

Dow Corning® 795

Structural Glazing Sealant

FEATURES

- Meets ASTM C1184 for Structural Silicone Sealant
- Meets ASTM C719 Class 50 High movement capability +/-50% in well designed weatherseal joint
- Excellent adhesion to a wide range of substrates including glass, anodized and coated aluminum profiles
- Non corrosive cure system

BENEFITS

- Ease of use – all-temperature gunnability and easy tooling
- The cured product exhibits excellent weathering characteristics, and a high resistance to ultra-violet radiation, heat and humidity.
- High ultimate tensile strength which makes it suitable for structural bonding applications
- Excellent mechanical properties

COMPOSITION

- One-part, neutral-cure, RTV silicone sealant

One-part, neutral-cure silicone sealant

APPLICATIONS

- Dow Corning® 795 Structural Glazing Sealant is a one-component Silicone sealant designed for site or factory glazing and curtainwall production. It requires contact with air as it reacts with atmospheric moisture to cure to a tough but flexible silicone rubber. Dow Corning® 795 Structural Glazing Sealant can be used where dual structural and weatherseal applications are desired. It has up to +/- 50% movement capability in a well-designed weatherseal joint.

TYPICAL PROPERTIES

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

| Test ¹ | Property | Unit | Result |
|---|--------------------------------------|---------|------------|
| As Supplied | | | |
| ASTM C 679 | Tack-Free Time, 50% RH | hours | 1.5 (max) |
| | Curing Time at 25 °C, 50% RH | days | 7-14 |
| | Full Adhesion | days | 14-21 |
| ASTM C 639 | Flow, Sag or Slump | mm | 0 |
| | Working Time | minutes | 20-30 |
| | Specific Gravity | | 1.44 |
| | VOC Content ² | g/l | 32 |
| As Cured - 7 Days at 25 °C (77 °F), 50% RH | | | |
| ASTM D 412 | Tensile Strength (Ultimate) | MPa | 2.3 |
| | Elongation | % | 670 |
| ASTM C661 | Durometer Hardness, Shore A | points | 35 |
| ASTM D624 | Tear Strength, Die B | kN/m | 13 |
| As Cured – After 21 days at 25 °C (77 °F), 50% RH | | | |
| ASTM C 794 | Peel Strength | kg/cm | 8.5 |
| ASTM C 1135 | Tensile strength, at 100% elongation | MPa | 0.6 |
| | Ultimate Tensile strength, at break | MPa | 1.2 |
| | Ultimate elongation at break | % | 400 |
| ASTM C 719 | Joint Movement Capability | % | ±50 |
| As Cured – After 21 days at 25 °C, 50% Relative Humidity followed by 5,000 hours in a QUV weatherometer, ASTM G 53 | | | |
| ASTM C 1135 | Tensile strength, at 100% elongation | MPa | 0.6 |
| | Ultimate Tensile strength, at break | MPa | 1.1 |

¹ASTM – American Society for Testing and Materials.

²Based on South Coast Air Quality Management District of California. Maximum VOC is listed both inclusive and exclusive of water and exempt compounds. For a VOC data sheet for a specific sealant color, please send your request to product.inquiry@dowcorning.com.

DESCRIPTION

Dow Corning®795 Structural Glazing Sealant is a one-part, neutral-cure, architectural-grade sealant that easily extrudes over a wide temperature range. This cold-applied, non-sagging silicone material cures to a medium-modulus rubber upon exposure to atmospheric moisture. The cured sealant is durable and flexible enough to accommodate ± 50 percent movement of original joint dimension when installed in a properly designed weatherseal joint. In a properly designed structurally glazed joint, the sealant is strong enough to support glass and other panel materials under high wind-load and seismic effects.

APPROVALS/ SPECIFICATIONS

Dow Corning®795 Structural Glazing Sealant meets the requirements of: ASTM Specification C 1184 for structural silicone sealants ASTM Specification C 920, Class 50

COLORS

Dow Corning®795 Structural Glazing Sealant is available in 4 colors: black, white, gray and bronze.

HOW TO USE

When *Dow Corning*®795 Structural Glazing Sealant is used in structural applications the structural joint design MUST be reviewed by a Dow Corning technical service specialist.

Complete design and installation guidelines are contained in the Dow Corning Asia Technical Manual, and must be followed for warranty applications when using this product.

JOINT DESIGN

Structural joints sealed with *Dow Corning*®795 Structural Glazing Sealant should have a minimum depth (or bite) of 6mm. For large site-glazed joints the sealant or bite should be not more than 15mm when the sealant can cure from one side only. When an open-cell moisture-permeable spacer tape is used, a structural bite up to 30mm can cure to optimum strength. The exact structural

bite should always be calculated. The thickness of the structural sealant joint or glueline should be 6mm minimum. As it must accommodate thermal and dynamic movements the actual joint movements should be calculated. Ideally the bite to glueline ratio should be not more than about 3:1.

ACCESSORY SELECTION

The appropriate selection of all accessories such as setting blocks and backing materials is important to avoid discoloration or adhesion-related problems due to incompatibility. Dow Corning will also assess the suitability of proposed accessory materials as part of the standard testing services. Silicone-based setting blocks are generally recommended for best compatibility.

PREPARATORY WORK

Thoroughly clean all substrates to be sealed, removing all contaminants such as grease, oil, dust, frost or water. All metal, glass, or other surfaces should be cleaned with the recommended solvent, using a lint free cloth.

METHOD OF APPLICATION

Install backing material or joint filler, setting blocks, spacer shims and tapes. Mask areas adjacent to joints to ensure neat sealant lines. Apply *Dow Corning*®795 Structural Glazing Sealant in a continuous operation using positive pressure. (The sealant can be applied using many types of air-operated guns and most types of bulk dispensing equipment.) Before a skin forms (typically within 15 minutes), tool the sealant with light pressure to spread the sealant against the backing material and joint surfaces. Remove masking tape as soon as the bead is tooled.

HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL

SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEB SITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

USABLE LIFE AND STORAGE

When stored at or below 27 °C (80 °F), *Dow Corning*®795 Structural Glazing Sealant has a shelf life of 12 months from the date of manufacture. Refer to product packaging for "Use By Date."

Questions about the use of *Dow Corning*®795 Structural Glazing Sealant can be answered by calling your local Dow Corning Application Sales Engineer. Our laboratory personnel and technical service staff are also available for assistance.

PACKAGING INFORMATION

Dow Corning®795 Structural Glazing Sealant is supplied in 300 ml disposable plastic cartridges and 600 ml foil sausages.

LIMITATIONS

Dow Corning®795 Structural Glazing Sealant should not be used for structural applications without the prior written approval of Dow Corning Construction Industry Technical Services Department. Each project should be specifically and separately approved by Dow Corning.

Project specific approval involves the following prerequisites:

- Joint dimensioning and print reviews.
- Successful laboratory adhesion and compatibility testing to all building components.
- Observance of professional sealant application and workmanship standards.

- Users should always consult Dow Corning Technical Services Department for adhesion recommendation.

Dow Corning shall not be held liable for any possible claims arising from structural glazing use of *Dow Corning*®795 Structural Glazing Sealant for projects which have not been specifically approved by Dow Corning.

For projects which have been approved, Dow Corning will issue a structural adhesion warranty on a case by case basis at the user's request. It is the user's exclusive responsibility to ensure project compliance with local building regulations.

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

HEALTH AND ENVIRONMENTAL INFORMATION

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our Web site, dowcorning.com or consult your local Dow Corning representative.

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.

Dow Corning'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.

DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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