

TECHNICAL INFORMATION SHEET

XR Stick™

Item Description

Box – Part 1, 5 Gallon bag in box
Box – Part 2, 5 Gallon bag in box
Cartridge – 1500 ml Cartridge Kit (750 ml Part 1 and 750 ml Part 2)

Item Number

W56TPO3401
W56TPO3402
W56TPO3400



Product Information

Description:

Firestone XR Stick adhesive is a two-component, low-rise polyurethane adhesive designed to attach Firestone PVC XR and UltraPly™ TPO XR, fleece backed roofing membranes to a variety of acceptable substrates as allowed by Firestone specifications. XR Stick (cartridges) can be dispensed using various Firestone approved hand or multi bead electric dispensing units. The dispensing units extrude Part A and Part B simultaneously through a static mixer which results in a properly mixed bead of adhesive to be applied to the receiving substrate. XR Stick (box) is specifically designed to be dispensed using the PaceCart 2™ dispenser. The PaceCart 2 dispenser pumps the XR Stick Parts 1 and 2 simultaneously to a static mixer, which allows a properly mixed bead of adhesive to be applied to the receiving substrate. **NOTE:** PaceCart 2 is a registered trademark of OMG, INC.

Method of Application:

1. Install only as much roof membrane anchored with XR Stick adhesive as can be covered and made watertight during that working day.
2. The substrate must be clean, smooth, dry, and free of sharp edges, loose and foreign materials, oil, grease, and other contaminants.
3. Proper equipment must be used to install XR Stick Membrane Adhesive. Install XR Stick adhesive only when ambient conditions, and bonding substrates and membranes, exceed 40 °F (4.4 °C) and are rising.
4. To mix and dispense XR Stick adhesive with the Pace Cart 2, properly install the XR Stick Parts 1 and 2 onto the PaceCart 2 and apply the product as per the equipment manufacturer's instructions.
5. Unroll the Firestone PVC XR or UltraPly TPO XR membrane sheet and position in place. Fold the sheet in half width wise.
6. The adhesive should be properly mixed in a 1:1 ratio through the attached static mix tip. When properly mixed, there should be no marbling in the adhesive.
7. Apply the adhesive on the substrate in beads spaced at a maximum of 12" (300 mm) on center with a ¾" - 1" (19 mm – 25.4 mm) wide bead.
8. It is important to allow the adhesive to rise in height. Before a skim coat develops (See **Reaction Time** section) on the adhesive, mate the XR membrane to the substrate.
9. Immediately after setting the membrane in the XR Stick Adhesive, it is required to thoroughly apply continuous pressure to the bonded membrane using a roller (not to exceed 150 lb). It is important that freshly installed membrane remains in contact with the substrate and XR Stick adhesive until the adhesive sets to ensure proper adhesion.
10. To store previously opened XR Stick containers for an extended period, turn off the pump on the PaceCart 2 and relieve pressure by closing the valves located. Remove and discard the static mixing tip. Apply grease to the PaceCart 2 manifold. Keep Part 1 and Part 2 containers of XR Stick adhesive connected to the PaceCart 2.

Storage:

- Store in original unopened containers at temperatures between 60 °F - 80 °F (16 °C - 27 °C) prior to use.
- Do not store in direct sunlight.
- Do not allow to freeze.
- Ship and store product with handle side up and keep caps of nozzle closed tightly. Do not expose to moisture.
- Stored in original unopened containers indoors away from direct sunlight between 60 °F - 80 °F (16 °C - 27 °C), shelf life is 18 months.

TECHNICAL INFORMATION SHEET

XR Stick™

Coverage Rate:

These typical coverage rates are applicable when the XR Stick adhesive is properly mixed with 1:1 ratio and applied in the appropriate bead spacing in a serpentine pattern at a bead width of ¾" to 1" (19 mm to 25.4 mm). Coverage rates will vary if the bead spacing is increased. Coverage rate may differ due to substrate type. (On approved, smooth, non-porous surface with a ¾" to 1" (19-25 mm) wide bead)

Coverage, ft ² /gal (m ² /L)	Bead Spacing	Coverage (ft ² /4 cartridge carton)
170-200 (4.1-4.8)	12" o.c.	270 -317
90-120 (2.2-2.9)	6" o.c.	143 - 190
60-90 (1.4-2.2)	4" o.c.	95 - 143

Packaging Information:

Boxes: Part 1 and Part 2 are each packaged in separate 5-gallon (18.9 L) box container. 18 sets per Pallet

Cartridges: One 1500 mil Cartridge Kit (750 ml Part 1 and 750 ml Part 2)

Carton: Each Carton of cartridges contains four-1500 ml Cartridge Kits and includes 4 state mixing tips

Reaction Time:

When applying XR Stick adhesive, the XR membrane must be placed into the adhesive while it is still wet and tacky (before it reaches tack free state). The membrane may be placed into adhesive shortly after it has reached its maximum rise, typically after 2-3 minutes.

Substrate Temperature	Tack Free* State (minutes)	Set Up (minutes)
40-90 °F (4 – 32 °C)	5	8

* **Definition-** Tack Free State: The point at which no adhesive will transfer from the surface to a gloved finger upon touching.

LEED® Information:

Post-Consumer Recycled Content: 0%

Post Industrial Recycled Content: 0%

Manufacturing Location: Rockford, MN

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



Precautions:

- Review applicable Safety Data Sheet (SDS) prior to use.
- Personnel who are sensitive/allergic to isocyanate or polyurethane should not work with XR Stick adhesive.
- At the start and throughout each workday, test samples made with XR Stick adhesive should be created to verify that proper mixing, set-up and overall adhesion of membrane to substrate is being achieved before proceeding.
- Avoid contact with eyes. Wear safety glasses with side shields.
- Avoid breathing of vapors. A Self-Contained Breathing Apparatus (SCBA) or Respirator should be used in areas of limited ventilation (i.e. confined space).
- Avoid contact with skin. Wear gloves when dispensing. Wash hands thoroughly after handling.
- Use caution when removing caps from cartons.
- Do not burn empty kit containers. Dispose in accordance with local, federal, and state regulations.

TECHNICAL INFORMATION SHEET

XR Stick™

Typical Properties

Property	Part A	Part B
Composition	Polymeric MDI	Polyurethane Component
Max Ratio (Part A: Part B:)	1:1	
Specific Gravity	1.23	1.02
Viscosity	400-600 cps	250-400 cps
V.O.C. Content	≤ 13 grams/Liter	

Perimeter and Corner Enhancements (3/4"-1") (19-25 mm) wide bead

Building Height	Bead Spacing (Perimeter)	Bead Spacing (Corner)	Bead Spacing (Field)
0-25'	6" o.c. – 4' perimeter	4" o.c.	12" o.c.
25-50'	6" o.c. – 8' perimeter	4" o.c.	12" o.c.
50-75'	6" o.c. – 12' perimeter	4" o.c.	12" o.c.
75-100'	6" o.c. – 16' perimeter	4" o.c.	12" o.c.

NOTE: Greater than 100': Please Contact the Firestone Technical Services Department at 1-800-428-4511 for further information.

Substrates

Acceptable	NOTE
Structural Concrete (New)	New poured decks must be dry prior to the application of XR Stick.
Structural Concrete (Existing)	
Gypsum Decks Cementitious Woodfiber Plywood and OSB Lightweight Concrete	Acceptable Lightweight concrete substrates include cellular or air-entrained concrete. Lightweight concrete substrates with aggregate (such as perlite or vermiculite) are not acceptable. Positive adhesive test required.
Existing Asphalt and Modified Bitumen Roofs (Mineral or Smooth Surfaced)	Any residual asphalt must be cleaned and scraped as smooth as possible.
SBS Base Sheets	
Acceptable Insulations	Iso 95+™ GL / ISOGARD™ GL, ISOGARD HD, Resista / ISOGARD CG, HailGard / ISOGARD HG, Dens-Deck® and Dens-Deck Prime, Securock® and StructoDeck® HD wood fiberboard (maximum 15-year warranty)
Not Acceptable	Existing Single Ply roofs, Coal Tar Pitch, Fiberglass insulation, Perlite insulation, EPS, XPS
NOTE	Existing substrates containing residual asphalt must be cleaned and scraped smooth as possible. The substrate shall be smooth, flat, clean, dry, free of sharp fins, or foreign materials All perimeters, deck seams and all penetrations must be sealed to prevent air infiltration through the deck. Firestone recommends an expanding foam or similar product be used. Dens-Deck is a registered Trademark of Georgia-Pacific. Securock is a registered trademark of USG. StructoDeck is a registered trademark of Blueridge Fiberboard.

Please contact Firestone Technical Services 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.