

Cronin Stone Installation Instructions

(Exterior Over Sheathing)

Ardex Engineered Cements will warrant that properly installed Cronin Stone will remain securely bonded to recommended substrates for a period of 10 years when installed in accordance to their written recommendations using Ardex X9 Mortar. Ardex X9 can be used in wet and/or cool weather without creating efflorescence or latex-leaching. Backerboard installations are more resistant to efflorescence than scratch-coat installations because they have already cured and they are formulated with very little lime.

Preparation: Surface to be tiled must be sound and properly flashed to prevent water from entering the installation from above.

Important: Keep boxes standing upright to prevent damage. The individual pieces are glued together to facilitate quick and accurate installation, but the panels are not structural. Some panels will break if boxes are laid on their sides.

1. Starting from the bottom, apply 2 layers of No. 15 asphalt felt per ASTM D 226, Type 1 to the sheathing. Overlap side joints a minimum of 3" and overlap vertical joints 6". Upper layers must lap over lower layers. Attach felt paper with galvanized staples.
2. Staple Mortairvent® over felt paper on area where backerboard will be installed. You only need enough staples to hold it in place, the backerboard nails will go through the mesh in the next step. In installations extending to the soffit or roof framing, attach a 1" strip to the bottom of the roof or soffit framing and maintain a ¼" gap between the stone and framing to allow air to pass through.
3. Attach ½" Wonderboard over sheathing using 2" galvanized roofing nails every 6"– 8" in field and 1-2" from edges. Stagger joints with those of adjacent rows. Where open mesh wrapped edges meet, fill the gap completely with Ardex X 9 thinset. On all other joints, prefill the gap with Ardex X 9, then embed 2" alkali-resistant mesh tape and smooth Ardex X9 over joints and corners.
4. All exterior corners should be waterproofed. Trowel on a thin layer of Ardex 8 + 9 about 3" wide on both sides of the corner and embed Ardex SK50 4 ¾" mesh. Trowel over the top of the mesh after it is in place with a thin layer of 8 + 9 and feather the edge to the backerboard. After the first coat dries, apply a second coat to be certain all voids are filled. Allow the second coat to dry thoroughly before setting the stone with Ardex X9 thinset.
5. **Although not required, we recommend rolling the entire backerboard surface with 2 coats of Ardex 8 + 9. This will permanently waterproof the installation and when combined with the Mortairvent® mesh provides the safest installation available to prevent water damage and mold growth. This method far exceeds local building codes and standard practices but is inexpensive insurance against long-term moisture-related problems.**
6. All exterior installations require flashing to prevent water seeping in behind the installation — consult local building codes. A Foundation Weep Screed is required at the bottom of a framed wall. Use a #7 or #36 type screed with a 3 ½" vertical leg.
7. Caulk around windows and doors with a perimeter sealant between the Wonderboard and the window or door frame. The sealant selection should be confirmed with the window/door manufacturer.

8. Lay pieces of Cronin Stone out on a flat surface and measure area to be covered. Determine the best layout so that no tiny slivers are left after cuts are made. Note that Cronin Stone is slightly different on each side and pieces can be turned either way for installation. Turn pieces to be cut as needed to achieve the best finished layout.
9. Establish bottom working line that is level. If cuts are needed on the bottom pieces, a level board can be temporarily attached to start the second row. This board can be removed after mortar has set and bottom pieces can be cut in.
10. If there are outside corners, you must start the installation from the outside corner. Install stone panels on each side of the corner and stair step up to maintain good working lines. If there are 2 outside corners on a wall at least 1 side will need to be cut in: Check measurements and lay out cuts to keep as large of pieces as possible. (**Important note:** Corners come 5 pairs to a carton. Each pair is a matched set; your installation will be easier and look better if you keep the corners paired as they are in the carton.) The long and short side of the corners can be staggered as you add rows for a more random look or you can stack them all the same if a more uniform look is preferred.
11. Mix Ardex X9, following directions on the bag and prepare to set tile, working from several boxes, or multiple crates on large jobs.
12. Spread Ardex X9 with either a Platinum Series PINT3 trowel or a 1/2" x 1/2" square notched trowel after keying in the mortar with the flat side of the trowel. Spread only as much mortar as you can cover before it skins up, being especially careful in hot or windy weather. Test frequently with your glove; if you press on the spread out mortar with your glove and mortar sticks to it the mortar is still good. If mortar does not stick to your glove when touched, it needs to be re-troweled.
13. With the flat side of your trowel, spread a layer of mortar over the back of each stone panel and immediately place in the troweled mortar. Continue up the wall maintaining level courses of stone. Keep the face of the stone clean as you proceed. Mortar can, in most cases, be cleaned off the next day but it is far easier to clean as you go.
14. After the stone is set, or at the end of each day, clean mortar off of the surface of the stone with a sponge and clean water. No grouting is required.
15. All exterior installations must be properly be flashed

Once mortar has cured, Cronin Stone can be washed off with a hose for normal cleaning. If heavy cleaning is required, mild acids and/or a stiff brush will not harm the stone. Phosphoric or sulfamic acids are recommended at a concentration of 5%. Rinse all cleaning solutions thoroughly with clear water after cleaning.