

Technical Data Sheet

DOWSIL™ Contractors Professional Sealant (CPS)

Medium modulus, one-part, neutral silicone sealant

Features & Benefits

- Primer-less on many common nonporous substrates
- Excellent adhesive strength, medium modulus, and high movement capability
- Low VOC
- Excellent UV & weather resistance
- Ideal for use in precast concrete; aluminum windows and doors; interiors; new and renovation projects and low rise buildings
- Conforms to ASTM C920: Type S, Grade NS, Class 35, Use NT, M, A & O

Composition

Medium modulus, one-part, neutral cure, RTV silicone sealant

Applications

 Sealing moving joints, expansion joints, control joints, concrete panel joints, tilt-up panel joints, and perimeter caulking of windows, doors and panels

Typical Properties

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

ASTM1	Property	Unit	Result
	Uncured – As Tested @ 25°C and 50% RH		
	Colors		White, sandstone, grey and black
C 639	Flow/Sag (Slump)	mm	0
	Curing Time	days	7–14
C 679	Tack-Free Time	min	50
	Working Time	min	20
	VOC	g/L	< 35
	Shelf Life from Date of Manufacturing	months	12
	As Cured – After 21 Days @ 25°C and 50% RH		
C 661	Durometer Hardness, Shore A	points	30
C 794	Peel Strength	ppi	25
C 719	Joint Movement Capabilities, Extension/Compression	%	±40
C 1135	Tensile Adhesion Strength @ 25% Extension	psi	30

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

Description

DOWSIL™ Contractors Professional Sealant (CPS) is a primer-less sealant used on many common nonporous building substrates. This unique weather-resistant, medium modulus formulation possesses excellent adhesive strength and high movement capabilities, making it ideal to perform when joints are subjected to shear, tensile and compression extremes. 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.

How to Use

Refer to the 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 9 mm depth in wide joints. DOWSIL™ Contractors Professional Sealant (CPS) can be used in the following joint configuration:

- A. Minimum width of joint should be four times the anticipated movement, but not less than 6 mm wide.
- B. Joint depth to be 6 mm for joints 6 to 13 mm in width.
- C. Maximum joint size approximately 32 mm width x 9 mm depth in a single application.

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

DOWSIL™ Contractors Professional Sealant (CPS) is primer-less on many 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.

Form No. 62-1814-01-0521 S2D

How to Use (Cont.)

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.

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

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

Typical Cure

Cure rate at 25°C and 50% RH:

Tack-free time: < 1 hour

Thorough cure 9 mm depth: 7–14 days

Maintenance

Generally, no maintenance is required. If the sealant becomes damaged, replace the damaged portion. DOWSIL™ Contractors Professional Sealant (CPS) 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.

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 Professional Sealant (CPS) has a shelf life of 12 months from date of manufacture. Refer to product packaging for "Use By" date.

Packaging Information

DOWSIL™ Contractors Professional Sealant (CPS) is available in 310 ml disposable plastic cartridges that fit ordinary caulking guns and 600 ml disposable sausages.

Limitations

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

DOWSIL™ Contractors Professional Sealant (CPS) is not recommended for:

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

Availability

DOWSIL™ Contractors Professional Sealant (CPS) is available from a local distributor.

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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