



NEWCASTLE
STONE

Installation Guide

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Stone Installation Guidelines

Preparing the Surface

Water Resistive Barrier (WRB)

If you will be installing the stone on an exterior non-masonry surface, it is recommended to apply a WRB such as a 30 pound single barrier Asphalt Saturated Felt paper meeting ASTM D226 on top of house wrap. First, always install a weep screed meeting ASTM C1063 no more than 4" above concrete or paved surfaces or right where framing meets foundation, then apply WRB starting with the bottom edge at the lip of the weep screed continuing upward in a shingle like fashion. Overlap WRB a minimum of 2" on horizontal seams and 6" on vertical seams.

Flashing

Any flashing must be installed to meet code requirements before installing first course of masonry.

Rainscreen

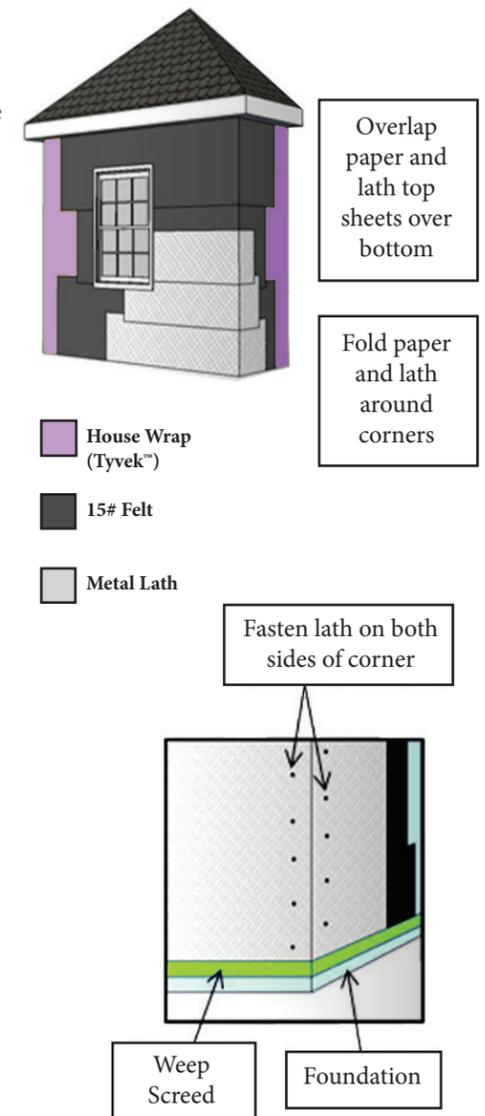
Before installing rainscreen check with your local building code requirements and read all Rainscreen manufacturers' installation instructions. Newcastle Stone recommends using Keene Rainscreen or any U.S. or Canadian certified Rainscreen. Ensure that the wall is free from structural defects, any membranes or flashing are properly installed and the final system will have a path for moisture to escape from the wall. Rainscreen should only be applied to structurally sound surfaces, incorporate good building practices, and meet all local code requirements.

Wire Lath

- Directly over WRB, or directly over the sheeting on an interior project, cover the area with metal wire lath. Newcastle Stone recommends using a 2.5 lb/sq yd dimpled self-furring diamond metal lath meeting ASTM C847.
- Install the lath horizontally overlapping a minimum of 2" the horizontal seams and 2" on the vertical seams.
- The lath should feel smooth as you run your hand down over the lath and rough as run your hand up over the lath.
- Use fasteners (nails, staples, etc. meeting ASTM C1063 sec.7.10.2) that will penetrate the framing or OSB a minimum of 1 inch. Fasteners to be every 6 inches vertically and horizontally.
- When working with corners, fold the lath tightly around the corner. This rule applies for inside corners also; fold lath 90 degrees and fit it tightly into the corner. See diagram to right.
- Never have a seam in a corner.
- **Very important to fasten the lath on both faces of the corner, See diagram to right.**

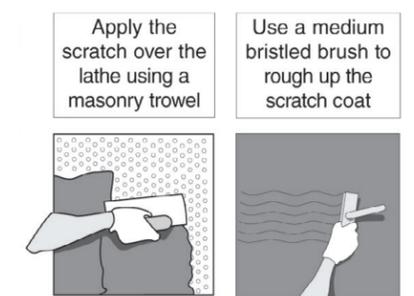
Masonry Surface

When installing to any masonry surface (brick, block, etc.), no metal lath or WRB is recommended unless the masonry surface has been treated with any



Scratch Coat

- Use a masonry trowel to work the mortar into and over the lath. Cover the entire area of lath with the mortar mixture.
- Newcastle Stone always recommends using type S masonry cement meeting ASTM C270.
- While the mortar is slightly wet, use a medium bristle brush to rough up the scratch coat.
Tip: use a trowel and level to mark horizontal lines that will be used as guides to apply your stone veneer.
- Newcastle Stone recommends the application of stones before the scratch coat is fully cured. This results in a "wet joint" for better adhesion.
- If the scratch coat has been sufficiently cured, this area shall be dampened with water prior to applying the stone. There should be no collecting water on the surface when stone is applied.



Stone Installation Guidelines

Keene Rainscreen

Keene Rainscreen is a drainage mat for exterior wall systems. The entangled net product eliminates incidental moisture problems in most siding applications including stucco, manufactured stone and plank siding.

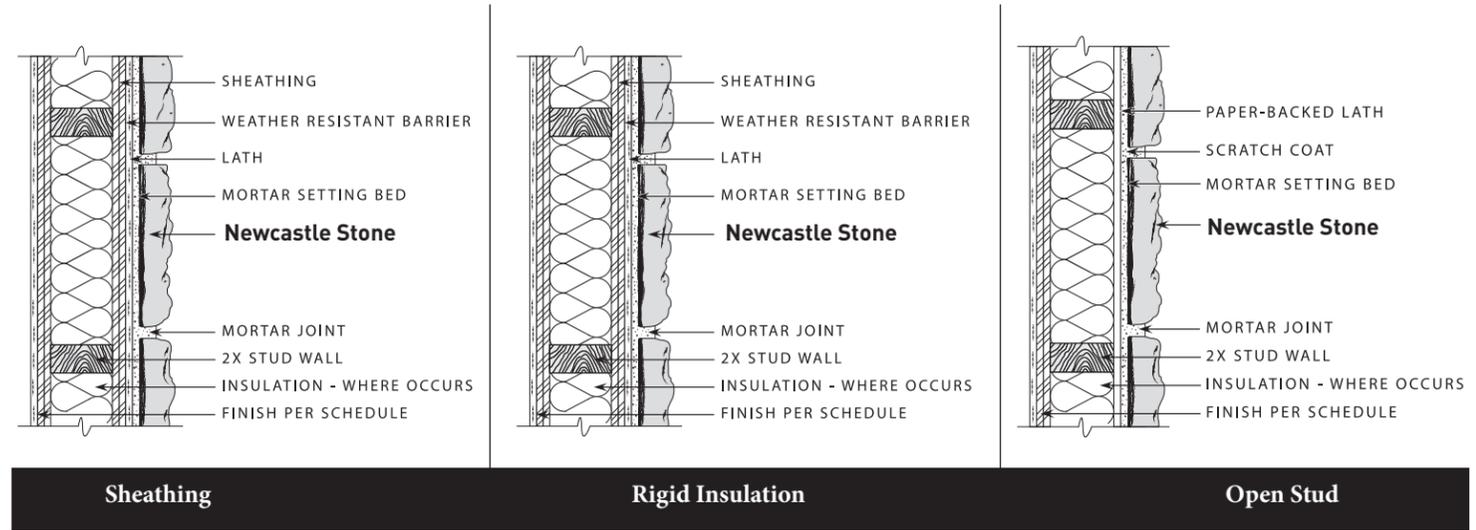
The full wall Keene Rainscreen product rolls over the Weather Resistant Barrier to separate it from the siding. The assured airspace that Keene Rainscreen created, increase airflow through the wall cavity, allowing the wall to breathe and stay dry.

APPLICATIONS	BENEFITS
<ul style="list-style-type: none"> Stucco 	<ul style="list-style-type: none"> Prevents callbacks from moisture problems
<ul style="list-style-type: none"> Thin stone or brick 	<ul style="list-style-type: none"> Increases ventilation
<ul style="list-style-type: none"> Manufactured stone 	<ul style="list-style-type: none"> Helps prevent mold
<ul style="list-style-type: none"> Stone and brick masonry 	<ul style="list-style-type: none"> Most effective way to drain and vent
<ul style="list-style-type: none"> Lap siding 	<ul style="list-style-type: none"> One product that can do it all
<ul style="list-style-type: none"> Siding applications 	

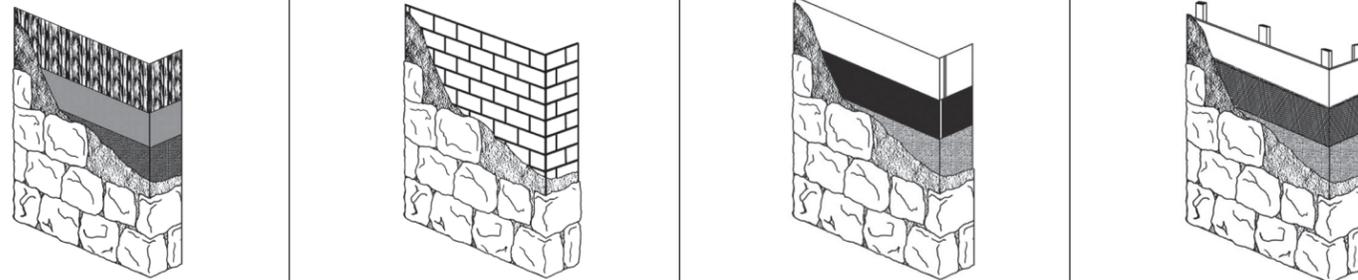
Manufactured Stone and Thin-Set Natural Stone

- Install expanded metal lathe over the Keene Rainscreen according to the stone manufacturer's recommendation.
- Apply scratch coat according to the stone manufacturer's recommendation.
- Install manufactured stone according to guidelines. Guidelines should include a weep method for ventilation and drainage.
- Trim Keene Rainscreen around all penetrations, windows and doors so that the material is flush to the flashing.

Installation Details



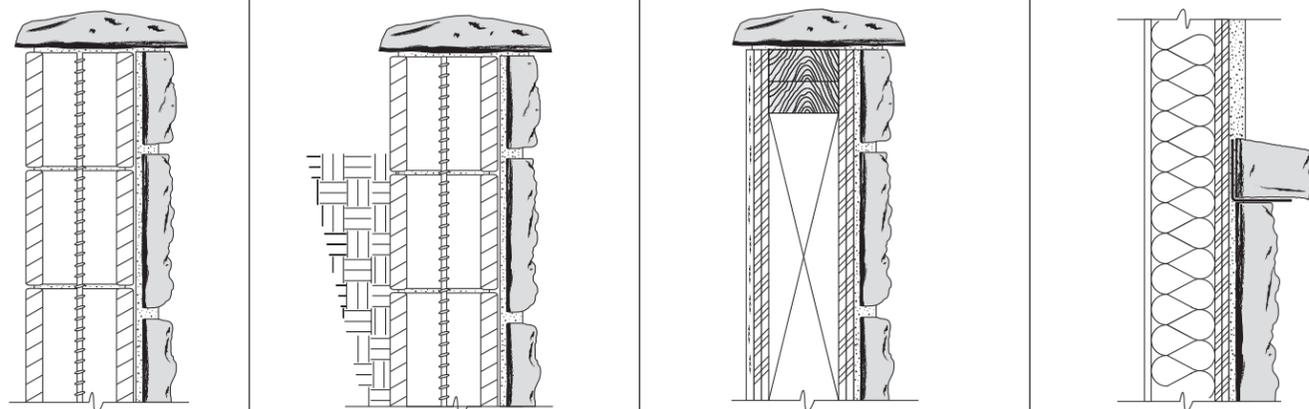
Installation Details



Over Rigid Foam Over Masonry/Concrete Over Drywall Over Wood Frame



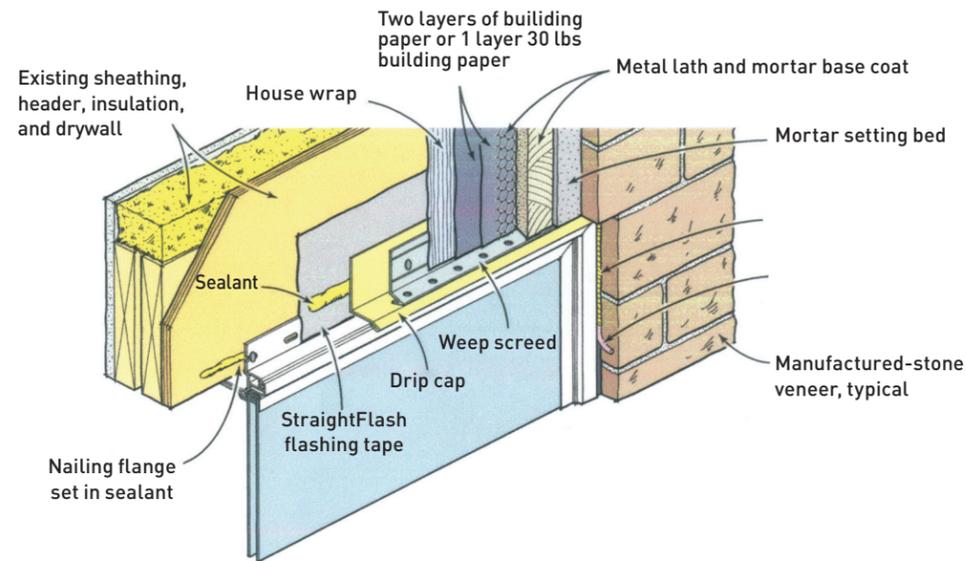
CMU Wall Concrete Wall



Wall Cap CMU Wall Cap Retaining Wall Cap Stud Water Table

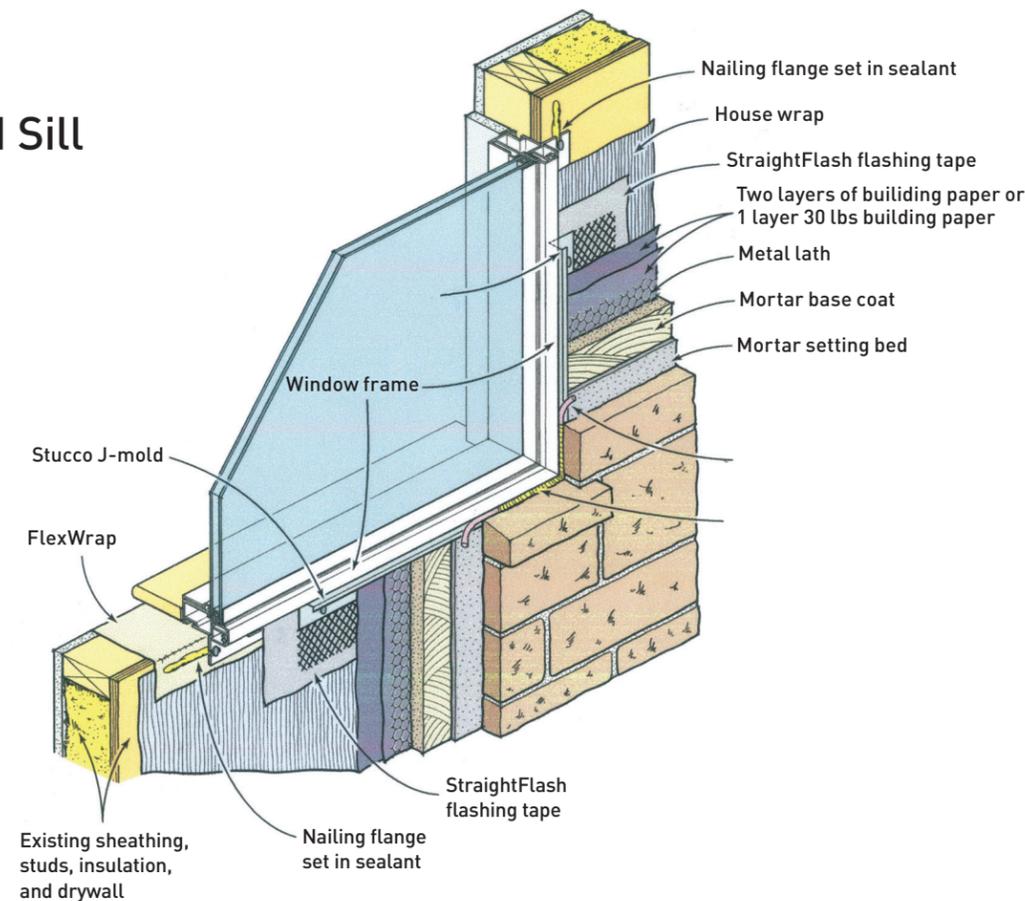
Window Treatment Detail

Window Head



Single layer 30 lb building paper installed over house wrap created a drainage plane beneath the mortar base coat. Plastic weep screeds at the top of the window and at the base of the wall allow water to drain out of the assembly.

Jamb and Sill



DISCLAIMER INFORMATION

The specifications and instructions for this installation guide meet the ASTM International standards and local building codes; however, before commencing work of any nature with this product, CONSULT YOUR LOCAL BUILDING INSPECTOR AND/OR CODE ENFORCEMENT OFFICER to ensure the installation meets local building codes, especially in coastal areas affected by hurricane specifications.



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