

# STONE VENEER INSTALLATION RECOMMENDATIONS

*Following are some general recommendations for the installation of stone veneer products. These recommendations are not applicable for every product and situation. The NCMA regularly updates their installation guide, and their installation guide takes precedence over any recommendations provided in this document.*

## PREPARING YOUR WALL OVER FRAMING

*The following instructions apply for installation over framing (wood or metal) with sheathing (plywood, OSB, rigid insulation, gypsum wall board, concrete board, or fiber board).*

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

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

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

**STEP 4:** Trowel a 3/8-inch 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".

## SETTING STONES IN MORTAR

**STEP 1:** Dampen the back of the stone and the scratch coat with water. Completely cover the back of the stone with mortar, at least one-half 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. Assure 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 one-half inch 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 (about 30 to 60 minutes), and then point them up with a jointing tool. Weather conditions and the type of surface can influence drying time.

**STEP 7:** Brush joints - remove excess mortar, and 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.

## IMPORTANT NOTES

**USAGE:** Do not use manufactured stone in direct contact with chemicals (de-icing minerals, salt, chlorine), submerged in water, or below grade.

**DRY-STACK APPLICATIONS:** In Dry-Stack Applications in which 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 & SEALING:** Clean stone veneer with a soft bristle brush and water. If stained with mineral deposits or efflorescence, stone may be cleaned with a diluted household vinegar solution (seven parts water, one part vinegar). Rinse thoroughly with clean water after cleaning. Do not use wire brushes, acid, or pressure washing to clean stone veneer. Seal stone veneer in dry-stacked applications or in harsh environments with a breathable, non-film forming masonry sealer.

**Download the NCMA Installation Guide for complete details.**  
**<https://ncma.org/building-solutions/manufactured-stone-veneer/>**