Technical Data Sheet

DOWSIL™ 758 Silicone Weather Barrier Sealant

Neutral one part silicone sealant, designed for adhering to low energy surfaces common in sheet or peel and stick weather resistant barriers.

Features & Benefits

- Excellent adhesion to a wide range of building materials, including polymeric surfaces that are traditionally difficult to adhere to, such as peel and stick weather resistant barriers
- Priming not required on most surfaces
- Usable over wide temperature range
- Excellent adhesion to extruded and formed silicone sheet materials
- Adheres to many polyethylene film based weather resistant barriers
- Adheres to many spun-bonded polyolefin and fibrous or woven air barriers
- Adheres to many other sealing elements such as flashing or elastomeric liquid applied weather barriers
- Adheres to many common fenestration element materials such as anodized aluminum, vinyl, PVC, powder coat, paint and fluoropolymer coatings
- Contributes to improved air tightness of window installations
- UV resistant
- Excellent durability, does not become brittle or crack
- Movement capability of +/- 25% in a properly designed joint

Composition

- One-part RTV, neutral-cure silicone sealant

Applications

- Interior air sealing between a sheet or liquid applied weather resistant barrier and fenestration element
- Edge lap seal for weather resistant barriers
- Sealing penetrations in weather resistant barriers such as plumbing or ductwork
- Sealing other difficult to adhere surfaces such as mill finishes and plastics

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Test[1]	Property	Unit	Result
	As Supplied		
CTM 0098	Working Time 25°C and 50% RH	min	15
ASTM C639	Flow, Sag or Slump	inches	0.06
EPA Method 24[2]	VOC Content	g/L	22.2
	As Cured – 21 Days at 25°C (77°F) and 50% RH		
C661	Durometer Hardness, Type A		30
ASTM D412	Ultimate Tensile Strength	psi	200
ASTM D412	Ultimate Elongation	%	800
ASTM C794	Peel Strength:		
	Unprimed to HDPE Sheet	ppi	> 20
	Unprimed to Anodized Aluminum	ppi	> 40
	Unprimed to Vinyl	ppi	> 40
	Unprimed to Powder Coated Aluminum	ppi	> 40
	Unprimed to Kynar Coated Aluminum	ppi	> 40
	Primed to Concrete	ppi	> 20
ASTM C719	Joint Movement Capability	%	+/- 25
	As Cured – After 21 days at 25°C (77°F) and 50% RH Followed by 10,000 Hours in a QUV Weatherometer, ASTM G 53		
ASTM D412	Ultimate Tensile Strength	psi	200
ASTM C794	Peel Strength[3]		Unchanged

1. CTMs (Corporate Test Methods) correspond to standard ASTM (American Society of Testing and Materials) tests in most instances. Copies are available upon request.
2. Measured in accordance with EPA Method 24 and reported exclusive per South Coast Air Quality Management District Rule 1168 guidelines.
3. Uprimed to glass.

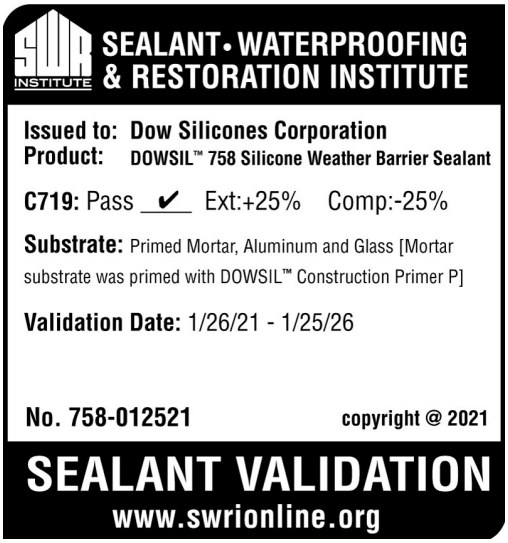
Description

DOWSIL™ 758 Silicone Weather Barrier Sealant is a one part, neutral cure silicone available in white. It easily extrudes and cures at room temperature by reaction with moisture in the air to form a durable, flexible rubber seal.

This medium modulus sealant is specially designed for the weathersealing of weather resistant barriers where low movement is anticipated, such as window and door frames and wall penetrations.

Approvals/ Specifications

- ASTM C920 Type S, Grade NS, Class 25
- ASTM C719 +/-25% movement



How to Use

Please consult the Americas Technical Manual, for detailed information on state-of-the-art application methods and joint design.

Surface Preparation
The application surface must be clean, dry, sound and frost-free. Mask adjacent surfaces and apply primer if required. Laboratory testing or field adhesion testing may be used to demonstrate primer requirements.

Application
Install sealant according to published guidelines. Ensure the surfaces to be sealed are free of dust, dirt, debris and contaminants. Apply primer as needed and allow to dry as needed. Install backer material for any joint moving more than 15%. Lap joints will not require backer material. Apply and tool the sealant. DOWSIL™ 758 Silicone Weather Barrier Sealant should be tooled prior to it skinning over. Standard caulking tools, materials, and methods may be used.

Joint Design

The sealant joint should be designed so that the maximum expected sealant movement, including thermal, settlement and live load, does not exceed 25% in order to achieve a sufficient durability of the seal. Consult with the flashing manufacturer for details on the movement capability of flashing materials as used in your joint configuration.

When detailing the sealant joints using DOWSIL™ 758 Silicone Weather Barrier Sealant, the following should be considered:

- DOWSIL™ 758 Silicone Weather Barrier Sealant may be used to seal lap joints between two pieces of flashing or other materials. Please ensure a ¼" (6 mm) sealant to substrate contact ("bite") on each side of the lap joint and minimum ⅛" (3 mm) sealant depth.

Joint Design (Cont.)

- The minimum width of a perimeter joint, or "hourglass" joint should be ¼". For joints between ¼" to ½" (6–12 mm) wide a minimum seal depth of ¼" (6 mm) is required.
- For joints above ½" (12 mm wide), a width to depth ratio of 2:1 should be used up to a maximum depth of ½" (12 mm).
- Joints in excess of 1" (25 mm) wide are possible but sealant depth should not exceed ½" (12 mm). It is recommended that specific recommendations be obtained from Dow for any joints in excess of 3" (75 mm).
- In applications where fillet type joints are to be used, a minimum of ¼" (6 mm) sealant bite is recommended for each substrate.

Handling Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life and Storage

When stored at or below 27°C (80°F), DOWSIL™ 758 Silicone Weather Barrier Sealant has a shelf life of 12 months from the date of manufacture. Refer to product packaging for "Use by Date."

Packaging Information

DOWSIL™ 758 Silicone Weather Barrier Sealant is available in 20 oz (591 ml) sausages.

Limitations

DOWSIL™ 758 Silicone Weather Barrier Sealant should not be used:

- As an aesthetic weatherseal
- In below grade applications
- In structural application
- In continuous water immersion applications

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Avoid prolonged exposure to citrus containing cleaners, solvents and solvent-based cleaners.

Health and Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, dow.com or consult your local Dow representative.

Form No. 63-1144-01-0421 S2D

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

dow.com