

DensDefy®

Liquid Flashing

DensDefy® Liquid Flashing is a waterproofing, and detailing compound made with STP Technology which seals rough openings, penetrations, joints, sheathing fasteners and seams in new or existing wall assemblies.

DensDefy® Liquid Flashing creates an elastomeric flashing membrane which is highly durable. It eliminates the need for joint reinforcing tape reducing installation time.



Advantages

The inclusion of DensDefy® Liquid Flashing with the DensElement® Barrier System and DensDefy™ Liquid Barrier System delivers a complete, tested solution providing water-resistive and air barrier continuity.

Ease of Use

- No priming is required, bonds to most building materials.

Versatility

- Easy to apply to complex geometries.
- Compatible with many sealants and waterproofing or air barrier components.

Weather Resistant

- Provides a durable, weather-tight seal.
- Bonds and cures in adverse weather conditions, on damp substrates, and tolerates rain immediately after application.
- Will not tear or lose effectiveness when exposed to normal weather conditions during construction.
- May be fully exposed to UV and normal weather conditions for up to 12 months.
- Application temperature can be above 25°F and rising. Product is able to cure at 32°F.

Limitations

- Not for use as a structural sealant.
- Not for use as a through-wall flashing.
- Not for use below grade or in locations designed to be continuously immersed in water.
- Spans 1" maximum gap over backer rod.
- May not be used for service temperatures above 180°F.
- Cap and seal roofing systems or protect top of walls from water intrusion before and after the air barrier system is installed. Water intrusion may interfere with bonding of air barrier waterproofing materials and/or detrimentally impact the performance of such materials.

Avoid conditions that will create moisture in the air and condensation within the exterior walls. This is especially important during periods

when the exterior and interior temperature differentials can create a point within the exterior wall. The use of forced air heaters creates volumes of water which, when not properly vented, can condense on building materials. The use of heaters and any resulting damage is not the responsibility of Georgia-Pacific Building Products.

Consult heater manufacturer for proper use and ventilation.

Regulatory Compliance

VOC Compliance

Complies with California SCAQMD Rule 1168 (VOC limits for sealants and adhesives).

Safety Information

Always read full label and SDS for precautionary instructions before use. Use appropriate safety equipment and job-site controls during application and handling.

For additional product fire, safety and use information go to buildgp.com or call 1-800-225-6119.

Preparation

- Before applying the DensDefy® Liquid Flashing, ensure the surface is clean, and free of dirt, debris, contaminants, and other bond inhibiting materials.
- Protect people, vehicles, property, plants and all other surfaces not intended to receive DensDefy® Liquid Flashing.
- Treated lumber must be dry and may be solvent wiped with isopropyl alcohol to aid adhesion of DensDefy® products.
- Poured in place concrete must be allowed to cure a minimum of 7 days and be free of any curing compounds or form release agents before application.
- Mortar joints in CMU construction must be allowed to cure a minimum of 3 days.
- If adhering to Insulated Concrete Forms (ICFs), gently clean the surface with water and let dry.
- Ensure substrate is sound and is undamaged.
- All surfaces should have a positive pitch to prevent ponding or pooling water

General Technical Data

Physical Properties

FORM	viscous paste, mild odor, gold color
SPECIFIC GRAVITY	1.39 - 1.48
pH	not applicable
WT/GAL	11.60 – 12.35 lbs
TOTAL SOLIDS	99%
VOC CONTENT	30 g/L maximum
FREEZE POINT	not applicable
SHELF LIFE	1 year in tightly sealed, unopened container
HARDNESS, SHORE A	40-50
TENSILE STRENGTH	>150 psi
ELONGATION AT BREAK	>350% ASTM D412*
WATER VAPOR TRANSMISSION	12 perms (ASTM E96)
CORROSIVE PROPERTIES	Non-corrosive
AAMA 714	PASS

Surface & Air Temperatures

Surface and Ambient Temperatures

- Application temperature above 25°F (-3.8°C) and rising. Ensure the substrate is free of frost or ice prior to application.

Hot Weather Conditions/Precautions

- When air/surface temps exceed 95°F (35°C), apply product to the shady side of structure before daytime air and surface temps reach their peak. Keep containers closed and out of direct sunlight when not in use. Do not apply when temp exceeds 110°F (43°C).

Cold Weather Conditions/Precautions

- May be applied to frost-free substrates at temps above 25°F (-3.8°C). Ensure the substrate is free of frost or ice prior to application. Product will not begin to cure until temps reach 32°F (0°C) and remain above freezing. Keeping sausages warm prior to application may make product easier to apply and spread.

Low Humidity Conditions/Precautions

- Curing may take longer when lower humidity levels occur.

Surfaces with Standing Water or Frost

- While DensDefy® Liquid Flashing may be applied to damp surfaces and tolerates rain immediately after application, do not apply to surfaces with standing water or frost.

Equipment

Reference DensElement® Barrier System Installation Guidelines for specific recommendations of appropriate equipment.

- Dispense DensDefy® Liquid Flashing with a sausage type caulking gun and spread with a spreading tool.
- Do not use soapy water or solvent to help with the tooling process or to slick the surface profile..

Personal Protective Equipment

- Eye/Face Protection:** Wear safety glasses with side shields (or goggles) and a face shield.
- Skin Protection:** Hand protection – Wear appropriate chemical resistant gloves.
- Other:** Wear appropriate chemical resistant clothing. Refer to SDS for more information: [https:// buildgp.com/resources](https://buildgp.com/resources). Once on the website click SDS.

Storage & Handling

Store in a cool, dry place. Keep container tightly closed when not dispensing. Do not open container until preparation work has been completed. Do not alter or mix with other chemicals. When stored at or below 80°F (27°C) DensDefy® Liquid Flashing has a shelf life of 12 months after the date of manufacture. This shelf life assumes upright storage of factory-sealed containers. Do not double stack pallets. Dispose of unused product and container in accordance with local, state and federal regulations.

Application of DensDefy® Liquid Flashing

Read “Preparation” section of this document and the SDS located at <https://buildgp.com/resources> before use.

Dilution & Mixing

Apply as packaged. Do not dilute or alter, or use for applications other than specified. No mixing required.

Typical Coverage Rates

Coverage rates will vary depending on surface texture, substrate porosity, installer skill level and other factors. Actual rates should be determined through mock-up applications. DensDefy® Liquid Flashing is sold in 20 oz sausages.

DensElement® Barrier System DensDefy® Liquid Flashing Application Chart*

Container: 20 oz. "Sausage"

2 inch joint width coverage

Minimum Mil Thickness	Coverage (linear feet)
16 (minimum)	85
24	60
32	42

2x4 framed opening coverage

Minimum Mil Thickness	Coverage (linear feet)
16 (minimum)	25-30
24	37-45
32	12-15

* Coverage shown is an estimate only. Actual coverage will vary based on experience level of applicator and other factors

* Coverage assumes that joints and corners are butted tightly together and gaps and voids are prefilled with backer-rod

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Installation Instructions

Sealing Panel Seams, Corners, Fasteners, Transitions, Rough Openings and Penetrations for WRB-AB Compliance Using DensDefy® Liquid Flashing

Dispense DensDefy® Liquid Flashing from a 20-oz. sausage-type caulking gun. For best results, spread/tool DensDefy® Liquid Flashing while still wet, within 2–3 minutes of gun application.

Note: DensDefy® Liquid Flashing shall be installed at a minimum of 16 wet mils.

Refer to DensElement® Barrier System Installation Guide for more detailed instructions.

Panel Seams

1. Apply DensDefy® Liquid Flashing over the DensElement® Sheathing joint seam.
2. With a straight-edged tool, spread evenly over both sides of the seams.

Corners

1. Apply DensDefy® Liquid Flashing over the inside and/or outside corner.
2. With a straight edge tool, spread evenly over the sheathing corner, extending over both sides of the corner.

Fasteners

1. The fasteners should be spotted with DensDefy® Liquid Flashing and wiped down with a straight edge tool leaving a minimum thickness of 16 wet mils over the entire fastener.

Rough Openings

1. Rasp jagged or uneven DensElement® Sheathing edges and clean framing free of debris and dust or other bond-inhibiting materials.
2. Apply a bead of DensDefy® Liquid Flashing into the entire width of the inside corners of the opening return.
3. Apply DensDefy® Liquid Flashing over the opening sill, jamb and header as well as the DensElement Sheathing adjacent to the opening.
4. With a straight edge tool, spread DensDefy® Liquid Flashing over the entire width of the sill, jambs, header and DensElement® Sheathing surface adjacent to the opening.

Pipe Penetrations

1. Penetrations should be rigid and mechanically secured.
2. If the gap between materials is over 1/4", install backer rod between penetration and DensElement® Sheathing to form a back dam regardless of size of penetration or opening.*
*Only acceptable for non fire rated assemblies.
3. Apply a thick bead of DensDefy® Liquid Flashing around the penetration.
4. Use a straight edge tool to feather and completely seal the joint around the penetration.

Material Transitions

1. If the gap between materials is over 1/4" fill the gap with a backer rod fill the gap with a backer rod.
2. Apply DensDefy® Liquid Flashing over the DensElement® Sheathing and adjacent material.
3. Using straight edge tool, spread DensDefy® Liquid Flashing over material surface.
4. Using straight edge tool, spread DensDefy® Liquid Flashing over material transition joint.
5. Apply at a rate to achieve a minimum thickness of 16 wet mils. Ensure the flashing is applied a minimum of 2" on each substrate material surface.

Repair

After curing, voids or pinholes can be filled with an additional application of DensDefy® Liquid Flashing. For additional repair instructions, refer to the DensElement® Barrier System Repair Guide.

Curing

At 70°F (21°C) and 50% relative humidity, product skins within 30–60 minutes and dries in 4–6 hours. DensDefy® Liquid Flashing is moisture curing. Low temperatures and low relative humidity slow dry time. High temperatures and high relative humidity accelerates cure time.

Clean-up

Clean tools and equipment with mineral spirits or similar solvent immediately after use and prior to material curing. Follow all safety precautions. Cured material must be removed mechanically.

Warranty

Visit buildgp.com/warranties for limited warranty details.

Customer Care

Our sales and technical experts are available to assist. Call our GP Technical Hotline at 800-225-6119, or visit our website at denselement.com. Georgia-Pacific is not responsible for providing quality control. Proper application is the responsibility of the applicator.

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DensDefy® Liquid Flashing Product Test Results

AAMA 714-19: Voluntary Specification for Liquid-Applied Flashing Used to Create a Water-Resistive Seal Around Exterior Walls in Openings in Buildings

Test	Method	Requirement	Result
Adhesive Strength to Substrate (lbf)	ASTM C794	≥ 5	Pass
Water penetration around Nails	ASTM D1970 Section 7.9	Shall Pass 31 mm (1.2 in) of Water	Pass
Accelerated Aging (lbf/in)	ASTM G154, UVA cycle 1 ASTM C794, Visual	≥ 5	Pass
Elevated Temperature (lbf/in) Level 3 = 176° F for 7 days	AAMA 711 ASTM C794 Level 3	≥ 5	Pass
Thermal Cycling (10 cycles)	AAMA 711 ASTM C794	≥ 5	Pass
Crack Bridging Ability Category II 10 Cycles	ASTM C1305/ AAMA 714 Section 5.6	Water holdout of 550 ml for 24 hrs.	Pass
Water Immersion (lbf)	AAMA 714, Section 5.7 ASTM C794	≥ 5	Pass
Damp Surfaces	ASTM C794	≥ 5	Pass
Moisture Vapor Permeance	ASTM E96 Procedure B	≥ 10	Pass
Additional Testing For Energy Code (IECC) Compliance¹			
*Air Leakage of Air Barrier Assemblies	ASTM E2357	0.04 cfm/ft ² at 75 Pa	Exceeded IECC requirements with below code air infiltration rates of 0.01 cfm/ft ² at 75 Pa
Fire Testing			
Surface Burning Characteristics	ASTM E84	Criteria for ICC and NFPA Class A Building Material: Flame Spread ≤ 25 Smoke Developed ≤ 450	Meets Class A Building Material Flame Spread: 15 Smoke Developed: 10
Surface Burning Characteristics of Building Materials and Assemblies (Canada)	CAN/ULC S102-10	N/A	Flame Spread Rating: 5 Smoke Developed Classification: 25

Testing was completed as required in AAMA 714-19:

Voluntary Specification for Liquid Applied Flashing used to Create a Water-Resistive Seal around Exterior Wall Openings in Buildings.

*ABAA: Air Barrier Association of America Acceptance Criteria for Liquid Applied Membranes

1. Meets ICC-ESR 3786

