Condensed Stone Veneer Installation Guide

Professional Guide for Residential and Commercial Projects

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Purpose

Install Stoneyard natural thin stone veneer correctly the first time using the LATICRETE MVIS system.

Working Conditions

Install between 40–90 °F. Protect from rain, frost, and direct sunlight until cured.

Core Steps

1. Plan stone color, pattern, and joint style. Build a mockup.
2. Measure square footage and add 10–15% waste.
3. Identify surface type: masonry, framed, interior, or exterior.
4. Apply waterproofing where required.
5. Blend from multiple pallets for color consistency.
6. Dry-lay starter course and corners.
7. Trim stones using Hardie, Chipper, or Hammer.
8. Mix MVIS Hi-Bond Mortar to creamy, non-sag texture.
9. Back-butter stones and test bond coverage.
10. Set from the bottom up, starting with corners.
11. Fill and tool joints with MVIS Pointing Mortar.
12. Wait 7 days before cleaning with Vana Trol or water.
13. Seal only if needed, using breathable sealers.
14. Control temperature and curing during extreme weather.
15. Inspect for uniform joints, tight bonds, and clean faces.
16. Correct loose stones, haze, or efflorescence promptly.

Common Pitfalls
Skipping waterproofing, weak mortar coverage, poor blending, and leaving acid residue.

Key Products
MVIS Air & Water Barrier, MVIS Hi-Bond Mortar, Prosoco Vana Trol, Stoneyard shaping tools, and HCA (Harsh Climate Approved) approved stone.

0. Scope and Preparation

This guide covers installing Stoneyard natural thin stone veneer on walls, fireplaces, columns, and foundations.
Use for both residential and commercial applications.

Tools Needed
Hardie splitter, carbide chipper, thin stone hammer, notched and margin trowels, buckets, brushes, and safety gear.

Note: Use LATICRETE MVIS mortars and waterproofing for system compatibility.
Reference ASTM C1780 for professional standards.

[Insert Diagram: Wall section showing veneer, mortar, waterproofing, and substrate layers]

1. Design Decisions

Select the stone color, pattern, and joint style that fits the design.
Build a 3 ft × 3 ft mockup with the actual mortar color to confirm the final appearance.

Pro Tip: Order corners first. They define realism and are not interchangeable with flats.

Warning: *Joint style affects coverage and waste. Finalize before ordering.*

2. Material Takeoff

Measure total wall area and subtract openings.
Add 10–40% extra for trimming and waste depending on product shape.
Order flats by square foot and corners by linear foot.

Note: Tight joints require more trimming and waste.

3. Jobsite Conditions

Determine whether the installation is interior or exterior.
Exterior and wet-area projects require waterproofing and proper drainage.
Use HCA (Harsh Climate Approved) for freeze-thaw or coastal conditions.

Pro Tip: In extreme temperatures, use tents or heaters to maintain stable conditions.

4. Substrate Preparation

- **Concrete or CMU:** Clean, sound, and flat. Apply two coats of MVIS Air & Water Barrier.
- **Brick:** Remove paint, repair cracks, flatten with Hi-Bond Mortar if needed.
- **Cement Board:** Fasten to framing, tape seams, apply two coats of MVIS Air & Water Barrier.

Warning: *Never bond veneer directly to plywood, gypsum, or OSB.*

Pro Tip: Use a wet-film gauge to confirm 15–22 mils thickness per coat.

5. Layout and Blending

Open multiple pallets to blend colors and sizes evenly.
Dry-lay a starter course to confirm joint spacing and fit.
Alternate long and short corners for a natural pattern.

Pro Tip: Keep long stones horizontal and step back often to check the overall layout.

6. Trimming and Fitting

Score, split, and chip stones using a Hardie 12 lbs steel splitter, carbide chipper, and stone hammer.

Back-cut thicker pieces for tighter joints.
Wear eye and hearing protection.

Note: More trimming produces a tighter joint look but increases waste.

7. Mixing MVIS Hi-Bond Mortar

Add clean water per bag instructions. Mix to a creamy, non-slump texture.
Allow to rest for five minutes, then remix without adding water.

Note: Use within 20 minutes. Discard if stiff or skinned over.

Warning: *Do not use Type S or unmodified mortars. Only MVIS Hi-Bond provides proper bond strength.*

8. Scratch Coat (If Needed)

Apply a 1/4–1/2 inch leveling coat to uneven surfaces.
Score horizontally before setting stones.

Pro Tip: A flat wall reduces squeeze-out and speeds installation.

9. Back-Butter and Bond Test

Apply Hi-Bond mortar to both the wall and back of each stone.
Press firmly and slide slightly (1-2 inches) to ensure full contact.
Remove one test stone per batch to confirm 100% mortar coverage.

Pro Tip: Keep a margin trowel handy for adjusting stones on the wall.

Warning: *Dust, paint, or moisture on the substrate can weaken adhesion.*

10. Setting Stones

Start at the corners, then work upward and inward.
Maintain consistent joint width and spacing.
Use spacers if needed for jointed designs.
Do not tap or hammer stones into place—press evenly instead.

Note: Step back regularly to confirm the pattern and blend are balanced.

11. Grouting and Pointing

After the stones have set, fill joints with MVIS Pointing Mortar.
Pack joints firmly and tool to the desired profile.
Lightly brush before the final set to remove crumbs and soften edges.

Pro Tip: Recessed joints add depth and shadow; over-grout gives a traditional look.

12. Cleaning

Allow at least seven days of curing before cleaning.
Pre-wet the surface, apply Prosoco Vana Trol diluted per label, scrub gently, and rinse several times with clean water.

Warning: *Never apply cleaner to a dry surface. Always pre-wet and rinse thoroughly.*

Note: For interiors, use Safety Klean or water with a soft brush.

13. Sealing (Optional)

Natural stone does not require sealing.
If sealing is desired, use a breathable silane/siloxane sealer.
Always test on a sample board first.

Pro Tip: Avoid sealing in freeze-thaw regions unless you plan to maintain it over time.

14. Cold or Hot Weather Adjustments

In cold weather, warm materials to about 70 °F and use heated enclosures.
In hot weather, dampen the substrate and provide shade.
Maintain stable conditions for at least seven days after installation.

Note: *Rapid drying or freezing weakens mortar bonds. Control temperature and humidity as needed.*

15. Final Inspection

Check for consistent joints, pattern alignment, and color blending.
Remove excess mortar before it hardens.
Confirm corners and transitions are secure.
Photograph the finished wall for documentation and approval.

Pro Tip: Walk the project with the homeowner or GC before final cleanup for sign-off.

16. Typical Issues and Corrections

Even well-done installations can show minor issues as they cure. Address them early.

Loose or Hollow Stones
Usually from poor mortar coverage or dusty surfaces. Remove and re-set using fresh Hi-Bond Mortar with full back-butter coverage.

White Haze or Surface Film
Occurs when cleaning residue remains. Rewash with clean water and a soft brush until clear.

Efflorescence (White Crystals)
Caused by moisture movement through the wall. Brush off when dry and improve drainage or flashing if it returns.

Uneven Joints or Misalignment
Often from skipping layout lines. Snap guides and check alignment every few feet.

Color Variation or Patchy Blend
Happens when working from a single pallet. Always blend from multiple pallets.

Mortar Smears or Stains
Appear when mortar is left to dry on the stone surface. Brush gently before full set. Never use metal brushes.

Freeze-Thaw Damage
Results from trapped water behind veneer. Check waterproofing, flashing, and drainage. Replace damaged pieces as needed.

Pro Tip: Keep a short daily inspection checklist. Small fixes now prevent costly rework later.

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