



PRECISION STONE PRODUCTS, INC.

- QUALITY PRODUCTS MADE WITH PRECISION

INSTALLATION INSTRUCTIONS:

Stone manufactured by **Precision Stone Products** can be adhered to virtually any structurally-sound surface: wood framing, metal framing, concrete, or masonry. Proper surface preparation prior to stone installation is vital to ensure a long lasting end result. Ambient air temperature must be **40°F (4.4°C)** or higher at the time the stone is applied or the installation must comply with the cold-weather construction requirements of the local building code. Always check with your local municipal authorities for any building code restrictions and requirements before installing manufactured stone.

Precision Stone recommends using **Type S** mortar for installation, although **Type N** may also be used. Suggested mix quantities are shown below. Different air temperatures and humidity levels may have an effect on the workability of the mortar mix.

* **Type S:** 3 parts masonry cement / 5-7 parts masonry sand / water

* **Type S:** 2 parts Portland cement / 1 part lime / 5-7 parts masonry sand / water

* **Type N:** 2 parts masonry cement / 3-5 parts masonry sand / water

* **Type N:** 1 part Portland cement / 1 part lime / 3-5 parts masonry sand / water

* Pre-mixed mortar can also be used as long as it is specified for use with stone veneer.

APPLICATION OVER WOOD FRAME CONSTRUCTION:

Local building code requirements will vary in different areas of the country so be sure to consult with your local building official on flashing detail requirements and locations. **Proper flashing** must be installed along **all stone terminations and penetrations** to property divert water away from the structure. Exterior wall surfaces are to be covered with a **minimum of two layers of a water resistive barrier** complying with the requirements of the appropriate building code. The appropriate building paper is to be applied horizontally by lapping the upper layer over the lower layer by **no less than 2"**.

Lap all vertical joints by **no less than 6"**. Galvanized expanded diamond mesh metal lath complying with ASTM C847, with a **minimum weight of 2.5lb/yd²**, is to be attached to the **studs spaced 16 in. on center** with galvanized roofing nails. All exterior corners are to be overlapped by a **minimum of 16"**. The nails are to be spaced **6 in. on center vertically** and shall have sufficient length to penetrate into the studs a **minimum of 1 in.** A nominal **½ in. thick scratch coat** of Type-S or Type-N mortar complying with ASTM C270 shall be applied to the metal lath. Depending on the temperature conditions, the scratch coat typically needs **12-24 hours to cure** prior to applying stone veneer. The stone is to be applied to the cured scratch coat with an **additional ½ in. thick bed** of Type-S or Type-N mortar. **Joints between the stone are recommended to be grouted.** A standard masonry grout bag may be used to force the mortar into all spaces between each stone. Depending on the outside conditions, the grouted joints typically firm up within 30-45 minutes and are ready to strike for the intended appearance. Stone is to be installed a **minimum of 4" above any earth surface and 2" above concrete or pavement.**

APPLICATION OVER METAL FRAME CONSTRUCTION:

The application to metal frame is similar to wood-frame construction indicated above with the exception that the metal lath is to be attached with **corrosion-resistant self-drilling, self-tapping screws** having a sufficient length to penetrate **at least ½"** through the metal studs with a **3/8" diameter head.**

APPLICATION OVER CONCRETE / MASONRY CONSTRUCTION:

Precision Stone products are permitted to be applied directly to clean, unpainted, and unsealed concrete or masonry substrates with a nominal ½ to ¾ in. thick bed of Type-S or Type-N mortar. **Joints between the stones are recommended to be grouted.** Painted masonry surfaces and mooth poured concrete walls are **recommended to be covered with galvanized expanded metal lath prior to stone installation to ensure a proper bond.** The metal lath is to be attached using **air-actuated or powder-actuated guns and concrete anchors.** **Do not attempt to operate any air-actuated or powder-actuated device without having proper training and or certification to use these tools.** **A nominal ½ in. thick scratch coat of Type-S or Type-N mortar should be applied to the attached metal lath prior to any stone installation.** The stone is to be installed to the fully cured scratch coat in the same way as with Wood Frame Construction.