



## Dow Performance Silicones

# DOWSIL™ 121 Structural Glazing Sealant

Cost-saving, fast-cure structural silicone sealant lets curtainwall fabricators build with confidence



Façade contractors and manufacturers now have a high-performance alternative to the challenges posed by investments in expensive, two-part mixing equipment; slow-curing one-part sealants; mechanical fixations and gaskets; or the limited load capacity of tapes. DOWSIL™ 121 Structural Glazing Sealant answers those challenges with a comprehensive, fast-cure, easy-to-install solution.

### On-site or in-shop structural glazing

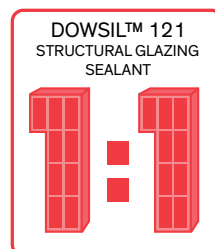
DOWSIL™ 121 Structural Glazing Sealant is a neutral-cure, RTV silicone sealant ideal for assembly, installation or repair of structurally glazed glass and other substrates. It is especially suitable for on-site structural glazing – including storefront systems or attachment of panel stiffeners – as well as for in-shop structural glazing.

### Meets industry standards

- ASTM C719 Class 25 (G, A, O)
- ASTM C1184 Structural Sealant Specification
- ABNT NBR 15737:2009
- IRAM 11981

### Features/Benefits

- Easy-to-use, 1:1 mix ratio for portable dispensing
- Fast, 24-hour cure
- Available in black and gray, 400 ml (2 x 200 ml)/13.5 fl. oz. (2 x 6.8 fl. oz.) cartridges
- Suitable for structural glazing and weathersealing<sup>1</sup>
- Provides primerless adhesion to glass, alodine and anodized aluminum<sup>2</sup>
- Adheres to DOWSIL™ structural sealants for reglazing applications
- Achieves adhesion and structural strength in 24 to 48 hours<sup>3</sup>
- 12-month shelf life
- 20-year Structural Adhesion Limited Warranty available



### Easy-to-use, user-friendly dispensing

Featuring a unique 1-to-1 (“121”) mix ratio, DOWSIL™ 121 Structural Glazing Sealant is supplied in a portable, two-part cartridge, complete with a static mixer that simplifies mixing and minimizes quality control testing requirements. Easy application using pneumatic or electric pumps improves ergonomics over manual dispensing.

### Cost savings

Fast cure and simplified installation help save costs and increase productivity.

- Compared with one-part sealants, the cure time is reduced to just one day (24 hours) compared with 14-21 days
- Reduced swing stage rental
- Faster curing increases throughput and reduces work-in-process inventory
- 1:1 mix ratio eliminates the need to invest in expensive, specialized pumps and mixing equipment and related maintenance costs

## Typical properties

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow sales office or your Global Dow Connection before writing specifications on this product.

Test	Property <sup>1,4</sup>	Unit	Result
<b>As Supplied – As Tested at 23°C (75°F) and 50% RH</b>			
	Color – Base		Black/Dark Gray
	Color – Catalyst		White
	Physical Form		Paste
ASTM D1475	Specific Gravity – Base		1.35
ASTM D1475	Specific Gravity – Catalyst		1.24
<b>As Catalyzed – Mixed at 1:1 Base to Catalyst by Volume</b>			
	Working Time	minutes	15-45
	Unit Handling Time, 23°C (75°F), minimum <sup>3</sup>	hours <sup>2</sup>	24
	VOC Content, mixed	g/L	<25
ASTM D2202	Flow/Sag (slump)	inches (mm)	<0.2 (<5)
<b>Cured – After 1 Day at 75°F (23°C) and 50% RH</b>			
ASTM C661	Durometer, Type A	points	30
ASTM D412	Tensile Strength	psi (MPa)	300 (2.4)
ASTM C1135	Tensile Strength at 25%	psi (MPa)	26 (0.18)
ASTM C1135	Tensile Strength, Ultimate	psi (MPa)	90 (0.62)
ASTM C1135	Elongation, Ultimate	%	240
<b>Cured – After 7 Days at 75°F (23°C) and 50% RH</b>			
ASTM C661	Durometer, Type A	points	30-40
ASTM D412	Tensile Strength	psi (MPa)	350 (2.0)
ASTM C1135	Tensile Strength at 25%	psi (MPa)	40 (0.28)
ASTM C1135	Tensile Strength, Ultimate	psi (MPa)	135 (0.93)
ASTM C1135	Elongation, Ultimate	%	204
ASTM D719	Movement Capability	%	+/-25

<sup>1</sup>All structural glazing applications MUST be reviewed by the technical staff at Dow. If their recommendations are followed, Dow will issue a project-specific structural adhesive warranty.

<sup>2</sup>Certain sealing materials used in the anodizing process may increase the potential for use of primer to gain adhesion within a 24-hour period. DOWSIL™ Primer C is recommended for fast and consistent adhesion, especially to Kynar, polyester powdercoat and other high-performance substrates approved for architectural structural glazing applications.

<sup>3</sup>Adhesion must be confirmed prior to removing temporary attachments or shipping to the job site. In general terms, glazed units can be moved or temporary attachments removed within 24 hours, depending on the temperature and relative humidity (RH). DOWSIL™ 121 Structural Glazing Sealant can achieve the necessary strength and adhesion properties in 24 hours when applied and cured at 23°C and 50% RH. Check adhesion before moving units.

<sup>4</sup>All testing was conducted using an 18-element, ½-inch diameter static mixer and a pneumatic two-part gun operating at 87 psi.

Image: dow\_44065058696

### 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 WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

### LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

## Superior performance

DOWSIL™ 121 Structural Glazing Sealant leverages silicone benefits for better performance than organic weatherseal and structural tapes.

- Exceptional UV resistance unavailable from other technologies
- Durable, long-life performance
- Enables larger lite sizes
- Excellent movement capability
- Unlike tape, the sealant works as a weatherseal as well, eliminating a second installation step

## Service and support from a trusted source

To assist with your building project needs, Dow offers a full range of project services, including blueprint reviews of structural joint designs, as well as an available 20-year Structural Adhesion Limited Warranty.

## Contact us

With more than 50 years of construction industry experience, Dow High Performance Building Solutions has developed a wide range of proven materials for structural and protective glazing, weatherproofing, insulating glass, window and door fabrication, high- efficiency insulation, and building materials protection. Learn more about DOWSIL™ 121 Structural Glazing Sealant and our full range of construction industry solutions, including service and support, at [consumer.dow.com/construction](http://consumer.dow.com/construction).

Dow has sales offices, manufacturing sites, and science and technology laboratories around the globe. Find local contact information at [consumer.dow.com/contactus](http://consumer.dow.com/contactus).



Dow's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

**TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.**

**DOW DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

®™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

© 2018 The Dow Chemical Company. All rights reserved.

30023848

Form No. 63-1256-01 D