



## Recommended Installation Instructions For Natural Stone Veneer Thin Cut

### Application of Thin Veneer Stone

Stone Solutions LLC Thin Veneer Products are equally suitable for use in both interior and exterior applications. Stone Solutions LLC Thin Veneers require no structural support and can be used as a lightweight veneer facing applied to both masonry and wood surfaces. A foundation, wall ties or other structural support is not required. Installation is simple and inexpensive compared to heavier stone veneers, such as our traditional full size stone.

### Estimating Required Amount of Thin Veneer Stone

Measure the length times the height (in feet) of the project to determine the amount of Thin Veneer Flats that will be required. Subtract square footage for any openings such as doors, windows, or fireplace inserts. In areas where a matching outside corner is desired, measure the lineal footage to determine the amount of corner pieces that will be required. Obtain some extra stone to allow for a wider selection, cutting, trimming or replacement if accidentally damaged during the installation process.

### Preparing the Surface

- **Over sheetrock, wallboard, paneling, plywood, other rigid wood-related sheathing or rigid insulation board:** Cover the wall surface with a weather-resistive barrier. The barrier shall be applied horizontally with the upper layer lapped over the lower layer not less than 4". Where vertical joints occur, the barrier shall be lapped not less than 6 inches. Then install 2.5 gauge diamond mesh expanded metal lath. Overlap lath sides by not less than ½ "and lath ends by not less than 1". Wrap lath around corners not less than 6". Attach the lath using galvanized nails or staples 6" on center vertically and 16 inches on center horizontally, penetrating studs a minimum of 1 inch. Then apply a ½"-thick scratch coat of mortar over the metal lath and allow it to cure.

- **Over clean, unpainted, unsealed, and untreated brick, block, concrete or other masonry surfaces:** Stone may be applied directly to surface. The surface must either a) be cleaned back to the original surface by sandblasting, water blasting, acid etching or wire brushing, or b) have metal lath attached using corrosion-resistant concrete nails with a scratch coat applied over the metal lath.

### Stone Preparation

Ensure stone is clean and free of dirt and dust. To achieve an attractive blend of shapes and colors, lay out a trial pattern prior to installation. Mix colors, sizes, shapes, thickness, and textures to create unique and natural finishes.

### Preparing the Mortar

Stone Solutions LLC strongly recommends the use of a bonding agent in the setting mortar. Mortar should be mixed to a workable consistency.

## Recommended Setting Mortar

- 3 parts type S masonry cement
- 6 parts masonry sand
- Bonding agent and water

## Applying the Stone

### - Setting the stone:

Using a mason's trowel, apply an approx. ½" thick, even layer of mortar to the entire back of the stone. Then press the stone firmly into place on the prepared wall surface, squeezing the mortar out around all edges. Using a gentle wiggling action or tapping of stone will ensure a good bond. For joint less/dry-stacked installations, it is important when setting the stone that the edges of the stone are properly sealed with mortar to ensure satisfactory bond.

If the stone is being installed onto a very dry surface or in a hot/dry climate, the wall surface should be wet to prevent excessive absorption or moisture from the mortar. This can be done by spraying or brushing water onto the wall surface. The wall surface should be allowed to dry for a few minutes after wetting to eliminate excess surface water.

### - Grouting the Joints:

After the stone has been applied to the wall surface, use a grout bag to fill the joints with mortar, forcing grout into any voids. Any mortar that accidentally gets on the stone should be allowed to set until dry and crumbly, and then brush off with a dry whisk broom.

### - Finishing the joints:

When the mortar joints becomes firm, use a wooden or metal striking tool to rake out the excess mortar to the desired depth while at the same time forcing the mortar into the joints so as to thoroughly seal the stone edges. Be careful not to work the joints too soon or the mortar will smear. After working the joints, use a whisk broom to smooth the joints and clean away any loose mortar from the joints and stone face. Loose mortar and mortar spots which have set for only a few hours, clean up easily and should never be allowed to set overnight.

## Cleaning

As Stone Solutions LLC Thin Veneers are 100% natural stone, and do not have painted surfaces, extra precautions are not required when washing the stone; however, a simple solution of soap and water should clean most dirty surfaces. A bristle brush may be used for stubborn situations.

## Efflorescence

Efflorescence is an unsightly residue caused by water-soluble salts being released to the surface from mortar, stucco, concrete, brick and simulated stone. As Stone Solutions LLC Thin Veneers are completely natural, efflorescence will not be caused from the stone, but may rarely come from the masonry cement. To clean this, allow the film to completely dry, and then scrub off. A bristle brush and clean water is usually sufficient, but if not, use water (vinegar solution at a 5:1 mixture). Always use clean water to rinse off.

**Note:** *These installation recommendations are provided only as ideas for solutions to architectural designs, they do not necessarily apply to specific architectural applications. These installation recommendations may require changes to meet a particular design requirement. Stone Solutions LLC will accept no responsibility or liability for use of these installation recommendations*