

BASIC INSTALLATION INFORMATION AND COMMON QUESTIONS



Basic Installation information and Common Questions

Moisture Control

- * There should be 2 layers of weather resistant barrier behind the lath and scratch coat to restrict the transmission of moisture to the surface behind.
- * Acceptable WRB combinations are as follows:
 - 2 layers of felt
 - 2 layers of grade D paper
 - 1 layer of house wrap used with either felt or paper
- * The ½” scratch coat should completely cover the lath, leaving no voids.
- * Flashing should be installed prior to the adhered stone units on all doors and windows.
- * All flashing and flashing accessories must be corrosion resistant material and integrated with the stone materials.
- * Again, flashing must be installed at all through wall penetrations and at termination of stone installations.
- * Rainscreen Drainage Plane Systems(Optional) are techniques that have been used in construction for years. These techniques are typically used to improve the escape of incidental water and decrease drying time. Rainscreen products (such as drainage mats or formed polymer sheeting) or construction techniques (such as strapping or furring) that create a capillary break/air space between the cladding and the primary water resistive barrier can be effectively incorporated into Horizon Stone applications.
- * Flashings/Weep Screeds/Casing Bead/Movement Joints
all flashing and metal detail pieces should be manufactured of corrosion resistant material.
Verify that all flashing, including roofing kickout flashing, has been properly installed. Although roof flashings are not part of the wall cladding system, they are necessary for proper moisture management. Flashing material should extend above horizontal terminations, roofing material, and drainage planes or drainage products.
All flashing material should be integrated with water resistive barriers To prevent moisture penetration into structure. The WRB should overlap the weep screed flange.
Do not install Horizon Stone over movement joints.

How to prevent cracking

- * Metal lath and WRB needs to be wrapped continuously around all outside and inside corners a minimum of 16 inches and also attach every 6 inches at the next stud. WRB should lap WRB and lath should lap lath.
- * On flat wall areas, metal lath needs to be overlapped 1 inch horizontally and vertically. WRB should be overlapped 2 inches horizontally and 6 inches vertically. WRB should lap WRB and lath should lap lath.
- * Mortar mixed with higher cement content may be prone to cracking.

Bond

- * When attaching stone, it is important to butter the entire back, not just the perimeter, with a nominal ½ thickness.
- * Prior to application of mortar to the backs of the stone or the scratch coat, the back of the stone should be moistened so that the surfaces appear damp but without free standing water. This is especially important in hot conditions.
- * Moist curing the mortar scratch coat will help to ensure there is minimal cracking and proper hydration. Before applying the stone, the mortar scratch coat should be dampened so that the surface appears wet but without free standing water. Again, this is especially important in hot conditions
- * All stone pieces, especially large ones, should be firmly worked onto the scratch coat and slid slightly back and forth with a slight rotating motion to set the stone. The installer should start to feel the stone grab within a few seconds. At this point, no further movement of the stone should be made as the bonding will be broken. If the stone is moved after the initial set has begun, it should be removed, mortar scraped off the back of the stone and scratch coat, and then reattached properly.
- * Grouting the joints should be completed after there is sufficient cure time of the installation of the stone units, when mild contact will not break the bonding.
- * Horizon recommends using type "S" mortar mix.

Cold Weather

- * The use of anti-freeze admixtures to lower the freezing point of the mortar is not recommended.
- * Stone pieces containing visible frozen moisture shall not be installed.

Cleaning

- * Do not use muriatic acid or harsh chemicals to clean stone.
- * Do not use a wire brush to clean surface.
- * Do not use pressure washers to clean stone.
- * It is recommended to use a soft brush, soap, water, and a low pressure hose to clean stone.

Common Questions

* *Is the quantity on the box figured with a mortar joint?*

Answer: All Horizon Stone boxes contain the actual square footages as stated on the box except for 19th Century. It is figured with a mortar joint.

* *How much mortar is needed for a job?*

Answer: It varies depending on the mason. However, typically the following should work:

Drystacked: 3-4 bags per 100 square feet.

Mortar Joint: 4-5 bags per 100 square feet.

* *Can you use hearthstones for steps?*

Answer: It is not recommended to use hearthstones for steps or to drive on.

For more information visit our website at www.horizon-stone.com, visit the CMHA website at [Concrete Masonry and Hardscapes Association](http://ConcreteMasonryandHardscapesAssociation.com), call our office at 423-629-0801, or call your sales representative.