

KASTONE

INSTALLATION INSTRUCTIONS

IMPORTANT: Carefully read the entire installation instructions prior to beginning. If you have questions regarding any part of the installation process, call your selling agent. Before beginning installation make sure the substrate, on which the stone will be applied, is structurally sound and conforms to all local codes. Any damage to the stone resulting from movement in the substrate is not covered by the stone's warranty.

If applying stone to a stud and sheathing wall, start at step 1.

If applying stone to a masonry or concrete wall, start at step 3. It is **very important** to make sure that the masonry/concrete substrate is clean and free of any substances that could prohibit bonding of the scratch coat (paint, sealers, oils, etc.). If the wall contains anything like this, it will need to be carefully etched with acid and scrubbed with a wire bristle brush in order to create an adequate bonding surface.

STEP 1: VAPOR BARRIER

Install 2 layers of vapor barrier material using galvanized roofing nails or staples. Overlap all seams by at least 3”.

STEP 2: METAL LATH

Install metal lath over the vapor barrier using the same galvanized roofing nails or staples every 6” vertically and penetrating at least 1 ¼” into the studs. Make sure the “rough cups” of the lath are pointing up so as to better hold the scratch coat of mortar. Overlap lath seams by 16” at all inside and outside corners and 4” on vertical and horizontal seams.

STEP 3: LAYOUT STONE

In order to assure a good mix of colors, textures and shapes it is necessary to select pieces of stone from several different boxes. Arrange these pieces on the ground in the order you will put them in the wall. If you have outside corners, start your layout with your corner pieces and work in from the corners with your flat pieces. This is time well spent and will speed-up the installation of the stone.

STEP 4: SCRATCH COAT

Mix mortar as per instructions on the mortar bag. Mortar that is too dry will not bond properly and mortar that is too wet will be weak and messy. Depending on the style of stone you have, this will determine where you begin applying the scratch coat (see step 5 below). Apply mixed mortar to the metal lath or directly to the masonry/cement wall, using a “float trowel” to an overall thickness of approx. ½”. **Do Not** apply more than 5-10 sq. ft. of scratch coat at a time so the mortar doesn’t “set-up”. You are now ready to apply the stone pieces.

STEP 5: APPLYING THE STONE

Apply the stone starting at the top of the wall and work down whenever possible. This will minimize mortar droppings on the stone below. All ledgerstone styled stones should be laid from the bottom up and leveled. If you have outside corners, begin by setting some of your corner pieces selected from your layout and work in from the corners. Apply enough mortar to the back of the stone so that some excess mortar squeezes out around the edges when applied to the scratch coat. Press the stone piece firmly into place and hold there for a few seconds to assure a good bond. Alternate the long and short lengths of your corner pieces so your joints stagger. Select your first flat piece from your layout. Apply mortar to the back of it in the same manner and apply this piece next to your corner piece, paying close attention to your joint spacing. Work toward the center of the wall using cut or smaller pieces to fill in gaps between larger pieces, if needed. Broken pieces from shipping work well for smaller pieces. Long rectangular pieces should be laid horizontally.

Continue this process and Step 4 until all the stone is on the wall. If you are using Trim Stones (Quoins, Window Trims, Keystones) set those trim pieces before you set the flat pieces, in those areas. If you determine you do not have enough stone to finish, stop laying the stone, bring in the additional stone and mix the remaining stones in order to minimize color, texture and shape differences.

STEP 6: *GROUTING AND FINISHING JOINTS*

Not all styles of stone require grouting and finishing. Make sure there are no obvious holes or voids in between pieces. If there are voids, fill them with mortar so as to make it look more natural. If your style stone requires mortar joints, use a grout bag to apply mortar to the joints. Fill the bag half full with mortar soupy enough to squeeze from the bag, but not too soupy to run. Apply enough mortar to the joints to achieve the desired depth and look. To finish the mortar joints, wait until the mortar has become semi-hard but still workable. Use a wood stick, jointing tool or your finger to smooth the joint. **Do Not** over-rub the joint because this will cause the finished joint to be discolored. Wait until mortar is crumbly dry to brush excess mortar from the face of the stone. See Step 7 below for additional cleaning instructions. **Do Not** let the wall get wet during and at least 48 hours after installation is complete.

STEP 7: *CLEANING AND SEALING THE STONE*

If you worked from the top down and you brushed away any excess mortar when you finished your joints then there should only be a minimal amount of cleaning required. The key to cleaning any mortar stain is to do it within the first 48 hours after installation. **Do Not** use anything other than a brush to clean this stone. **Do Not Use:** a wire bristle brush, any acid based cleaners, power washing, sandblasting or anything that could attack the surface finish. Sealing the stone is not a requirement, but if desired use a silane-based breathable sealer. Most sealers will darken the overall color of the stone, so always pretest.