

Question

Do you really need flashing under stone masonry or precast sills?

Answer

Yes. Even one-piece stone or precast sills may take on moisture at the interface of the sill and masonry jamb, window failures, material imperfections, or porous material structure. The primary purpose of flashing under sills is to protect the wall below. If there is a moisture penetration problem, it is easier to repair a sill than to fix the wall. In other words, it is preferable to collect and divert moisture to the outside as quickly as practical rather than to hope it finds through-wall flashing elsewhere.

In general, whenever flashing is installed in a masonry wall you should also install weep vents – masonry sills are no exception. Without weeps, water may become trapped behind or under the sill. This water could eventually enter the building or deteriorate the mortar and/or sill through freeze thaw cycles.

Weeps can be installed in sill head joints or between the sill and the flashing. Examples of under sill weeps may include: rope wicks, tubes, half-tubes, or cell vents lying on their sides. Of course, care should be taken to keep mortar from clogging the weep vents.

Depending on sill details, length and weight, building configuration, and exposure to weather, some designers may want to tie sills to the wall with clips on the backside, end to end ties, or sill to wall ties from below. When details call for ties to penetrate flashing, a high level of craftsmanship is required to create a water resistant detail.

Other than masonry ties, strategies to keep sills in place include mortar bond with masonry jambs, weight of the stone itself, and/or ribbed metal flashing (not too common).

Additionally, do not try to span the wall cavity with non-rigid flashings systems. Extreme care should be taken to prevent sags, which may collect water and eventually leak into the wall system or building. And be sure to remember those end dams.

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End dams good. Sagging bad. Install through-wall flashing to complete this installation.



Weep installed under sill