Georgia-Pacific

DensDefy™
Transition Membrane

DensDefy™ Transition Membrane is a 25-mil composite impermeable membrane that is comprised of 16 mils of butyl adhesive and 9 mils of HDPP facer. It is primarily used as a transitioning accessory in the DensElement® Barrier System.

Basic Uses

DensDefy™ Transition Membrane is an impermeable, self-adhered sheet designed for use as a rough opening flashing and transition membrane for connecting dissimilar materials to maintain air and moisture barrier continuity. DensDefy™ Transition Membrane bonds to most surfaces such as glass mat gypsum sheathing, poured concrete, masonry, steel, and wood based substrates.

Features and Benefits

- The high-performance butyl has been tested and is compatible with the DensElement® Barrier System.
- Primerless application allows for faster installation time.
- Manufactured to a preset, uniform thickness that will not create excessive build up in rough openings while still providing exceptional strength/durability.
- Rugged HDPP film protects high-performance butyl membrane against incidental damage during construction process.
- Variety of widths available for job specific needs.
- Ability to be installed in a wide range of temperatures.

Packaging

Length	75’ (22 m)
Width	6” (15 cm) 8 rolls/box
	9” (22 cm) 4 rolls/box
	12” (30 cm) 4 rolls/box

Colors

Gold HDPP facer with Black DensDefy™ logo.

Storage

Store DensDefy™ Transition Membrane in the original, undamaged packaging in a clean, dry, and protected location where temperatures do not exceed 100 °F (37 °C).

Applicable Standards

DensDefy™ Transition Membrane is in compliance with AAMA 711 and has been tested to the following industry standards and test methods for self adhering flashing used for installation of Exterior Wall Fenestration Products:

- ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers – Tension
- ASTM D1970 Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection
- ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials
- ASTM E331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
- AAMA 800-10: Voluntary Specification and test Methods for Sealants
- ASTM C 734-06 (2012): Standard test Method for Low Temperature Flexibility of Latex Sealants After Artificial Weathering
- ASTM C 765-97 (2011): Standard Test Method for Low-Temperature Flexibility of Preformed Tape Sealants
- ASTM D 412-06a (2013): Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers – Tension
- ASTM D 1970/D 1970M-13:Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection
- ASTM D 3330/D 3330M-04(2010): Standard Test Method for Peel Adhesion of Pressure Sensitive Tape
- ASTM D 5034-09: Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)
- ASTM G 154-12a: Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials

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INSTALLATION INSTRUCTIONS

Surfaces to receive membrane must be dry, clean, firm, free of bond-inhibiting agents, such as dust, mud, oils, curing compounds or any other substances that might prevent placement and bonding of membrane.

Determine appropriate widths and lengths of DensDefy™ Transition Membrane prior to cutting. DensDefy™ Transition Membrane may be cut with scissors or a sharp utility knife. Use of longest lengths possible will minimize overlaps. For longer lengths, two applicators may reduce risk of wrinkles or fishmouths.

Transitions from Sheathing to Foundation, or from Sheathing to Dissimilar Materials

1. Choose the appropriate DensDefy™ Transition Membrane width to achieve a 2-in. (50 mm) minimum overlap on both sides of the transition. Pre-cut manageable lengths and place over the center of the transition area.

   Note: At corners or changes in plane, creasing the membrane prior to placing can help align the membrane.

2. Remove release paper from the DensDefy™ Transition Membrane and press in place following the contour of the substrate, avoiding wrinkles and fishmouths.

3. Use a J roller to apply even pressure to fully adhere the membrane and achieve a smooth and wrinkle free surface.

4. Apply DensDefy™ Liquid Flashing over edges of DensDefy™ Transition Membrane.

5. With a straight edge tool, spread DensDefy™ Liquid Flashing evenly over the membrane edge. Cover a minimum of 1-in. over the edge of the membrane and 1-in. over the adjacent material. Apply at a rate to achieve a minimum 16 wet mil thickness over the membrane edge, leaving no exposed membrane edge.

Transitions at Dissimilar Materials

1. For gaps greater than ¼" and less than 1", place pre cut lengths over the center of the transition area. Loop the membrane in a concave or convex fashion to accommodate potential movement. Use bond breaker material to ensure membrane does not adhere to surfaces inside the expansion joint. Maintain a minimum 2" (50mm) overlap on both sides of the joint.

2. Use a J roller to apply even pressure to fully adhere the membrane and achieve a smooth and wrinkle free surface.

3. Apply DensDefy™ Liquid Flashing over all edges of DensDefy™ Transition Membrane.

4. With a straight edge tool, spread DensDefy™ Liquid Flashing evenly over the membrane edge. Cover a minimum of 1-in. over the edge of the membrane and 1-in. over the adjacent material. Apply at a rate to achieve a minimum 16 wet mil thickness over the membrane edge, leaving no exposed membrane edge.

Protection at Sill of Rough Opening

1. As a best practice, apply a bead of DensDefy™ Liquid Flashing at the rough opening sill corners and allow to cure.

2. Apply bowtie reinforcement pieces of DensDefy™ Transition Membrane at rough opening sill corners.

3. Apply pre-cut lengths to sill, covering a minimum of 2 inches of the sheathing adjacent to the opening and wrap a minimum of 4 inches up rough opening jambs.

4. Use a J roller to apply even pressure to fully adhere the membrane and achieve a smooth and wrinkle free surface.

5. Apply DensDefy™ Liquid Flashing over all edges of DensDefy™ Transition Membrane.

6. With a straight edge tool, spread evenly over the membrane edge. Cover a minimum of 1-in. over the edge of the membrane and 1-in. over the adjacent material (minimum 16 wet mil thickness).

7. Apply DensDefy™ Liquid Flashing over the remaining width of the opening jambs, header and adjacent sheathing.

8. Apply DensDefy™ Liquid Flashing over the DensElement® Sheathing adjacent to the jambs and header in a zig-zag or ribbon pattern. Cover a minimum of 2-in. of the sheathing surface adjacent to the opening.

9. With a straight edge tool, spread DensDefy™ Liquid Flashing evenly over the membrane edge. Cover a minimum of 1-in. over the edge of the membrane and 1-in. over the adjacent material. Apply at a rate to achieve a minimum 16 wet mil thickness over the membrane edge, leaving no exposed membrane edge.

Protection at Rough Opening

1. As a best practice, apply a bead of DensDefy™ Liquid Flashing at rough opening corners and allow to cure.

2. Apply bowtie reinforcement pieces of DensDefy™ Transition Membrane at rough opening sill corners.

3. Apply pre-cut lengths to sill, covering a minimum of 2 inches of the sheathing adjacent to the opening and wrap a minimum of 4 inches up rough opening jambs.

4. Apply pre-cut lengths along rough opening jambs. Overlap, in a shingle lap fashion a minimum 2" (50 mm) onto sill protection.

5. Apply pre-cut lengths along rough opening header. Overlap, in a shingle lap fashion a minimum 2" (50 mm) onto jamb protection.

6. Use a J roller to apply even pressure to fully adhere the membrane and achieve a smooth and wrinkle free surface.

7. Apply DensDefy™ Liquid Flashing over all edges of DensDefy™ Transition Membrane.

8. With a straight edge tool, spread DensDefy™ Liquid Flashing evenly over the membrane edge. Cover a minimum of 1-in. over the edge of the membrane and 1-in. over the adjacent material. Apply at a rate to achieve a minimum 16 wet mil thickness over the membrane edge, leaving no exposed membrane edge.

Limitations

- Not intended for permanent exposure, cover within 12 months.
- Do not apply to damp, contaminated or frost-covered surfaces, including treated lumber which needs to be dry and wiped down.
- Not intended for dynamic joints. For gaps wider than 1" contact Technical Services.
- Application temperature is above 25°F (-4°C) and rising.

Warranty

GP's limited warranties for the DensDefy™ Transition Membrane and the DensElement® Barrier System are available at buildgp.com/warranties. GP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMERS ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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DensDefy™ Transition Membrane Product Test Results

Test	Results	Method
Tensile Strength (AAMA 711 Section 5.1) MD CMD	 1350 psi 1138 psi	ASTM D1970 Section 7.3
Nail Sealability (AAMA 771 Section 5.2)	Pass	ASTM D1970
Elongation	442%	ASTM D412,
Water Absorption	0	ASTM D570
Standard Test Method for Peel or Stripping Strength of Adhesive Bonds (ABAA Criteria) OSB (APA Exposure 1, smooth side out, 14% moisture Plywood (APA Grade Exposure 1) Anodized Aluminum Vinyl DensGlass Product applied to its face	Pass	ASTM D903
Accelerated Aging Peel (AAMA 711 Section 5.4)	Pass	ASTM D3330 Method F
Elevated Temperature Peel (AAMA 711 Section 5.5)	Pass	ASTM D3330 Method F
Thermal Cycling Peel (AAMA 711 Section 5.6)	Pass	ASTM D3330 Method F
Cold Temperature Pliability (AAMA 711 Section 5.7)	Pass	ASTM D3330 Method F
Peel Adhesion After Immersion (AAMA 711 Section 5.8) Pre-Immersion Post-Immersion	 Pass Pass	ASTM C765
Resistance to Peel (AAMA 711 Section 5.9)	Pass	ASTM D3330 Method F
Water Vapor Permeability	0.05 perms	ASTM E96 Method A
Water Vapor Permeability	0.07 perms	ASTM E96 Method B