

Window and Door Sealant Compatibility with ZIP System® Sheathing and Accessories

ZIP System® sheathing is a combination wood structural panel with an integrated water resistant overlay that eliminates the need for building wrap or underlayment. ZIP System® sheathing and ZIP System® R-sheathing are code recognized in ICC-ES ESR-1474 and ESR-3373 (respectively) as an alternative to the water-resistive barrier required in Chapter 14 of the IBC and Chapter 7 of the IRC. ZIP System® sheathing and R-sheathing satisfy the air barrier requirements as defined by the International Energy Conservation Code. In addition, taped ZIP System® sheathing is recognized in ICC-ES ESR-1473 as an alternative to traditional roofing felt or other roof underlayment. In order to achieve a continuous water control layer in the wall assembly, there are certain details such as window and door flashings which may require window and door sealants to interact with ZIP System® sheathing and ZIP System™ flashing products. For these interactions, Huber Engineered Woods (HEW) has carried out internal testing, using its own internal criteria and standards, to provide direction on compatible sealants for use over ZIP System® products at window and door fenestrations.

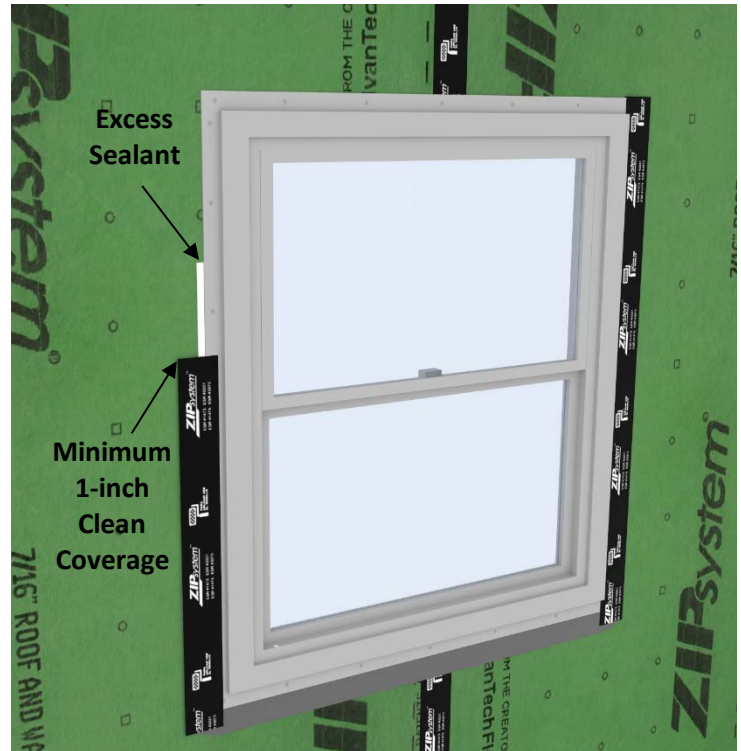
Always follow the installation guidelines provided by the sealant manufacturer. Field testing of sealant compatibility is recommended. ZIP System® sheathing and R-sheathing panel seams must be sealed with ZIP System™ tape or liquid flash.

Performance Evaluation

Sealants were evaluated for adhesion to the branded (non-adhesive) surfaces of ZIP System™ flashing tape and ZIP System™ stretch tape. Sealants were also evaluated for adhesion to cured samples of ZIP System™ liquid flash. Sealant samples were evaluated for peel strength with regard to peak load, continuous pull force, and average peel strength. Sealants passing the HEW criteria for these evaluated strengths were deemed compatible for use over the corresponding ZIP System® product without the use of a primer and are summarized in Table 1. Note: the adhesive (non-branded, sticky) side of ZIP System™ tapes were not evaluated for compatibility with any sealant. Care should be taken to apply sealants in a manner that prevents excess sealant from interrupting the bond of the tape to the substrate. In the event excess sealant squeezes out beyond the edges of nailing fins or other flanges requiring flashing,

the ZIP System™ flashing tape must be adhered to a minimum 1” of clean (i.e. not covered with sealant) ZIP System® sheathing panel (Figure 1).

Sealants listed under ZIP System™ flashing tape (linerless) and highlighted **yellow** did not, without additional steps, meet the strength criteria due to the release film on the tape backing. This release film prevents the tape from sticking to itself in the roll. In order to achieve compatibility when using these sealant/tape combinations, the non-adhesive, branded side of the tape to which the sealant will be applied must be wiped with acetone to remove the release film prior to sealant application. Note, acetone may cause removal of branding or slight discoloration of the tape but will not affect tape performance.



Incompatible Sealants

Sealants not listed as either compatible (✓) or requiring that the tape be wiped with acetone (⚠) in Table 1 did not meet HEW’s evaluation criteria under all testing conditions when applied to the correlated substrate. However, **the use of solvent-based sealants or those that cure through solvent evaporation in any application in contact with ZIP System™ flashing products is not approved by Huber Engineered Woods and use thereof may void any product warranties.**

Note to Sealant Manufacturers

Though many sealants are covered in this technical tip, some sealants may not have been tested due to availability or other limitations. If you manufacture an applicable sealant, please reach out to the Huber Engineered Woods technical service team to inquire about compatibility testing.

Please visit zipsystem.com or contact our technical department at 800-933-9220 Ext 2716 or at techquestions@huber.com with any questions or comments.

Table 1: Sealant Compatibility with ZIP System® Sheathing and Flashing Products for Window and Door Fenestrations*

Manufacturer/ Brand	Product	ZIP System™ Substrate					
		Panel	Flashing Tape (linered)	Stretch Tape	Liquid Flash	VP Flashing Tape	Flashing Tape (linerless)
3M™	Window-Weld™ Super Fast Urethane	✓	✓	✓	✓	✓	!
Andersen™	Sealant for Window and Door	✓	✓	✓	✓	✓	!
Master Builders Solutions	Masterseal™ NP1™	✓	✓	✓	✓		!
	Masterseal™ NP150™	✓	✓	✓	✓		!
CRC™	RTV Silicone™	✓	✓	✓	✓		!
DAP™	Dynaflex™ 800	✓	✓	✓	✓		!
	Dynaflex™ Ultra	✓	✓	✓	✓		!
Dow Corning™	732	✓	✓	✓	✓	✓	!
	756	✓	✓	✓	✓	✓	✓
	758	✓	✓	✓	✓	✓	✓
	790	✓	✓	✓	✓	✓	!
	795	✓	✓	✓	✓		!
	799	✓	✓		✓		!
GE™	GE5000 Advanced™	✓	✓		✓		!
	SCS2000 SilPruf™	✓	✓	✓	✓	✓	!
OSJ™	Quad™	✓	✓	✓	✓	✓	!
Pecora™	890 NST™	✓	✓	✓	✓	✓	!
Sashco™	Lexel™	✓	✓	✓			✓
Sikaflex™	1A	✓	✓	✓			!
Titebond™	Weathermaster™	✓	✓			✓	!
Tremco™	Dymonic™ FC	✓	✓	✓	✓		!
	Spectrem™ 1	✓	✓	✓	✓	✓	✓
	Spectrem™ 2	✓	✓	✓	✓	✓	✓
	Tremco™ 830	✓					
	Vulkem™ 116	✓	✓	✓	✓	✓	!

The following products were tested but are not code-recognized window and door sealants

Huber Engineered Woods	ZIP System™ Liquid Flash	✓	✓	✓	✓	✓	!
Benjamin Obdyke™	HydroFlash™ LA	✓	✓	✓	✓		!
OSI	Quad™ Foam	✓	✓	✓	✓		!
DuPont™	Great Stuff™ Window and Door	✓	✓	✓	✓	✓	!

* Results are based on criteria specified by Huber Engineered Woods to determine sealant compatibility with ZIP System® products used in window and door fenestrations only. The testing criteria and requirements are confidential. Testing conducted on sealant samples available during the test period of January 2020 to July 2020. Sealant formulation and composition (and, ergo, compatibility) are subject to change after the completion of the test period.

✓ -- Compatible

! -- Clean ZIP System™ flashing tape branded backing with acetone before applying sealant

DISCLAIMER

Huber Engineered Woods DOES NOT certify or otherwise take a position as to whether the above sealants are in compliance with any specifications or standards that may be required for code recognition, window or door manufacturer requirements, or other authorities having jurisdiction. It is the responsibility of the user to determine the proper materials and applications for their needs, and the user assumes all risks as to the use of any such material and its application. THE USER ASSUMES ALL RISK AND LIABILITY ARISING FROM ITS USE OF THE INFORMATION CONTAINED IN THIS DOCUMENT. HUBER ENGINEERED WOODS ASSUMES NO LIABILITY OR OBLIGATION FOR THE INFORMATION CONTAINED HEREIN. NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY HUBER ENGINEERED WOODS FOR HUBER ENGINEERED WOODS PRODUCTS. HUBER ENGINEERED WOODS EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.