

that extends from behind the stucco over the sloped stone piece. The flashing must be sloped as well.

Embedded Ledger Boards

It is common to see the ledger board embedded in the field of the stone. Unfortunately, this condition promotes premature deterioration of the ledger board due to a lack of flashing and waterproofing. Mortar absorbs water and acts as a sponge. When the ledger board is constantly in direct contact with a wet sponge, it will rot out much faster.

An easy way to avoid this problem is to isolate the embedded ledger board from the mortar and flashing over the top to shed water to a surface below. The top edge of the ledger board should be beveled and the flashing should be positively sloped to avoid ponding water. Below the ledger board, it is best to install a flashing that extends from behind the ledger board over the stone below. This way, when the ledger board is replaced, it will not damage the surrounding stone. Another option would be to seal the interface between the bottom of the ledger and the top of the stone.

Roofs

The kickout flashing may be the most important piece of flashing on the building that has to transition between surface products. After the windowsills, the second most common error is when a kickout (or diverter) flashing at rake wall terminations is missing. Without the kicker flashing, the water is channeled into the stone veneer, which not only increases the likelihood for debonded stones, but also ultimately allows excess water into the moisture-managed system. Further, it is common to cut the building paper around the rake termination, so not only is the water directed into the stone veneer, but also behind the weather barrier. Make sure kicker flashings

are installed and make sure the weather barrier is continuous behind the flashing to catch any incidental water.

Maintain clearances above the roofline similar to the clearance above the concrete and asphalt at the first-floor level. Installing a trim accessory such as a weep screed can be useful for setting the stone clearance height prior to the actual stone application.


Protective Coatings

Some homeowners want to install a clear waterproof coating over the stone veneer, wishing to protect the stone from weathering. If this coating is planned for the home, it must be a vapor-permeable coating, such as a silane or siloxane. If an impermeable coating is installed, the natural drying ability to the exterior is reduced. Combined with walls full of insulation and an interior vapor retarder, deficiencies that allow water behind the stone result in a wall that cannot dry to the interior or exterior. Moisture-sensitive building materials (i.e., wood) will deteriorate even faster. A coating will not save the system if the underlying materials have been improperly installed.

Summary

Stone is functionally similar to stucco; even stone manufacturers disclose this. Stone requires equal or better weather-

proofing details than stucco, especially when dry-stacked. If the architect or client insists on the dry-stack look in a cold climate, then greater attention to waterproofing details, application techniques, and manufacturer requirements must be adhered to in order to avoid costly callbacks. It all starts with a proper weather barrier. This is the most important step in any façade installation, especially stone.

Synthetic stone veneer is here to stay. Stone has been used as a building material since man moved into caves and called them home. Synthetic stone is a product that will continue to be utilized in the construction of buildings. With improved manufacturing techniques, almost any stone architectural “look” can be achieved and appear completely natural. Unfortunately, waterproofing techniques and the skill of application have not caught up with the improved stone manufacturing techniques and “tighter” construction practices. 

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