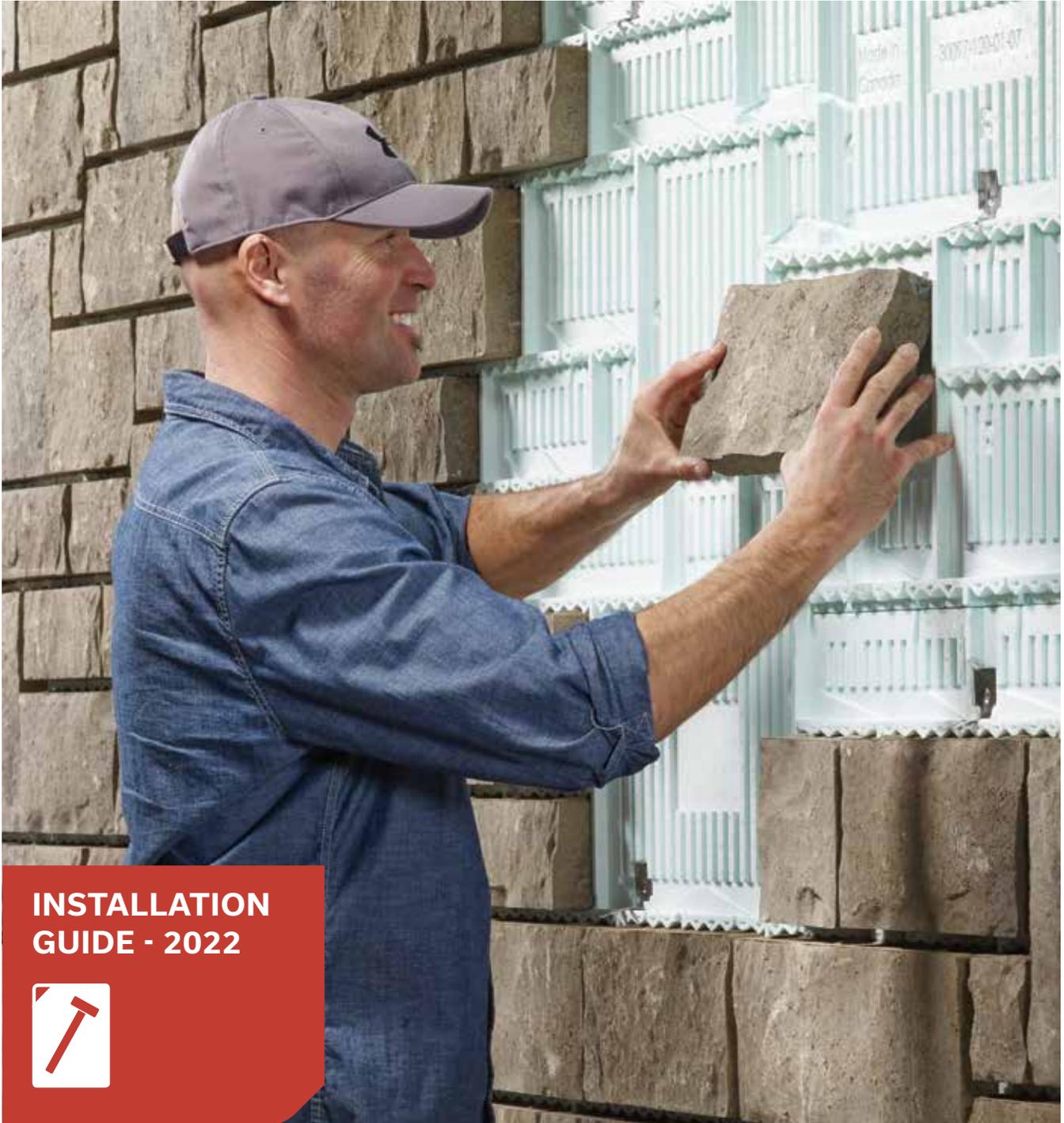


PERMACON

Suretouch™



INSTALLATION
GUIDE - 2022



Suretouch Masonry System

Important Warnings

This document is a basic guide explaining the various steps for installing any **Suretouch** masonry system product.

Note : The word **unit** and the expression **masonry unit** are often used for **stone**.

Get a permit from your municipality before starting work.

Be sure to wear a hardhat, construction boots, gloves and safety glasses.

Use safe work methods to prevent any accidental fall of stones or bricks that could have serious consequences. **The units inserted in the polystyrene cells are not secure until they have been pointed.** The polystyrene can only hold the units for a short time, particularly if site activity causes strong vibrations. The wall should therefore be pointed with mortar as soon as possible. Make sure that no one (worker or other) is near an unpointed Suretouch wall.

To avoid accidents, it is essential that the units be glued to the polystyrene with drops of glue (without plugging the water drainage channels) in the following situations:

- › Along corners
- › When a unit is placed in a broken, damaged or incomplete cell
- › Glue should also be used if the small protrusions on the top of the unit are damaged.

In this guide, the cladding is applied to a conventional wood wall frame (studs at 16 in. - 400 mm centres). Installation on any other type of structure should be adjusted accordingly and approved by an engineer.

Attach any hooks or anchors (for a clothesline, for instance) to the structure of the house. Any deterioration caused by attaching the hook to the facing alone will not be covered by the warranty.

For more information, visit permacon.ca
or call **Permacon** at **1 888 737-6226**

Index of INSTALLATION VIDEOS



View Suretouch system installation videos on our website at permacon.ca

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▶ INJECTING MORTAR

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Tools and Materials

TOOLS

- › Utility knife
- › Level
- › Screw gun (preferably Impacto type)
- › Circular saw
- › Guillotine
- › Grinder
- › Pointing tools (see **Pointing** section)

MATERIALS

INCLUDED IN THE SURETOUCH SYSTEM

- › Polystyrene panels
- › Stones
- › Stainless steel anchors and screws
- › Galvanized steel starter strip
- › Spacers
- › Weepers

OTHERS

- › Sills, jambs, lintels, keystones, etc.
- › Adhesive waterproofing membrane
- › Polystyrene-compatible acoustic caulk in tubes
- › "J" trim for windows
- › Glue (PL Premium)
- › Deck screws (ceramic-coated) - # 8: 1 1/2 to 2 in.
- › Mortar



Spacers



Weepers

The illustrations show installation conditions for stones. Unless otherwise indicated, the principle illustrated is the same for both types of masonry.

Preparation

WALL ALIGNMENT

Check the alignment of the wall to be covered, as the Suretouch system is installed directly onto it. Make sure that any visible deviations, bulges or imperfections on the wall are carefully corrected.

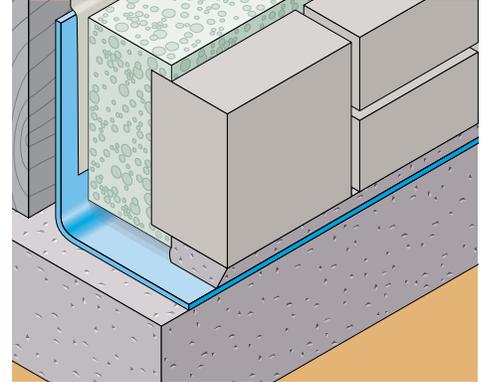
We suggest you use OSB panels.

STUD LOCATION

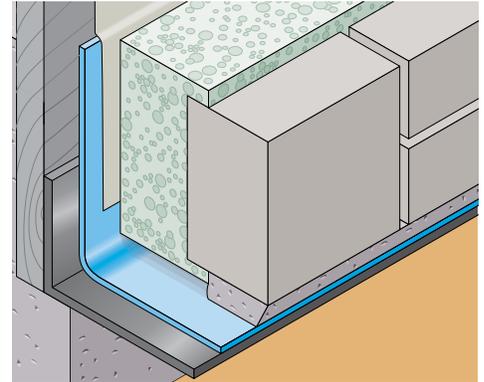
Mark the stud locations on the steel starter strip. This will ensure that the anchors are screwed into the stud, and not into a non-structural nailer.

FOUNDATION SUPPORT

If the foundation provides a support base of at least 3 1/4 in. (82 mm), it is sufficient to support the Suretouch system directly. If the support base is narrower, as is often the case in renovations, a steel starter strip will have to be added.



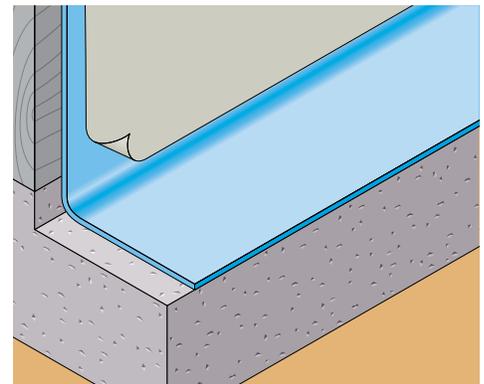
With a brick ledge of 3 1/4 in. or more



Without a brick ledge. Using Suretouch steel starter strip.

ADHESIVE WATERPROOFING MEMBRANE AND AIR BARRIER

Place the adhesive waterproofing membrane to the foundation or steel starter strip, then overlap the air barrier and glue it to the adhesive waterproofing membrane. The air barrier should not extend onto the horizontal part of the foundation or steel starter strip.



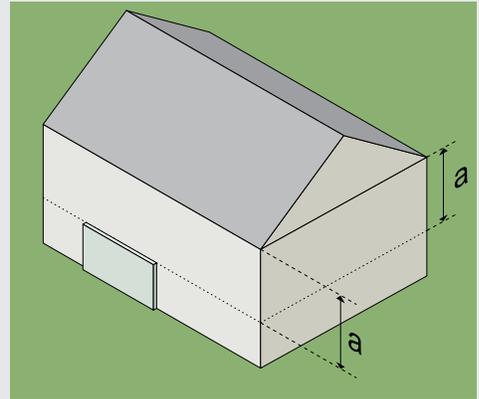
Preparation - cont'd

VIRTUO STONE ONLY

REFERENCE LINE

The reference line allows first the polystyrene panels and then the Virtuo stone to be properly aligned. To establish this line, temporarily place one panel so that it is level. Leave a space between the bottom of the polystyrene panel and the foundation (or steel starter strip). This space should be approximately the same width as the joints. Draw a level line along the top of the panel. Measure the distance between this line and the bottom of the roof truss (**a**).

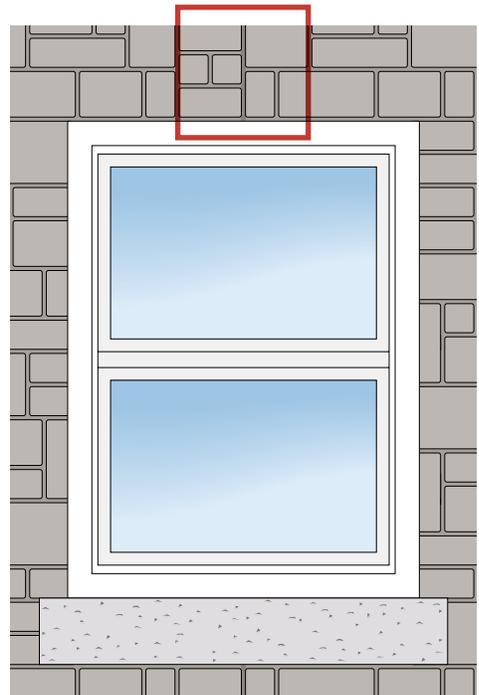
Transfer this measurement to each corner and then draw a line connecting these points on the wall to be covered, or around the perimeter of the house, if appropriate.



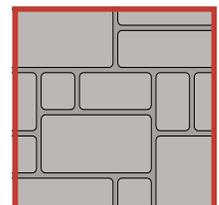
END POINT

If you plan to cover all the walls of the house, you will have to decide ahead of time on a point at which the first and last panels will meet (end point).

Choose the top of an inconspicuous door or window, perhaps on the side or back of the house. For a nicer look, you can change the installation pattern when the units are being installed by creating new cells (**B**) to avoid ending up with a long vertical joint (**A**).



Joint A



Joint B

Installing the Polystyrene Panels

IMPORTANT

The Suretouch system is designed for conventional wood structures with studs spaced at 16 in. (400 mm) centres. For any other type of structure, plan the anchor arrangement in consultation with an engineer to ensure that the entire structure is solid.

Only use Suretouch stainless steel screws and anchors.

This product cannot be installed on wood panels.

GENERAL PRINCIPLES FOR INSTALLING THE PANELS

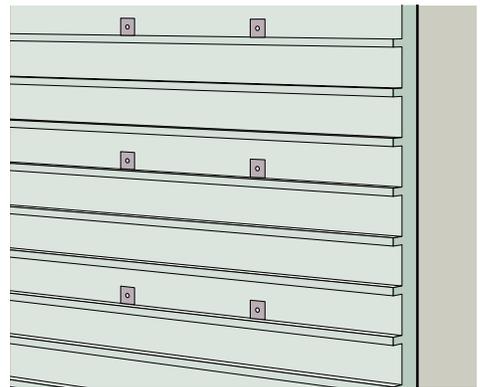
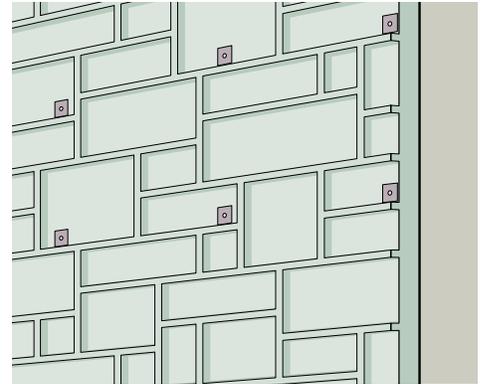
Always install the panels from left to right.

Do not rest the panels on the steel starter strip (at the bottom of the wall and above openings). Always leave a space.

All the polystyrene must always be attached to wall studs with at least one Suretouch stainless steel anchor and screw for every 2 ft² (0.18 m²). To achieve this ratio on a structure at 16 in. (400 mm) centres, the anchors should be spaced 19 in. (485 mm) apart vertically and should all be screwed into studs. The vertical edges of the polystyrene panels do not have to be aligned with the stud centres.

Attach the anchors at the bottom of the cell in such a way that their prongs are visible under the units once the units are inserted. These prongs will ultimately sit in the mortar joint and hold the cladding firmly to the structure.

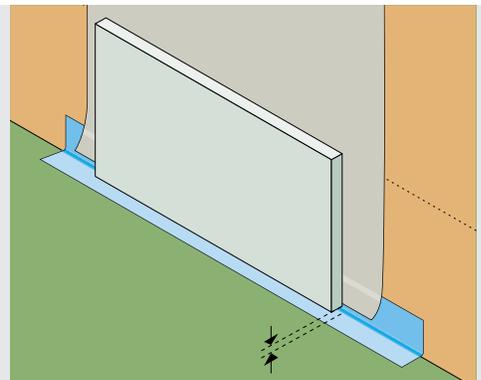
The panels are installed vertically or horizontally, depending on the type of masonry. **The panels should always be installed in the direction indicated**, otherwise they will not hold the masonry units properly.



VIRTUO STONE ONLY

INSTALLING THE FIRST PANEL

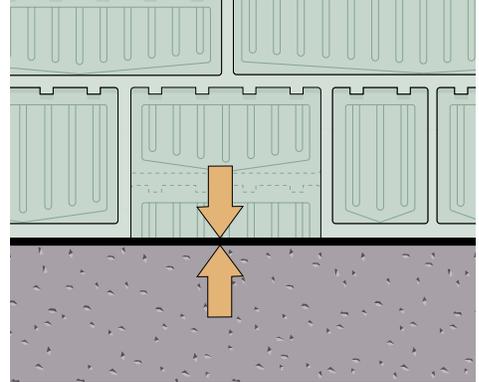
Install the first panel parallel to the reference line, leaving a space between the bottom of the panel and the foundation (or steel starter strip). This space should be the same width as the joints between the stones.



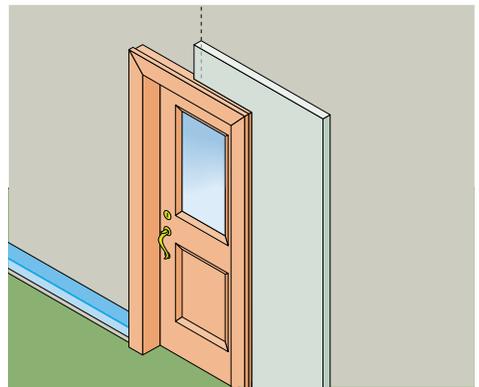
Installing the Polystyrene Panels - cont'd

INSTALLING THE FIRST PANEL

Install the first panel level, leaving a 3/8 in. (10 mm) space between the polystyrene panel and the foundation (or the steel starter strip).



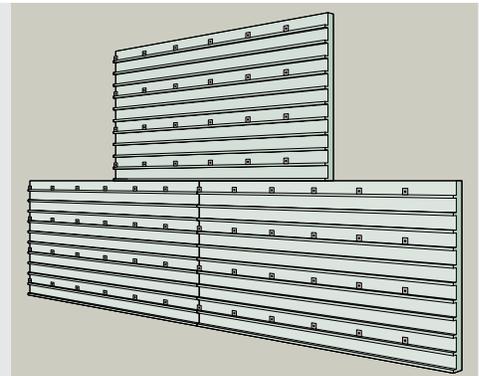
If you plan to cover all the walls of the house, the left edge of the first panel should be aligned with the predetermined end point.



VIRTUO STONE ONLY

INSTALLING THE REMAINING PANELS

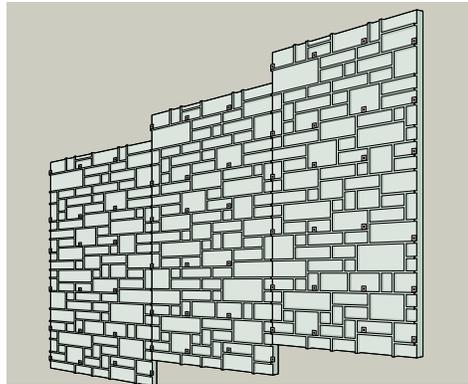
Install the panels so that their vertical joints are offset. Check the level against the reference line and make any necessary corrections.



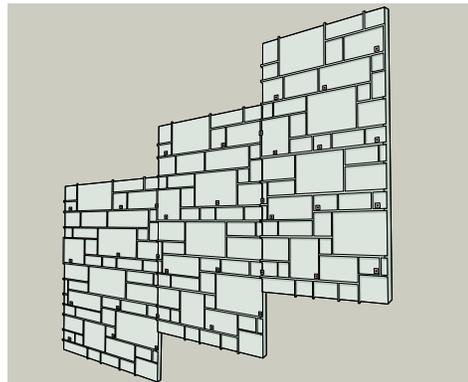
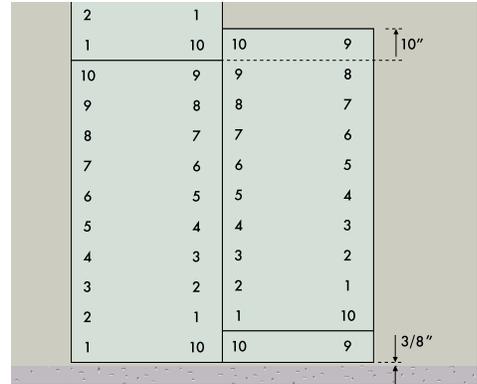
Installing the Polystyrene Panels - cont'd

INSTALLING THE REMAINING PANELS

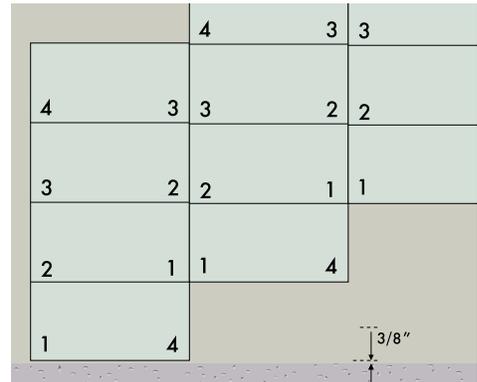
For Morency and Durham stones, the panels are offset upward, from left to right. There are reference numbers on the front and back of each panel and male/female shiplaps on the sides to facilitate installation. For more details, visit permacon.ca



Morency stone



Durham stone



IMPORTANT
 Always leave a space between the bottom of the panel and the horizontal part of the steel starter strip (or the foundation) at the base of the wall.

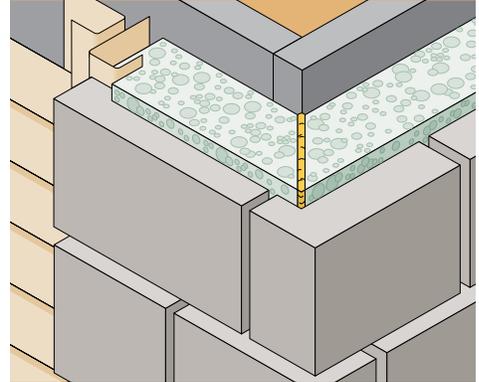
Installing the Polystyrene Panels - cont'd

MEETING UP WITH THE EXISTING CLADDING

When Suretouch cladding meets up with an existing cladding such as clapboard siding, you have two options.

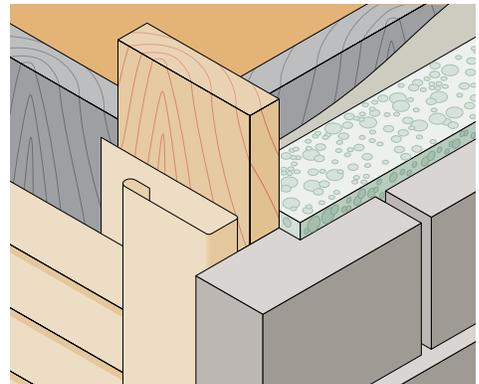
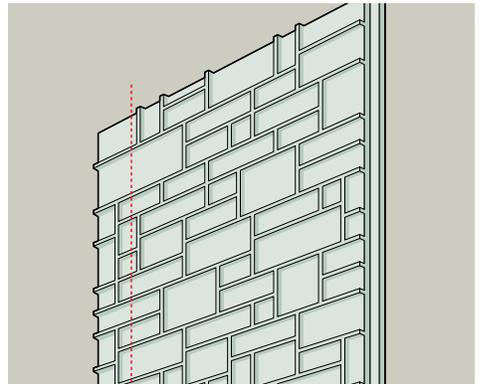
OPTION 1

Extend the polystyrene at least 1 ft. (300 mm) around the corner and use a "J" trim to hide the edge of the polystyrene. To install the polystyrene in a corner, see **Outside corners**, p. 13. During installation, use drops of glue to hold the corner units in place.



OPTION 2

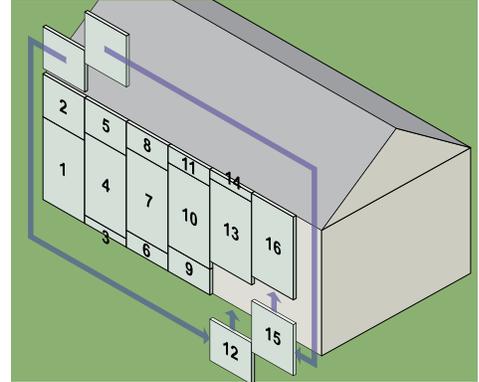
Cut a 2 in. (50 mm) strip of polystyrene from the left edge of the panel. When installing the units along this edge, use drops of glue to hold them in place.



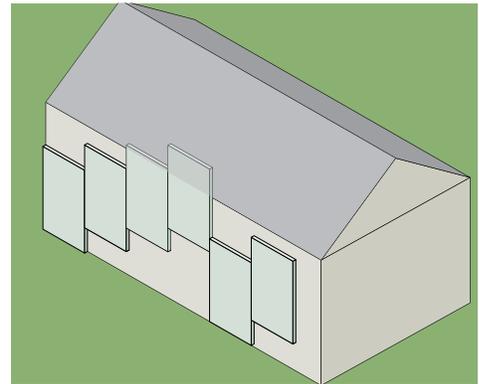
Installing the Polystyrene Panels - cont'd

CUTTING THE PANELS AT THE ROOF LINE

When the panels reach the top of the wall, they must be cut. Allow the panels to extend a few inches into the attic space, so that the soffits will rest against it. The cut pieces can be reused elsewhere where appropriate.



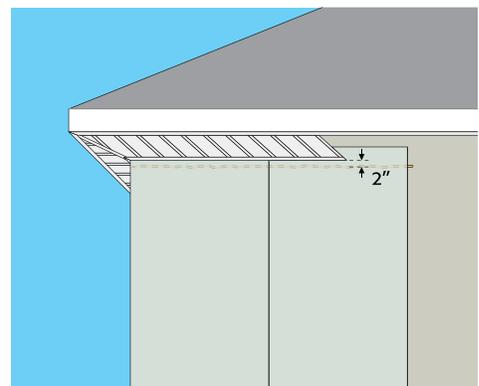
Morency stone



Durham stone

URETHANE ACOUSTIC SEALANT (TOP OF WALLS)

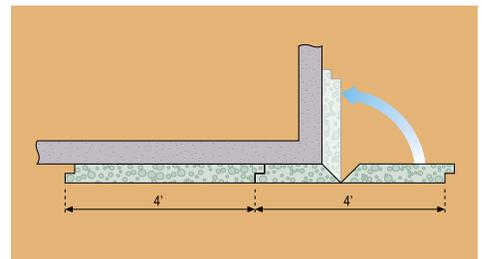
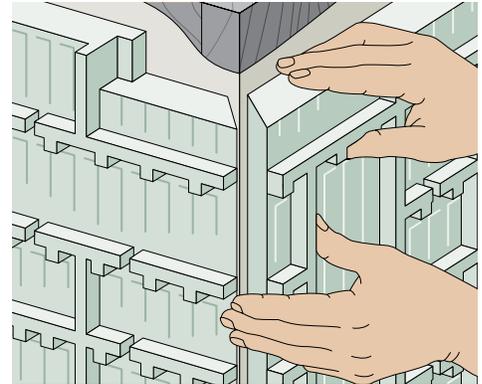
Just prior to installation, run a horizontal urethane acoustic sealant along the back of the top panel, about 2 in. (50 mm) below the planned soffit level. The bead will be flattened when the anchors are installed and will plug the channels on the back of the panel. This will prevent heat loss into the attic space through the chimney effect. Note that this operation is only performed on the panels at the top of the walls.



Installing the Polystyrene Panels - cont'd

OUTSIDE CORNERS

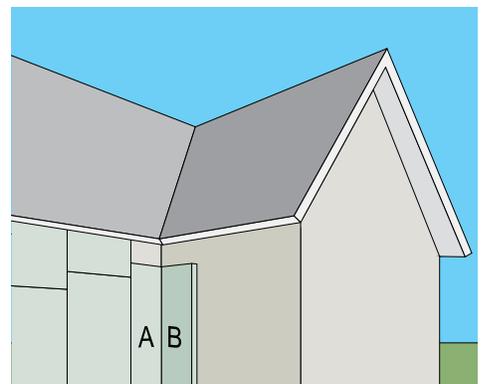
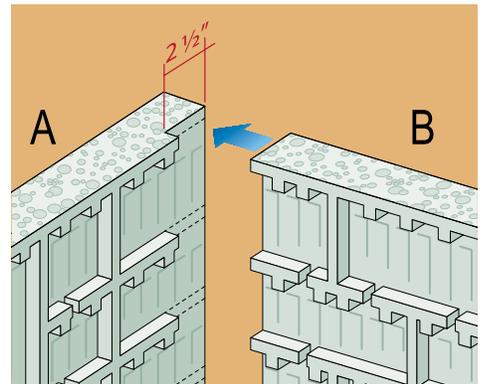
To turn a 90° corner, make two vertical 45° cuts on a panel. The cuts must be exactly 45° for the polystyrene cells to hold the corner units firmly in place. Because the corners of a building are never perfect, the two 45° edges of the polystyrene will often not meet perfectly. Align the cells as closely as possible, and fill any spaces using minimal expansion insulating foam. Once the foam has finished expanding, cut off any excess with a utility knife. It is important to take care of the cell edges, as it will make it easier when installing masonry units. The foam not only improves insulation in the corners, it forms a continuous cell edge and solidly joins the adjacent panels.



Use grooves to make the 45° cut

INSIDE CORNERS

Cut a section of panel (**A**) at a right angle so that it fits properly all the way to the edge of the wall. Once the panel is installed, remove 2 1/2 in. (65 mm) of cell edge all along the corner. Fit the "**B**" part of the panel into the "**A**" part.



Installing the Polystyrene Panels - cont'd

STEEL STARTER STRIP ABOVE OPENINGS

Never rest the steel starter strip on the frame of the opening. Always leave a minimum of 1/8 in. space above the opening.

CLASSES OF OPENINGS (DOORS AND WINDOWS)

1 In a home renovation project, all openings up to 4 ft. (1.2 m) wide, regardless of the number of floors

AND/OR

In a new home project, all ground floor openings up to 4 ft. (1.2 m) wide

2 In a new home project, openings up to 4 ft. (1.2 m) wide on floors above the ground floor

3 For both home renovation and new home projects, any large-sized opening (garage doors, living room windows, patio doors, picture windows, etc.)

CLASS 1

Cut a piece of Suretouch steel starter strip the length of the window and screw it to the lintel every 8 in. (200 mm).

CLASS 2

Note : In this class, plan for settling of the wood structure on the upper floors of a new home.

Cut the steel starter strip the length of the opening + 6 in. (150 mm) (3 in. on each side). Screw it to the lintel every 8 in. (200 mm).

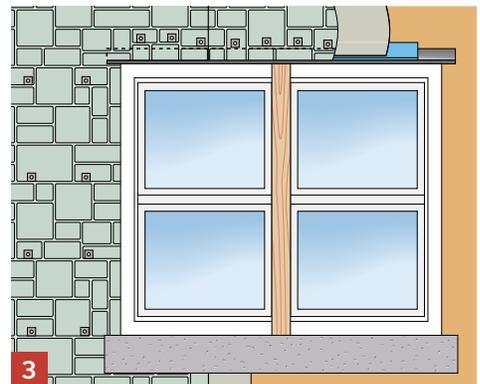
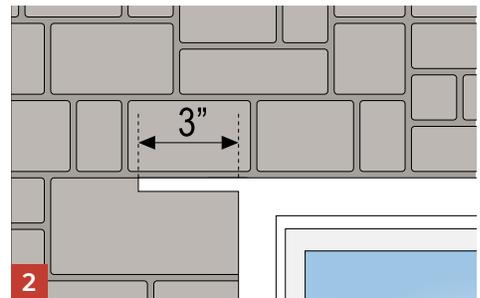
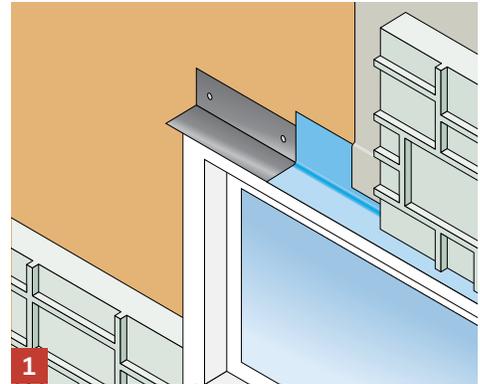
CLASS 3

It is very important to ensure that the lintels and steel starter strip of large openings can support the weight of the units to be installed above them. When in doubt, it is best to consult an engineer. All large openings must be braced during work to ensure that the steel starter strip does not bend under the load. The supports are removed once the mortar has cured.

Note : Never rest the steel starter strip on the frame of the opening. Leave a 1/4 in. (6 mm) space under it, to be sealed later with caulking.

Use more Suretouch anchors above Class 2 and 3 openings, about one anchor every 8 in. (200 mm) horizontally.

Leave a 3/8 in. (10 mm) air space between the bottom of the polystyrene panel and the horizontal part of the steel starter strip.



AROUND OPENINGS

Trim the polystyrene panels flush with the frame of the opening. When installing doors and windows in new home construction, allow for the frame to protrude far enough to cover the visible edge of the polystyrene. **The frame should extend 2 to 2 1/2 in. (about 60 mm) beyond the base wall so as to completely cover the polystyrene.**

Installing the Polystyrene Panels - cont'd

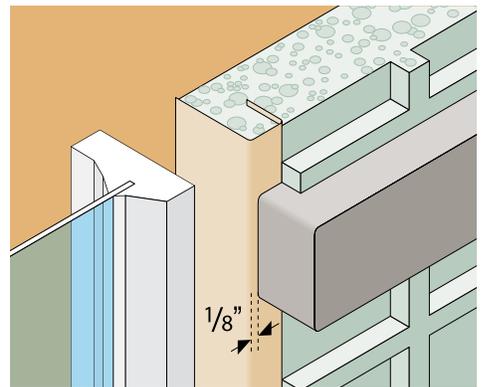
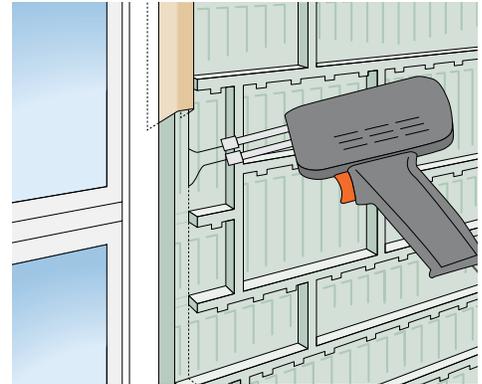
"J" TRIMS

For renovation projects, add aluminum flashing "J" trim (standard trim available at hardware stores or bent by a tinsmith) to hide the edge of the polystyrene.

There are three steps to installing the trim:

1. Once the polystyrene panel is installed and trimmed, remove 3/4 in. (20 mm) of cell ridge on each side of the opening.
2. Make a $\pm 1/2$ in. (12 mm) deep channel over the full height of the opening.
3. Insert the "J" trim.

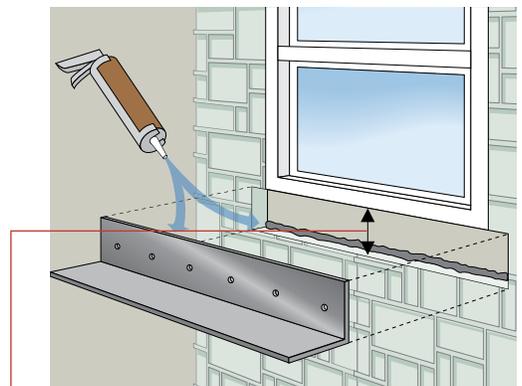
The units will later rest on the trim, 1/8 in. (3 mm) toward the outside of the opening.



ALLOWING FOR SILLS

At the base of a window, cut the polystyrene to create the opening required to install a sill. The dimensions of the polystyrene section to be removed are: (sill's length + 3/8 in. (10 mm) of its thickness). Run a bead of acoustic caulking the length of the polystyrene. Cut a section of steel starter strip the same length as the sill. Run a bead of acoustic caulking along the top of the back of the steel starter strip. Press the base onto the polystyrene and screw it to the structure every 8 in. (200 mm).

Thickness of the sill + 3/8 in. (10 mm)



Installing the Masonry Units

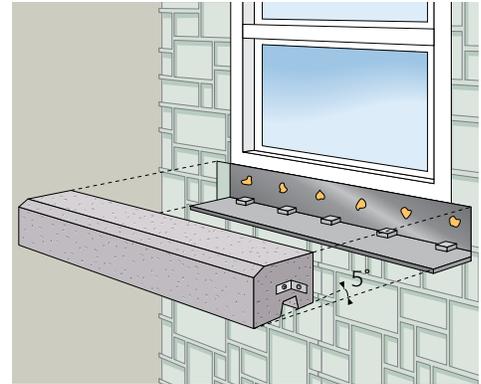
SILLS

Put drops of glue on all the screw heads and screw holes of the steel starter strip installed earlier. Put 1/8 in. (3 mm) thick spacers at the bottom of the steel starter strip so that the sill slopes about 5° toward the front. Attach the sill with screws and bent metal straps.

ARCHITECTURAL ELEMENTS

Install accessories (keystones, jambs, lintels, civic numbers, French corners, outlet trim, hose trim, etc.) before you install the units. These accessories are not included in the system, but can easily be installed.

Always leave a 1/8 in. (3 mm) space between the steel starter strip and an accessory above an opening. Attach accessories using screws and bent metal straps. Take the necessary precautions if you want the accessories to extend out beyond the masonry.



IMPORTANT

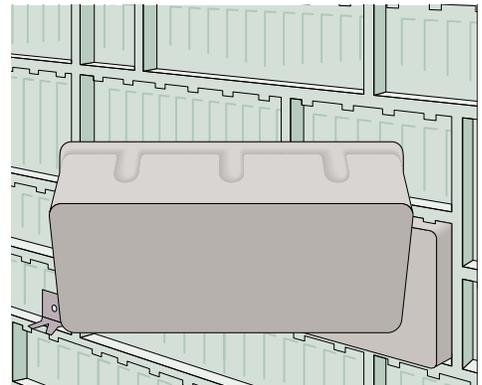
Use safe work methods to prevent any accidental fall of stones that could have serious consequences. **Stones inserted into their polystyrene cells are not secure until they have been pointed.** The polystyrene can only hold the units for a short period of time, especially if site activity causes strong vibrations. The wall should therefore be pointed as soon as possible. Make sure that no one (a worker or anyone else) remains near an unpointed Suretouch wall.

Note : Sills and architectural elements should be installed before the units.

GENERAL PRINCIPLES FOR INSERTING THE UNITS

The Virtuo, Morency or Durham stone units are inserted into the polystyrene cell in the same way. First, insert the unit all the way into the top of the cell, then tilt it down and push the base of the unit into the wall.

The stones come in different shapes, each corresponding to the shape of a polystyrene cell. The order in which the units are inserted into the cells is irrelevant from a technical standpoint. Simply find a cell that is the same shape as the stone, and insert the stone.



Installing the Masonry Units - cont'd

VIRTUO STONE ONLY

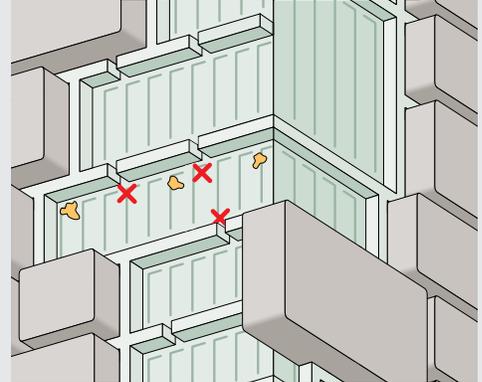
PRINCIPLES FOR INSERTING UNITS

Stones must be installed sequentially, one row at a time, from left to right, starting from the bottom up. Complete one entire row before moving up a row. **For Virtuo stone, alternate the sizes, making sure that you never align two adjacent vertical joints.**

To avoid accidents, it is essential that the units be adhered to the polystyrene with drops of glue (without plugging the water drainage channels) in the following situations:

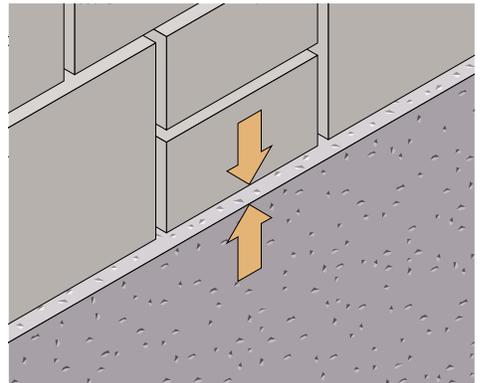
- › along corners
- › when a unit is placed in a broken, damaged or incomplete polystyrene cell
- › when a unit spans a horizontal joint between two panels

Glue should also be used if the small protrusions on the top of the unit are damaged.



IMPORTANT

Allow for a mortar joint along the entire length of the base, between the bottom of the units and the top of the foundation.

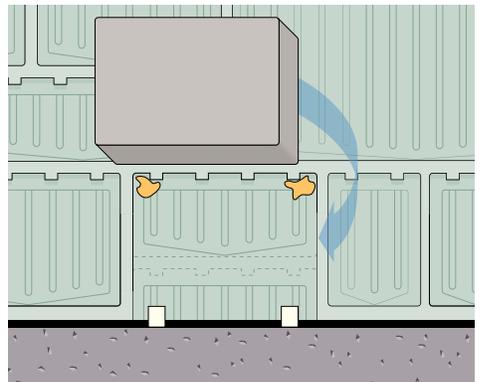


CUTTING THE STONES

For incomplete cells, you can usually combine two cells by breaking the edges and then using another size of stone. If this is not possible, cut the stone using a guillotine.

INSERTING A STONE INTO AN INCOMPLETE CELL

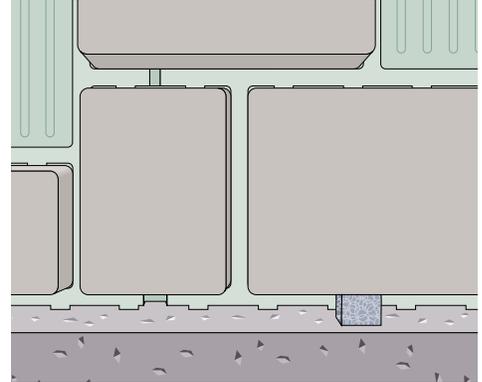
A polystyrene cell with no bottom edge cannot hold a stone. This problem can be addressed by placing a small drop of glue in each of the upper corners of the cell, then inserting the stone while wedging it with the spacers that come in the packs of polystyrene panels. The spacers are removed during pointing.



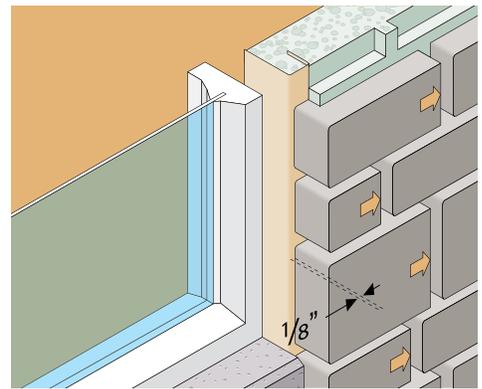
Installing the Masonry Units - cont'd

WEEPERS

Foam cubes used to create weep holes (for drainage) and air vents (to equalize the pressure behind the cladding) should be placed **at the base of the walls and top of openings**, at least 24 in. (600 mm) but not more than 30 in. (750 mm) apart. Install these cubes between the base of the masonry and the foundation (or at the steel starter strip), in front of the cell's weep hole.

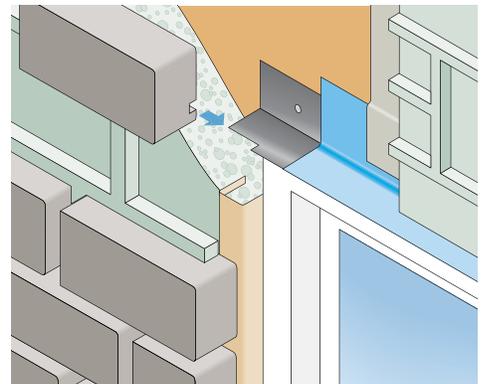


Cut the excess part of the units that will line the sides and top of the opening. Always cut the side away from the opening so that the side that is visible is the factory (uncut) side of the unit.



AROUND OPENINGS

Above the openings, trim the corner iron (steel starter strip) at each end and make a saw cut in the units that will support it.



Installing the Masonry Units - cont'd

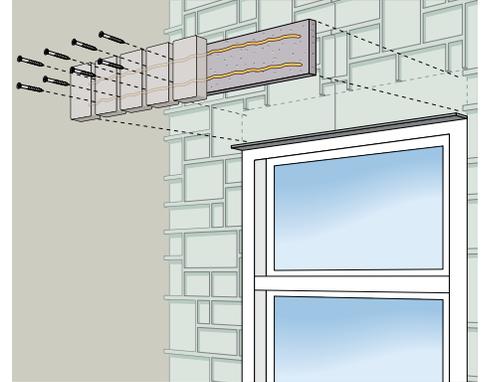
SOLDIER STONES AROUND OPENINGS

Above

Break the polystyrene ridges above the opening over a height of 7 1/2 in. (190 mm). Pre-glue (with PL Premium) the 7 1/4 in. (185 mm) in soldier stones onto a lightweight concrete panel (1/2 in. x 6 in. x the width of the opening). Once the glue is completely dry, attach the unit in the lintel, 1/8 in. (3 mm) above the steel starter strip, using two 3-in. (75 mm) decking screws per vertical joint, with one of the two only partially sunk to act as a metal strap.

On the sides

Proceed in the same manner, leaving 1/8 in. (3 mm) between the sides of the stones and the opening.



CORNERS

To avoid having stones that are too small, break some of the vertical sections of the polystyrene cell edges (1) to create new joints and/or new stone shapes. Use a stone cutter. Always break the stone on the side away from the corner (2) so that the unbroken side of the stone (3) is the one that is visible.

Place a drop of glue (PL Premium) in the upper corners of the cells (4) for all corner stones.

Important note : *Never install a unit that is smaller than the smallest unit in the pallet.*

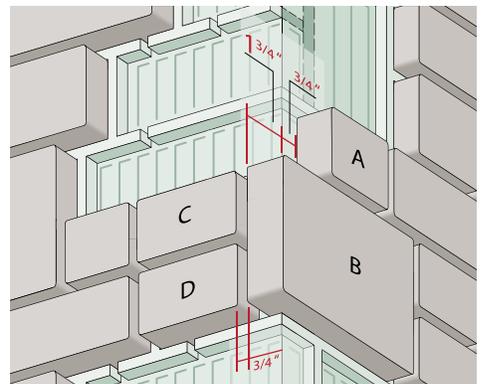
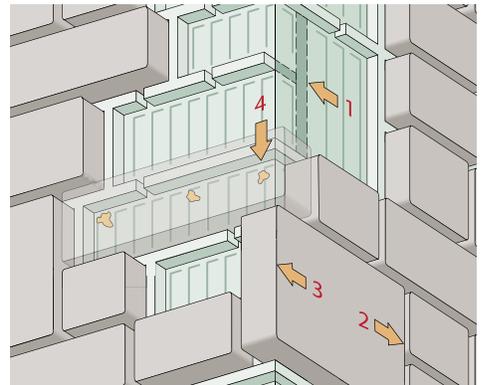
Interlace corner stones as you go up by alternating:

- > one stone recessed 3/4 in. (20 mm) in from the corner - **A**
- WITH**
- > one stone protruding 1 3/4 in. (45 mm) out from the corner - **B**

This produces a 3/4 in. (20 mm) joint between two stones at 90°.

This technique works for both inside and outside corners.

Occasionally, you may have to deviate from this alternating pattern because of a conflict in stone height (**B** vs **C** and **D**).



Pointing

The mortar to be used in a Suretouch installation is type 1-1-6 which meets the CSA-A179-94 standard. The Suretouch warranty will not apply when using a different type of mortar.

Consult your Permacon representative for any questions you may have.

MORTAR TOOLS AND ACCESSORIES

- › Whitewash brush
- › Wooden dowel 1/4 in. (6 mm) larger in \varnothing than the width of the mortar joint
- › Cat's tongue trowel
- › Mortar bit (use with power drill to mix)
- › Containers to measure the water and additives
- › Manual injection gun

and/or

- › Grout Bag, Quick-Point, Twist & Grout

Note : *Professionals inject mortar using a special pump that covers large surfaces quickly, but requires proper training and practice.*

PREPARING A BATCH OF MORTAR

Properly mix a bag of mortar. The recipe is 4.5 litres (about one gallon) of water for each 25 kg bag. This can be adjusted later if the mixture is too thick or too runny.

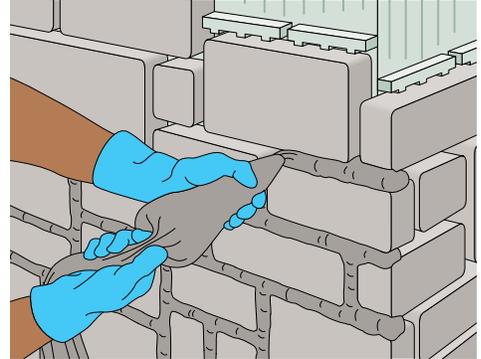
IMPORTANT PRECAUTIONS

- › Protect the mortar from moisture from the moment it arrives.
- › A batch of mortar is only good for around 1 1/2 hours at about 20° C.
- › Useful life varies depending on the outside temperature.
- › Over 28° C, a retarder is advisable.
- › Under 10° C, an accelerator is suggested.
- › Use cold water in summer and hot water in cold weather.
- › Place the mortar and equipment in a dry, shady spot.
- › Wet down the wall five minutes before pointing. In hot weather, drench the units well.
- › It is preferable to inject the mortar when the wall is in the shade.
- › It is advisable to first test mortar on scraps of stone.
- › If you plan on applying mortar to the Suretouch wall two weeks after stone installation, we suggest applying glue behind each unit. If you require additional information, please contact your Permacon representative.

Pointing - cont'd

INJECTION

Before pointing, make sure that all the spacers have been removed **and the weeps are in place**. Injecting mortar takes practice. Take your time to fill the joints completely, making sure to fill the cavities thoroughly and embed the “prongs” of the Suretouch anchors. Don't waste your time trying to fill the vertical slots at the bottom of the polystyrene cells with mortar. These slots allow any water or condensation that penetrates the mortar joints to drain. Until they are finished, mortar joints should look like rough welding joints.



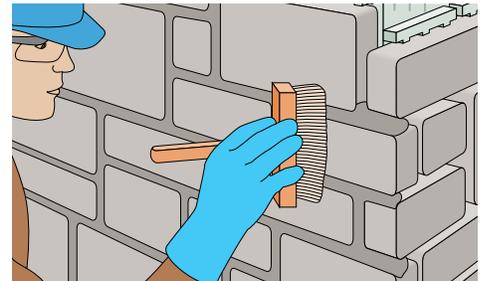
FINISHING

Finishing mortar is an art. To obtain a nice finish, it is important to finish the joint when the mortar is somewhat cured but not too dry. Take the weather into account, as it influences curing time. Apply firm pressure to the joint using a wooden dowel to ensure that the mortar adheres properly to the surface of the unit. This gives a smooth finish to the joint. Around openings, use a cat's tongue trowel; this produces a joint that is flat rather than concave. **Take care to obtain a uniform, granular finish.**



BRUSHING

Before brushing, make sure the mortar is hard enough that it will not dirty the stones or bricks. Use a whitewash brush. Brush in such a way that the particles come off without dirtying the brush and spreading mortar all over the wall. Brushing should be done the same day as injection. It is better to brush mortar that is slightly too hard than too soft.



CLEANING

If any mortar residue remains on the stones once the mortar has dried, use a gentle masonry cleaner according to the manufacturer's instructions. Do not use a pressure washing system to wash the cladding. We recommend cleaning the Suretouch units by sandblasting them.

CAULKING

Once all the mortar on the wall has dried completely, the caulking specialist should run a caulk bead around all the openings.

EFFLORESCENCE

In the weeks and months after installation, efflorescence may occur (white salt on the surface of the stones). This is normal, and disappears with time. However, it can be cleaned by brushing the wall with a soft-bristle brush dipped in a gentle masonry cleaner, after first spraying the wall with water. Rinse by spraying gently with a garden hose. Do not use a pressure washing system.

PERMACON

50 Year Warranty

Residential Landscape and Masonry



Permacon's 50-year warranty applies to landscape and masonry products including Suretouch intended for residential use¹. This warranty statement affirms that products manufactured by Permacon meet the requirements of the CSA (Canadian Standard Association) and ASTM (American Society for Testing and Materials) standards.

For details regarding commercial applications, please refer to our institutional, commercial and industrial warranty.

Permacon guarantees that, as of the date of delivery, our concrete products are free from manufacturing defects. Provided that the conditions set forth below are met, Permacon guarantees the structural integrity of the concrete in its landscaping and masonry products for a period of 50 years from the date of the product's purchase. The warranty applies to normal, non-abusive use of the product. To preserve the original appearance of your products, we recommend that you consult our Preventive Maintenance Guide for Concrete Landscaping Products available on our website.

IN ALL CASES DETAILED BELOW, THE WARRANTY IS LIMITED TO THE PRODUCTS' MARKET VALUE.

How do I make a claim?



permacon.ca/en/warranty/

Proof of purchase will be required to proceed with a claim request. No claims will be accepted without proof of purchase.²

All claims must be reported within 15 days of the discovery of a product's defect. To validate a claim, a Permacon representative will arrive to inspect the defective products in order to confirm whether the claim is admissible. Therefore, it is essential to provide Permacon with the necessary access to inspect and take photos of the products in question.

This warranty is the only one that is presently offered. Because Permacon continually improves and modifies its products, it may alter and discontinue products at any time, and therefore may replace warranty-covered products with products of similar quality or offer monetary compensation if the products under warranty have been discontinued or are no longer on the market while the warranty is active.

In the event that a product is found to be non-conforming by Permacon or an authorized representative of the company, and in order to proceed with compensation, Permacon will take into account the number of months

during which the landscape or masonry products were in the possession of the owner or their contractor, up to the date of the claim, and will prorate the amount of the payment or replacement to be made accordingly.

For example: if the purchaser makes a warranty claim in the last month of the 10th year of the warranty (i.e., the 120th month), the manufacturer, at its sole discretion, shall either:

- Provide a replacement for the product in question if still available (only the defective product will be replaced)
- Return 480/600 of the price paid for the products to the owner. No labour, transportation, or other compensation will be covered by Permacon

Transferability

The warranty is transferable. Proof of warranty registration will still be required in the event of a claim. The prorated period will be based on the 50-year warranty period remaining as an assignee, if the purchaser transfers the warranty to a subsequent owner, as described above.

¹ The following locations are defined as residential: family dwelling of 5 units or less, single family home, garden suite, or townhouse

² The following items are considered valid proof of purchase: invoice directly from an authorized Permacon distributor or invoice from a landscape contractor, general contractor, mason, or home builder

Exclusions

A landscape or masonry product installed on an area of more than **100 square feet** confirms the acceptance of the product received on site and that no claim can be made to Permacon regarding the colour, size, or texture of the product.

This warranty excludes all products not supplied by Permacon, as well as any defects, failures, or damages that may result from the actions listed below:

- Contact with chemicals or cleaning products
- Damage caused by pressure washers
- Improper installation or other construction activities that do not comply with the installation standards established by ICPI, NCMA or IMQ, the National Building Code or the installation methods and tips recommended by Permacon. The installation guides provided by Permacon represent certain installation situations and are not exhaustive. It is therefore strongly recommended that you consult a qualified professional to ensure the proper installation of Permacon products on a specific job site.
- Defective design or construction resulting in sagging, shifting, or failure
- Breakage due to shock, impact, or excessive load during handling, use, or transportation
- Natural disaster or other uncontrollable event
- Breakage and damage to products caused by soil movement or building movement as well as misuse of construction, compaction, or snow removal equipment. The warranty does not cover surface deterioration caused by the misuse of sodium chloride (NaCl) to de-ice pavers, slabs, or steps.
- The use of sodium chloride (NaCl) on the following products:
 - Step Valentia
 - Valentia Block
- Be.OnStone and Mirage products sold by Permacon

Installation

When installing masonry products, it is vital that the work be cleaned to remove residue and contaminants left on the stone or brick. Permacon accepts no responsibility for stains and colour changes caused by installation residue or the consequences of cleaning said residue.

Our Preventive Maintenance Guide for Concrete Landscaping Products is available on our web site permacon.ca

Colour

The presence of natural ingredients used in the manufacturing process varies from one product to another. Therefore, the product received on the job site will not be completely identical to the products presented in our commercial presentations (catalogs, samples, displays). Any difference in colour cannot be attributed to the guarantee.

Photos of our products in landscape and masonry brochures, as well as in displays such as masonry panels and landscape racks at our distributors, are not an exact representation of the products that will be delivered to the job site. Permacon offers a variety of products with different colours to reproduce the appearance of natural stone. It is therefore strongly recommended that you view several products directly from your authorized Permacon distributor to see all available colours.

It is the purchaser's responsibility to approve the products delivered to the job site prior to installation and to ensure that the colour is satisfactory. It is also recommended to mix products from different pallets received on site. Since variations in colour shades are a natural phenomenon, Permacon does not guarantee colour uniformity between different pallets on the same job site. Product installation constitutes acceptance.

Polymeric film

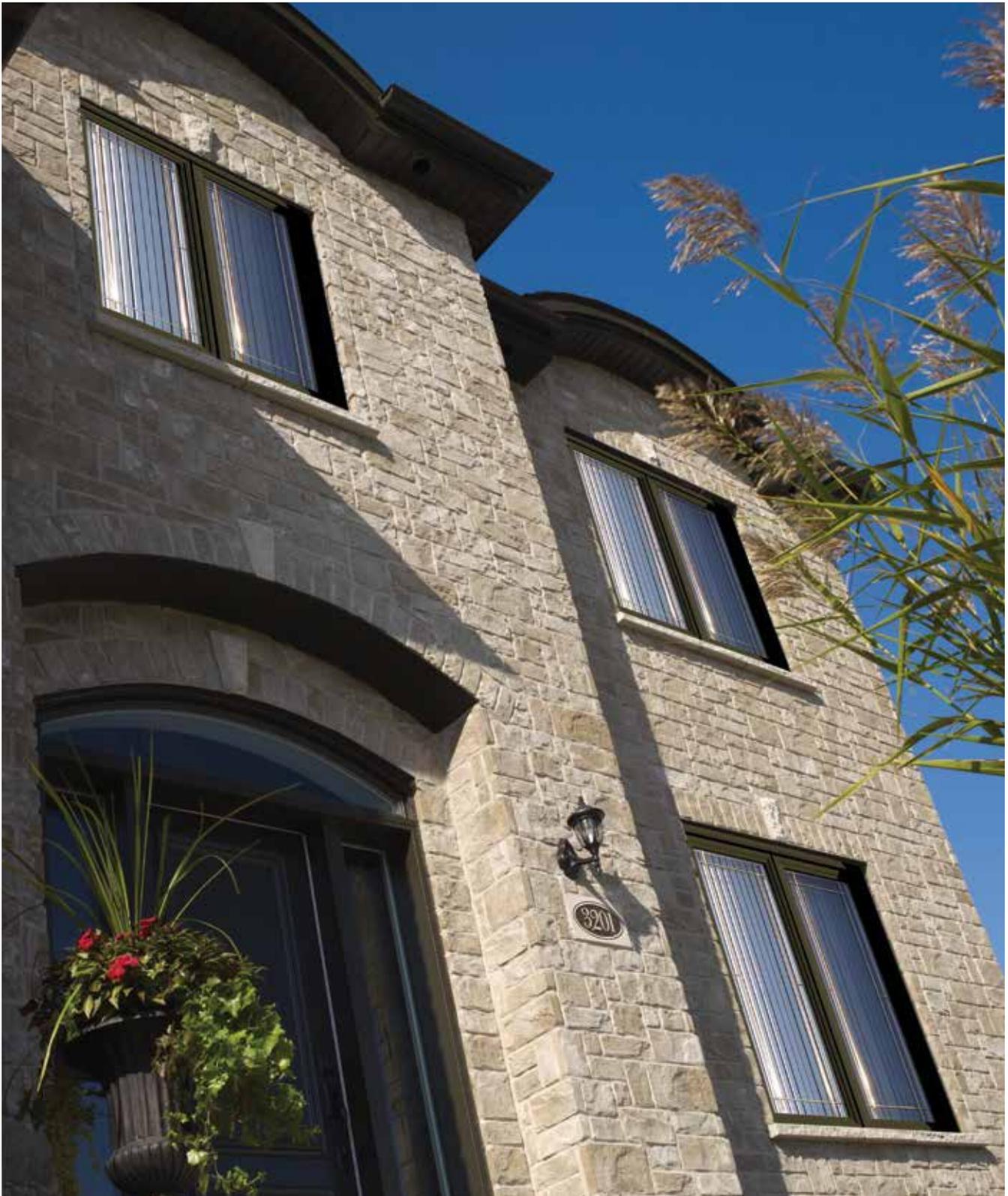
A whitish polymeric film can be found on the surface of our products. This is the result of an inadequate use of polymeric sand. Improper cleaning of slabs and pavers prior to the application of water on the products' surface can cause this whitish polymeric film. This film does not affect the structural integrity of the product. Permacon cannot be held responsible for this phenomenon, which is not covered by the warranty.

Efflorescence

White traces on the surface of the product are caused by a natural phenomenon called efflorescence. More visible on darker products, efflorescence affects neither the intrinsic technical qualities nor the structural integrity of our products. The possible appearance of efflorescence cannot be the subject of any guarantee on our part. In most cases, efflorescence disappears by itself over time.

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National Research Council Canada
Evaluation #: CCMC 13302-R