



Thin Veneer Installation

Natural Thin Veneer Stone

Surface Preparation

Thin Veneer Products may be installed over most any masonry surface or interior/exterior framed wall. All surfaces should be clean and dry and void of debris or loose material. All building materials, material sizes/gauges, and application techniques should be in compliance with both local building codes and manufacturer requirements. Installation in temperatures below 40°F is not recommended.



The use of type S mortar coupled with an acrylic bonding agent mixed per the manufacturer's instructions is recommended.



Installation of a weep system such as Masonry Technology's Sure-Cavity™ can create an effective percolation system for exterior moisture or interior condensation where needed and/or desired.

Framed Walls (sheetrock, greenboard, or wood sheathing), figure 1:

Install a vapor barrier (two-ply 15# felt or better) taking care to provide sufficient overlap both on the sides and top/bottom. Install galvanized diamond mesh expanded metal lath (2.5 lb. or higher recommended) with galvanized fasteners (or equivalent) 16" on center minimum, and every 6" vertically. Fasteners should penetrate underlying studs at least 1". Corner applications should overlap the lath installed on the wall flats by at least 4". Apply a 1/2" scratch coat and allow to cure thoroughly (24 hours).

Framed Walls (concrete board), figure 2:

Unless mandated by local codes, no specific surface preparation is required. If necessary, however, follow the instructions for sheetrock, greenboard and wood sheathing above EXCEPT for the vapor barrier, which should not be installed.

New Masonry (block or poured wall), figure 3A:

No specific surface preparation is required. For poured walls, be certain that all surfaces are void of any residual form release agents. If necessary, clean with muriatic acid, rinse, and allow to dry completely.

Existing Masonry (painted or sealed concrete, block or brick), figure 3B:

Sandblast the entire surface to remove paint and/or sealer, rinse, and allow to dry completely OR install galvanized diamond mesh expanded metal lath (3.4 lb. recommended) with concrete screws or nails and apply a 1/2" scratch coat. Scratch coat should be allowed to cure thoroughly (24 hours).

Insulated Concrete Forms figure 4:

Apply a vapor barrier followed by a weep system and expanded metal lath taking care to use fasteners of sufficient length to adequately penetrate the poured wall. Apply a 1/2" scratch coat and allow to cure thoroughly (24 hours).

figure 1

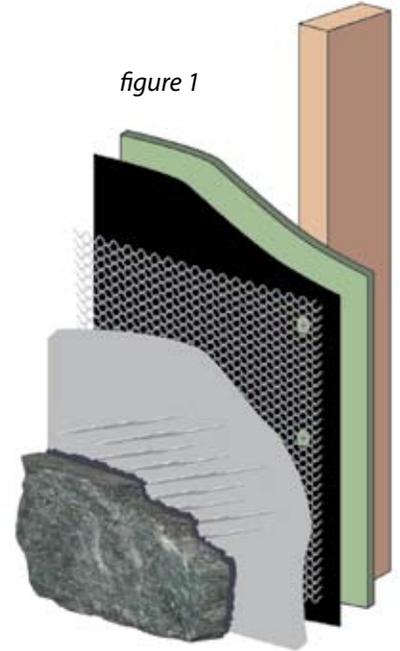


figure 2

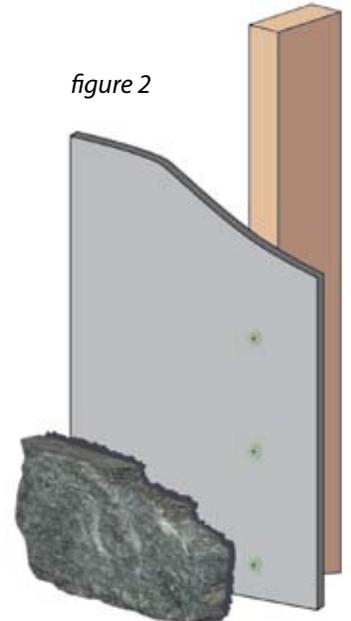
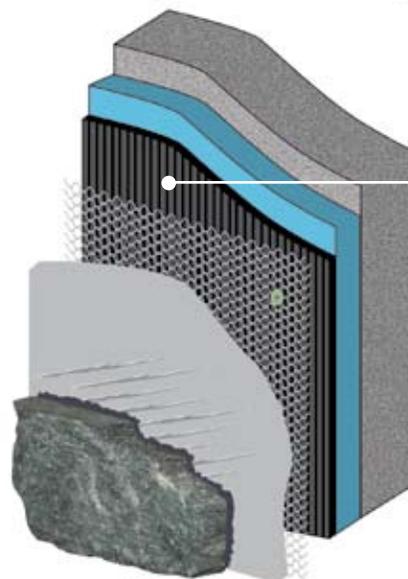
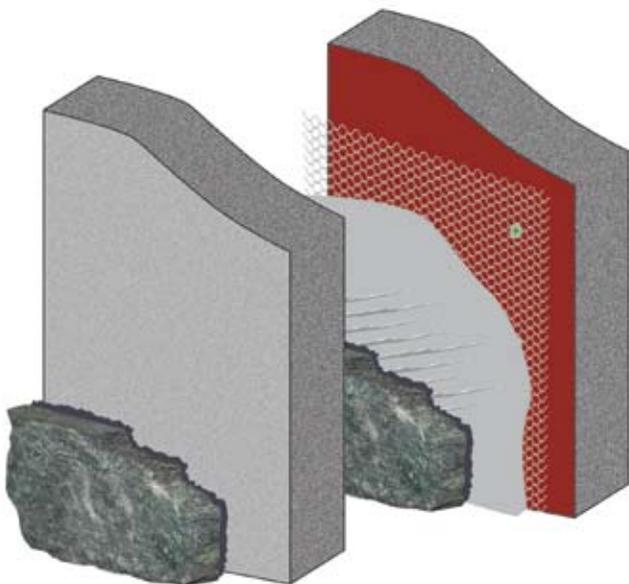


figure 3A

figure 3B

figure 4



CAVITY WEEP SYSTEM INSTALLED DIRECTLY OVER THE VAPOR BARRIER



Natural Thin Veneer Stone

Trimming & Setting the Stones

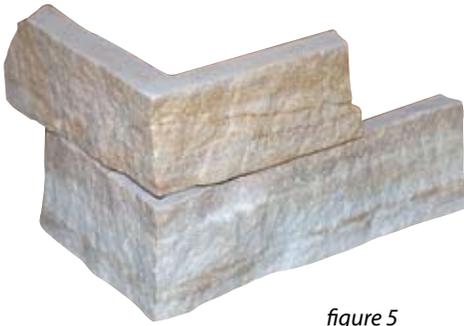


figure 5

Wash or brush any dirt or loose material from the back of each stone and allow to dry thoroughly. Install the corners first, beginning at the bottom of the structure. Most corners are irregular in length and look best when the “long” and “short” sides are alternated as you go up (figure 5).



figure 6



figure 7

Trimming: Perhaps the most efficient method for trimming thin veneer is through the use of a 4” angle grinder equipped with a diamond blade* (figure 6). Cuts made at an angle from the back (sawn) side at 1/2 depth will allow the stone to be “snapped” with a small hammer along the cut line leaving a natural edge on the front side.

Setting: Using a mason’s trowel, “butter” the back of the stone completely with an even layer of mortar approximately 1/2” thick with a small amount of additional mortar placed in the center (figure 7). Press the stone against the prepared surface and wiggle/rotate slightly to create a firm bond between the two surfaces. A small amount of mortar should “squeeze out” on all sides of the stone filling the joints as you set additional pieces (figure 8). Take care to keep the joints between the stones consistent and to stagger the vertical joints.



figure 8



figure 9

After all of the stones have been set, mortar can be applied to the joints via a grout bag (figure 9) or pointing trowel. Work your way through the field from bottom to top, forcing the mortar into the joints or any voids that may exist. Note that joint treatments vary by region and individual preference. Be sure to take into account the joint mortar depth required by your specific job as you work your way through the field. If any mortar lands on the face(s) of the stone during the course of installation, allow it to dry slightly and then brush or sponge off any residue.



figure 10



figure 11

When the mortar becomes firm (30-60 minutes depending on climate and temperature) use a striking tool to rake the joints to the desired depth (figure 10). Finish with a brush or whisk broom (figure 11). After the stone has set for a minimum of 48 hours, wet it down with water and apply a mild detergent with a soft-bristled brush. DO NOT USE ACIDS OR SOLVENTS.

* The wheel guard on the angle grinder pictured has been removed for illustrative purposes only. Be sure to follow all safe operating instructions included with your tools and to wear both hearing and eye protection.