

# GENERAL INSTALLATION GUIDE



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*The Zion Stone General Installation Guide provides generally accepted methods and details for the installation of our manufactured stone veneer. This is intended as a guide and not intended for any specific project. There is no expressed or implied warranty or guarantee of the techniques, methods or materials identified. It is understood that there are alternative methods that might be required and/or recommended based on the specific project and/or mason/contractor recommendations.*

***Please review other AMSV Installation Requirements at [zionstone.us/install](http://zionstone.us/install).***

*Please note that we recommend the use of Type S mortar.*

- If stone is exposed on the exterior, a water resistant barrier that is either one layer of house wrap or two layers of felt with layers of 2-inch laps horizontally and 6-inch laps on vertical seams may need to be installed. Corners should be wrapped continuously at a minimum of 16-inches. Make sure it's smooth so lath may be applied over the felt.
  - Please note that it is not necessary to apply felt and lath to unpainted brick, block, or stucco. Stone can be applied directly to these surfaces with a scratch coat of mortar.
- If using metal lath, attach horizontally, rough pointed edges up. Penetrate galvanized roofing nails into the studs at least 1 inch, every 6 inches on center vertically. Lath should be overlapped 1-inch horizontally and vertically. Make sure that it is tight to the wall, smooth and without bumps.
- Stone can also be applied directly to durock or concrete board with a scratch coat.
  - Prepare Type S mortar mix (or Floor Tile ThinSet) with the instructions on the bag. The mortar should hold thick to a pool trowel without instantly sliding off.
  - Scratch the mortar horizontally with a masonry stiff brush, with sufficient pressure and thickness to fully embed the lath and felt (if used) to ½" - ¾", leaving no voids. This will ensure a good bond.
    - Before applying, ensure moist curing of the scratch coat. The scratch coat should be damp so the surface appears wet without standing water. This prevents cracking and proper hydration, and is vital for laying stone in hot weather. Please note that it is not recommended to lay stone outside in freezing temperatures.
  - Lay out the stone design at least 25 square feet at a time before applying to the wall. There should be a variety of sizes, shapes and colors to choose from in your design. Please refer to [zionstone.us/stone](http://zionstone.us/stone) to see suggested design styles. We package our stone exactly how they should be laid on the wall, but anyone may mix our stones to create their own unique design.
  - Apply the stone veneer using the same stone mortar mix used for the scratch coat. Butter the back of the stone with a nominal ½" thickness of mortar over the entire back (not just the perimeter).
  - Pin the stone to the surface, wiggling it with a back and forth motion. Push with enough pressure to get the mortar mix to push out on all sides. The stone and mortar should begin to bind within a couple seconds of setting it in place. Once set, do not make any further movement to the stone.
  - If desired, use a level to ensure that each stone is even and holds its horizontal look.

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- If a piece that has been applied needs to be moved to a new area, remove the stone from the original surface and the mortar on the back, as well as from the scratch coat. Start again at step A. Stone can usually be chiseled off with a chisel tool and hammer.
  
- OPTIONAL: If a grout-look is desired (non-dry stack, fieldstone, river rock), apply the remaining amount of stone mortar mix at least 30 minutes after applying the completed stone design to the wall with a grout bag (similar to a cake design bag). Strike the joints by applying enough pressure to ensure the mortar is set in place and no air pockets are visible. Brush the joints to remove any excess mortar, avoiding getting the mortar on the stone as this will cause a hazed look.
- OPTIONAL: If desired, apply a 100% acrylic concrete sealer. Avoid ultra gloss sealers which can lock in excess water. Brush away excess dust by using a slightly moist non-cotton hand towel. Allow the stone to dry completely, then apply an even coat of sealer. This will create a shiny look on the surface of your stone that may need to be refinished annually depending on its location (an exterior coat of seal will need to be refinished more frequently than an interior one).
- DO NOT apply stone to drywall/sheetrock or with any type of glue. Drywall/sheetrock projects will need to be covered with durock/concrete board/backer board in order for stone to stick properly.
  - Stone can be laid directly to James Hardie board, but it is more difficult to work with than Durock.

Avoid pressure washing and using any cleaning solutions on the stone, especially acid. Do not use a wire brush. To clean, use a slightly moist non-cotton hand towel or soft brush to lightly take away dust and dirt. Exterior surfaces may use a low pressure hose. Please review our policy for more information on warranties ([zionstone.us/policy](http://zionstone.us/policy)).

***Please send a picture of your project to [info@zionstone.us](mailto:info@zionstone.us) or message us on Facebook!  
Relax and enjoy your project from Zion Stone!***