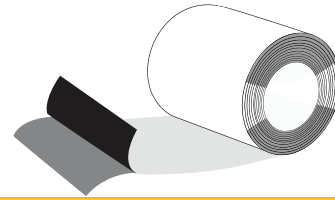


Covalence Adhesives
April 15, 2007



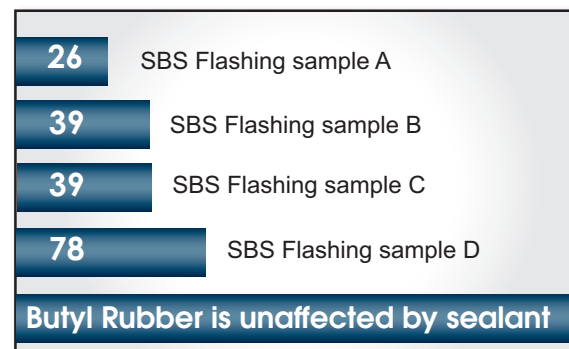
There have been numerous inquiries regarding caulking and sealant compatibility with flashing tapes used in building fenestrations. The Covalence Research and Development team conducted testing in October 2005 to determine how various caulking chemistries interact with the butyl rubber and rubberized asphalt adhesive compounds that are commonly used in self adhering flashing products. The tests showed dramatically different results between the two adhesive types. While the rubberized asphalt deteriorated quickly, the butyl rubber adhesive remained unaffected by the sealant chemistry.

The Research and Development team tested six sealant formulations composed of polyurethane, rubber, silicone and various solvents. The sealants were applied to both the film facer and the adhesive side of the flashing tapes. The butyl rubber flashing tape tested was made with a 6 mil polyethylene film backed with a butyl rubber adhesive formulation that is coated at 14 and 29 mils respectively onto Nashua Optiflash B20 and Polyken Shadowlastic. The SBS asphalt tape was comprised of a 2 mil polypropylene film backed with 25 mils of SBS asphalt similar to many types that are on the market.

The samples were put into an accelerated aging chamber at 150°F for 31 days. This method of accelerated aging can be the equivalent of 400 days of full exposure (depending on the region, elevation and season). Observations were taken each day for the duration of the test. The rubberized asphalt adhesive reacted with the sealants as indicated by the adhesive flow, within 2 to 6 days of exposure. The butyl rubber adhesive systems remained in tact exhibiting no adhesive breakdown or flow throughout the duration of the test. The caulking systems coated onto the butyl rubber adhesive remained inert. Specific information regarding the results is available upon request.

Proper selection of flashing materials is crucial to the permanence of the seal that protects the building structure from penetration of moisture, water vapor and air. Adverse reactions between flashing tape adhesives and sealants can compromise the integrity of the weatherproof seal. At a minimum, this can cause staining of building materials and air leakage. All too often, the degradation of the seal allows moisture penetration and retention that can contribute to mold and mildew development which will require corrective action.

Flashing Tape Adhesive Compatibility



Number of days before breakdown of adhesives occurs when paired with various sealant types.*

*Each day of accelerated aging can be the equivalent of 13 days of full exposure (depending on the region, elevation and season) in the real world. Number of days shown in graph are shown from the real world perspective.