

# TECHNICAL INFORMATION SHEET

## EPDM – Solvent Free Bonding Adhesive



**Item Description**

5 Gallon Pail (18.9 L)

**Item Number**

W563587029

### Product Information

#### Description:

Firestone EPDM – Solvent Free Bonding Adhesive is a polymer based bonding adhesive for adhering non-reinforced RubberGard™ EPDM membranes to approved substrates on vertical and horizontal applications. This adhesive is formulated for a single-sided application that does not need mixing, contains NEAR ZERO volatile organic compounds (VOC) and meets most current US environmental regulations, including Ozone Transport Commission (OTC) and South Coast Air Quality Management District (SCAQMD) rule 1168 regulations. Effectively odor free and non-hazardous, Firestone EPDM – Solvent Free Bonding Adhesive is an ideal bonding adhesive to quickly install RubberGard EPDM while being both environmentally and people friendly.

#### Method of Application:

##### Roofing Application

1. Position non-reinforced EPDM in place over acceptable substrate (not to exceed 1:12 slope).
  2. Allow EPDM membrane to relax for 30 minutes (minimum).
  3. Fold EPDM membrane back to expose the mating substrate to receive EPDM – Solvent Free Bonding Adhesive.
  4. Surfaces to receive Firestone EPDM – Solvent Free Bonding Adhesive shall be clean, smooth, dry, and free of sharp edges, loose and foreign materials, oil, grease, and other contaminants. Sweep the mating surface of the membrane with a stiff broom to remove excess dusting agent, if present, and remove other contaminants from the mating surfaces.
  5. Apply Firestone Solvent EPDM – Solvent Free Bonding Adhesive to the substrate (*not the EPDM membrane*) uniformly at a coverage rate of 120 to 150 square feet per gallon. EPDM – Solvent Free Bonding Adhesive may be applied to substrate as follows:
    - a. "Dip & Roll" using paint rollers
    - b. Drop Spreader with roller:
      - i. Ambient conditions will dictate the dispensing rate
    - c. Spray application:
      - i. Graco 60:1 Xtreme pump with NXT air motor, Heavy Duty Cart & Hopper Kit for gravity feed, 50' X 3/8" 4500 PSI high pressure hose, G-40 air assisted airless applicator with G40 519 tip. 1000 PSI pressure yields 9" wide adhesive fan when spray tip is 18" from the substrate. *Changing the spray tip to substrate distance will change the fan width.* Follow spraying with back-rolling *immediately* to uniformly apply adhesive on substrate.
        - 1) 1000 PSI pressure yields 9" wide adhesive fan when spray tip is 18" from the substrate. *Changing the spray tip to substrate distance*
- NOTE:** Take care to keep EPDM Solvent-free Bonding Adhesive from lap splice areas.  
**NOTE:** Do not mix
6. Allow 5-10 minutes after dispensing for the adhesive to set up, then adhere the EPDM membrane to the substrate. Set up time will vary, depending on ambient conditions.
7. Broom the membrane in place, *followed by rolling with a heavy roller* (carpet roller; lawn roller; etc) immediately after mating the EPDM into the adhesive to insure proper mating.

## TECHNICAL INFORMATION SHEET

# EPDM – Solvent Free Bonding Adhesive

### Vertical Surfaces

1. Apply EPDM – Solvent Free Bonding Adhesive to both the EPDM membrane and the vertical flashing substrate uniformly at coverage rate of 120 – 150 square feet per gallon per side.
2. Allow a brief open time period to allow EPDM – Solvent Free Bonding Adhesive to develop tack. This open time period will vary, depending on ambient conditions. Warm, humid days will require brief open time period. Cool, dry, days will require longer open time. Touch the adhesive surface with a clean, dry finger to determine whether tack has developed. *Some trial and error will be required, as too little open time may result in blistering between the membrane and bonding surface.*
3. Mate the EPDM membrane to the vertical substrate then roll the freshly mated vertically applied membrane using a 1½" to 2" (38 mm to 51 mm) wide silicone roller or a 7½" linoleum roller to insure proper mating pressure.

### Dispensing:

- EPDM – Solvent Free Bonding Adhesive can be dispensed via “dip and roll” method, using a medium nap (¼" to ⅜") solvent resistant paint roller to uniformly apply adhesive to substrate.
- EPDM – Solvent Free Bonding Adhesive can be dispensed via commonly used “drop spreaders” followed by back-rolling to uniformly apply adhesive to substrate. Ambient conditions will dictate rate of dispensing to result in specified coverage rate.
- EPDM – Solvent Free Bonding Adhesive can be spray applied using Graco 60:1 Xtreme pump followed by back-rolling to uniformly apply adhesive to substrate- see specifics listed under Approved Power Dispensing Equipment.

### Storage:

- Store in original unopened containers at temperatures between 60 °F and 80 °F (16 °C and 27 °C) until ready for use.
- If top layer of adhesive “skins over”, remove the “skin” to expose fresh adhesive.
- Shelf life of 12 months can be expected if stored in original unopened containers when stored at temperatures between 60 °F and 80 °F (16 °C and 27 °C). If exposed to lower temperatures, restore to room temperature before use.
- Temperature exposure exceeding 80 °F during storage will reduce the shelf life.
- Rotate stock to insure stored material will not exceed the 12 month shelf life.

### Coverage:

120 - 150 ft<sup>2</sup> per gallon (2.95 to 3.68 m<sup>2</sup> per Liter) (nominal). Some surfaces that are more uneven and porous may result in a lower coverage rate; while smooth, less porous substrates could result in higher coverage rates. All insulation joints, gaps in substrates greater than ¼" (6.3 mm) shall be filled with acceptable filler.

### \*LEED® Information:

Post Consumer Recycled Content: 0%

Post Industrial Recycled Content: 0%

Manufacturing Location: Spring Lake MI

\*NOTE: LEED® is a registered trademark of the U.S. Green Building Council.



# TECHNICAL INFORMATION SHEET

## EPDM – Solvent Free Bonding Adhesive

### Precautions:

- Review the Safety Data Sheet (SDS) before use
- Maximum roof slope is 1" in 12"
- Avoid prolonged inhalation
- Do not thin adhesive
- Keep this adhesive off membrane splice areas
- Use only when ambient and substrate temperatures exceed 40 °F (4 °C). Do not use when temperatures will drop below freezing within 12 hours after installation.
- Avoid skin contact. Wear OSHA approved gloves when handling
- This adhesive is moisture sensitive. Exposure to moisture initiates curing. Use contents of pail within 72 hours after initial pail opening, *if the pail has been sealed tightly*.
- Recommended cleaning procedures:
  - Before the adhesive cures: Splice Wash SW-100 or Single Ply LVOC Splice Wash using clean cotton rags.
  - After the adhesive cures: Single Ply LVOC Splice Wash using QuickScrubber™ Scrub Pads; or remove by mechanical means (wire brush if substrate will not be damaged)
- Use only with non-reinforced EPDM membrane
- DO NOT STIR
- Harmful or fatal if swallowed
- Do not use for splicing
- Use only in well ventilated areas
- Wear appropriate eye protection - safety goggles with side shields
- Cover pail when not in use
- Remove any skim coat of adhesive that may be present in pail; do not attempt to use skimmed or thickened adhesive
- This adhesive is heat sensitive. Temperature exposure exceeding 80 °F (32 °C) during storage will reduce the shelf life. Temperature exposure exceeding 90 °F (32 °C) during application will hasten curing.

### Typical Properties

<u>Property</u>	<u>Minimum Performance</u>
Base Polymer:	Synthetic
Color:	Yellow
Brookfield Viscosity:	6,000 ± 10,000 CPS
Weight/Gallon	8.3 to 8.5 lb/gal (0.9946 Kg/L to 1.0185 Kg/L)
Percent Solids:	100%
Field Dispensing:	Spray Apply, Drop Spread, Dip & Roll with rollers
VOC Content:	13 ± 3 Grams/Liter

### Acceptable Substrates

<u>Substrate</u>	<u>NOTE:</u>
Structural Concrete (New and Existing)	Substrate must be clean, dry, fully cured and may require primer
Plywood and OSB	Check local code for acceptance of direct application
Masonry and CMU (New and Existing)	Substrate must be clean, dry, fully cured and may require primer
IsoGard / ISO 95+™ GL	
IsoGard CG / RESISTA	
ISOGARD HD	
ISOGARD HD Composite	
DensDeck Products	DensDeck is a registered trademark of the G-P Gypsum Corporation
Securock	Securock is a registered trademark of the USG Corporation
DexCell	DexCell is a registered trademark of the National Gypsum Company

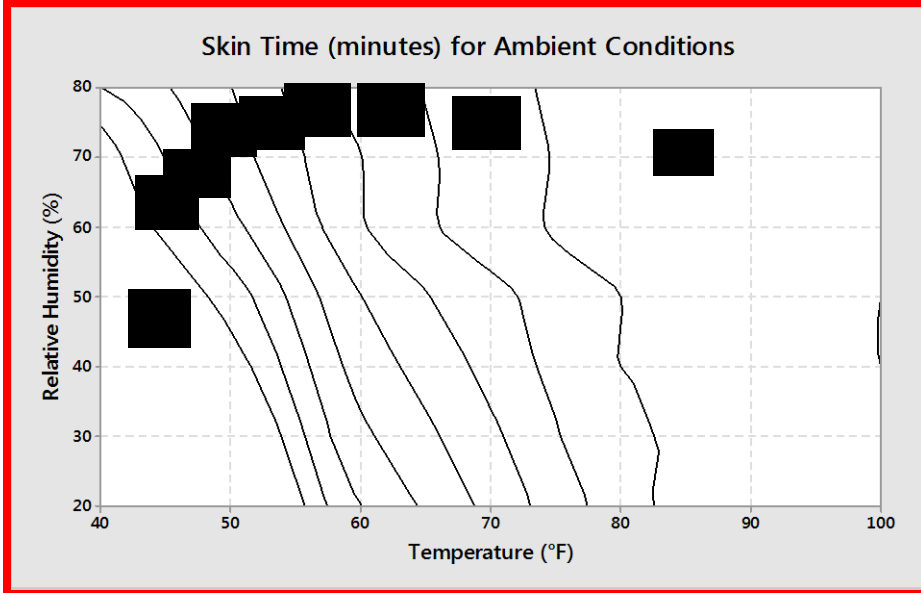
### Unacceptable Substrates

Expanded/Extruded Polystyrene; Fiberglass; Perlite; Wood Fiber Board; Existing single ply roof membranes; Existing asphalt and granule surfaced modified bitumen roofs; Coal tar pitch built up roofs; Cementitious wood fiber/tectum; direct application to steel deck, lightweight concrete, gypsum.

# TECHNICAL INFORMATION SHEET

## EPDM – Solvent Free Bonding Adhesive

### Skin Time



### Approved Power Dispensing Equipment:

Graco 60:1 Xtreme pump with NXT air motor, Heavy Duty Cart & Hopper Kit for gravity feed, 50' X 3/8" 4500 PSI high pressure hose, G-40 air assisted airless applicator with G40 519 tip. 1000 PSI pressure yields 9" wide adhesive fan when spray tip is 18" from the substrate. *Changing the spray tip to substrate distance will change the fan width.* Follow spraying with back-rolling *immediately* to uniformly apply adhesive on substrate.

Please contact Firestone Technical Services Department at 1-800-428-4511 for further information.

*This sheet is meant to highlight Firestone products and specifications and is subject to change without notice. Firestone takes responsibility for furnishing quality materials which meet published Firestone product specifications or other technical documents, subject to normal roof manufacturing tolerances. Neither Firestone nor its representatives practice architecture. Firestone offers no opinion on and expressly disclaims any responsibility for the soundness of any structure. Firestone accepts no liability for structural failure or resultant damages. Consult a competent structural engineer prior to installation if the structural soundness or structural ability to properly support a planned installation is in question. No Firestone representative is authorized to vary this disclaimer.*