Technical Letter

Sealant Adhesion and Compatibility

Updated on: July 2, 2021

Sealant Adhesion and Compatibility Chart reporting results of Adhesion-in-Peel testing per ASTM C794-15a, and chemical compatibility per AAMA 713-08 between various elastomeric joint sealants and SIGA products.

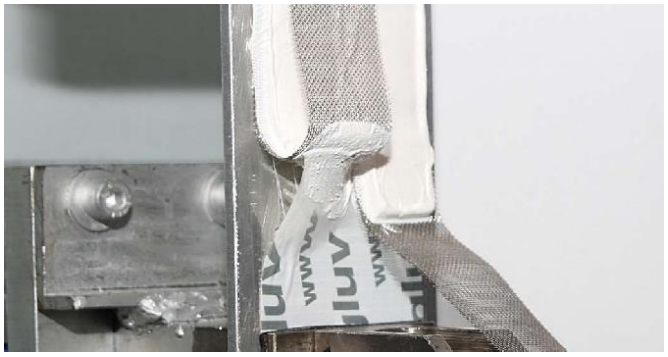
This technical letter is intended to provide information on adhesion-in-peel and chemical compatibility between various groups of elastomeric joint sealants and, respectively, Wigluv", Majvest', and Majvest' 500 SA for use in building construction. In order to evaluate the space between air- & and water-sealing continuity of the building envelope, it is necessary to test long-term adhesion and compatibility at a transitional area, where it is essential for dissimilar building components to meet and seal.

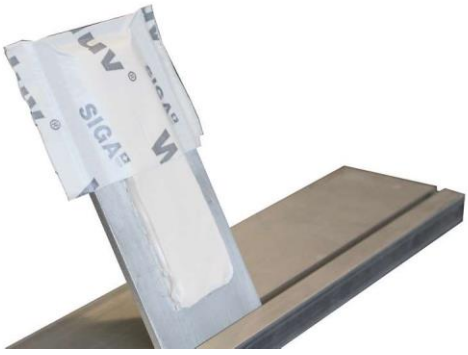
Most sealants are chemically compatible with SIGA products. Some sealants, typically those with a high solvent content, may not be compatible with the self-adhesive component of the SIGA flashing system products. Therefore, we don't recommend the use of sealants with high solvent content with SIGA products. The results reported here are not considered a substitute for project specific field or laboratory adhesion testing. SIGA strongly recommends that field testing be conducted to determine the acceptability and level of adhesive bonding of a specific sealant, for the intended use in the wall assembly design.
This document will be updated periodically. Therefore, it is important to refer to the most up to date version as found on the SIGA Website: https://americas.siga.swiss

Methods used:

Adhesion Testing
ASTM C794-15a covers a laboratory procedure for determining the strength and characteristics of the peel properties of a cured-in-place elastomeric joint sealant, single- or multicomponent, for use in building construction. The test specimens are prepared according to subsection 8.1 by embedding a wire mesh between two thin layers of sealant applied on the SIGA products. After a defined curing time, the specimens are placed in a tension testing machine for a 180° peel test. The force exerted and the mode of failure are determined.

Chemical **Compatibility** Testing
AAMA 713-08 provides a means of evaluating the chemical compatibility of layers in contact in the building envelope. The test method describes a laboratory screening procedure for evaluating the chemical compatibility of materials intended for use in construction and fenestration installations that are properly installed.
Samples of sealant with self-adhered flashing are placed in an oven at elevated temperature for two weeks to observe any deleterious effects of direct contact after aging





Summary of Results

The adjacent layers adhered to or in contact with the reported SIGA products were identified and tested according to one or both of ASTM C794-15a or AAMA 713-08, as appropriate. The following table on the next page shows the results of chemical compatibility testing and adhesion testing according to the legend on the top right of the table:

		Substrates		
Manufacturer	Adhesive/Sealant	Wigluv®	Majvest®	Majvest 500 SA®
SIGA	Meltell 3xx	✓	✓	✓
BASF	MasterSeal NP1	✓	✓	✓
BASF	MasterSeal NP100	✓	✓	✓
BASF	MasterSeal NP150	✓	✓	✓
Bostik	915	✓	✓	✓
Bostik	PRO-MS50	✓	✓	✓
CRL	M66 Textured PU Construction Sealant	✓		✓
CRL	Fortifiber Moistop	✓	✓	✓
DAP	Dynaflex 230	✓	✓	✓
DAP	100% silicone	✓	✓	✓
Dow Corning	758	✓	✓	✓
Dow Corning	790	✓	✓	✓
Dow Corning	791	✓	✓	✓
Dow Corning	LIQUIDAMOR™ Liquid Flashing and Sealant	✓		✓
Dow Corning	795	✓	✓	✓
Dow Corning	Contractors Weatherproofing Sealant	✓		
DuPont	Tyvek Fluid Applied Flashing	✓		✓
GE	Silicone II Window & Door			✓
GE	SCS9000	✓		✓
Henkel	OSI H2U	✓	✓	✓
Henkel	OSI Quad	✓	✓	✓
Henry	212 All Purpose Crystal Clear		✓	✓
Henry	925 BES Building Envelope Sealant	✓		✓
Pecora	890 NST	✓	✓	✓
Pecora	895 NST	✓	✓	
Prosoco	Air Dam	✓	✓	✓
Prosoco	Fast Flash	✓	✓	✓
Prosoco	Joint & Seam Filler	✓	✓	✓
Sika	Sikaflex-1a	✓	✓	✓
Sika	Sikaflex 15LM	✓	✓	✓
Soprema	Sopramastic SP1	✓	✓	✓
Soprema	Sopraseal Liquid Flashing	✓		✓
STI	SpecSeal SNS Smoke N Sound		✓	✓
STO	StoGuard RapidSeal	✓		✓
Tremco	Dymonic FC	✓		✓
Tremco	Spectrem 1	✓	✓	✓
Tremco	Spectrem 2			
Tremco	TremGlaze S500	✓		✓
Tremco	TremGlaze U1600	✓		✓
Tremco	Vulkem 116 PU Sealant	✓	✓	✓
VaproShield	VaproBond	✓	✓	✓
VaproShield	VaproLiqui-Flash	✓	✓	✓

+•' = compatible
(when empty, products did not pass tests and are not compatible)

1. Tests were conducted by SIGA laboratories on products available in the market in 2018, according to the AAMA 713-08 and the ASTM C794-15a.
2. The composition of the sealants tested may have changed since the time SIGA laboratories conducted its tests.
3. Additional sealants may be suitable but were not tested by SIGA laboratories.
4. The results reported here are not considered a substitute for project-specific field or laboratory adhesion testing. Project-specific adhesion testing is always recomended. Sealant selection is the responsibility of the designer of record.