

# Avoiding Sealant/Flashing Incompatibility

Preventing water from intruding into a building is very important, but equally important—and often overlooked—is the compatibility of materials used to protect against moisture damage. Weather-resistive barriers, window flashings, and sealants must be effectively integrated with sheathing materials and fenestration to form a comprehensive moisture control system.

Most sealants on the market contain plasticizers, and a lot of them prove incompatible with newer, self-adhering flashing products incorporating rubberized asphalt. When the two are combined, the rubberized asphalt can go soft and liquefy over time.

Luckily, these problems can be easily identified and avoided when manufacturers test their materials with other products. As such, the specifier should select materials only from those manufacturers who test their products regularly for compatibility, heeding their recommendations for the flashing and sealant materials intended for use in the project.

Rubberized asphalt self-adhering flashing is universally incompatible with products made of flexible vinyl (PVC). For example, a contractor once used a flexible vinyl brick flashing product in conjunction with rubberized asphalt self-adhering flashing. Predictably, the asphalt liquefied and flowed onto the housewrap.

Another contractor used a flanged window constructed with a flexible vinyl gasket integrated into the rigid vinyl frame. He then applied a rubberized asphalt self-adhering flashing product to flash the window structure. This installation failed almost immediately.

When these products come into contact with one another, the rubberized asphalt breaks down over time, and the protective value of the flashing diminishes because of the plasticizer

issues described above. The incompatibility seen with flexible vinyl products seldom occurs with rigid PVC products because the latter do not contain plasticizers.

The specifier can do a number of things to prevent compatibility problems, the most important of which is to use only those sealants recommended by the manufacturer of window flashing systems.

In addition, the American Architectural Manufacturers Association (AAMA) Window Installations Masters Program™ offers guidance on sealant compatibility. When a flashing manufacturer cannot suggest a compatible sealant, AAMA recommends obtaining documentation from sealant manufacturers on the compatibility of their products with others intended for use in the project.

AAMA also specifies compatibility with all surfaces coming into direct contact with the sealant. All materials must retain their properties after being integrated. Some common indications of incompatibility are when the sealant shows signs of hardening, softening, tackiness, loss of adhesion, discoloration, or bleeding. When in doubt, always obtain documentation from the manufacturer regarding compatibility between the various materials and the sealant.

The manufacturers of rigid vinyl windows should be able to recommend compatible sealants for their products.

In the event of a compatibility problem, the specifier should immediately contact the manufacturer of each building component involved to uncover any incompatibility issues. Reputable manufacturers are equipped to test their materials in combination with other manufacturers' products, and should not only actively participate in identifying the source of the problem, but in finding the solution, too. ♥