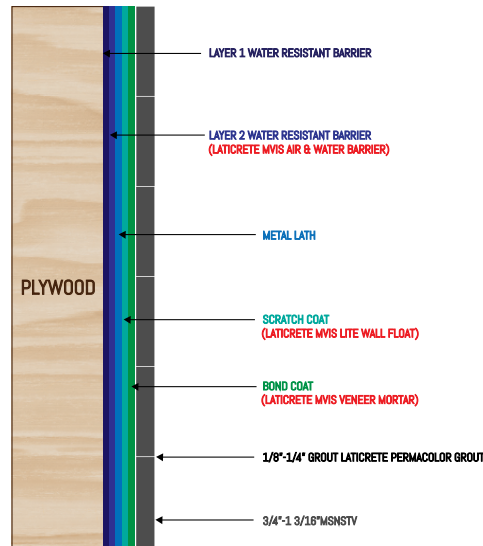


THIN VENEER WALL APPLICATION (PLYWOOD WALL)

MSNSTV – Marmiro Stones Natural Stone Thin Veneer



WARNING

Installation of material is sign of acceptance.

No returns on open crates, custom orders, & products with custom packaging.

These requirements align with NCMA/MVMA, the Natural Stone Institute, TMS 402/602, ICC-ES, and key ASTM/ANSI standards. Always follow local code and the project engineer's direction.

Epoxy mesh-backed stone is used to increase the strength of the stone for shipping. All epoxy mesh-backed veneer should be removed with a grinder before installation.

Laticrete® LATIPOXY® 300 Adhesive is required for long term adhesion of the stone without removal of epoxy meshed-back stone for installation on a concrete wall.

STANDARDS AND INDUSTRY REFERENCES

1. ASTM C847 (metal lath)
2. ASTM C926 (scratch coat)
3. ASTM C1063 (lath installation & weep screed)
4. ASTM C1325 (cement board)
5. ICC-ES AC308 (exterior cement board recognition)

*MSNSTV - MARMIRO STONES NATURAL STONE THIN VENEER

APPLICATION - ADHERED TO MARMIRO STONES THIN VENEER OVER EXTERIOR SHEATHING

1) SUBSTRATE, FRAMING, AND BASE CLEARANCES

- a. Verify framing and sheathing. Framing must meet project structural/deflection requirements. Install exterior sheathing per the sheathing manufacturer's instructions.
- b. Provide code clearances at the base: Hold the veneer/weep screed a minimum 4" above grade or 2" above paved surfaces. (May be ½" above a walking surface supported by the same foundation).

2) PRIMARY WEATHER/AIR BARRIER & DRAINAGE LAYER

- a. Verify framing and sheathing. Framing must meet project structural/deflection requirements. Install exterior sheathing per the sheathing manufacturer's instructions.
- b. Provide code clearances at the base: Hold the veneer/weep screed a minimum 4" above grade or 2" above paved surfaces. (May be ½" above a walking surface supported by the same foundation).

3) WEEP SCREED

- a. Install a foundation weep screed at the base of framed walls: Lap the WRB over the screed flange per ASTM C1063/industry details.
- b. This is done when plywood application meets CMU or there's a poured in place concrete wall (foundation).

4) METAL LATH AND SCRATCH COAT

- a. Lath: Install galvanized, self-furring metal lath conforming to ASTM C847, fastened to framing with corrosion-resistant fasteners and laps/attachments per ASTM C1063.
- b. Scratch coat: Apply a cement-plaster scratch coat in accordance with ASTM C926 to fully embed the lath and form horizontal scoring on vertical walls. Allow to cure per standard and project conditions.
 - Apply Laticrete® MVIS™ Lite Wall Float, (listed for use as a scratch or finish coat in place of Type S/N) mixed with water only. Build up to plane as needed, (up to approx. ¾" in one lift).

*Note: On clean, sound masonry or concrete backings, lath/scratch is often not required, but framed walls require lath/scratch, unless the cement board option below is used (and approved).

- c. Alternate substrate (where approved): Exterior cement board.
 - Cement board option: In lieu of lath/scratch, install exterior-rated cementitious backer units that comply with ASTM C1325 and are recognized for exterior use under ICC-ES AC308. Fasten per the board manufacturer's exterior sheathing instructions.
 - Setting mortars over cement board: Use only polymer-modified thin-set mortars meeting ANSI A118.4/A118.15, (no Type S/N as a setting bed). Appropriate Laticrete® choices include MVIS™ Hi-Bond Veneer Mortar or MVIS™ Veneer Mortar.

5) SETTING THE STONE (ALL SUBSTRATES)

- a. Pre-check moisture & layout: Ensure the substrate (scratch coat or cement board) is dry and clean. Confirm base clearances and movement joint locations at dissimilar materials/openings.
- b. Bond coat selection (exterior):
 - Standard exterior work: MVIS™ Hi-Bond Veneer Mortar for maximum non-sag and bond.
 - Alternate: MVIS™ Veneer Mortar (polymer-fortified).
 - Follow product data sheets for mixing (with water only) and open time.
- c. Apply a full setting bed and back-butter each unit as needed to achieve essentially 100% contact (no voids/"doughnuts"). Periodically remove a freshly set unit to verify coverage.
- d. Unit placement: Press/slide the veneer into the wet mortar bed to collapse ridges and set. Support temporarily if needed until initial set.

6) MORTAR JOINTS

- a. Place MSNSTV (typical is 4" & 6" height material) with no mortar joint, creating a tight fit.
 - If a mortar joint is needed or designed in for aesthetics, follow guidelines below.
- b. MSNSTV 3"-6"-9" system is designed for a 3/8" grout joint.
 - Be sure to use spacers to maintain consistent joint spacing.
 - Before starting to grout, remove spacers and debris in grout joints and remove dust and dirt using a wet sponge. Do not leave water sitting in joints.
 - **Mixing:** Use approximately 2.4–2.6 quarts (2.3 L– 2.5 L) of clean potable water for 25 lbs. (11.3 kg) of PERMACOLOR® grout. Place water in a clean mixing container and add grout powder. Mix with a slow speed drill mixer (300 rpm) for one minute. Wait for five minutes and remix with drill for one minute.
 - **Apply:** Using a grout bag, apply grout to joints filling completely. Use a 3/8" slicker trowel or jointing tool to give a concave look.

7) BEST PRACTICES

- a. Base clearances - Maintain clearances to shed water: Typically, 4" above earth, 2" above paved, ½" above walking surfaces, sharing the same foundation.
- b. Use MSNSTV: Pull from multiple crates for blending. Do not install saturated/frozen stone.
- c. Exterior installations should target essentially 100% contact with tight edges; avoid "center void doughnuts."
- d. Follow product temperature limits: Protect from freezing, rapid drying, or direct rain until cured.
- e. Use polymer-modified mortars for exterior wall applications.
- f. Do not bridge structural/expansion joints with mortar or stone; continue the joint through the veneer with backer-rod & sealant.
- g. Do not rely on a thin "dot and dab." Full coverage is required. Periodically pull a piece to check.
- h. Do not set in stone in freezing temperatures, on saturated substrates, or in driving rain—follow mortar product temperature/cure limits.