Do not use nails for this application.

Note: If the Versetta Stone Trim Stone will not be retained by a Versetta Stone J Channel or Starter Strip, or other wood/composite trim material, or the partial panel is more than 4 feet above ground, supplementary fasteners are required to hold panel during adhesive curing. Additional fasteners are required through the masonry portion of the panel. Screws are the fastener of choice for this step. As a general rule, one additional fastener every 16" will be sufficient to supplement the adhesive. The Versetta Stone Trim Stone will need to be pre-drilled with a masonry drill bit of an appropriate size, as recommended by the fastener manufacturer. See "Sundry Material Requirements" section for fastener requirements. The head of this fastener will likely be visible when the installation is complete. To conceal it, we recommend a dab Versetta Stone Textured Finishing Adhesive. Fasteners are easier to conceal in shaded or darker areas of the stone, but may crack a panel if installed in the simulated mortar joints. Do not over tighten fasteners. Use enough force to pull the panel into the adhesive and maintain substantial contact during curing.

INSTALLING VERSETTA STONE ACCESSORIES RECEPTACLE BOX AND LIGHT BOX

Identify electrical box connection location and verify that power has been disconnected. Prepare the surface as outlined in the "Partial Panels and Accessories" section of these installation instructions. Prior to installation of metal flashing/lath, trace enclosed electrical box extension onto the flashing or lath. Flashing material should be a minimum of 4" larger than the product being installed. Cut hole into flashing material to match outline of electrical box extension. Install flashing material over existing outlet box. Flashing/lath material fasteners should penetrate framing a

minimum of 1". Fasten electrical box extension to existing electrical box keeping box level and plumb. If a telescoping electrical box extension is being used, fasten it using 1-½" screws. The extension box flange should be set equal to the thickness of the Versetta Stone Accessory Box thickness. Weatherproof the perimeter of box penetration with additional flashing/caulk. Apply a self adhered flashing material over top edge of flashing, overlapping 1". Temporarily place Accessory Box stone over box extension making sure it is level and plumb. Trace Accessory Box stone perimeter onto flashing material. Remove Accessory Box stone and store for installation later. Install Versetta Stone panels, using standard installation, up and around traced Accessory Box stone lines. Continue with balance of the panel installation to complete the wall. Once the wall is completed you are ready to install the Accessory Box stone. Apply ¾" beads of adhesive in an upside-down "U" shape. Adhesive beads must be thick enough to make substantial contact with back of Accessory Box stone. Install Accessory Box stone and press into adhesive to assure complete contact. Maintain pressure against Accessory Box stone to ensure proper initial bond. It may be necessary to insert a wedge or shim between box extension and Accessory Box stone or Versetta Stone panels, to hold level and plumb during curing. **CAUTION: TEMPORARY PRESSURE OR SUPPORT MAY BE REQUIRED TO MAINTAIN FULL ADHESIVE CONTACT UNTIL CURED.**

Refer to adhesive manufacturer installation instructions for temperature and cure time recommendations. See Figure 15 and Figure 16 for examples of accessories.

FIGURE 15 - LIGHT BOX

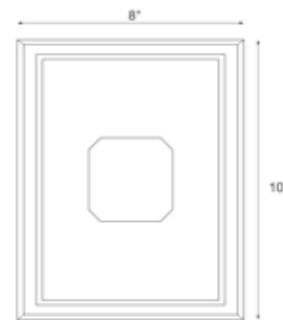
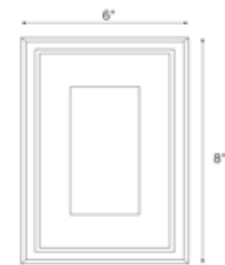


FIGURE 16 - RECEPTACLE BOX



CLEANING

Cutting dust and general construction dust can be removed with clean water and a nylon bristle brush. Stubborn dirt may require the addition of a granulated general detergent. Do not clean with harsh chemicals or acid products. Do not pressure wash. ***Note: When using a wet saw ensure that all slurry is immediately washed off panel to prevent staining.**

SALT AND DE-ICING CHEMICALS

All concrete and masonry materials are vulnerable to damage by salt and de-icing chemicals. Do not use salt or de-icing chemicals on the product or in areas adjacent that may splash onto it. See printed warranty for more details.

GOOD BUILDING PRACTICES

Make sure the product is being applied to a wall or structure that meets all building code requirements. Code-approved flashing materials must be present at all terminations, penetrations and material transitions. Control water and minimize penetration caused by roof run off, gutters and downspouts. If there is any question as to the integrity of the wall or water management principles, contact the appropriate owner, registered design professional or builder for corrective measures.




REPAIR/REMOVE/REPLACE

Using a masonry saw or grinder with a diamond blade and proper personal protective equipment, cut out the area to be replaced. Take care to avoid damaging the weather resistive barrier behind the panel. Trim new panels to fit the area you just cut out. Repair any damage to the water resistive barrier, making sure to lap and seal in shingle fashion. Follow the partial panel installation method to install replacement panel.

SPECIAL APPLICATIONS

Follow the instructions in the table below to apply Versetta Stone to additional substrates not addressed in the previous sections. These instructions focus on the recommended fasteners to use for these applications. Except where noted below, spacing and quantity of fasteners per Flat Panel, Universal Corner, Partial Panel and Accessory all remain the same as the standard Versetta Stone installation instructions. Fasteners must be corrosion resistant and suitable for exterior use and exposure. Fasteners must be compatible with galvanized sheet metal. Boral Stone Products LLC recommends the use of quality, hot-dipped galvanized nails or screws. Boral Stone Products LLC is not responsible for the corrosion resistance of the fasteners.

FASTENER RECOMMENDATIONS

Application Groupings	Sheathing	Fastener Description	Fastener Image	Fastener Penetration	Max. Head Thickness	Min. Head Dia.	Min. Shaft Dia.
-Wood Framing	-7/16" OSB -1/2" Plywood -1/2" Drywall -1/2" Insulation Board	-Exterior Wood Screws -Roofing Nails*		1" penetration into framing	0.13 inch	0.375 inch	0.125 inch
-CMU Block -Concrete -Brick	N/A	Tapcon Flat Head Concrete Anchors		1" penetration into masonry	0.13 inch	0.375 inch	0.1875 inch
-Steel Framing	-7/16" OSB -1/2" Plywood	#8 or #10 (ASTM C1513) Self Tapping, Self Drilling Screw		Minimum 3 thread penetration through framing	0.13 inch	0.375 inch	0.164 inch

Note 1: Concrete anchors may be reduced to 3 per Flat Panel when located with one at each end and one at center.

Note 2: Pre-drilled holes in Versetta Stone nail flange are 3/16". If you choose to increase the diameter of the fastener, the pre-drilled holes will also need to be enlarged.

Note 3: Versetta Stone can be installed over 1/2" rigid insulation if maintaining the prescribed penetration

*Panels may be difficult to remove if installed with roofing nails.

Recommended Installation Tools: Screw gun or pneumatic roofing nail gun, hammer, circular saw w/ diamond blade, hand grinder, chop saw or wet saw* (see **Cleaning on pg. 7**), level, chalk line, tape measure, tin snips, brush, small screwdriver.

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