



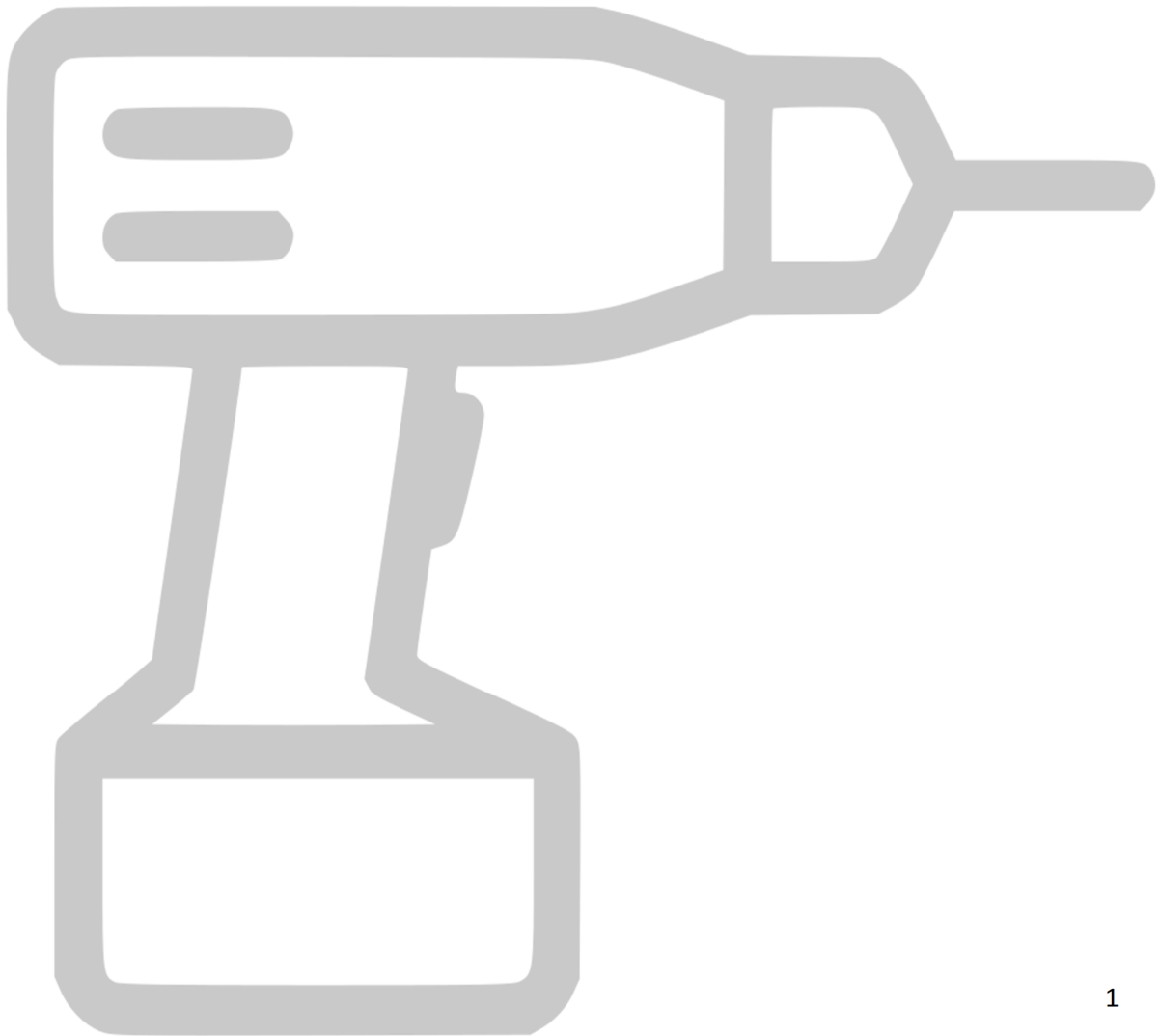
# RENOSTONE

DECORATIVE STONE / PIERRE DÉCORATIVE

## Installation Guide

Renostone Screw on Panel

*As of January 2022*



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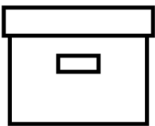
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# 1 Storage & Maintenance

To maintain the performance and look of your *Renostone* stone veneer product, this product must be installed with care. Be sure to carefully read and understand this manual prior to installation.

- ▲ **IMPORTANT:** Compliance with *Renostone's* preparation, installation, storage, maintenance and care requirements, and with applicable local/regional building codes is mandatory. Failure to comply with these requirements and codes may affect product performance and lead to personal injury.
- ▲ **WARNING:** Do not install products you believe to be conflicting with local/regional building codes. Before you begin, refer to your local/ provincial/ state and national building codes for requirements regarding the installation of interior feature walls, interior decorative stone, manufactured stone siding, breather membrane, house wrap, caulking, fastening, etc. Follow the manufacturers' instructions for installing the breather membrane, and house wrap. For more information regarding building codes, consult the Government of Canada's National Model Construction Codes at [www.nationalcodes.nrc.gc.ca](http://www.nationalcodes.nrc.gc.ca) and The International Code Council (ICC) at [www.iccsafe.org](http://www.iccsafe.org)

## Storage



Store flat and keep dry prior to installation. Installing wet panels may result in something happening. Protect edges and corners from breakage. Product should not come into contact with other stone product; use wood strapping or cardboard to prevent interaction. To further prevent breakage, when working with panels, carry product on edge. *Renostone* is not responsible for damage caused by improper storage and handling of the product.

## Maintenance



Our manufactured stone surfaces require very little maintenance and should be cleaned using water, or warm water and mild soap. Water pressure from a garden hose and the use of a soft bristle brush will be sufficient. Do not use a pressure washer, particulate or sand blasting device, or harsh chemicals (i.e. bleach, acid, detergents). Staining is not required or recommended.

# 2 General Requirements

- *Renostone* can be installed over steel studs or braced wood with a maximum spacing of 16". When installing stone veneer over foam insulated OSB or sheathing install-furring strips similar to vinyl siding installation 16" apart.
- In extreme cases irregularities in framing and sheathing can mirror through the finished application
- Avoid over-driving fasteners, which can result in non-adhesion of product or breaking of the panels. Do not use an impact driver to install fasteners for this reason.
- A water-resistive barrier as recommended in this guide is required in accordance with local building code requirements.
- The water-resistive barrier must be appropriately installed with penetration and junction flashing in accordance with local building code requirements. *Renostone* will assume no responsibility for water infiltration.
- Adjacent finished grade must slope away from the building in accordance with local building codes typically a 6" minimum over 10' or 2%.
- Do not install *Renostone* products on a horizontal plane or ceiling. Vertical wall applications only.
- Maintain a 2" minimum clearance between *Renostone* products and driveways, paths and steps. Do not caulk gap.
- Proper flashing, counter-flashing and kick-out flashing is to be installed, as per roofing manufacturers instructions, wherever *Renostone* product is used.
- Products finish may lighten slightly in the first two years due to elemental curing- this is normal and within the products parameters.
- Do not install **Renostone** products, such that they may remain in contact with standing water.
- Minimize exposure to salt

## Cutting Instructions- Outdoors

1. Position cutting/trimming station so that dust will not blow in the direction of the user or others in the working area.
2. The following methods may be used: A) Handheld grinder with high-speed diamond cutting wheel designed for masonry and stone. B) Dust reducing circular saw with high-speed diamond blade designed for masonry/stone.
3. Use eye and respiratory protection when cutting or trimming product.
4. When working with stone products a hardhat, toe protection and a face shield is recommended.
5. Do not cut or trim *Renostone* products indoors.
6. Never use a toothed blade or wheel not designed to cut stone or masonry.
7. Panels may be cut with a wet saw. Ensure product is rinsed immediately following the cut. Failure to do so will cause dust to adhere permanently.

If concerns exist about cement dust exposure levels or you do not comply with the above, practices you should consult a qualified industrial hygienist for further information.

# 3 Installation

## Wall Preparation

- Inspect the exterior wall prior to installation to ensure framing is a minimum 16" ODC spacing and that sheathing is a minimum of either 7/16" OSB or ½" plywood. Verify that appropriate flashing, J-channel, caulking and water resistive barrier have been installed or are part of your installation materials. Interior wall boarding and roofing should be installed prior to *Renostone* products. Corners should be sheathed to meet building codes and prevent racking. Consult a professional civil/engineer for applications over 30'.
- *Renostone* panels use an 8" anchor spacing specifically designed to accommodate most ICF foundation installations.
- When installing panels over concrete block or poured foundation pressure treated furring strips should be installed and fastened to the wall with both a foundation fastener and polyurethane adhesive.
- Check wall for defects or irregularities and contact the builder or contractor to correct any deficiencies before you proceed.

## Water Resistive Barrier Installation (WRB)

*Renostone* products were designed to be installed in conjunction with a vented water resistive barrier.

Following installation instructions provided by the manufacturer, install a minimum of one layer of WRB to the structures sheathing. Ensure its installation meets building code requirements, terminates at least 16" past all outside and inside corners and integrates with flashing materials. In order to prevent insect intrusion fold the bottom portion of the barrier behind itself to create a "lip" where it meets the base of the starter strip.

## Fastener type and use

Only stainless steel screws are approved for installing *Renostone* products on exterior surfaces. Galvanized and electro-galvanized fasteners will corrode prematurely. Grip Rite PrimeGuard MAX screws are recommended and are available through your local *Renostone* dealer. An impact driver is not recommended for installation (see below).

Screw size and thread type chart:	Screw Thread Size	Screw Length
<b>Product</b>		
Drystack Panels	#7 trim head	2 ¼"-3"
Drystack Corners	#7 trim head	2 ¼"-3"
Trim Pieces	#10	3"
Ledge Pieces	#10	3"
Galvanized Trim securing strip	#8	1 ¼"

\*When installing over 1" exterior rigid foam insulation add 1" to fastener length.

**▲** Use caution when driving fasteners through attachment points. Use only enough pressure until there is resistance. Applying too much force will result in faulty attachment and broken panels. *Renostone* product should be fastened so the screw head is driven just below the surface of the silicone plug and fastening stops when further resistance is felt. (On a Dewalt XRP drill this is a 9-10 setting on the chuck torque setting)

## Before you begin: Planning the installation

Carefully plan the distribution of panels on the walls. Position product over the wall area so as to limit the number of cuts. Ensure corners alternate to avoid joint alignment. In some instances, height of ledge may be pre-determined by a feature such as the bottom of a window, it is our recommendation to pick a starting position that minimizes waste and cutting of panels. *Renostone* ledges are 3" high. *Renostone* panels are 9" high. An example of an easy height that is aesthetically pleasing and minimizes waste would be 39". If using our *Renostone* products, this same dimension is achieved by using one row of ledge and four rows of panels (3"+9"+9"+9"+9"=39").

## Installing the starter strip/row

*Renostone* starter strip consists of the first row of installed product. Depending on the aesthetic or functional application this can be ledger piece, molding or accent trim, or standard panels. Use a laser level and chalk line to ensure a perfect level. Panels are designed to interlock and maintain a straight line, however checking level and alignment of the panels regularly is recommended.

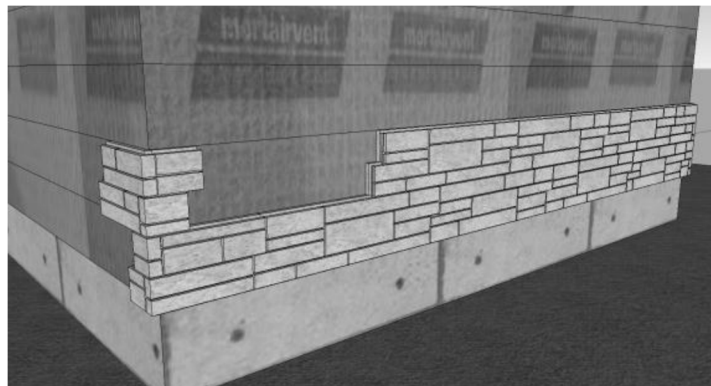
When using trim or ledge pieces to start a project flash the top before starting panels to prevent water intrusion. Do not caulk bottom gap. See trim installation for more detail when using trim as starter course.

**Installers' Tip:** Use a straight piece of dimensional lumber fastened to the exterior wall to mark the top line of product to be installed. Butt the positive lip or topside of first row of corner and panels to this edge.

## Installing Panels

*Renostone* panels are engineered with an interlocking lip system to prevent water intrusion and facilitate ease of installation. Ensure that each panel has its positive tongue edge facing up and that panels are adequately staggered throughout installation to prevent lining-up of vertical seams. (See corner installation below to see how this is accomplished)

*Renostone panel installation is done from right to left of the building surface.* If using corner pieces begin from right corner piece. If panels do not sit correctly in their grooves, or mold castings prevent a snug fit a handheld grinder is used to trim the excess. An approved stainless screw must be used at each of the 8 fastening points on each panel, these fastening points are easily found below the indicator arrow markings on the top lip of the panel. They appear as a small "burr" or silicone nub in the concrete between the mortar lines of stacked stone. Be sure to not drive the fastener through the anchor points. To ensure even color and tone distribution mix products from different pallets.

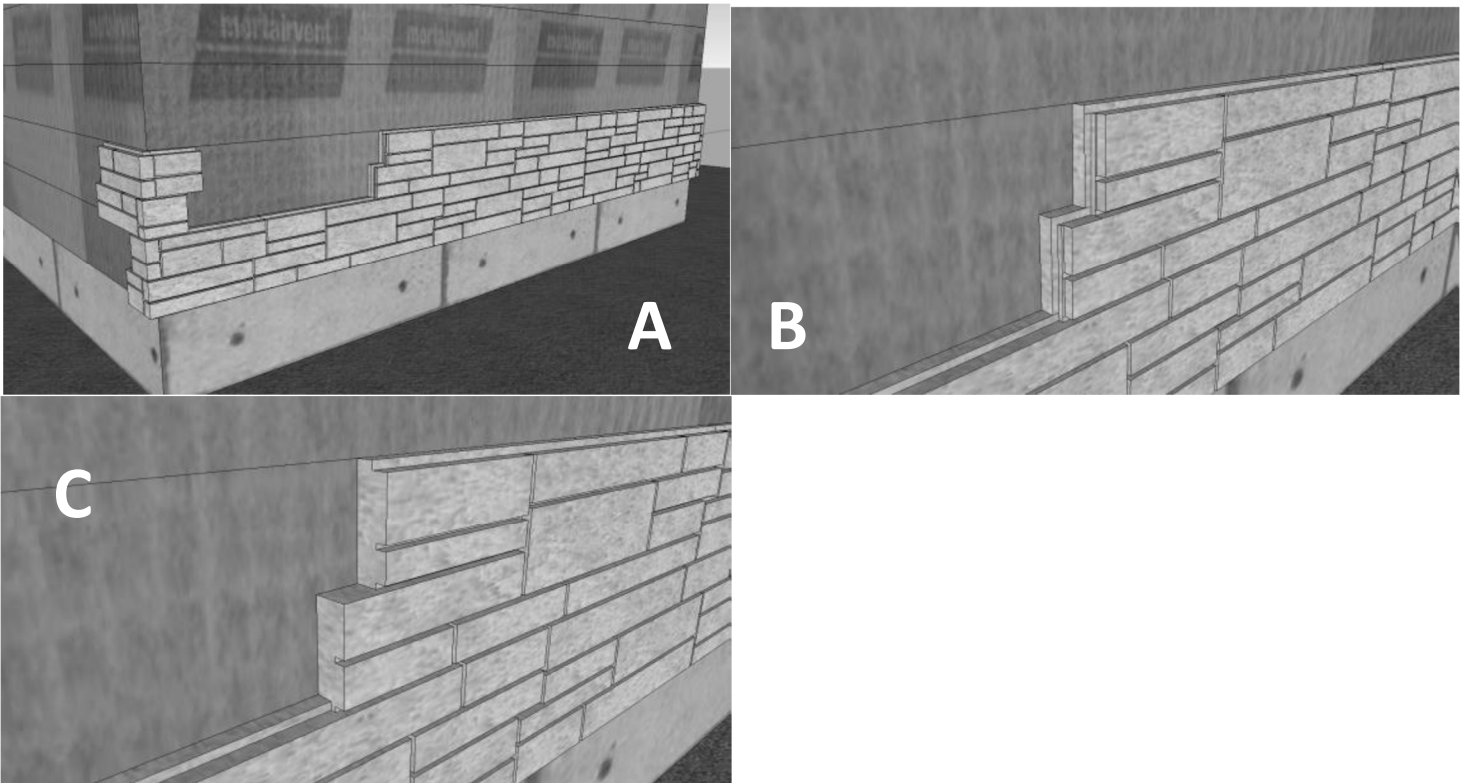




## Trimming and Cutting Panels

Trimming and cutting of panels can happen between a finished panel and a corner piece, in the middle of a row, at the end of a wall or an inside corner where two walls meet. When cutting a panel at the end of a wall where a finished corner piece is absent, it is recommended that the cut end be caulked with a color matching seal and finished with a decorative flashing or trim. When a horizontal cut is required simply mark a level line across the panel, and using a size appropriate handheld grinder, cut along the mark. Follow the guidelines below for cutting-in a *Renostone* panel in a corner piece wall.

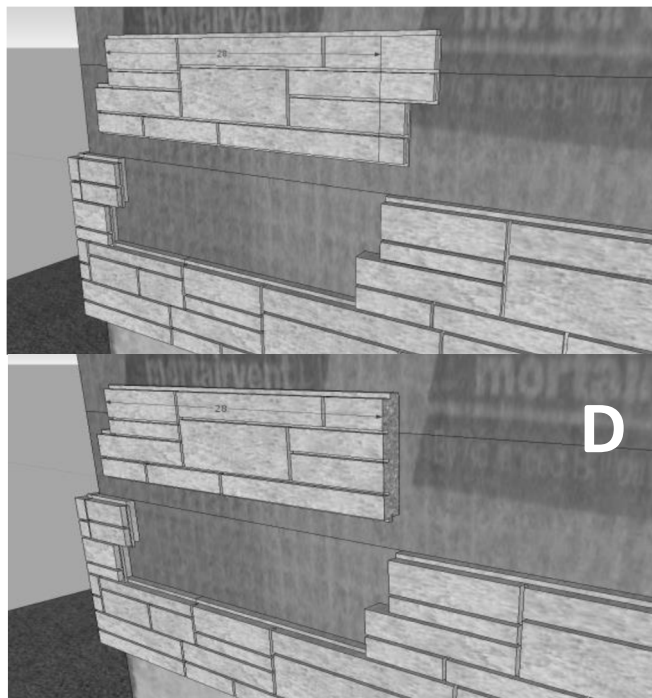
1. Measure cut gap between the two panels, to ensure accuracy use 2 screws to temporarily fasten the finished corner end (**Fig A**). Ensure you select a panel whose side lining up with the cut end has similar stone properties (e.g. stones line up, color). Using angle grinder with a 7" blade (recommended) cut away the left lip on the side of the panel (**Fig B**) preceding the panel to be cut and fit. Cut this panel before installation as to not damage water barrier. Install this panel. (**Fig C**)

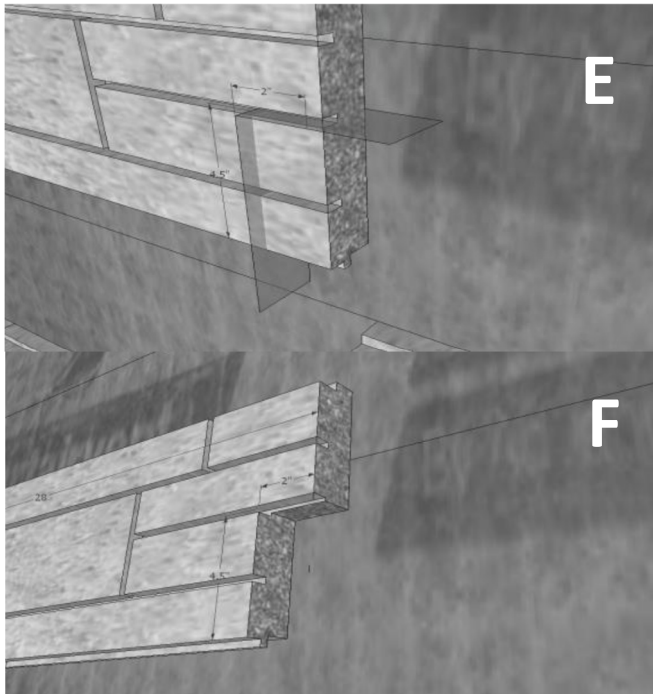


2. Using the top ledge of the installed right panel mark and cut your first vertical cut of the cut to fit panel. Ensure the left lip is in line with the female joint on the corner piece. **(Fig D)**

Line the cut to fit panel with the lip of the temporarily installed corner piece and mark your second vertical cut line, this line should be 4 ½" high **(Fig E)**. This will align with the lower tab and be cut to mirror the ledge feature on the adjoining right panel. Do not cut the grout line portion of the cut to fit panel this will allow alignment in the cut attached panel.

Measure and mark the position of the cut to trim the remaining top tab of the panel to be installed to align with the top cut tab of the installed panel on the right **(Fig F)**.

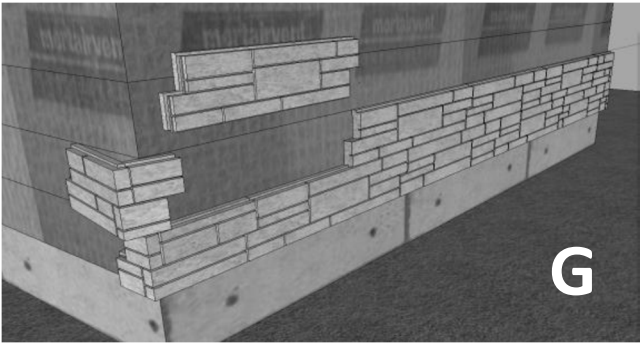


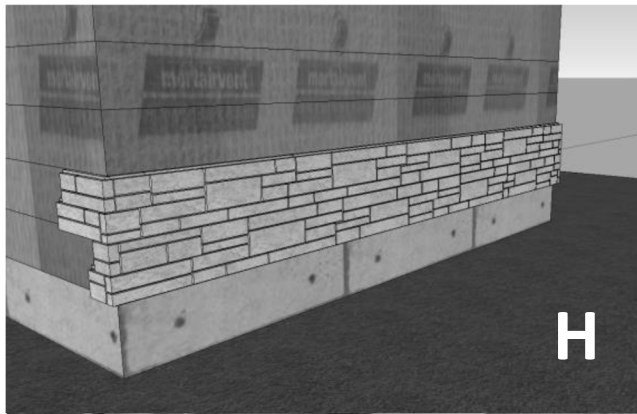


**Trimming and Cutting Panels (cont.)**

3. After panels have been trimmed remove temporary anchors from the corner or adjoining left-most piece and dry-fit the two pieces to ensure proper fit and seating (**Fig G**). Caulk all cut sides of panels before fastening to wall. Caulk top channel of adjoining cut panel and smooth with finder to seal the vertical seam. Finish installing cut panel and corner (**Fig H**).

**⚠ IMPORTANT:** Before installing the cut panel use a color matched caulk and seal the cut side of the product, ensure that there are no caulk gaps and that entire ledge is sealed to prevent water intrusion.

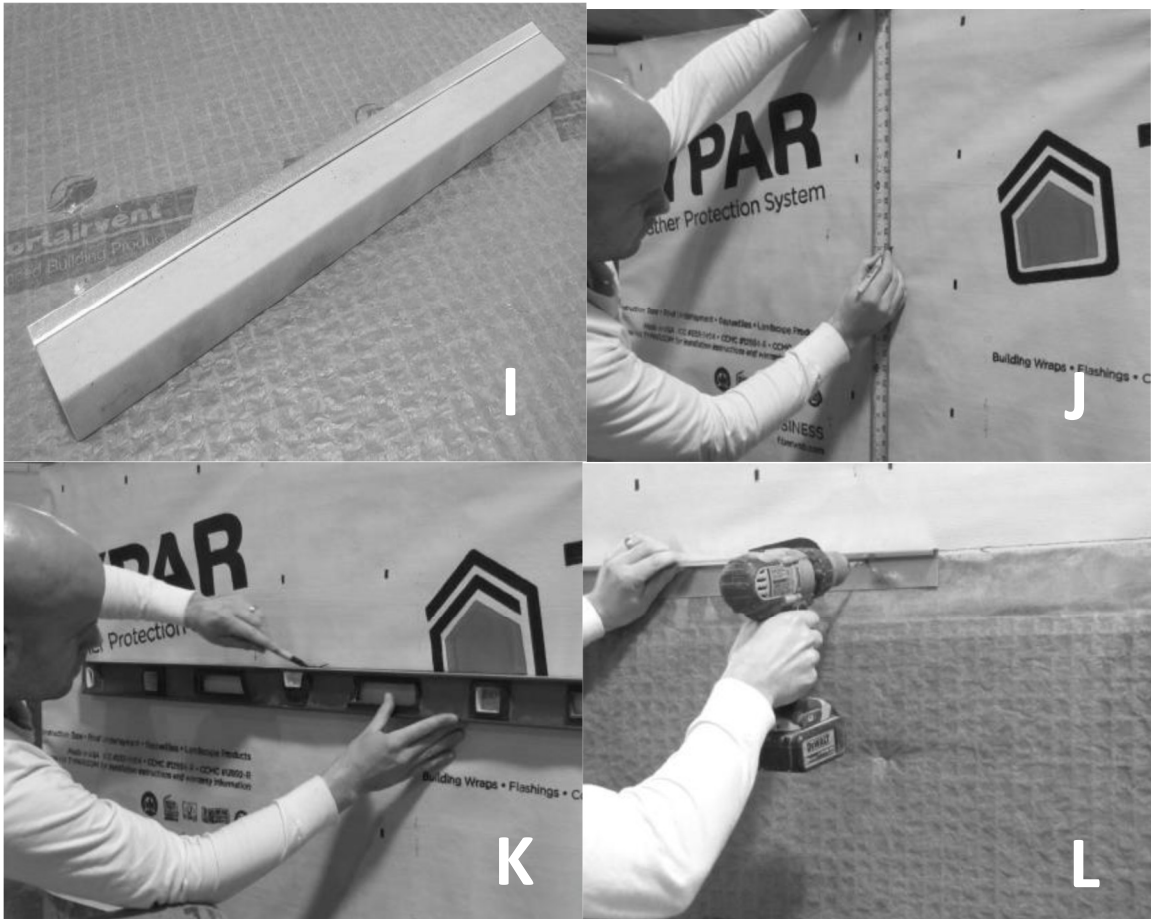




## Installing Trim and Ledge

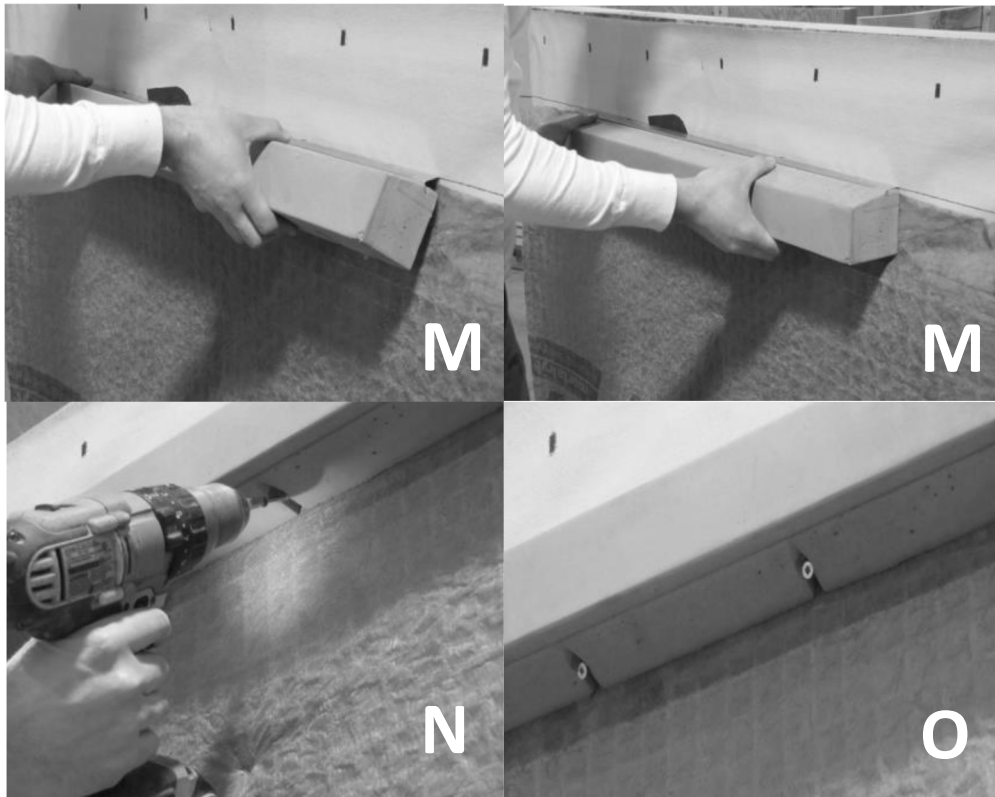
*Renostone* ledge pieces (**Fig I**) can be used interchangeably depending on the desired aesthetic. Trim and ledge pieces come in a wide variety of shapes and sizes, consult your distributor or the *Renostone* catalogue for the best options for your application. Trim and ledge can be used in horizontal or vertical applications to frame windows, doors and other architectural features. A typical trim or ledge installation occurs where a “wainscot” application of stone is applied to the lower portion of the building face. This transition is required from *Renostone* siding to conventional siding products. Pick the horizontal position of your ledges to maximize the length of each piece and eliminate “stubs” of ledge. As a general rule, starting with a precut ledge on a miter from outside corner is best practice.

1. Determine the position of the ledge/trim piece (**Fig J**). Carefully mark a level line with a chalk line and carpenter's level or laser level (**Fig K**). Align top of bracket with level line and fasten with stainless steel #8 x 1 ¼” screws (**Fig L**). It is recommended that the J and corresponding ledges align so that 8” spacing on fastener holes allows for screws to penetrate studs spaced at 16” centers.

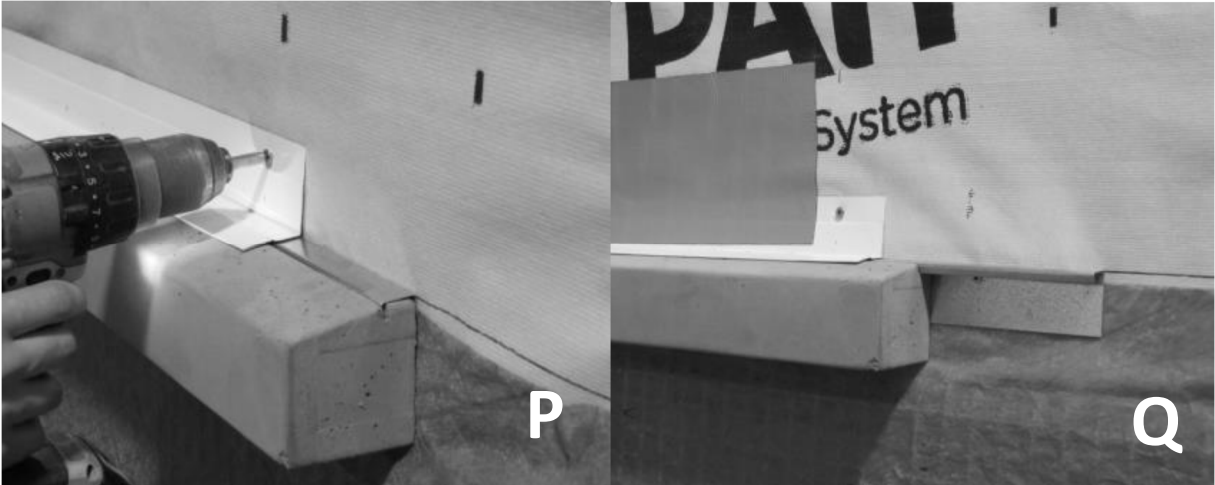


## Installing Trim and Ledge (cont.)

2. Fit the ledge into the galvanized J (**Fig M**), attach with #10 x 3" Stainless Screws (**Fig N**). Position the tip of the screw as high as possible within the keyhole. This will prevent any downward movement of the ledge out of the galvanized J. Drive screw until the head is seated against the cast, concave seat (**Fig O**). Prior to fitting of ledges, use a straight edge to determine how in-plane your wall is and note any imperfections: Bows in wall combined with over-tightening of screws may cause ledge to fracture during installation.



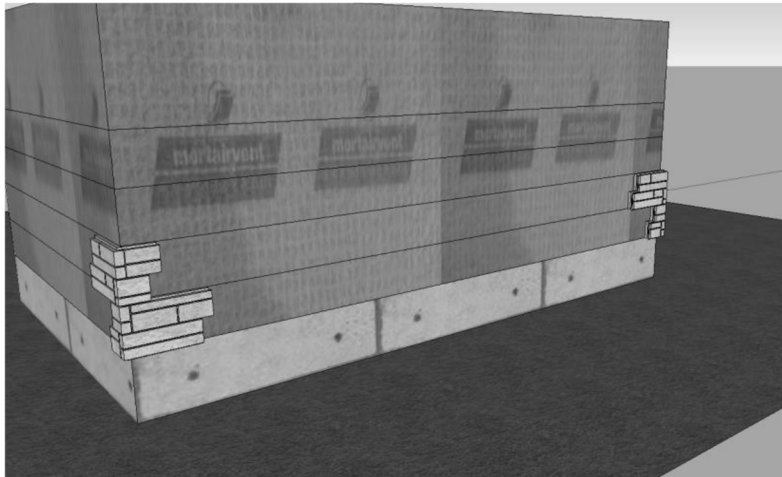
3. Ensure that flashing is installed in accordance with building codes to prevent water intrusion along the galvanized bracket top channel. “L” Flash from wall (**Fig P**), a minimum of 1 ½” from supporting wall. Install flexible weather resistant membrane in accordance with local and national building code when transitioning to or from a different siding material (**Fig Q**).



## Installing Corners

*Renostone corners are installed in the same way as flat panels; from right to left and begin the starter strip and installation when they are used.*

Follow panel fastening and fastener use sections for further details.



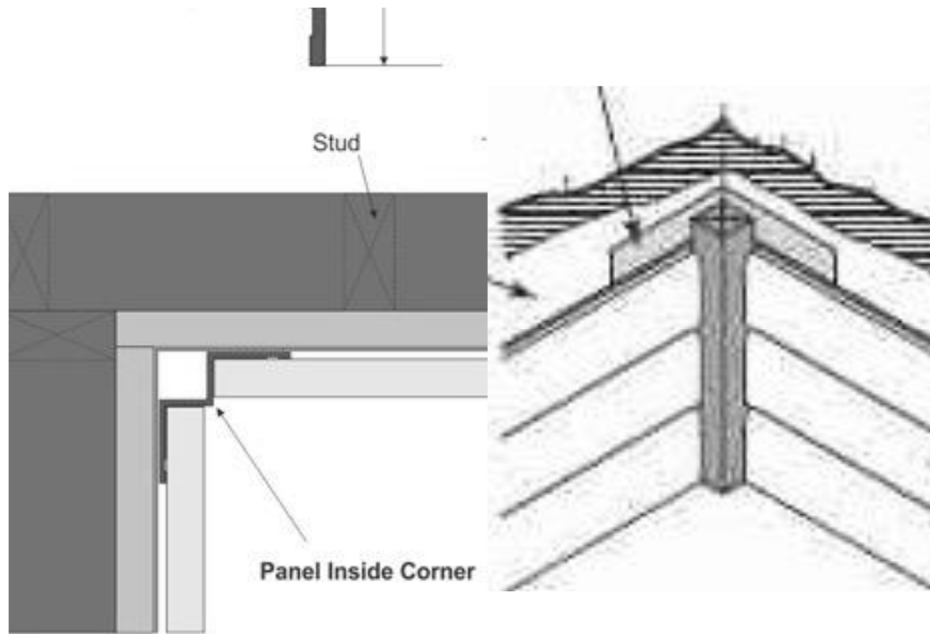
There are 3 available methods to finish inside corners.

1. Coping is the recommended method and yields the best results. Join the panels and use coping method similar to coping interior baseboards. Apply caulk in the joint prior to pressing the coped joints together. A flexible adhesive weatherproofing flashing behind the corner piece is recommended.





2. Install a vinyl trim piece, weatherproof 2"X 2" trim piece or a 90° corner flashing piece where the two walls meet and butt the joining panels against it. Caulk the space between the flashing and the cut panel. A flexible adhesive weatherproofing flashing behind the corner piece is recommended.



3. Thirdly, the corners can be mitered to fit the corner. Follow caulking and weatherproofing instruction from the first two methods. This is the least effective method for adjoining inside corner panels and should be avoided.

## Installing Accessory Pieces

*Renostone* accessory pieces are designed to put the finishing touch on your project. Consult your authorized dealer for endless trim and accessory options with *Renostone*. When working with electrical and plumbing accents consult a qualified electrician or plumber to ensure safe practices. When using an accessory option to surround an electrical component, identify electrical box locations and ensure power has been disconnected.

It is recommended that a flexible weather resistant membrane be installed around fixtures to prevent water infiltration.

Outlet and lighting accessory pieces can be installed before or after stone panels so long as the guidelines below are met.

Refer to the Trimming and Cutting Panels section for cutting instructions.

To attach an accessory piece to the wall:

Dry fit the accessory piece for cut in installations. Apply a liberal bead of caulking around the back edge of the piece. Attach with #10 x 3" Stainless Screws. Position the tip of the screw as high as possible within the keyhole. It is recommended that a strip of flashing be installed on the top edge to prevent water intrusion. Apply color matched caulk between the cut sides of the panel and the accessory piece.

## Finishing an Installation

No mortaring or finish work is required for panel installation. Complete the job with a visual inspection to ensure all fastener heads have been secured through the attachment points and that screw heads are not visible. Exterior electrical and plumbing accessories can now be installed through accessory pieces. If any visible joints exist they may now be sealed with a color matching caulk mixed with some cement dust to maintain the texture of the stone.



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