Dow Corning® 790 Silicone Building Sealant

FEATURES

- Excellent performance even in building joints that experience extreme movement
- Suitable for new and remedial construction
- Extension/compression capability of +100/-50 percent

BENEFITS

- Excellent weathering properties and resistance to sunlight, rain, snow, and temperature extremes
- Excellent unprimed adhesion to masonry, concrete substrates
- Easy application over a wide temperature range

COMPOSITION

- Ultra-low-modulus, one-part, neutral-cure silicone sealant

Ultra-low-modulus sealant for new and remedial construction joint sealing applications

APPLICATIONS

Dow Corning® 790 Silicone Building Sealant offers outstanding unprimed adhesion to masonry and is particularly effective for sealing expansion and control joints, precast concrete panel joints, Exterior Insulation and Finish Systems (EIFS) joints, curtainwall joints, mullion joints, stone pavers, and many other construction joints. When used in accordance with Dow Corning application and testing recommendations, the sealant forms a durable, flexible, watertight bond with many common building materials, including combinations of stone, concrete, masonry, granite, marble, aluminum, painted substrates, and glass.

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*	Property	Unit	Result
	As Supplied		
ASTM C 679	Tack-Free Time, 50% RH	hours	1
	Curing Time, 50% RH, at 25°C		
	(77°F), 3/8" depth	days	7-14
	Full Adhesion, cured joint	days	14-21
ASTM D 2202	Flow, Sag, or Slump		None
CTM 98 B	Working Time	minutes	10-20
EPA Method 24	VOC Content[1], maximum	g/L	43
	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	Tensile Strength, maximum	psi (kg/mm2)	100 (0.070)
ASTM C 794	Peel Strength	lb/in (kg/cm)	25 (4.46)
ASTM C 1135	Tensile,		
	at 25% extension	psi (kg/mm2)	15 (0.010)
	at 50% extension	psi (kg/mm2)	20 (1.015)
ASTM C 719	Joint Movement Capabilities		
	Extension/Compression	%	+100/-50
ASTM C 1248	Staining, various substrates		None

*ASTM: American Society for Testing and Materials.
 CTMs (Corporate Test Methods) correspond to standard ASTM tests in most instances. Copies of CTMs are available upon request.
[1]Based 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

Suitable for new construction or remedial applications, *Dow Corning* 790 Silicone Building Sealant provides excellent performance, even in building joints that experience extreme movement. It places a low stress on the sealant/substrate bond line to minimize failures in moving joints.

Dow Corning 790 Silicone Building Sealant is available in 11 colors: black, precast white, gray, natural

stone, bronze, adobe tan, blue spruce, rustic brick, sandstone, charcoal, and dusty rose. Custom colors are available upon request.
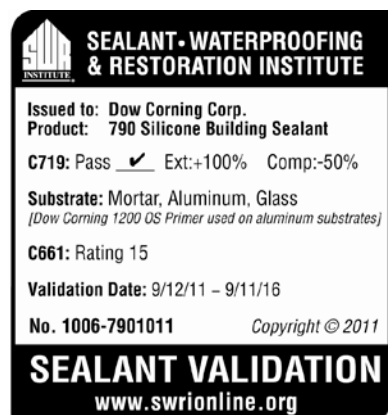
APPROVALS/ SPECIFICATIONS

This sealant meets or exceeds the requirements of:

- ASTM Specification C 920, Type S, Grade NS, Class 100/50, Use T, NT, M, G, A, and O
- Many UL wall/floor fire designs, some without a protective cover plate (see www.ul.com for current listing)
- Fire Tests of Building Construction and Materials, UL 263 (ASTM E 119)

Data from an independent test lab and Sealant, Waterproofing and Restoration Institute validation are available from Dow Corning and the SWR Institute. A complete product specification sheet for this product is available upon request.

HOW TO USE

Consult the current version of the Dow Corning Americas Technical Manual, Form No. 62-1112, (available from dowcorning.com/construction) for detailed information on application methods, joint design, field testing, and warranty requirements when using *Dow Corning®* brand sealants. Please contact your local Dow Corning Sales Application Engineer for specific advice.

SEALANT·WATERPROOFING & RESTORATION INSTITUTE

Issued to: Dow Corning Corp.
Product: 790 Silicone Building Sealant

C719: Pass ✔ Ext:+100% Comp:-50%

Substrate: Mortar, Aluminum, Glass
[Dow Corning 1200 OS Primer used on aluminum substrates]

C661: Rating 15

Validation Date: 9/12/11 – 9/11/16

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SEALANT VALIDATION
www.swrionline.org

HANDLING PRECAUTIONS

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 32°C (90°F), *Dow Corning* 790 Silicone Building Sealant has a shelf life of 12 months from date of manufacture. Refer to product packaging for "Use By" date.

PACKAGING INFORMATION

Dow Corning 790 Silicone Building Sealant is packaged in 10.3-fl oz (305-mL) disposable cartridges that fit ordinary caulking guns, 20-fl oz (590-mL) E-Z Pak foil sausages that fit caulking guns, and also in 2.0- and 4.5-gal (7.5- and 17-L) bulk pails. It can be dispensed by many air-operated guns and most types of bulk dispensing equipment.

LIMITATIONS

Dow Corning 790 Silicone Building Sealant should not be applied:

- In structural applications.
- Below grade or to materials that outgas, which can cause bubbling in curing sealant.

- On brass or copper or other similar material that can be corroded.
- To surfaces that are continuously immersed in water.
- For use as an interior penetration firestop sealing system.
- To building materials that bleed oils, plasticizers, or solvents – materials such as impregnated wood, oilbased caulks, green or partially vulcanized rubber gaskets, or tapes or bituminous below-grade waterproofing and asphalt-impregnated fiberboard.
- In totally confined spaces because the sealant requires atmospheric moisture for cure.
- To surfaces that will be painted after application. The paint film will not stretch with the extension of the sealant and may crack and peel and most likely will not adhere to the sealant.
- To surfaces in direct or indirect contact with food.
- To wet or frost-laden surfaces.
- In applications where solvents or primers are not fully dried prior to sealant application. Uncured sealant is very sensitive to many solvents, primers, and cleaning agents; these may cause the sealant to remain uncured or tacky.

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.

A 20-year Weatherseal Limited Warranty is available. Some testing may be required. Consult your Dow Corning Sales Application Engineer for details.

We help you invent the future. ™

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