



DOW LIQUIDARMOR™ – CM Flashing and Sealant

Product Information – Commercial – U.S.

1. PRODUCT NAME

DOW LIQUIDARMOR™ -CM Flashing and Sealant

2. MANUFACTURER

The Dow Chemical Company
Dow Building Solutions
200 Larkin Center, 1605 Joseph Drive
Midland, MI 48674
1-866-583-BLUE (2583)
Fax 1-989-832-1465

3. PRODUCT DESCRIPTION

Basic Use

DOW LIQUIDARMOR™ -CM commercial flashing and sealant is a sprayable, waterborne coating to be used as joint sealant and window flashing for Dow's commercial wall systems. If an airless paint sprayer is not available, the coating can be brushed or rolled, etc. The sprayable formulation is also engineered to penetrate and seal hard-to-reach gaps.

DOW LIQUIDARMOR™ -CM Flashing and Sealant dries to form a tight, seamless barrier around the window. It self-seals around fasteners, forming a tight, seamless barrier against water and air leakage.

DOW LIQUIDARMOR™ -CM Flashing and Sealant offers exceptional adhesion to extruded polystyrene (XPS), THERMAX™, steel stud, CMU, GREAT STUFF PRO™ Window & Door Insulating Foam Sealant,* and acrylic caulk, among other substrates. Once cured, it is extremely durable, withstanding jobsite conditions and weathering.

Limitations

Surface and ambient temperatures should be 35°F and rising and below 120°F during application. DOW LIQUIDARMOR™ -CM Flashing and Sealant tolerates rain shortly after installation. However, do not apply to surfaces with standing water or frost.

4. TECHNICAL DATA

Applicable Standards

DOW LIQUIDARMOR™ -CM Flashing and Sealant complies with the following standards listed in the codes:

- ASTM D903, "Standard Test Method for Peel or Stripping Strength of Adhesive Bonds"
- ASTM D412 "Standard Test Method for Elongation and Tensile Strength"
- ASTM E2485, "Standard Test Method for Freeze/Thaw Resistance of Exterior Insulation and Finish Systems (EIFS) and Water Resistive Barrier Coatings."
- ASTM E33 1, "Water Penetration of Exterior Windows by Uniform Static Air Pressure Difference."

- ASTM E2357, "Standard Test Method for Determining Air Leakage of Air Barrier Assemblies"
- ASTM D1970, "Nail Sealability"

Contact your Dow sales representative or local authorities for state/provincial and local building code requirements and related acceptances.

Physical Properties

DOW LIQUIDARMOR™ -CM Flashing and Sealant exhibits typical properties and characteristics indicated in Table 1 when tested as represented.

5. INSTALLATION

Safety and Conditions of Use

- As with any construction site, follow basic safety practices.
- Use safety glasses with side shields.
- Cover exposed skin and wear gloves while using a sprayer.
- Ensure adequate ventilation during application.

TABLE 1: DOW LIQUIDARMOR™ FLASHING AND SEALANT TYPICAL TECHNICAL DATA

Liquid Properties		Cured Properties	
Form	Grey-blue, sprayable sealant	ASTM D412 Tensile Strength	105 psi
Volatile Organic Compounds (VOC)	2.3 wt%	ASTM D412 Elongation at Break	450%
Density	11.4 lbs./gal.	ASTM E96 Water Vapor Transmission	4 perms
Total Solids	75%	Accelerated Weathering AC148, 45.2	Passes
Shelf Life	1.5 years	Nail Sealing Ability ASTM D1970/ AC148 Sec. 4.2	Passes

Application Environment

- 35°–120° F
- One step (no mesh required)
- Tolerates freeze-thaw
- Tolerates heat-age
- Rain resistant

Third-Party Tested:

ASTM E331, "Water Penetration of Exterior Windows by Uniform Static Air Pressure Difference": Passed with no leakage after 2 hours at 6.24 psf as part of Dow's THERMAX™ Wall System and Ultra Air Barrier Wall system designs.

ASTM E2357, "Standard Test Method for Determining Air Leakage of Air Barrier Assemblies": Rated at 0.0714 L/S-M2 at 75 Pa (0.1849 cfm/sq. ft. at 1.57 psf). as part of Dow's THERMAX™ Wall System and Ultra Air Barrier Wall system designs.

* Consult label and MSDS carefully before use.

- Follow all spray equipment instructions and warnings.
- See the Material Safety Data Sheet for further information.

Preparation

- To facilitate best results, apply to clean surfaces free of contaminants.
- Remove and replace damaged sheathing.
- Treat any gaps that are greater than ¼" wide with acrylic caulk.

Equipment

- Recommended Airless Paint Sprayer: Graco TexSpray Mark IV
 - Max GPM: 1.1
 - Max PSI: 3,300
 - Motor: 2.2 hp
- Recommended Spray Tip: Graco XHD325
 - Use a RAC X 521 tip for wider fan width (joints) and a RAC X 521 tip for wider fan width used on larger windows.

Application Instructions

- If necessary, just before spraying DOW LIQUIDARMOR™ -CM Flashing and Sealant, treat any gaps that are greater than ¼" wide with GREAT STUFF PRO™ Window & Door Insulating Foam Sealant or acrylic caulk.
- Allow 10 to 20 minutes for GREAT STUFF PRO™ Window & Door Insulating Foam Sealant or acrylic caulk to skin over, then spray DOW LIQUIDARMOR™ -CM Flashing and Sealant (50 ±5 wet mils thick) at 3 ±1" wide on board joints. As window flashing, cover rough opening per flashing design details at 50 ±5 wet mils thick, and > 2" overlap on any sheathing surface at transitions.

- After spraying DOW LIQUIDARMOR™ -CM Flashing and Sealant, ensure consistent film thickness of the coating and visually inspect for missed spots.
- If there are missed spots, a brush can be used to smooth the coating and fill any voids.
- Allow DOW LIQUIDARMOR™ -CM Flashing and Sealant to "dry-to-touch." Depending on humidity, temperature, sun exposure and wind direction, minimum 1 to 4 hours or overnight may be needed.
- Insert the window per manufacturer's instructions.

6. SAFETY AND CONDITIONS OF USE

- Read the label and Material Safety Data Sheet carefully before use
- It is recommended that spray applicators and those working in the spray area wear eye protection.
- Contact with exposed skin may cause skin discoloration and dryness.
- Gloves are recommended for prolonged exposures.
- Ensure adequate ventilation during spray applications.

7. AVAILABILITY

DOW LIQUIDARMOR™ -CM Flashing and Sealant is available in 5-gallon pails at select locations.

For more information, call 1-800-232-2436.

8. WARRANTY

When used per Dow's recommended installation, Dow hereby warrants that the product will be free of defects in material and perform to Dow's published physical property specifications at time of purchase so long as product is within best-use date as stated on product label, and the product is applied

per product literature. All recommendations or suggestions for use are made without guarantee. Dow recommends that customers inspect ambient and substrate conditions, and test product before use to determine content and suitability for their specific use. In no event shall Dow be liable for any other costs or damages, including labor costs.

LIMITATIONS

THESE WARRANTIES ARE IN LIEU OF ALL OTHER GUARANTEES AND WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND SHALL NOT BE EXTENDED OR ALTERED EXCEPT BY WRITTEN INSTRUMENT SIGNED BY DOW AND THE OWNER. THERE ARE NO WARRANTIES OR GUARANTEES THAT EXTEND BEYOND THE DESCRIPTION SET FORTH IN THESE WARRANTIES.

Dow does not warrant the compatibility of any other product (including but not limited to any roofing membrane or coatings) with the warranted products, and does not assume any liability for any incidental, consequential, exemplary, special or punitive damages, including (but not limited to) incremental heating, cooling or similar costs and any other harm to persons or property.

9. MAINTENANCE

Not applicable.

10. TECHNICAL SERVICES

Dow can provide technical information to help address questions when using DOW LIQUIDARMOR™ -CM Flashing and Sealant. For technical assistance, call your local Dow Sales representative.

In the U.S.

The Dow Chemical Company
Dow Building Solutions
200 Larkin, 1605 Joseph Drive
Midland, MI 48674

Technical Information

Contact your local Dow
 Sales representative

Sales Information

1 800 232 2436

dowbuildingsolutions.com

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Dow Polyurethane Foam Insulation and Sealants

CAUTION: When cured, these products are combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F (116°C). For more information, consult MSDS, call Dow at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-989-636-4400 in the U.S. or 1-519-339-3711 in Canada. When air sealing buildings, ensure that combustion appliances, such as furnaces, water heaters, wood burning stoves, gas stoves and gas dryers, are properly vented to the outside. See website: <http://www.epa.gov/iaq/homes/hip-ventilation.html>.

GREAT STUFF PRO™ sealant and adhesive products contain isocyanate and a flammable blowing agent. Read the label and Material Safety Data Sheet carefully before use. Eliminate all sources of ignition before use. Wear long sleeves, gloves and safety glasses or goggles. Provide adequate ventilation or wear proper respiratory protection. Contents under pressure.

Building and/or construction practices unrelated to building materials could greatly affect moisture and the potential for mold formation. No material supplier, including Dow, can give assurance that mold will not develop in any specific system.

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