

Technical Data Sheet

DOWSIL™ Contractors Weatherproofing Sealant

Medium-modulus silicone joint sealant

Features & Benefits

- Primerless on most common nonporous building substrates
- Balanced adhesive strength, medium modulus, and high recovery
- Easily gunnable in all weather conditions

Composition

• High-performance, medium modulus, one-part, neutral-cure silicone sealant

Applications

 Sealing dynamically moving joints such as expansion and control joints, concrete panel joints, tilt-up panel joints, curtainwall joints, perimeter caulking (windows, doors, panels, EIFS, bedding of mullions, panels, and frames, etc.)

Typical Properties

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

Test ¹	Property	Unit	Result
	As Supplied		
	Colors		20 standard, 19 made-to-order special, and custom colors
	Application Temperature, Substrate	°C	-29 to 49
		°F	-20 to 120
	Tack-Free Time, 50% RH	hours	3–6
	Curing Time, 3/8" (9 mm) Depth, 50% RH at 25°C (77°F)	days	7–14
C 639	Weep and Sag		Passes
	VOC Content	g/L	35
	As Cured		
C 661	Durometer Hardness, Shore A	points	25 ±5
D 412	Ultimate Tensile Strength	psi	180
		MPa	1.24
D 412	Ultimate Elongation	%	550

^{1.} ASTM: American Society for Testing and Materials.

Typical Properties (Cont.)

Test	Property	Unit	Result
C 794	Peel Strength	lbs./in	20 to 28
		N/m	109 to 152
C 719	Joint Movement Capabilities, Extension/Compression	%	±40
C 510	Staining		Passes
C 792	Weight Loss, Cracking, and Chalking after Heat Aging		Passes
	Service Temperature, Cured Bead	°C	-40 to 121
		°F	-40 to 250

Description

DOWSIL™ Contractors Weatherproofing Sealant is primerless on most common nonporous building substrates. This unique weather-resistant formulation possesses a balanced adhesive strength, medium modulus, and high recovery, making it ideal to withstand adverse conditions in common installations including moisture, movement, sheer, and deflection. It is easily gunnable in all weather conditions from -29 to 49°C (-20 to 120°F). Because it requires no mixing and a smaller joint ratio, it is an economical, high-performance alternative to other sealant options with a ±40 percent movement capability.

DOWSIL™ Contractors Weatherproofing Sealant is available in 20 standard stocked colors (white, limestone, gray, window bronze, sandstone, aluminum, antique white, charcoal, black, bronze, precast white, off white, ivory, buff, mountain fog, anodized aluminum, sandalwood, geographic beige, redwood tan, light bronze) and 19 made-to-order special colors. Custom colors are also available.



Approvals/ Specifications

DOWSIL™ Contractors Weatherproofing Sealant meets or exceeds the requirements of:

ASTM C 920, Type S, Grade NS, Class 35, Use NT, M, A, and O (granite)

How to Use

Refer to the Dow Americas Technical Manual, Form No. 62-1112, for detailed information on joint design, preparatory work, priming, masking, and application techniques.

Joint Design

While most urethanes suggest a depth of 1/2" to 5/8" (13 to 16 mm) in wide joints, the superior weathering of this silicone allows a 3/8" (9 mm) depth in wide joints. DOWSIL™ Contractors Weatherproofing Sealant can be used in the following joint configuration:

- A. Minimum width of joint should be four times the anticipated movement, but not less than 1/4" (6 mm) wide.
- B. Joint depth to be 1/4" (6 mm) for joints 1/4" to 1/2" (6 to 13 mm) in width.
- C. Maximum joint depth not to exceed 3/8" (9 mm).
- D. Maximum joint size approximately 1–1/4" (32 mm) width x 3/8" (9 mm) depth in a single application.
- E. Consult your local Dow representative for specific design requirements.

Surface Preparation

The joint interface must be clean, dry and free from oils, loose mortar, laitance, form release agents, waterproofing, damp proofing, and other contaminants. A thorough wire brushing, grinding, sandblasting, or solvent cleaning may be required to expose clean, sound, virgin surface.

Priming

Primer should be applied before installing the backer rod. Applying a bead of silicone sealant to the substrate material to test adhesion prior to general use is always recommended.

DOWSIL™ Contractors Weatherproofing Sealant is primer less on most common nonporous building substrates. Consult Dow for priming recommendations on other materials.

In all cases, a sample should be tested and/or test joints should be installed on the project.

Masking

Areas adjacent to joints should be masked to ensure neat sealant lines and to avoid contact with polished granites, metal, or glass. Do not allow masking tape to touch clean surfaces on which the sealant is to adhere. Masking should be removed immediately after tooling.

Application

Install backer material or joint filler, setting blocks, spacer shims, and tapes as specified. Apply sealant in a continuous operation, using a positive pressure adequate to properly fill and seal the joint.

Tooling

Tooling should be completed in one continuous stroke immediately after sealant application and before a skin forms. Tool or strike the sealant with light pressure to spread the material against the backer material and the joint surfaces. A tool with a concave profile is recommended to keep the sealant within the joint. Do not use liquid tooling aids such as water, soap, or solvents.

How to Use (Cont.)

Tooling (Cont.)

Tool the sealant applied at sills so that precipitation and cleaning solutions will not pool.

Cleaning

Immediately remove all excess sealant and smears adjacent to the joint with xylene or toluene as work progresses.¹

Typical Cure

Cure rate at 25°C (77°F) and 50% RH:

- A. Tack-free time: 3-6 hours.
- B. Through cure (3/8" [9 mm] depth): 7–14 days.

Maintenance

Generally, no maintenance is required. If the sealant becomes damaged, replace the damaged portion. DOWSIL™ Contractors Weatherproofing Sealant will adhere to most cured silicone sealant with only a preparatory solvent wipe to remove accumulated dirt. Dirty sealant may be cleaned with a solvent wipe or soap and water.

1 Follow solvent manufacturer's recommended safe handling instructions and applicable federal, state, and local regulations.

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

DOWSIL™ Contractors Weatherproofing Sealant has a shelf life of 18 months from date of manufacture. Refer to product packaging for "Use By" date.

Packaging Information

DOWSIL™ Contractors Weatherproofing Sealant is available in 10.3 fl oz (305 mL) cartridges (12 per case), 20 fl oz (591 mL) sausage packs (16 per case) and 2 gal (7.5 L) pails.

Limitations

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

DOWSIL™ Contractors Weatherproofing Sealant is not recommended for:

- Silicone structural glazing
- Application in confined areas without proper ventilation
- Joints under constant water submersion

Shipping Limitations

None.

Form No. 62-718-01-0321 S2D

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.

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

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