



DOWSIL™ Contractors Concrete Sealant

Low-modulus silicone joint sealant

Features & Benefits

- Excellent weatherproofing performance in building joints that experience extreme movement
- Excellent adhesion to concrete and masonry
- Low VOC content
- Easy application over a wide temperature range
- Extension/compression capability of ±50 percent

Composition

- Low-modulus, one-part, neutral-cure, 100% silicone sealant

Applications

- Sealing joints between tilt-up concrete walls, joints surrounding window and door openings in tilt-up concrete walls, Exterior Insulation and Finish Systems (EIFS) joints and many other construction joints
- On most building materials in any combination: concrete, masonry, stone, ceramics, finished steel and aluminum

Typical Properties

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

Test	Property	Unit	Result
	Colors		White, antique white, precast white, gray, charcoal, black, sandstone, limestone, bronze, window bronze and aluminum
ASTM C 679	Tack-free time, 50% RH	hours	1
	Curing time, 50% RH, at 25°C (77°F)	days	7–14
	Full adhesion	days	14–21
	Flow, sag or slump		None
	Working time	minutes	10–20
	VOC content	g/L	22

1. ASTM: American Society for Testing and Materials.

Typical Properties (Cont.)

Test	Property	Unit	Result
As cured – after 7 days at 25°C (77°F) and 50% RH			
ASTM C 661	Durometer hardness, Shore A	points	15
ASTM D 412	Ultimate tensile strength, maximum elongation	psi (kg/mm ²)	100 (0.070)
ASTM D 412	Elongation, maximum	percent	1600
ASTM C 794	Peel strength	lb/in (kg/cm)	25 (4.46)
ASTM C 719	Joint movement capabilities, extension/compression	percent	±50
ASTM C 510	Staining		None

Description

DOWSIL™ Contractors Concrete Sealant is a one-part, moisture-cure silicone sealant that provides durable, flexible, watertight joint seals and offers outstanding unprimed adhesion to masonry.

The low-modulus material places only a low stress on the sealant/substrate bond line and exhibits good recovery from extension and compression, enabling superior performance in joints that experience movement extremes. The high joint movement ability of DOWSIL™ Contractors Concrete Sealant typically allows the repair of failed joints, with no joint widening – saving time and labor costs – due to the increased movement capability of this product compared to organic products used previously.

DOWSIL™ Contractors Concrete Sealant is available in 11 standard stocked colors (white, antique white, precast white, gray, charcoal, black, sandstone, limestone, bronze, window bronze and aluminum). Custom colors are also available.



Approvals/ Specifications

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

- ASTM Specification C 920, Type S, Grade NS, Class 50

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.

How to Use (Cont.)

Surface Preparation

Clean all concrete, masonry and stone joints of all contaminants and impurities. Porous substrates should be cleaned where necessary by grinding, saw cutting, blast cleaning (sand or water), mechanical abrading or a combination of these methods as required to provide a sound, clean, dry surface for sealant application. Dust, loose particles, etc., should be blown out of joints with oil-free compressed air or be vacuum cleaned. Metal and glass surfaces adjacent to masonry should be cleaned by wiping with an oil-free absorbent cloth saturated with solvent such as xylene or toluene.¹ *Do not use alcohols as they inhibit the cure.*

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.

Primer is not required with concrete, masonry, most glass and most porous surfaces. Most aluminum substrates (painted, mill, anodized, etc.) and other nonporous surfaces require use of a primer. 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 may be masked to ensure neat sealant lines. Do not allow masking tape to touch clean surfaces to which the silicone sealant is to adhere. Tooling should be completed in one continuous stroke immediately after sealant application and before a skin forms. Masking should be removed immediately after tooling.

Application

DOWSIL™ Contractors Concrete Sealant should be applied in a continuous operation. A positive pressure adequate to properly fill and seal the joint width should be employed.

The sealant can be applied at outdoor temperatures as low as -29°C (-20°F), provided that surfaces are clean, dry and frost-free. As a general rule, condensation or frost should not be a problem above 4.4°C (40°F).

Tooling

Tool or strike DOWSIL™ Contractors Concrete Sealant with light pressure to spread the material against the back-up material and the joint surfaces. *Do not use soaps, oil or alcohols as tooling aids as they inhibit the cure.*

Use a tool with a concave profile to keep DOWSIL™ Contractors Concrete Sealant within the joint.

Cleaning

Do not allow uncured silicone sealants to contact non-abradable surfaces such as polished granites, metal or glass. Uncured sealant will leave a film that may change the aesthetic surface characteristics of these substrates. Inadvertently applied sealant should be cleaned from nonporous surfaces using solvent before cure.¹

¹Follow the solvent manufacturer's safe handling recommendations and local, state and federal regulations regarding solvent usage.

**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 32°C (90°F), DOWSIL™ Contractors Concrete Sealant has a shelf life of 12 months from date of manufacture. Refer to product packaging for “Use By” date.

**Packaging
Information**

DOWSIL™ Contractors Concrete Sealant is packaged in 10.3 fl oz (305 mL) cartridges, 20 fl oz (590 mL) sausages that fit caulking guns, and in 2.0 gal (7.5 L) bulk pails. It can be dispensed by many air-operated guns and most types of bulk dispensing equipment.

Limitations

DOWSIL™ Contractors Concrete Sealant should be applied to concrete that is cured for 28 days. Green concrete (less than 7 days old) will cause adhesion loss of the sealant. Concrete 7 to 28 days old may require priming to obtain proper adhesion. Additional field quality control adhesion testing is necessary if project requirements dictate sealing to concrete less than 28 days old.

DOWSIL™ Contractors Concrete Sealant should not be applied:

- Below grade
- To epoxy-based materials as inhibition will occur

DOWSIL™ Contractors Concrete Sealant will yellow when in contact with bitumen- or EPDM-based products.

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

**Shipping
Limitations**

None.

**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

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

