Product Information
Silicone
Coatings

DOW CORNING

Dow Corning® AllGuard Silicone Elastomeric Coating

FEATURES

- Provides long-term waterproofing protection
- Maintains water protection properties even when exposed to sunlight, rain, snow, or temperature extremes

COMPOSITION

- One-component, pigmented, water-based silicone elastomer

Water-based silicone elastomer for waterproofing above-grade exterior masonry substrates

APPLICATIONS

- *Dow Corning*® AllGuard Silicone Elastomeric Coating is designed to waterproof above-grade exterior masonry substrates, such as concrete block, fluted block, brick, stucco, synthetic stucco, poured concrete, precast concrete, exterior insulation finish systems (EIFS), and previously coated masonry substrates.

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
ASTM D 2369	Solids Content	percent by weight	58.6
		percent by volume	50.1
ASTM D 1475	Specific Gravity	lb/gal (kg/L)	9.64 (1.155)
ASTM D 2196	Viscosity[2]	cps (Pa s)	63,000 (63)
ASTM D 1849	High Temperature Stability (no change in viscosity)	days	>28
EPA Method 24	Volatile Organic Content[3] (VOC)	lb/gal (g/L)	<0.42 (<50)
As Cured			
ASTM D 2240	Durometer Hardness, Shore A	points	38
ASTM D 412	Tensile Strength	psi (MPa)	>145 (1.00)
ASTM D 412	Elongation	percent	600
ASTM D 1653	Permeance	English perms (ng/(m².Pa.s))	43.2 (2480)
ASTM D 1737	Room Temperature Flex, 1/8" mandrel		Pass
ASTM C 711	Low Temperature Flex, 1/4" mandrel		Pass
ASTM D 3274	Fungus Resistance		No growth
ASTM D 6904	Wind Driven Rain[4]		Pass

[1]ASTM: American Society of Testing and Materials.
[2]Brookfield HAV, spindle #3, 2 rpm, Pastel base.
[3]VOC includes all Dow Corning approved colors (EPA method 24 or 40 CFR 59.406 data).
[4]Measured on coating system with two coats of *Dow Corning* AllGuard Silicone Elastomeric Coating.

DESCRIPTION

Dow Corning AllGuard Silicone Elastomeric Coating is a one-part, 100 percent water-based silicone elastomer supplied in three tint bases for pigmenting at distributor locations.

The coating is typically applied in two coats over *Dow Corning*® AllGuard Primer. The coating can be roller, brush, or spray applied. It cures to form a flexible membrane that is impervious to water but has the ability to “breathe,” allowing water vapor to escape from inside the substrate.

Its matte finish minimizes brush and roller marks. The coating provides long-term waterproofing protection, withstanding hurricane-force, wind-driven rain; normal movement imposed by seasonal thermal contraction and expansion; ultraviolet radiation; and the elements. The coating maintains its water protection properties even when exposed to sunlight, rain, snow, or temperature extremes.

Once pigmented, it is a ready-to-use material that can be applied between 5°C (40°F) and 38°C (100°F) to a clean, dry surface. The average drying time is 4 to 8 hours, depending upon temperature, humidity, and wind conditions. *Dow Corning* AllGuard Silicone Elastomeric Coating will attain full adhesion and physical properties in 7 to 14 days.

Dow Corning AllGuard Silicone Elastomeric Coating is available in more than 55 standard colors or can be custom colored to order.

HOW TO USE

When properly applied and cured, *Dow Corning* AllGuard Silicone Elastomeric Coating provides a fast, easy, and effective method of keeping exterior above-grade surfaces waterproof.

Design Considerations

In many building designs, areas such as ledges and windowsills allow air-borne dirt and soot to accumulate. Surfaces exposed to concentrated water run-down may appear dirty or streaky over time and the coating may become difficult to clean. In those areas, drip edges should be installed before the coating is applied to rechannel water away from the surface to protect the long-term appearance of the facade.

The success of a drip edge is achieved by moving the runoff water away from the wall onto the drip edge, creating a non-uniform runoff.

A drip edge can be fabricated from the same material as the windowsills or from other formable composites. The drip edge can be mechanically adhered to the substrate or attached with *Dow Corning*® 795 Silicone Building Sealant (see Figure 1).

Surface Preparation

All surfaces to be coated with *Dow Corning* AllGuard Silicone Elastomeric Coating must be prepared as described in the most recent *Dow Corning* AllGuard Silicone Elastomeric Coating Application and Maintenance Guide (Form No. 62-617). The following is a short reference guide for surface preparations.

All surfaces must be clean and free of dirt, frost, dust, oil, grease, mold, fungus, efflorescence, laitance, peeling coating, chalking coating, and any other foreign material. Green concrete must be allowed to cure 28 days before application of *Dow Corning* AllGuard Silicone Elastomeric Coating (see "Limitations"). Pressure clean, wire brush, or grind the wall surface to remove all of the above materials. Repair any damaged concrete, stucco, block, brick, masonry, or EIFS. Repair cracks larger than 1/16" (1.6 mm) with a material that is compatible with the substrate and *Dow Corning* AllGuard Silicone Elastomeric Coating. *Dow Corning*® 790 or 795 Silicone Building Sealant or *Dow Corning*® 791 Silicone Perimeter Sealant can be used for crack repairs.

SEALANT • WATERPROOFING & RESTORATION INSTITUTE

Issued to: Dow Corning Corporation
Product: AllGuard Silicone Elastomeric Coating

ASTM D 6904: Resistance to Wind Driven Rain
Weight Gain: 1.0 oz. Water Leaks: none
Pass ✔

ASTM E 96: Moisture Vapor Transmission
WVT (grains/ft².h) 12.7 oz. Perms (grains/ft².h.in.Hg): 35.2
Pass ✔

ASTM D 412: Tensile Properties
Tensile Strength: 240 psi Elongation: 930%
Pass ✔

ASTM C 1305: Cracking Bridging Ability
Results: No cracking
Pass ✔

ASTM D 2697: Solids Content by Volume
Results: 55.6% Density: 9.8 lbs/gal.
Pass ✔

Validation Date: 4/16/09 - 4/15/14

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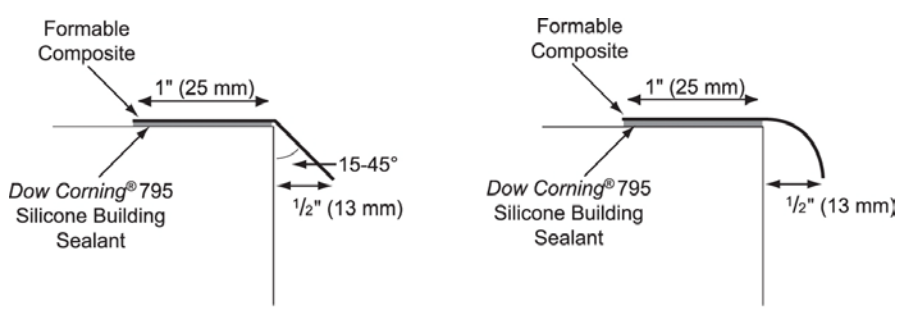
Coating

A minimum of two coats of *Dow Corning* AllGuard Silicone Elastomeric Coating are necessary to achieve the required 10-mil (0.25-mm) minimum dry film thickness to attain protection against through-water penetration and to qualify for a project-specific warranty.

Figure 1: Drip Edge Design Consideration



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Apply the coating in a 10-mil (0.25-mm) wet thickness (a job-specific mockup is recommended to determine actual usage). Due to *Dow Corning* AllGuard Silicone being 50% solids, two thick wet coats (10- to 12-mil [0.25- to 0.30-mm]) will result in the required 10-mil (0.25-mm) dry coating thickness. On occasion, a third coat may be necessary on porous or rough surfaces to achieve the minimum dry film thickness.

Apply using a ¾ to 1½" (19- to 38-mm) nap, polyester, or 50/50 polyester/wool blend roller cover, nylon bristle brush, or airless sprayer. When applying the coating with a roller, apply it in a fan pattern to achieve uniform thickness. Always finish roller applications in the same direction to reduce visual surface texture differences.

Allow the coating to dry (typically 2 to 4 hours) before applying additional coats. Note: Do not thin or cut back *Dow Corning* AllGuard Silicone Elastomeric Coating.

After the additional coat has been applied, the average drying time is 4 to 8 hours, depending upon temperature, humidity, and wind conditions. *Dow Corning* AllGuard Silicone Elastomeric Coating will attain full adhesion and physical properties in 7 to 14 days.

Dow Corning AllGuard Silicone Elastomeric Coating was developed to obtain good adhesion to the substrate without the need of a primer. To verify that this adhesion is sufficient, field adhesion tests must be performed as described in the *Dow Corning* AllGuard Silicone Elastomeric Coating Application and Maintenance Guide. If adhesion does not meet requirements, a field adhesion test with primer should be performed. To obtain a project-specific warranty, field adhesion testing, meeting the requirements, must be performed and documented. Surface adhesion tests on each type of substrate and each face of the structure must be field adhesion tested and acceptable per the *Dow Corning* AllGuard Silicone Elastomeric Coating Application and Maintenance Guide.

Maintenance

Walls should be inspected at least once a year. If coating becomes damaged, repair damaged portion to maintain weatherproofing performance. Any touch-ups or repairs to the coating can be completed by applying *Dow Corning* AllGuard Silicone Elastomeric Coating to the clean, dry area in accordance to the recommendations in this data sheet and the *Dow Corning* AllGuard Silicone Elastomeric Coating Application and Maintenance Guide.

Dow Corning recommends routine cleaning to minimize dirt accumulation, following these guidelines:

1. Abrasive cleaners and cleaning equipment should never be used.

2. Clean using pressurized water and a basic cleaning agent such as TSP (trisodium phosphate)[1] or Simple Green™[2]. Water pressure should not exceed 1,500 psi (10.3 MPa) to clean the surface without removing the coating material from the wall surface. A small test patch should be done first to determine how long the cleaning agent should be left on the surface before rinsing.

3. Removal of stubborn marks may require the use of a soft bristle brush with the cleaning solution. Avoid stiff brushes that may abrade the coating.

[1]Follow solvent manufacturer's recommended safe handling instructions and applicable federal, state, and local laws.
[2]Simple green is a trademark of sunshine makers, Inc.

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 DOW CORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

USABLE LIFE AND STORAGE

Protect *Dow Corning* AllGuard Silicone Elastomeric Coating and *Dow Corning* AllGuard Primer from freezing. Store in a cool, dry place out of the weather. When properly stored in its original, unopened container above 1°C (34°F) and below 32°C (90°F), *Dow Corning* AllGuard Silicone Elastomeric Coating and *Dow Corning* AllGuard Primer have shelf lives of 6 months and 18 months, respectively, from date of manufacture. Refer to product packaging for "Use By Date."

PACKAGING INFORMATION

Dow Corning AllGuard Silicone Elastomeric Coating and *Dow Corning* AllGuard Primer are available in 5-gal (19-L) pails (42-46 lb [19-21 kg] per pail depending on color).

LIMITATIONS

Dow Corning AllGuard Silicone Elastomeric Coating should not be applied:

- When the ambient or surface temperature is expected to fall

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below 5°C (40°F) within 24 hours of application

- When there is a threat of rain within the next 24 hours or the relative humidity is in excess of 90 percent (because conditions would not permit complete surface drying)

- On below-grade applications

- On non-masonry substrates such as metal, wood, plastic, or asphaltic materials, or on tar-contaminated masonry

- As a decorative paint (*Dow Corning* AllGuard Silicone Elastomeric Coating is not warranted for aesthetics)

- On newly applied or green cementitious materials; Industry guidelines recommend at least 28 days cure before painting or coating the substrates (see SSPC, 2010 Painting Manual, Chapter 3.1. Concrete Surface Preparation)

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.

Dow Corning offers a project-specific 10-Year Limited Waterproof Performance Warranty when *Dow Corning* AllGuard Silicone Elastomeric Coating is applied in accordance with Dow Corning's published application guidelines. Contact your Dow Corning Sales Application Engineer for details or to apply for a project-specific warranty.

Under this Limited Warranty, for a period of ten years from the date of purchase, Dow Corning will be responsible for the cost of replacement coating for any areas in which *Dow Corning* AllGuard Silicone Elastomeric Coating fails to protect the above-grade substrate from through-water penetration and for the cost of labor to apply such replacement coating, up to a maximum of five times the cost of the replacement coating. Dow Corning's warranty is subject to certain restrictions and does not cover faults attributable to workmanship or the appearance of the coating.

NOTE: No warranty is available when *Dow Corning* AllGuard Silicone Elastomeric Coating is used on a single-family residential dwelling.

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