

DuPont™ LiquidArmor™ CM Flashing and Sealant

Advanced Liquid Flashing Alternative for Commercial Applications

FEATURES/BENEFITS

Description

DuPont™ LiquidArmor™ CM Flashing and Sealant* is an innovative, patented liquid flashing solution designed to provide advanced moisture and air sealing protection to commercial buildings. A unique alternative to flashing tape, the elastomeric spray forms a tight, seamless barrier along the rough openings of windows and doors while helping to significantly reduce labor time.

LiquidArmor™ CM offers an excellent alternative to conventional flashing and sealing products for installation of Thermax™ or the Ultra Air Barrier Wall System. The liquid flashing solution covers and seals hard-to-reach gaps up to a quarter inch wide and offers a reliable replacement to peel and stick flashing tapes commonly used on board joints of commercial buildings. The versatile, water-based coating of LiquidArmor™ CM works on a wide range of surfaces, including foam boards, steel studs, concrete masonry units, tapes, wood buck, and wraps. With sprayable, aqueous technology, it facilitates a consistent application using commonly available airless paint sprayers.

LiquidArmor™ CM seals around screws, veneer anchors and penetrating fasteners, resulting in a durable and resilient barrier suited to withstand job site variations and long term building performance. Once the sealant sets to the final elastomeric solid, the treated area is protected and helps provide superior air leakage and moisture control as part of a joint treatment with DuPont's commercial wall assemblies.

Ease of Use

LiquidArmor™ CM is easy to handle and apply. Some benefits include:

- Time-saving, one-step application (no mesh required)
- No measuring, cutting or folding required
- Convenient application range of 35–120°F
- Easy conformation to complex geometries
- High abrasion resistance and durability during installation
- Freeze-thaw tolerance
- Heat-age tolerance
- Rain resistance

Available Sizes

LiquidArmor™ CM is available in 5-gallon pails at select locations.

Sustainable Solutions

LiquidArmor™ CM received a gold 2016 Edison Award in the Energy and Sustainability category, honoring products that impact energy generation, efficiency and conservation, and protection of the environment.

PROPERTIES

LiquidArmor™ CM Flashing and Sealant exhibits physical properties as indicated in Tables 1 and 2 when tested as represented. Review all instructions and (Material) Safety Data Sheet ((M)SDS) before use. Please contact DuPont at 1-866-583-2583 when additional guidance is required for writing specifications that include this product.

TABLE 1: Typical Liquid Properties for LiquidArmor™ CM Flashing and Sealant

Property	Typical Value	Units
Form	Gray-blue, sprayable sealant	-
Volatile Organic Compounds (VOC)	2.3	wt%
Density	11.4	lbs/gal
Total Solids	75	%

* LiquidArmor™ CM is a former product of The Dow Chemical Company

TABLE 2: Typical Cured Properties for LiquidArmor™ CM Flashing and Sealant

Test Method	Property	Typical Value	Units
ASTM D412	Tensile Strength	340	psi
ASTM D412	Elongation at Break	270	%
ASTM E96, Procedure B	Water Vapor Transmission	4	perms
AAMA 714, Section 5.3	Accelerated Weathering	Passes	-
ASTM D1970/AAMA 714, Section 5.2	Nail Sealing Ability	Passes	-
AAMA 714, Section 5.4	Elevated Temperature	Passes	-

INSTALLATION

Use Conditions

- DuPont™ LiquidArmor™ CM Flashing and Sealant tolerates rain if adequate skin forms before rain exposure. Exact time varies depending on temperature and humidity conditions.
- Surface and ambient temperatures should be 35°F and rising but below 120°F during application.
- Do not apply to surfaces with standing water or frost.

Preparation

- Read all safety information and conditions of use before applying product.
- To facilitate best results, apply to clean surfaces free of contaminants.
- Remove and replace damaged sheathing.
- If necessary, just before spraying LiquidArmor™ CM, treat any gaps that are greater than ¼" wide with Great Stuff Pro™ Window & Door Foam Sealant or acrylic caulk.

Application

- Allow 10 to 20 minutes for Great Stuff Pro™ Window & Door or acrylic caulk to skin over, then spray LiquidArmor™ CM (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 LiquidArmor™ CM, 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 LiquidArmor™ CM to "dry-to-touch." Depending on humidity, temperature, sun exposure and wind direction.
- Insert the window per manufacturer's instructions.

Curing

- Allow at least 24 hours cure before rain to avoid rain wash out, or overnight may be needed.
- In low temperature, high humidity (> 50% R.H.) applications, allow LiquidArmor™ CM to cure for at least 24 hours.

Equipment

Recommended Airless Paint Sprayer: Titan Speedflow 1200 SF or Titan Impact 1140 or Graco GMAX II 5900 or Graco TexSpray Mark IV

- Max GPM: 1.1
- Max PSI: 3,300
- Motor: 2.2 hp

Recommended Spray Tip: TR2 tip 519/213 or Graco XHD325

- Use 500s series for wider spray widths and 200s or 300s series for narrower gaps, such as joints, as a general guidance.

Refer to sprayer manufacturer for specific sprayer and tip details. Other sprayer models matching the equipment throughput and pressure range can be used.

TESTING

Applicable Standards

LiquidArmor™ CM Flashing and Sealant complies with the following standards listed in the codes:

- ASTM E331 – "Water Penetration of Exterior Windows by Uniform Static Air Pressure Difference."
- ASTM E2357 – "Standard Test Method for Determining Air Leakage of Air Barrier Assemblies."

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

Notice

The following properties were 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 DuPont'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 0.0810 and 0.0508 L/s-m2. as part of DuPont's Thermax™ Wall System and Ultra Air Barrier Wall System designs, respectively.

HANDLING

WARNING: For Professional Use Only. Read and follow the entire Safety, Handling, and Storage section and the Safety Data Sheets (SDSs, formerly MSDSs or Material Safety Data Sheets) carefully before use. The information below is designed to protect the user and allow for safe use and handling of DuPont products. Follow all applicable federal, state, local and employer regulations.

Precautionary Statements

- As with any construction site, follow basic safety practices. Follow all spray equipment instructions and warnings.
- It is recommended that spray applicators and those working in the spray area wear eye protection such as safety glasses with side shields or goggles. Gloves are recommended for prolonged exposures.
- Contact with exposed skin may cause skin discoloration and dryness.
- Ensure adequate ventilation during spray applications. Do not apply to surfaces with standing water or frost.

Disposal

Dispose of any residual DuPont product, coated debris, or solvent in accordance with applicable federal, state, and local government regulations.



**For more information visit us at
building.dupont.com
or call 1-800-448-9835**

NOTICE: No freedom from any patent owned by DuPont or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where DuPont is represented. The claims made may not have been approved for use in all countries or regions. DuPont assumes no obligation or liability for the information in this document. References to "DuPont" or the "Company" mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY DUPONT. ALL IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. The buyer assumes all risks as to the use of the material. Buyer's exclusive remedy or any claim (including without limitations, negligence, strict liability, or tort) shall be limited to the refund of the purchase price of the material. Failure to strictly adhere to any recommended procedures shall release DuPont Specialty Products USA, LLC or its affiliates, of all liability with respect to the materials or the use thereof. The information herein is not intended for use by non-professional designers, applicators or other persons who do not purchase or utilize this product in the normal course of their business.

DuPont 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 (Material) Safety Data Sheet ((M)SDS), call DuPont at 1-866-583-2583 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.

Great Stuff Pro™ Polyurethane Foam Sealant contains isocyanate and a flammable blowing agent. Read all instructions and (Material) Safety Data Sheet ((M)SDS), carefully before use. Eliminate all sources of ignition before use. Cover all skin. Wear long sleeves, gloves, and safety glasses or goggles. Not for use in aviation, or food/beverage contact, or as structural support in marine applications. Provide adequate ventilation or wear proper respiratory protection. Contents under pressure. Not to be used for filling closed cavities or voids such as behind walls and under tub surrounds; this improper use of the product could result in the accumulation of flammable vapors and/or uncured material. Failure to follow the warnings and instructions provided with the product, and/or all applicable rules and regulations, can result in injury or death.

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