

# Installation Procedures for LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant

## OVERVIEW

LIQUIDARMOR<sup>™</sup> LT Liquid Flashing and Sealant is an innovative, abrasion resistant, liquid flashing solution designed to provide commercial buildings advanced moisture and air sealing protection. When LIQUIDARMOR<sup>™</sup> LT is used in combination with Dow Commercial Wall Systems, it can decrease labor on the job. LIQUIDARMOR<sup>™</sup> LT is trowel applied after dispensing from a sausage gun or small pail. It can be applied at temperatures as low as -20°F.

## Sizes

LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant is available in 20 oz (2.2 lb) sausages and 2 gallon (~ 20 lbs) pails. See Table 1 for the theoretical yield per sausage and pail at the recommended 30 +/- 5 wet mil application thickness.

## EQUIPMENT GUIDELINES

#### Sausage Gun Selection

LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant can be applied using a standard construction sausage gun designed for 20 oz sausages. Either a standard conical nozzle or fan nozzle laying down a wide bead of LIQUIDARMOR<sup>™</sup> LT on the substrate can be used. A troweling tool is then used to evenly distribute the flashing over the desired area. Alternatively, LIQUIDARMOR<sup>™</sup> LT can be removed from a pail and directly trowel applied over substrates.

## Wet Mil Gauge

A wet mil gauge will help ensure LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant is applied at 30 +/- 5 wet mils, optimizing product yields and product performance.

# STEP-BY-STEP INSTALLATION INSTRUCTIONS

 Before you begin applying LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant, prepare the jobsite.

## Safety first!

As with any construction site, follow basic safety practices, reading and following all equipment and SDS instructions.

LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant does not pose a respiratory hazard. Protective gloves must be worn to avoid potential skin irritation. Always wear safety glasses with side shields or goggles.

#### Ambient & Substrate Conditions

Check current outdoor temperatures and forecasted weather for the day.

Surface and ambient temperatures should be -20°F and rising and below 120°F during the application of LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant. Do not apply the product on surfaces with standing water or frost. LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant can tolerate rain within 15 minutes of application.

2. Check & Prepare All Installation Surfaces

LIQUIDARMOR<sup>™</sup> LT can span gaps up to ¼". Seal any gaps ¼" or greater with GREAT STUFF PRO<sup>™</sup> Gaps & Cracks, GREAT STUFF PRO<sup>™</sup> Window & Door or foam backer rod. If either GREAT STUFF PRO<sup>™</sup> Gaps & Crack or GREAT STUFF PRO<sup>™</sup> Window & Door is used, be sure it is fully cured before applying LIQUIDARMOR<sup>™</sup> LT.

Note that LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant is designed to span nonmoving joints (joints that move < 15%). If more movement is needed, consider traditional expansion joint treatments or contact your local Dow representative for suggestions.

## Table 1: LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant Theoretical Yield

Application Width (inches)	20 oz Sausage Theoretical Yield at 30 mil wet (linear feet)	2 gallon Pail Theoretical Yield at 30 mil wet (linear feet)
1	105	1120
2	53	560
3	35	373
4	26	280
6	18	187
8	13	140

If the facer on the THERMAX<sup>™</sup> Brand Insulation boards was damaged during installation, be sure to note so that LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant can be applied over the damaged areas once application has begun. WEATHERMATE<sup>™</sup> Straight Flashing Tape could also be used to tape down any facer flaws.

3. Flash Foam Board Joints, Penetrations, Rough Openings and/or Counterflash

Flash board joints, penetrations and/ or fenestration openings as detailed by the project drawings by applying LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant from either a sausage gun or directly from a pail onto the substrate. Trowel LIQUIDARMOR<sup>™</sup> LT to 30 ±5 wet mils. LIQUIDARMOR<sup>™</sup> LT has an average tooling time of 30 minutes.

Be sure to follow project drawing details. LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant is a critical component of the building envelope. Proper installation is required for the flashing to protect the building from air infiltration and water penetration as well as meet all Code requirements.

## Foam Board Joints

Apply a minimum of 1 inch over the joint, making sure that a minimum of 1/2 inch of LIQUIDARMOR<sup>™</sup> LT covers each side of the joint. Fasteners and washers along the board joints should also be completely covered with LIQUIDARMOR<sup>™</sup> Flashing and Sealant. When covering fasteners and washers, extend the LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant 1 inch onto the substrate from the outer edge of the washer. Brick anchors can installed after the application of LIQUIDARMOR<sup>™</sup> Flashing and Sealing.

#### **Rough Openings**

Extend LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant a minimum of 3 inches onto the sheathing face, completely covering the sheathing board edge. Then, extend LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant a minimum of 3 inches back onto the rough opening substrate or 1 inch behind where the primary air and water seal is to be installed, whichever is greater.

## **Penetrations & Counterflashing**

Apply LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant a minimum of 2 inches onto the sheathing face and a minimum of 2 inches onto the penetration substrate or primary flashing substrate.





 Inspect work shortly after LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant is applied.

## **Thickness Check**

Use a wet mil thickness gauge to ensure proper installation thickness. Use a trowel to even out the LIQUIDARMOR<sup>™</sup> LT application thickness. If product is consistently below minimum thickness, apply more material.

## Missed Spots & Fastener Washer Coverage

Check for missed spots along board joints, penetrations and rough openings. Inspect that fasteners and brick ties, where required to be covered, are completely covered with LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant. Re-spray, touch up using a trowel on more, if needed. 5. Allow product to cure.

LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant is a moisture cure product and will skin over in 30-45 minutes. This time can be extended to ~60 minutes at colder temperatures. LIQUIDARMOR<sup>™</sup> LT only needs to cure for 15 minutes before rain exposure.

6. Inspect work after LIQUIDARMOR<sup>™</sup> Flashing and Sealant is cured.

LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant, at 30 ±5 wet mils, will cure to a dry thickness of approximately 20 mils. Again, check for missed spots and areas where the product may have been applied too thin. While very rare, note any pinholes found in the LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant. If any of these items are found, repair by applying more LIQUIDARMOR<sup>™</sup> LT Flashing and Sealant.

LIQUIDARMOR<sup>™</sup> LT can be easily wiped off most plastic troweling tools and friction cleans without cleanser from metal tools. Dow Corning DS1000 and DS2025 silicone cleaners can also be used to aid in removing LIQUIDARMOR<sup>™</sup> LT from tools. Note that LIQUIDARMOR<sup>™</sup> LT will adhere well to clothing, work boots and gloves. Contaminated clothing must not be allowed out of the workplace.

## **EXPOSURE & STORAGE INFORMATION**

Once installed, LIQUIDARMOR<sup>™</sup> LT Flashing and Sealants can remain exposed to sunlight with no exterior cladding for 6 months.

Unused LIQUIDAMOR<sup>™</sup> LT Flashing and Sealant can be stored for up to 12 months when in unopened sausage or pail. Opened pails can be tightly recapped, preferable with plastic laid over the remaining material for use the next day. Opened sausages can be remain in the sausage gun and used the next day. Simply dispense and dispose of the cured material at the end of the nozzle. Opened pails and sausages have a limited shelf life as they will begin to cure. Dispose of cured materials according to local laws.





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COMBUSTIBLE: THERMAX<sup>®</sup> products should be used only in strict accordance with product application instructions. THERMAX<sup>®</sup> products, when used in a building containing combustible materials, may contribute to the spread of fire. For more information, consult (M)SDS and/or call Dow at 1-866-583-BLUE (2583). In an emergency, call 1-989-636-4400.

WARNING: THERMAX<sup>™</sup> insulation does not constitute a working walkable surface or qualify as a fall protection product

STYROFOAM<sup>™</sup> Brand Spray Polyurethane Foam contains isocyanate, hydrofluorocarbon blowing agent and polyol. Read the instructions and Safety Data Sheets carefully before use. Wear protective clothing, gloves, goggles and proper respiratory protection. Supplied air or an approved air-purifying respirator equipped with an organic vapor sorbent and a particle filter is required to maintain exposure levels below ACGIH, OSHA, WEEL or other applicable limits. Provide adequate ventilation. Contents under pressure. STYROFOAM<sup>™</sup> Brand SPF should be installed by a trained SPF applicator.

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.

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.

LIQUIDARMOR<sup>™</sup>: Read the instructions and (Material) Safety Data Sheets (M)SDS 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.