

TECHNICAL INFORMATION SHEET

XR Bonding Adhesive

Item Description

Available in 5 gallon (18.9 L) pails
Each pail weighs about 41 lb (18.6 kg)

Item Number

W56TPO3009



Product Information

Description:

XR Bonding Adhesive is designed for bonding UltraPly™ TPO XR membrane to various insulation surfaces, specific existing roof surfaces, as well as wood, metal, masonry, and other acceptable substrates following the Application Method one (I) below. XR Bonding Adhesive may also be used with standard UltraPly TPO when adhered to approved substrates. For flashing conditions, follow Method of Application two (II) below.

Method of Application:

Use for UltraPly TPO XR Membrane

1. Surfaces to receive XR Bonding Adhesive must be clean, smooth, dry, and free of sharp edges, loose and foreign materials, oil, grease, and other contaminants.
2. Stir the adhesive thoroughly to achieve a uniform mix with no marbling or sediment on the bottom evident. **STIR BEFORE AND DURING USE.**
3. Adhesive must be applied in a relatively uniform thickness to the base substrate only. Apply XR Bonding Adhesive with either a 9" (228 mm) wide solvent resistant, textured roller designed for medium to semi-rough textured surfaces or an industrial grade adhesive sprayer. See UltraPly TPO XR Application Guide for additional information. **DO NOT APPLY ADHESIVE TO THE POLYESTER BACKING PORTION OF THE MEMBRANE.**
4. If the adhesive is spray applied, it must be back-rolled with a similar type roller to assure proper contact and coverage. **DO NOT APPLY XR BONDING ADHESIVE TO SEAM PORTION OF THE MEMBRANE.**
5. Apply the adhesive in a uniform manner. Avoid globs and puddles of adhesive; these may lead to blistered membranes.
6. XR Bonding Adhesive shall have a brief flash-off period of approximately 5-15 minutes before mating the membrane but will depend on ambient conditions. XR Bonding Adhesive shall be slightly tacky to the touch when mating the membrane.
7. Starting at the fold of the TPO XR membrane, roll the mating portion into the coated substrate slowly and evenly to minimize wrinkles. To ensure proper contact, compress the bonded portion of the membrane to the substrate with a stiff push broom using heavy pressure immediately after mating, followed by the use of a heavy roller (approximately 5 lb per inch of width) to ensure proper contact of membrane to substrate. Examples of recommended rollers: 100 lb x 16" wide; or 150 lb x 30" wide.
8. Contact your Firestone Technical Services Advisor at 1-800-428-4511 for specific application information.

Use for UltraPly TPO Membrane*

1. Surfaces (both substrate and back side of the membrane) to receive XR Bonding Adhesive must be clean, smooth, dry, and free of sharp edges, loose and foreign materials, oil, grease, and other contaminants.
2. Stir the adhesive thoroughly to achieve a uniform mix with no marbling or sediment on the bottom evident. **STIR BEFORE AND DURING USE.**

* Vertical/curb applications only. No code rating currently exist for UltraPly TPO Membrane fully adhered with XR Bonding Adhesive.

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Method of Application Continued:

3. Apply the adhesive in a uniform manner to both the approved vertical substrate and the back of the UltraPly TPO membrane. Avoid globs and puddles of adhesive. These may lead to blistered membrane. Apply XR Bonding Adhesive with either a 9" (228 mm) wide solvent resistant, textured roller designed for medium to semi-rough textured surfaces or an industrial grade adhesive sprayer. See UltraPly TPO XR Application Guide for additional information.
4. Adhesive must be applied in a relatively uniform thickness to both surfaces. If the adhesive is spray applied, it must be back-rolled with a similar type roller to assure proper contact and coverage. **DO NOT APPLY XR BONDING ADHESIVE TO SEAM PORTION OF THE MEMBRANE.**
5. XR Bonding Adhesive shall have a flash-off period: approximately 15-30 minutes before mating the membrane. Use the "touch-push" test: Touch the adhesive surface in the middle of the applied area with a clean, dry finger to be certain that the adhesive does not stick or string. As you are touching the adhesive, pushing straight down to check for stringing, also push forward on the adhesive at an angle to ensure that the adhesive is ready throughout its thickness. If either motion exposes wet or stringy adhesive when the finger is lifted, then it is not ready for mating and the seam should not be closed. Flash off time will vary depending on ambient conditions.
6. Starting at the flashing base, roll the mating portion of the membrane into the coated substrate slowly and evenly to minimize wrinkles. To ensure proper contact, compress the bonded portion of the membrane to the substrate with a stiff push broom using heavy pressure immediately after mating.

Contact your Firestone Technical Services Advisor at 1-800-428-4511 for specific application information

APPROVED POWER DISPENSING EQUIPMENT:

Garlock 25ST Roller Boss Power Roller

4 hp Honda Engine
4 CFM Compressor
25 gal pressurized supply tank (20 gal for material; 60-80 psi)
Up to 100 psi rating
2 – ¾" x 30' supply hoses with swivels
2 – 18" roller head assemblies



Garlock 2120 Commander Sprayer

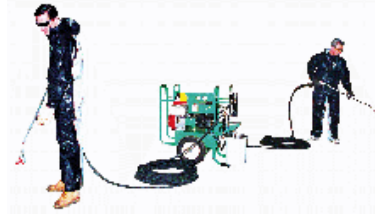
18 hp Kohler Engine
4500 psi Rating
5 Gallon per Minute Flow, 1200 psi (minimum pressure)
Pump Displacement 45:1
GPM Rating: up to 5 gpm
½" x 100' hose
2" Intake pipe with screen
5 or 55 gal drum containers
Graco Spray Tips: .023 to .031 diameter hose



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Garlock Twin Gun Airless Sprayer

6.5 hp Honda Engine
3000 psi Rating
Pump Displacement 30:1
GPM Rating: up to 1 gpm
Up to 400' of single ½" diameter hose
Up to 200' of dual ½" diameter hose
¾" Intake pipe with screen
5 or 55 gal drum containers
Bulk tank containers
Graco Spray Tips: .019 to .025 diameter hose
(1850 psi operating pressure)



Graco Spray Equipment:

P70EC4 – 70:1 Xtreme Sprayer Package w/Heavy Duty cart, Hopper package, w/NXY motor and Data Track, Xtreme-Duty high pressure hose, ¾" x 50', 7250 psi, ¼" x 6' whip and XTR-7 applicator, XHD821-823 tips



Storage:

Store in original unopened containers at temperatures between 60 °F (16 °C) and 80 °F (27 °C) until ready for use.

Shelf Life:

- Shelf life of nine (9) months can be expected if stored in original sealed container at temperatures between 60 °F (16 °C) and 80 °F (27 °C). If exposed to lower temperatures, restore to room temperature prior to use.
- Shelf life may be shortened if exposed to elevated temperatures for a prolonged period of time.

Coverage Rate:

Uneven and porous substrates will result in a lower coverage rate while smooth non-porous substrates will result in higher coverage rates. Rates here are based on roller application to mating surface(s).

- UltraPly TPO XR membrane – XR Bonding Adhesive applied to substrate only. A coverage rate of 70-90 ft²/gal (1.718-2.209 m²/L) may be obtained depending on the substrate.
- Vertical application of UltraPly TPO membrane – XR Bonding Adhesive applied to both the vertical substrate and the membrane. A coverage rate of 40-60 ft²/gal (0.982-1.475 m²/L) may be obtained depending on the substrate.
- Very porous substrates (rough wood, concrete block) may require two coats of XR Bonding Adhesive to ensure proper adhesion. This can be determined by testing a small area. Check by adhering a small piece of UltraPly TPO XR membrane to the porous substrate to verify the bonding strength.

NOTE: Coverage Rates may vary depending on the nature of substrate. Rough, porous substrates may require more adhesive. Some substrates may also require more adhesive due to absorption.

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Clean-Up:

Recommended cleaners are Acetone, or Orange Terpene based cleaners such as Sunsol®. Such can be used to clean up the aqueous adhesive.

Precautions:

- Review applicable Safety Data Sheet (SDS) prior to using.
- Flammable. Keep away from fire and open flame and other possible ignition sources during storage and use. Do not smoke when using.
- Harmful or fatal if swallowed.
- Avoid prolonged inhalation.
- Avoid prolonged contact with skin. Gloves should be worn (OSHA approved).
- Avoid eye contact by wearing safety goggles with side shields.
- Thinning is not allowed.
- Do not use for splicing.
- Use only in well ventilated areas.
- Cover tightly when not in use.
- Do not apply XR Bonding Adhesive directly to isocyanurate roof insulation (ISO 95+™ GL / ISOGARD™ GL, Resista / ISOGARD CG, ISOGARD HD). An approved cover board (wood fiber or gypsum) shall be installed over ISO boards, and be the immediate substrate to receive XR Bonding Adhesive.

LEED® Information:

Post-Consumer Recycled Content: 0%

Post Industrial Recycled Content: 0%

Manufacturing Location: South Bend, IN

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



Typical Properties

Property	Typical Performance
Base	Synthetic Rubbers
Color	Brown
Solvents	Acetone, 4-Heptanone, 2.6 Di-Methyl
Flash Point, X °F (X °C)	-2 °F (-19 °C)
Solids Content	38.0% ± 35
Specified Gravity	0.838-0.926
V.O.C. Content	Less than 250 grams/liter in accordance with South Coast Air Quality Management District

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

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