

Great Lakes STONE Supply, Inc.



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Do-it-Yourself / Stone Veneer

There are two basic types of installations that we will cover. One is what we will call “installing over a scratch Coat”, and the other we will call “attaching directly to concrete or concrete board”

Installing over a scratch coat

Most professional installers prefer this method. It insures good adhesion, and they are in control of the structural integrity of the application.

This method uses a metal lath or a fiberglass mesh lath that is mechanically attached to wood, icf, or other surfaces that may be painted or sealed. For example, a block or poured foundation that has been painted or sealed must have a metal lath attached to it with concrete anchors, as the mortar will not stick to the paint or sealer.

NOTE: Attaching directly to unsealed, unpainted concrete or cement board you can **skip steps 1-8 below**, and when you are ready to apply stone, you should dampen the area you are working on, as this will make a slower cure time for your mortar, achieving better adhesion. Use a polymer additive to your mortar; this will also help with adhesion.

Go ahead to step 9 below!

1. For inside installation: Attach lath to wood, preferably over plywood, or concrete using the appropriate fasteners. Make sure you nail into the studs!

2. For exterior installations: Take off the Tyvek or other house wrap, then install ddpaper. **THIS IS NOT TARPAPER!!** This is a breathable grade D paper that comes in two layers, so you put it on once, and it already is double layered. Then you install the **Mortairvent®**. This allows a breathable weep gap behind the mesh. Install the Lath.

3. Mix a batch of mud. We stock a Spec-mix type S stone veneer mortar, a 4000 psi mortar with some Air, and some polymers added. This is a premixed mortar that has your sand, Portland cement, and lime. Just add water! This is what our customers have told us is the best all-around mortar, using the same product for the scratch coat, laying the stone, and grouting. The easiest way we have found to mix mud is to use a 5-gallon bucket, a speedy mixer, and an electric variable speed ½” drill.

4. Pour about 2 inches of water in a bucket.

5. Pour in about a ¼ of a bag of mortar, and mix it up. It will be kind of soupy. Keep adding mortar until you get a nice creamy consistency. The way I can tell if the batch is good, is to run your finger through the top of the mud, making a crevice. The mortar should sluff into the crevice, but not fill in. The mud should not be at all crumbly, or cracked up when you run your finger through it.

6. We should note here that you must use common sense when working with mortar, as you can get “burned” from concrete!! Used gloves, and all safety gear! We will not be held responsible for someone messing up or getting hurt. This is how I would do it, as a guideline to help you, not to hurt you!

7. Cover the lath with a coat of mortar, and finish it off with a notched trowel. This will give you a “scratch coat”.

8. Allow the scratch coat to dry for at least 20 minutes, maybe longer in cooler or damp situations. You want the base coat to set up a bit. You can leave this scratch coat indefinitely. For example, you have time this weekend to scratch coat your foundation, but have to leave for two weeks before you start laying stone. That’s fine!

9. Now we are ready to start laying the stone! As with any trade, having the right tools will make your life much easier! Can you imagine framing a house without nail bags, speed square, pencil, hammer and tape? You could still do it with a pipe wrench to pound nails, use your kid’s ruler for measuring, use a notebook for a square, and a nail for a marker! The same for your stone masonry tools! You will want to have a steel notched trowel, masons trowel, a tuckpointer, an x-stand for your mudboard, speedy mixer, drill, bucket trowel, grout bags, and a mason’s brush. You can get all of this for just a couple hundred bucks, or borrow it if your job is smaller.

10. Lay out plenty of stone so you can see selections, but don’t try to lay it out to fit on the ground, because you usually can never duplicate what you laid out on the ground or template on the wall. Some stones may not be positioned exactly as they were on your template, and now you have taken twice as long as a professional!

11. Choose a stone to lay, making sure it will fit where you want it. Apply a layer of mortar to the back of the stone, forcing the mud to the stone.

- 12.** Apply a bead around the outside of the stone, making a thicker ridge around the edge.
- 13.** Press the stone to the wall, wiggling and pressing to insure a good seat.
- 14.** Use the excess mortar that squeezes out for your grouting, or scrape it off and put it back into your mud pile.
- 15.** Try to lay your stones with consistent joint sizes.
- 16.** For a dry-stack application, (indoor use only) we would recommend that you lay the stones from the bottom and work your way up.
- 17.** For all other manufactured stone applications, start at the top and work down. Keep your hands clean; don't pick up a stone with wet mud on your hands! If you drip mortar onto the stones, if it is a clump, let it dry, and it will flick right off. If it smears, you will want to wipe it off real well with a damp rag or sponge. This will keep your stone cleaner, and make your cleanup much easier. Since it is a concrete product, you cannot use a muriatic acid to clean the stone. Using an acid will void your warranty, and eat the color from your stone.
- 18.** For all natural stone, start at the bottom, and work towards the top. You can be as messy as you want, because you can acid wash it when you are finished.
- 19.** Use a grout bag filled with mortar and squeeze mortar into the joints
- 20.** Let the mortar set up a bit, then use a tuckpointer to seal the mortar to the stones, filling all holes and voids.
- 21.** Let the grout set up till it is pretty hard, and strike it using scraping motions with your tuckpointer, or use a thin piece of wood, like a paint stir stick, cut narrow so it fits between the stones, and smooth the grout. This will bring a nice sandy texture to your grout.
- 22.** Brush the stones and grout with a masons brush, or horse hair brush.
- 23.** Now you can seal the stone, with a sealer that will not change the look, or with one that gives it a slight sheen, or a wet look.