

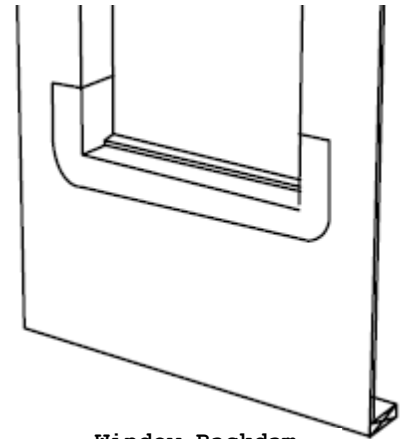
ABCO Technical Bulletin

Sill Pans and Backdams

The proper way to address residential windows and doors is to install an under “gutter” or pan flashing and then create an interior air seal. If and when the window or door leaks the leaking water is drained back to the exterior without compromising the performance of the window or door. Installing sill pans under windows and doors and adding backdams for windows are an excellent way to keep water out of your structure. Sill pans and backdams combined with proper installation of the product and flashing provide you with confidence of your installation.

All windows and doors should be installed in a drained and weeped opening. Sill pans can be purchased as a manufactured product and most of these have a built in backdam. Manufactured sill pans are typically made from molded PVC and can be adjusted for width. Follow the manufacturer’s installation instructions exactly.

If flexible flashing is used to form the sill pan, you will need to install a backdam prior to the flexible flashing. The flexible flashing should be a bituminous product and wide enough to fully cover the sill and extend down the front of the wall a minimum of 4 inches. Be sure to cut the flashing long enough to form end dams that extend up the sides of the jamb 4 to 5 inches. ASTM E2112, Section 5.16 provides further guidance for pan flashing.



Window Backdam

5.16 Pan Flashing Systems and Subsills for Weatherability

5.16.1 Where through-wall pan/sill flashings are provided, these flashing shall be sloped toward the exterior. The interior side and the ends of the flashing shall be panned to prevent water from flowing off the flashing into the wall or onto interior finishes. The height of the pan shall be appropriate for the fenestration product being installed, per manufacturer’s instruction or the advice of a design professional. To determine the minimum height requirement for the interior height of the pan flashing, refer to Annex A3.

5.16.2 When used, pan flashing system, sill and subsills, shall be designed to divert water to exterior of the building.

5.16.3 The panning system and subsill ends shall prevent water from entering the walls at the lower corners of windows. End dams shall be incorporated at both ends of the panning sills and subsills to restrict water entry. See Annex A3 for pan heights with detail.

Additional information can be found in the Water Management Guide, by Joseph Lstiburek, available from the Energy & Environmental Building Association (EEBA).

ABCO Construction Services Corporation has developed this information for its clients and friends. The information may contain citations of applicable codes, manufacturer’s recommendations and best practices from noted sources.

It is ABCO’s desire to present the topic in an unbiased manner, using generally accepted references, to allow those confronted with the topic to make an informed decision. If you have any questions or comments please feel free to contact ABCO.

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