PRI Construction Materials Technologies LLC

6412 Badger Drive
Tampa, FL 33647
813.621.5777
https://www.pri-group.com/

Laboratory Test Report

Report for:	Kelly Allore Dow Silicones Corporation 2200 West Salzburg Road Midland, MI 48686
Product Name:	DOWSIL™ Silicone Transition Strip
Project No.:	2107T0050
Date(s) Tested:	Nov. 26, 2023 – Mar. 25, 2024
Test Method(s):	SWR Institute Product Validation Performance Profile for Pre-Cured Sealants
Results Summary:	Performance meets or exceeds data sheet reported values

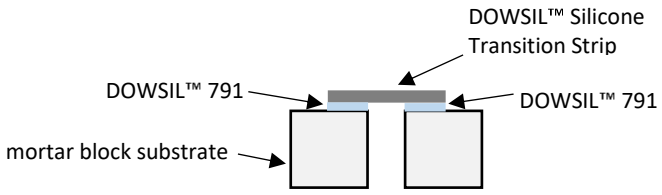
Purpose:

Evaluate DOWSIL™ Silicone transition Strip for compliance with the Sealant Waterproofing and Restoration Institute's Product Validation Program for Pre-Cured Sealants.

Test Methods:

Testing was completed in accordance with the Sealant, Waterproofing and Restoration Institute's Product Validation Program for Pre-Cured Sealants. Test Methods utilized include ASTM C1523-17: *Standard Test Method for Determining Modulus, Tear and Adhesion Properties of Precured Elastomeric Joint Sealants* and ASTM D412-16(2021): *Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension*. Ultimate elongation at break has been reported in units of (%).

For tear propagation and loss of adhesion or cohesion, 2" long specimens were cut from a roll 1.5" wide DOWSIL™ Silicone Transition Strip and adhered to 1" x 1" x 3" mortar blocks per the manufacturer's installation instructions with DOWSIL™ 791 Silicone Sealant at opposite sides of a bridge joint configuration. The adhesive was applied at a thickness of approximately 3/8" and a 1/2" depth of bond.



Sampling: The following materials were procured through local reputable distribution by PRI:

Product	Source	Date	Sampling
DOWSIL™ Silicone Transition Strip	Tampa, FL	Nov. 2, 2023	Coastal Construction Products
DOWSIL™ 791 Silicone Sealant	Tampa, FL	Nov. 2, 2023	Coastal Construction Products

Batch numbers were utilized to confirm that the samples were within shelf life.

Results:

Property	Test Method	Results				Requirement
Physical Properties						
Loss of Adhesion or Cohesion (%) 3 specimens; 1.5" x 2"; Adhesive applied at: 1/16" thickness x 0.5" depth of bond x 2" length. Cure 7d @ 73.4±3.6°F & 50±5%RH; Rate = 2"/min; Movement = 200%; Hold @ 200% elongation for 1h	ASTM C1523	**1**	**2**	**3**	**Avg.**	
Dry/Room Temperature (%) Condition @ 23 ± 2°C;		0	0	0	0	Report
Initial tensile load (psi)		422.7	445.3	416.9	428.3	Report
Tensile load after 1h (psi)		296.2	313.3	295.8	301.8	Report
Water Immersion (%) Condition 24h @ 23 ± 2°C		0	0	0	0	Report
Initial (psi)		438.3	414.5	419.4	424.1	Report
After 1h (psi)		318.1	301.7	303.3	307.7	Report
Frozen (%) Condition 24h @ -18 ± 2°C		0	0	0	0	Report
Initial (psi)		424.3	423.5	412.6	420.1	Report
After 1h (psi)		304.0	303.2	294.0	300.4	Report
Heat (%) Condition 24h @ 70 ± 2°C		0	0	0	0	Report
Initial (psi)		462.1	455.0	477.5	464.9	Report
After 1h (psi)		306.1	302.7	314.4	307.8	Report
Artificial Weathering (%) UV/Con Exposure Cycle 1 for 2500h QUV Accelerated Weathering Tester Model QUV/Spray		0	0	0	0	Report
Initial (psi)		445.7	442.9	431.2	440.0	Report
After 1h (psi)		310.1	310.1	301.8	307.3	Report
Tear Propagation (NT, PT or T) NT: No Tear, PT: Partial Tear, T: Tear; 3 specimens; 1.5" x 2"; Cure 7d @ 73.4±3.6°F & 50±5%RH; Rate = 2"/min Cut = 5mm	ASTM C1523					
Dry/Room Temperature 23 ± 2°C		NT	NT	NT	NT	Report

Continued on Following Page

Property	Test Method	Results		Requirement
Ultimate Elongation 5 specimens; Die C; Cond. 72h @ 75±5°F & 50±5%RH; Test @ 73.4±3.6°F & 50±5%RH; Rate = 20±2 in./min;	ASTM D412 Method A	**Average**	Std. Dev.	
Ultimate Elongation (%)		**434.6**	16.7	≥ 400

Note(s):

Statement of Attestation:

The properties of the material tested were determined in accordance with and conform to the requirements set forth in the Sealant, Waterproofing and Restoration Institute's Product Validation Program for Pre-Cured Sealants. The laboratory test results presented in this report are representative of the material supplied.

Signed: Anthony Catlett

Anthony Catlett
Manager

Date: 5/31/2024

Report Issue History:

Issue #	Date	Pages	Revision Description (if applicable)
Original	04/1/2024	4	N/A
Revision 1	5/31/2024	4	Editorial Revision
Revision 2	6/3/2024	4	Changed Reporting to psi (from lbf)

END OF REPORT