



Producers of Quality Manufactured Stone & Thin Brick

A close-up photograph of a person's hand holding a rectangular brick. The hand is wearing a brown leather work glove. A metal mallet is positioned to strike the brick. The brick has a rough, textured surface. The background is a blurred wall of similar stone or brick.

INSTALLATION INSTRUCTIONS

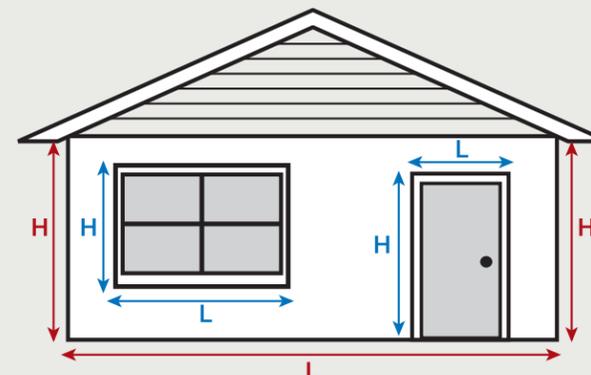
Step-by-Step Easy Installation Instructions

How Much Stone Do You Need?

Just follow these easy steps to determine how much Veneerstone by Tejas you will need:

To Order Corners (Linear Feet):

1. Determine how many linear feet of 90 degree outside corner pieces you will need. See Illustration below. **(H)**



$$L \times H \text{ (wall)} - \{ L \times H \text{ (window)} + L \times H \text{ (door)} \} = \text{Square Footage}$$

To Order Flats (Square Feet)

1. Measure the width and the height of the area to be covered and convert to square footage (width x height = square footage).
2. Figure the square footage of any windows and doors and subtract this amount from the first figure (total square footage – windows and doors). See Illustration A above.
3. Measure the linear feet of outside 90 degree corner pieces and convert to square feet. One linear foot of corners will cover about 1/2 square foot of flat area – ie, 20 linear feet of corners = 10 square feet of flat area. Subtract this flat area amount from the total square feet to determine how much total stone you will need. You should allow an extra 5 to 10% stone for cutting and trimming.

What Tools Will You Need?

- **Hammer:** Used for applying felt paper and metal lath.
- **Wheel Barrow & Hoe or Bucket & Drill Paddle:** Used for mixing mortar mix.
- **Notched Float or Float & Rake:** Used for applying scratch coat to metal lath and raking scratch coat.
- **Circular Saw with Masonry Blade:** Used for cutting stone.
- **Mason's Trowel:** Used for applying mortar to Veneerstone.
- **Grout Bag:** Used for grouting joints.
- **Jointing Tool:** Used for finishing mortar joints.
- **Whisk Broom:** Used for cleaning joints and stone.



Materials You Will Need

Materials Needed For Installation - Over Masonry

If installing Veneerstone by Tejas over existing masonry (brick, block, stucco, or concrete that is sound, clean, not painted or sealed, free from form oil, dust, and dirt):

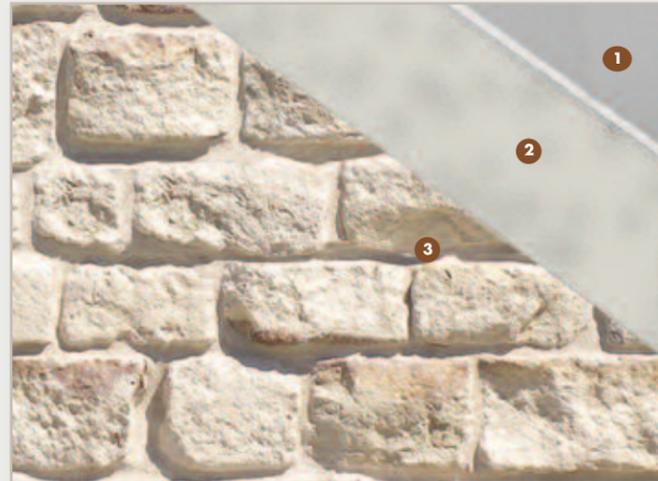
Mortar: Used to set stones, and to grout the mortar joint between stones. You may use premixed masonry mortar, masonry cement and sand, or portland cement, lime, and sand.

Masonry cement: Mix 1 part masonry cement (Type N or Type S) with 2 1/4 parts masonry sand and potable water or
Cement/Lime: Mix 1 part Portland cement, 1 part lime, and 4.5 parts sand or

Premixed Mortar: Check with the manufacturer to determine if their product is suitable for installation of manufactured stone (building requirement of 50 psi shear bond strength).

Bonding Agent: Latex brush-on or integral bonding agent recommended for this application.

Masonry Sealer: Use a breathable type, non-film forming sealer. Dry stack applications (mortarless joint) should be sealed.



Shown in Sequence:

1. Concrete, Brick, Block, Stucco or Masonry
2. Bonding Adhesive on Wall and in Mortar
3. Veneerstone or Thin Brick and Grout

Materials Needed For Installation - Over Framing

If installing Veneerstone over framing (wood or metal) with sheathing (plywood, OSB, rigid insulation, gypsum wall board, concrete board, fiber board):

Water Resistive Barrier: Used to prevent moisture from penetrating the exterior wall.

Veneerstone recommends two separate layers of WRB:

Use: 15# felt (ASTM D226 no. 15 type 1) or
 Grade D Paper (ICC-ES Acceptance Criteria AC 38) or
 House Wrap (ICC-ES Acceptance Criteria AC 38)

*1 layer of House Wrap or felt and 1 layer of paper backed lath meets the requirement for two layers of Water Resistive Barrier.

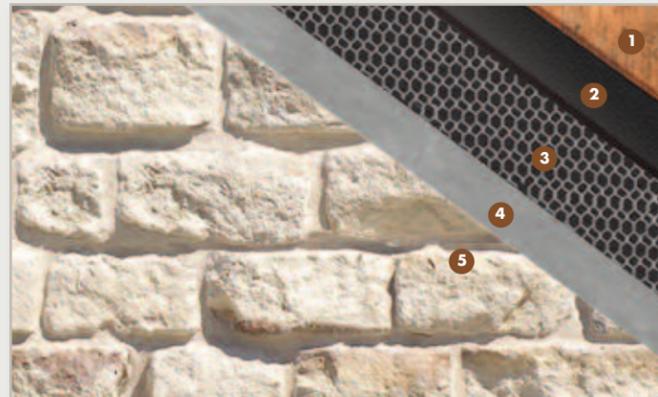
Metal Lath: Used to hold mortar when forming a mortar scratch coat. Use a minimum 2.5 lb. self-furring corrosion resistant metal lath or 18 gauge galvanized woven wire mesh. For metal buildings or open studs, use a galvanized, rib expanded metal lath (minimum 3.4 lb. / yd²). Check your local building codes for other acceptable lath or mesh.

Fasteners: Used to attach lath to the framing members to support the stone system.

Use corrosion resistant fasteners (ASTM C 1063) capable of penetrating wood studs 1" or metal studs 3/8". Screws or nails should have a 7/16" head or washers to prevent pulling through the lath.

Mortar: Used to make a mortar scratch coat, to set stones, and to grout the mortar joint between stones. You may use premixed masonry mortar, masonry cement and sand, or portland cement, lime, and sand.

NOTE: For new construction exterior applications, ensure that all penetrations (doors, windows, etc.) are properly flashed and sealed in accordance with manufacturer's instructions.



Shown in Sequence:

1. Sheetrock, Paneling, Plywood or Sheathing
2. Water Resistive Barrier (2 Layers)
3. Metal Lath
4. Mortar Scratch Coat
5. Veneerstone or Thin Brick and Grout

Mortar mixes

Masonry cement: Mix 1 part masonry cement (Type N or Type S) with 2 1/4 parts masonry sand and potable water.

Cement/Lime: Mix 1 part portland cement, 1 part lime, and 4.5 parts sand.

Premixed Mortar: Check with the manufacturer for determine if their product is suitable for installation of manufactured stone (building requirement of 50 psi shear bond strength).

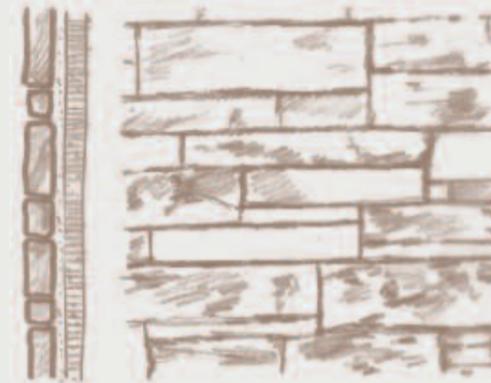
Masonry Sealer: Use a breathable type, non-film forming sealer. Dry stack applications (mortarless joint) should be sealed.

Materials You Will Need

Grouting Techniques

Dry-Stack Joint:

This style will give a contemporary or sleeker look to your project. Each stone should be meticulously placed for a tightly fitted look. No mortar joints are used with this application. For best results, stone should be installed from the corner pieces in and from bottom up.



Standard Striked Joint:

This application will give the appearance of a more tailored look. Each stone is laid with one half inch of mortar between each stone. For best results, stone should be installed from the corners in and from top to bottom.



Over Grout Joint:

This style is sure to give you a more European and Tuscan look. This application is one of the oldest techniques still used today. Grout is applied between the joints and beyond the edge of the stones' surface. Overlapping of the grout joints is applied in an irregular fashion.



* As with all Tejas Textured Stone products, it is important that you follow our recommended installation instructions.

How To Prepare Your Wall

Follow all local building codes for exterior application. Wall penetrations and transitions between sidings must be properly flashed to shed water. See detailed drawings for transitions from other sidings, including flashing, casing bead, weep screed, and sealants.

Preparing Your Wall - Over Masonry

Over Concrete, Masonry, Stucco, or Brick that is Clean and Untreated:

Check new concrete surfaces for form oil. If form oil is present, use muriatic acid to etch the surface then rinse thoroughly and score the surface with a wire brush.

For best results always use a bonding agent when installing Veneerstone by Tejas directly over clean and untreated concrete, masonry stucco, brick or block.

Concrete, Masonry, Stucco, or Brick that is dirty, Sealed or Painted.

Return surface to original condition by sandblasting or waterblasting (wash area to remove sandblast dust) or attach lath with concrete nails. Use a bonding agent on the wall and in the mortar mix.

Unacceptable Bonding Surfaces: Painted, sealed, dirty concrete, brick, or masonry, unsound/deteriorating masonry, EIFS, Fiber cement board.



Preparing Your Wall - Over Framing

If Installing Veneerstone by Tejas over framing (wood or metal) with sheathing (plywood, OSB, rigid insulation, gypsum wall board, concrete board, fiber board):

STEP 1: Ensure all penetrations are properly flashed in a watershed fashion.

STEP 2: Install two layers of Water Resistant Barrier, overlapping the horizontal joints 2", shingle fashion. Vertical seams should overlap 6". **Double wrap Water Resistant Barrier at inside and outside corners a minimum of 16" both sides**

STEP 3: Following local building codes, install mesh or lath. Lath should be installed horizontally, overlapping sheets 1" at the edges. Fasteners should be spaced 6" on center vertically and 16" on center horizontally and driven into the studs at least 1". **Wrap lath around corners to next framing member and lap lath at framing member.**

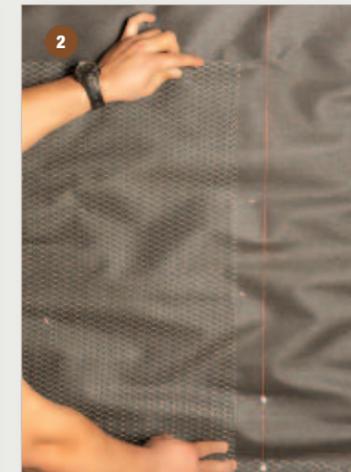
STEP 4: Trowel a 3/8" nominal thick coat of mortar to the metal lath to create a mortar scratch coat. Press hard enough to firmly embed the lath with mortar.

STEP 5: Score or scratch the surface horizontally when mortar is "thumbprint dry".

Do Not Use: In direct contact with chemicals (de-icing minerals, salt, chlorine), submerged in water, or below grade.



1 Install Water Resistant Barriers. (exterior applications)



2 Install corrosion resistant metal lath.



3 Mix mortar.



4 Apply mortar for scratch coat.



5 Rake mortar to create scratch coat.

Do Not Use: In direct contact with chemicals (de-icing minerals, salt, chlorine), submerged in water, or below grade.

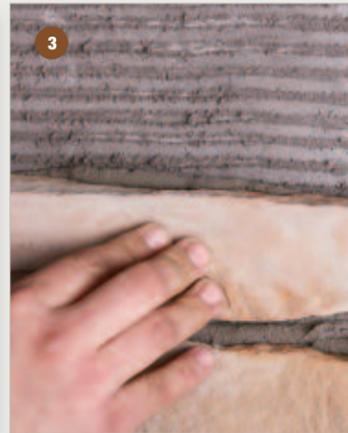
Applying Veneerstone by Tejas



1 Apply mortar to the entire back of the stone.



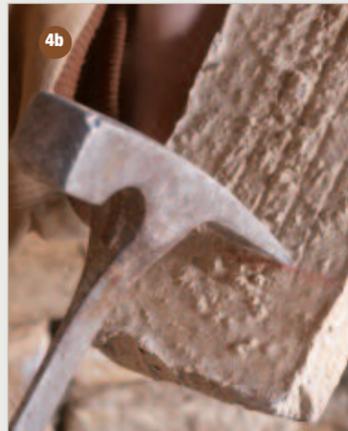
2 Install corner stones first.



3 Install flat stones.



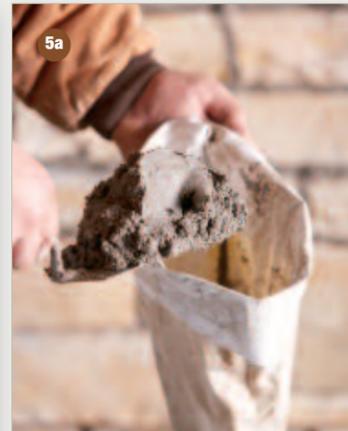
4a Trim stones to fit.
Option A - Circular Saw



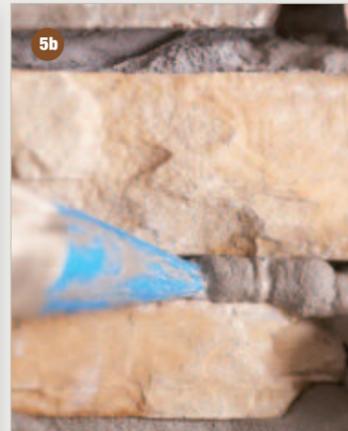
4b Trim stones to fit.
Option B - Hammer



4c Trim stones to fit.
Option C - Nippers



5a Fill Grout Bag.



5b Grout Joints.



6a Strike Joints.



6b Strike Joints.



7a Brush off excess mortar
with a dry brush.



7b Brush off excess mortar
with a dry brush.

Stone Application

Setting Stones in Mortar:

STEP 1: Completely cover the back of the stone with mortar, at least 1/2 inch thick, and press the stone firmly into the scratch coat to ensure a good bond. Press hard enough to squeeze out a little mortar around the edges of the stone. Make sure you have complete coverage between the mortar bed and the surface of the stone.

STEP 2: Corner pieces should be installed first. Alternate the long and short legs of the corner pieces in opposite directions.

STEP 3: After the corner pieces are installed, apply flat pieces starting at the outside working toward the center of the wall.

STEP 4: Cutting and Trimming.

Use the edge of a trowel, nippers, or a circular saw with an abrasive blade to cut and shape stones. If necessary, broken stones can be trimmed and shaped to fill in any gaps. For the most attractive finished appearance, coat with mortar any cut or broken edges. Also, try to place cut edges up when they are above eye level and down when they are below eye level.

STEP 5: Grouting Joints.

In applications where a mortar joint is used, fill in the joints with a mortar bag, taking care to avoid getting mortar on the stones' surface. Joints should be 1/2" to get the most natural look. Any accidental smears can be removed with a whisk broom after the mortar is crumbly. Never use a wet brush, wire brush, acid or acid-based product to clean the stone.

STEP 6: Finishing Joints.

Proper jointing gives your project an appealing and professional finish. Before finishing, allow mortar joints to become firm (approximately 30-60 minutes), then point them up with a jointing tool. Weather conditions and the type of surface both influence drying time.

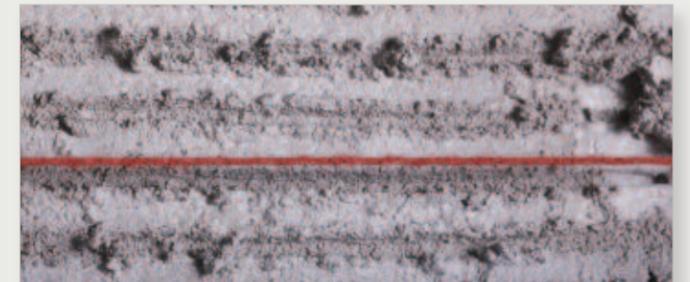
STEP 7: Brush Joints. Remove excess mortar then firmly compress and seal the edges around the stones. Brush stones and joints with a dry whisk broom to finish and clean the project.

Mortarless (Dry Stack) Application.

In dry stack application where no mortar joints are used, add a bonding agent to the mortar mix and seal the finished project with a breathable (non-film-forming) sealer. Install from the bottom up and keep joints as level as possible.

Cleaning and Sealing.

Clean Veneerstone by Tejas with a soft bristle brush and water. If stained with mineral deposits or efflorescence, stone may be cleaned with a diluted household vinegar solution (7 parts water, 1 part vinegar). Rinse thoroughly with clean water after cleaning. Do not use wire brushes or acid to clean Veneerstone. Seal Veneerstone in dry-stacked applications or in harsh environments with a breathable, non-film forming masonry sealer.



Joint lines should be level and plumb. Snapping horizontal chalk lines every 8" will help keep the installation level.



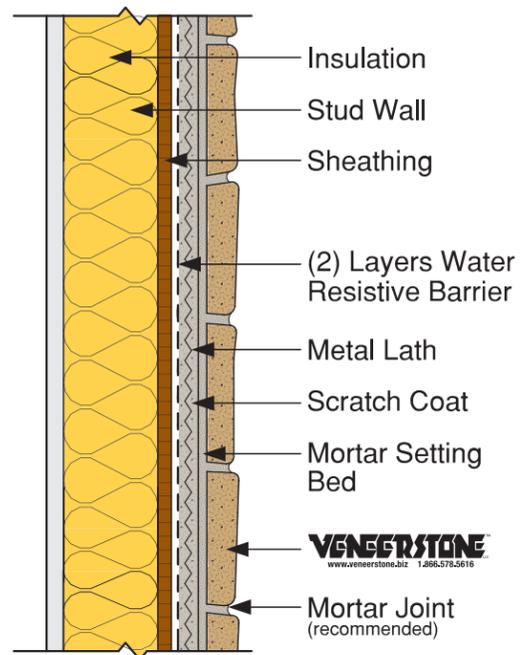
Moisten the scratch coat and the back of the Stone, especially in hot or windy climates



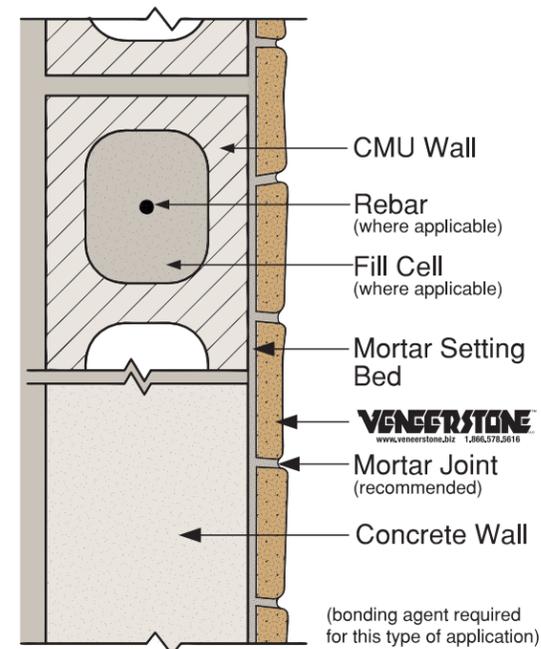
Mortar Consistency is best for application when it starts to stick to your trowel.

Installation Over Common Substrates

Over Sheathing

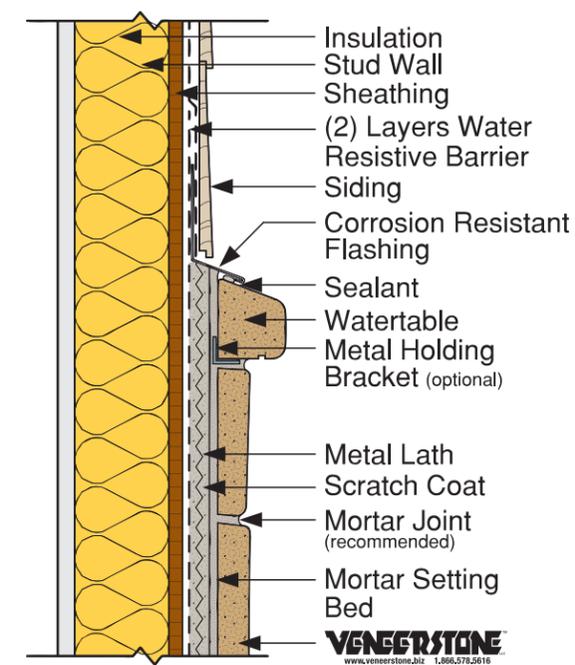


Over CMU or Concrete

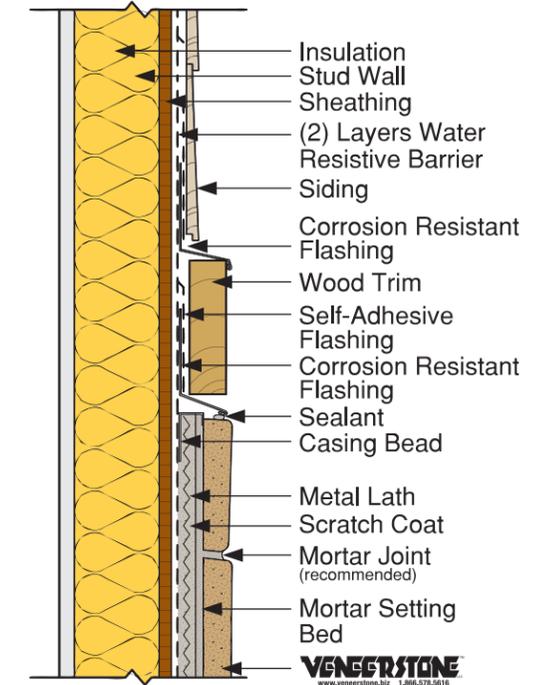


Transitions

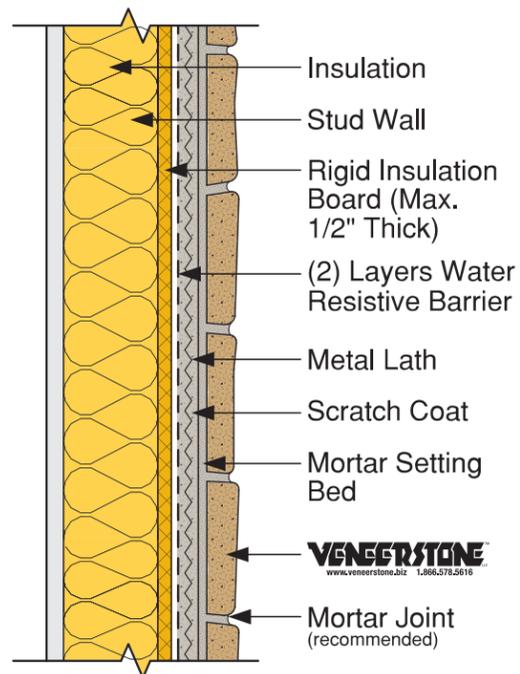
Transition - Watertable Siding



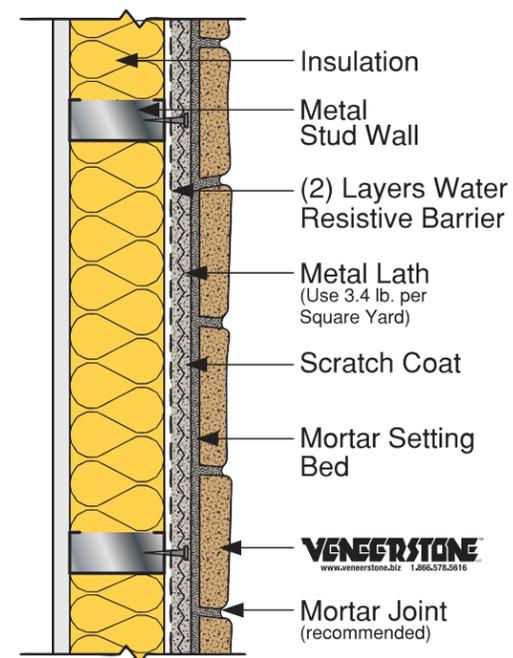
Transition - Wood Trim



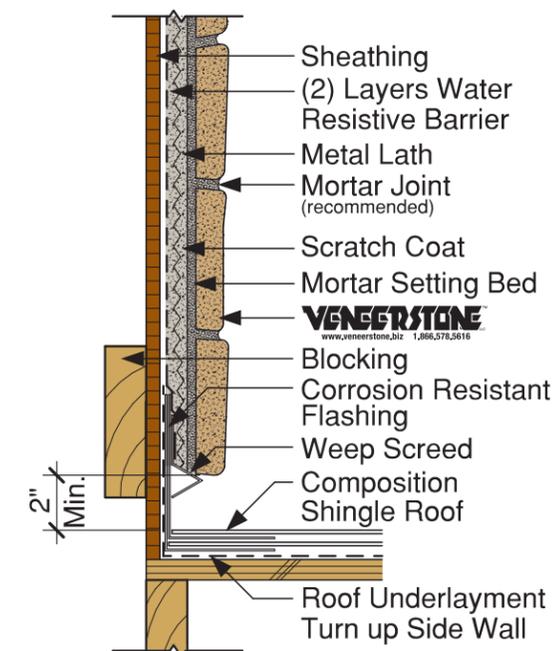
Over Rigid Insulation



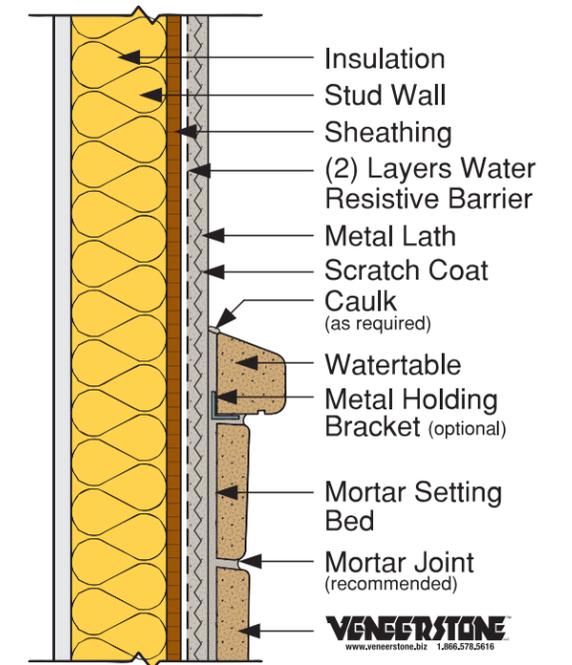
Over Open Stud Framing



Transition - Wall To Roof

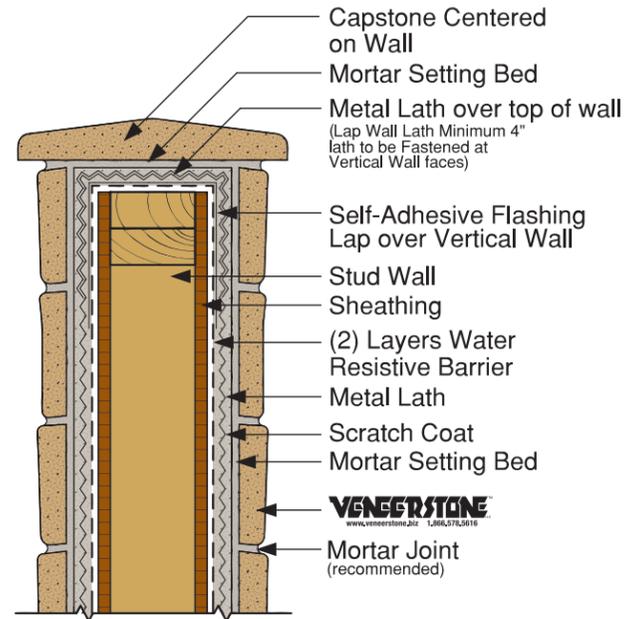


Transition - Watertable Stucco

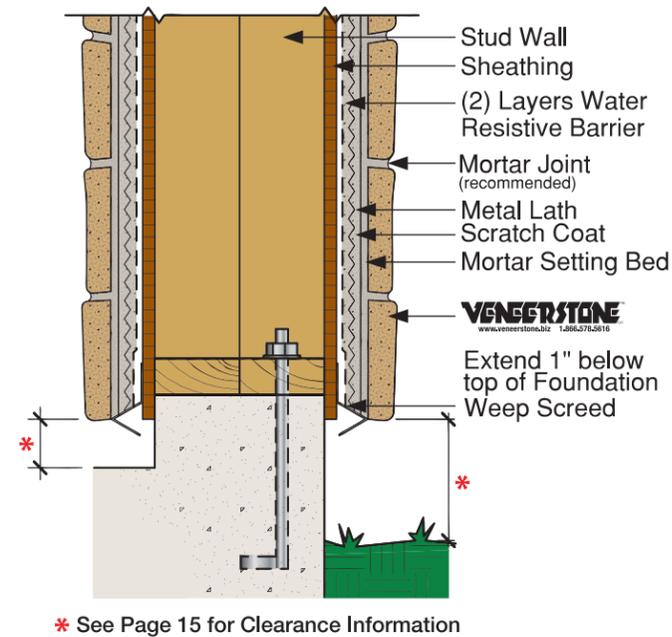


Installation Of Walls

Stud Wall - Cap

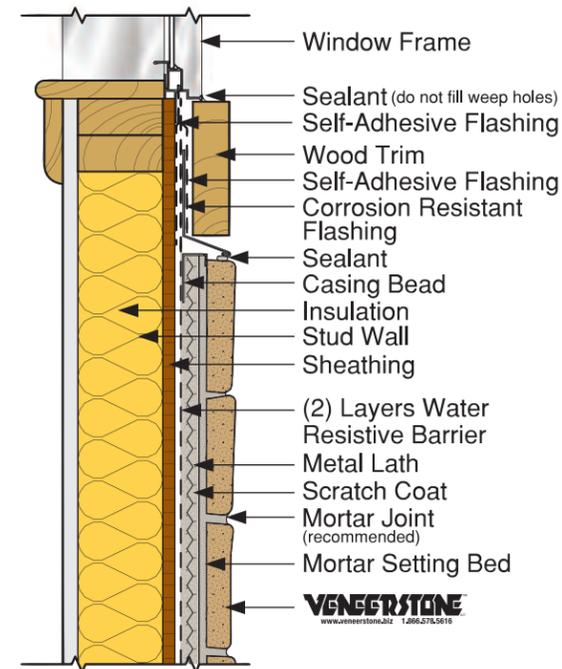


Wood Column Base

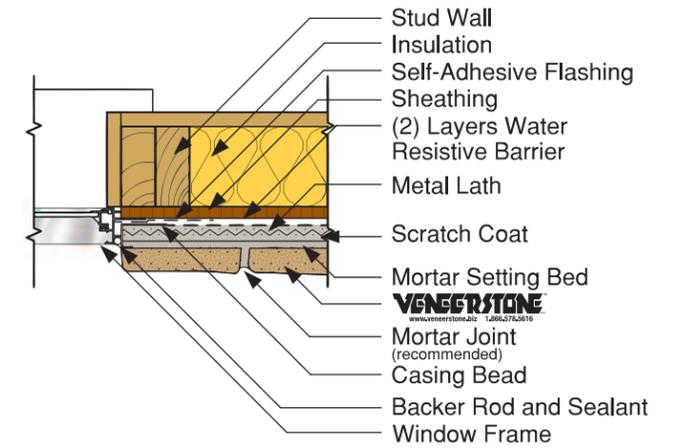


Installation Details

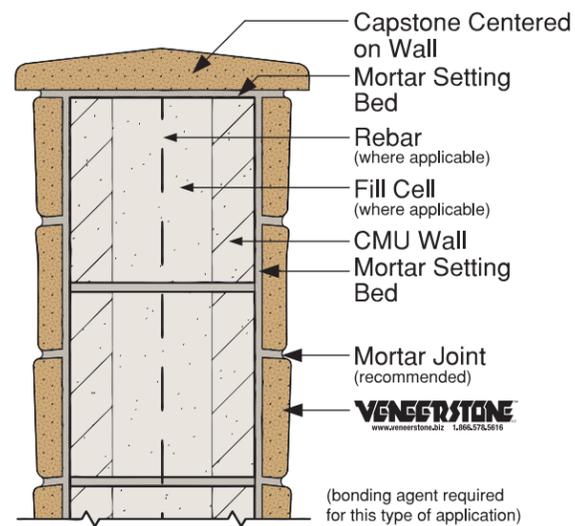
Window Sill - Wood Trim



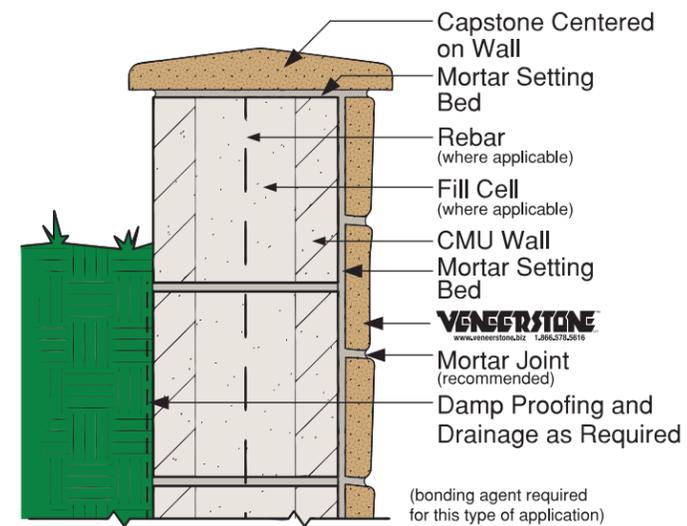
Window Jamb



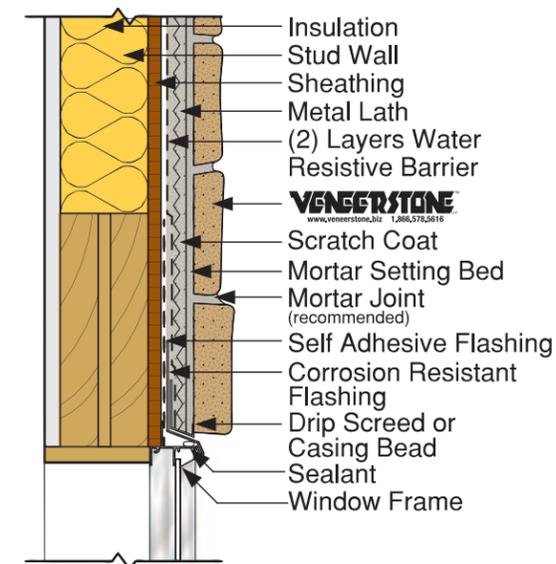
CMU Wall - Cap



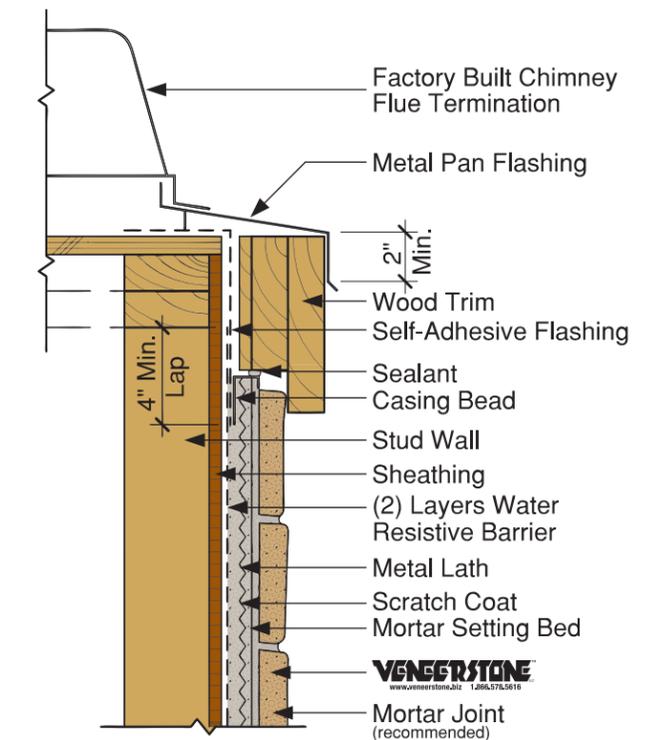
Retaining Wall - Cap



Window Head

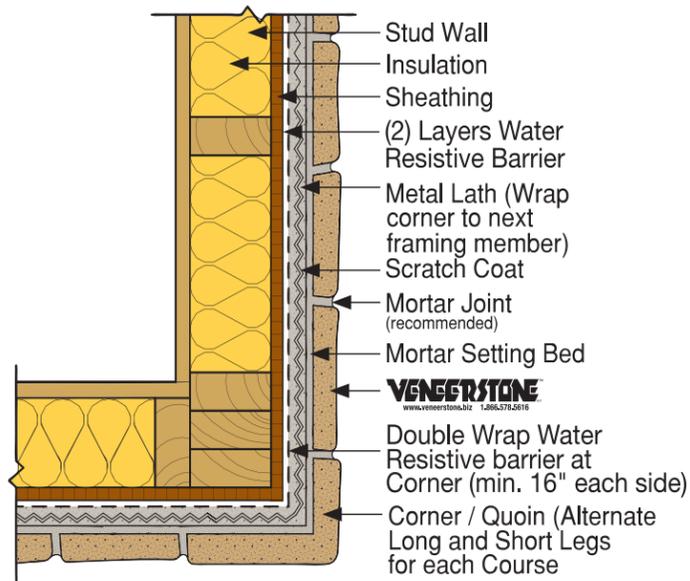


Chimney Cap

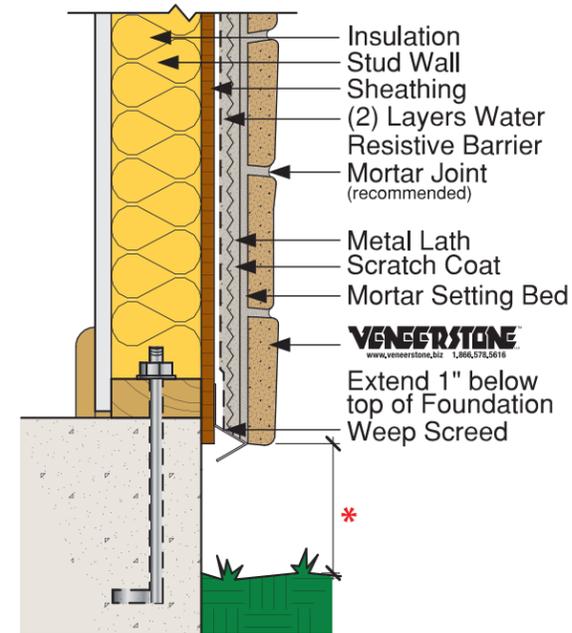


Installation Details

Corners / Quoins (Top View)



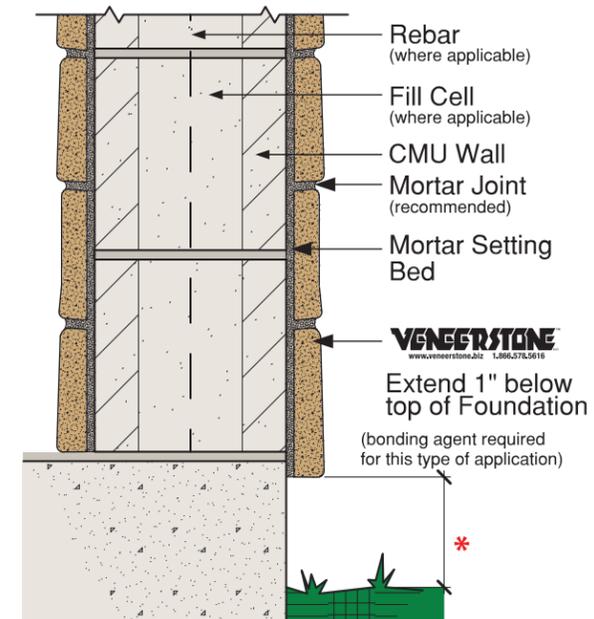
Foundation Wood



* See Page 15 for Clearance Information

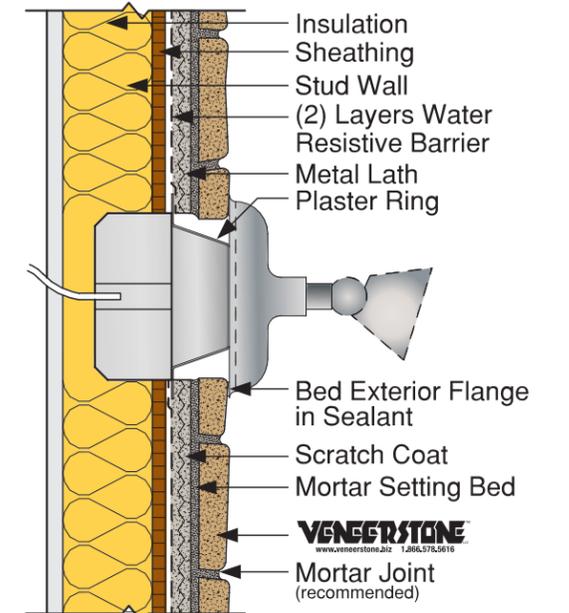
Installation Details

Foundation CMU Wall

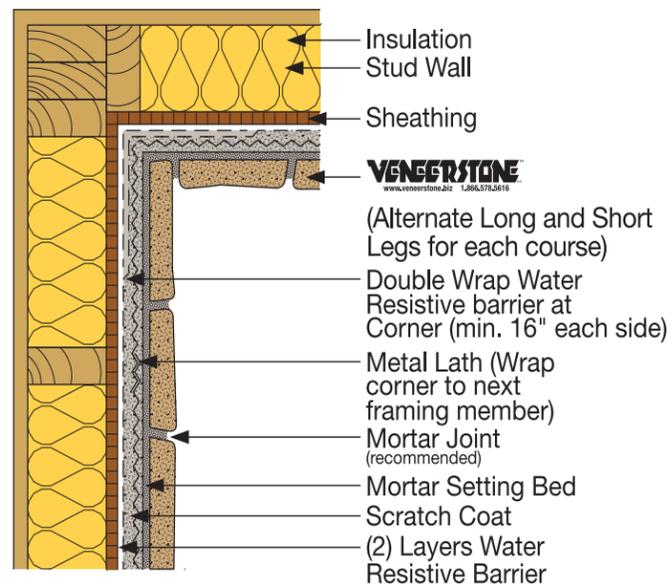


* See Page 15 for Clearance Information

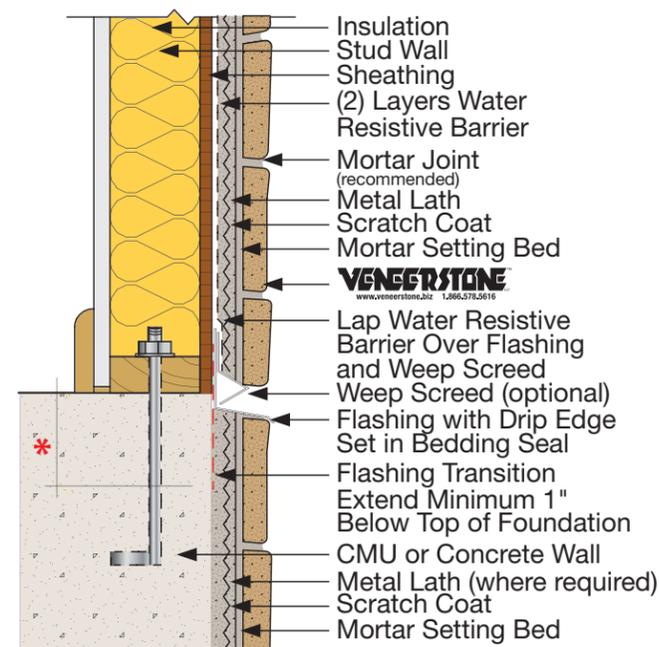
Fixture Penetration



Inside Corners (Top View)



Foundation - Stone Continuing



* See Page 15 for Clearance Information

* Clearance Information

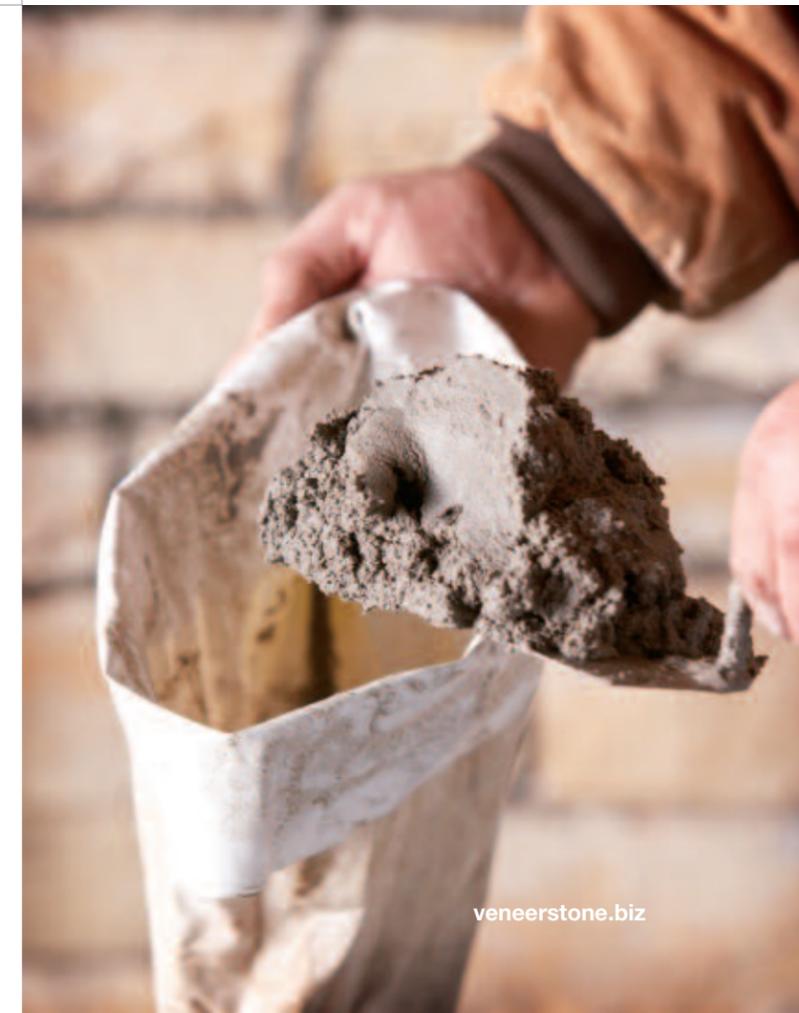
On exterior stud walls, weep screeds and other base flashings should be held a minimum of 4" above grade or a minimum of 2" above paved surfaces such as driveways, patios, etc. This minimum can be reduced to 1/2" if the paved surface is a walking surface supported by the same foundation supporting the wall.

On exterior stud walls where Veneerstone continues down a concrete or CMU foundation wall, and where a weep screed is incorporated into the wall-to-foundation transition, at the bottom maintain minimum 2" clearance from grade, or 1/2" clearance from a paved surface.

On exterior stud walls where Veneerstone continues down a concrete or CMU foundation wall, with WRB and lath installed down to the weep screed at bottom, maintain minimum 4" clearance from grade, or 2" clearance from a paved surface.

Where Veneerstone is applied over an exterior concrete or CMU wall, maintain 2" clearance from grade or 1/2" from a paved surface.

Over an exterior concrete or CMU wall that is not enclosing conditioned space (e.g. landscape walls, pillars, columns, etc) maintain minimum 2" clearance from grade or 1/2" from a paved surface.





Producers of Quality Manufactured Stone & Thin Brick



PACKAGING:

Flat Stones: Pallets are packaged 150 square feet per pallet. 10 square feet Handy Box packages are available for smaller quantities.
Corner Stones: Pallets are packaged with 100 linear feet per pallet. 10 linear feet Handy Box packages are available for smaller quantities.
Thin Brick Flat Stones: 30 square feet per box. Thin Brick Corner Stones: 15 linear feet per box.
All packaged quantities are figured with half inch mortar joint except for Stack Stone and Ledge Stone.
When installing stone, it has been determined that broken pieces can and should be used.

PHYSICAL REQUIREMENTS:

Veneerstone by Tejas meets or substantially exceeds the minimum physical requirements specified by the ICC-ES AC 51.
Density: ASTM C 567 • Moisture absorption: UBC Standard 15-5 • Compressive Strength: ASTM C 192, C 39
Tensile Strength: ASTM C 190 • Flexural Strength: ASTM C 348 • Bond Strength: ASTM C 482 • Freeze/Thaw: ASTM C 67

WARNING:

Concrete veneer contains Crystalline Silica (quartz) and traces of other hazardous substances which are released as dust and can be inhaled when dry-cutting, drilling, or shaping the product. Crystalline Silica is a chemical known to the State of California to cause cancer, birth defects, and other reproductive harm. Use appropriate safety precautions. Raw materials used in production may vary slightly. We recommend that you blend stones from different boxes throughout your installation area. Variations are inherent in all manufactured stone and concrete products. Questions regarding suitability and/or acceptability must be resolved before installation. Use constitutes acceptance.

LIMITED WARRANTY:

Veneerstone carries a 75-year limited warranty when used on structures that conform to all local building codes. Material must be installed according to manufacturer's installation instructions. Warranty is limited to replacement of defective materials only and does not cover labor to remove or replace stone. Warranty does not cover damage resulting from building settlement, wall movement, contact with chemicals or paint, discoloration due to airborne contaminants or stains caused by material applied to or allowed to come in contact with stone. Warranty is non-transferable and is limited to the original purchaser.

Available nationwide from plants and distributors coast to coast.

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