UltraPly™ Bonding Adhesive

**Description:**

Firestone UltraPly Bonding Adhesive is a solvent based contact adhesive designed specifically for bonding Firestone UltraPly TPO membranes to approved insulations in addition to wood, metal, masonry and other acceptable substrates. **NOTE:** Not for use in adhering UltraPly TPO XR membranes.

**Method of Application:**

1. Surfaces to receive Firestone UltraPly 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 sediment on the bottom and no marbling evident before and during use.
3. Apply UltraPly Bonding Adhesive at about the same time to both the exposed underside of the sheet and the substrate to which it will be adhered so as to allow approximately the same drying time. Apply UltraPly Bonding Adhesive evenly avoiding areas of accumulation.
4. Apply the UltraPly Bonding Adhesive with a solvent resistant paint roller, and roll the adhesive onto the mating surfaces. When applying UltraPly Bonding Adhesive, ensure complete uniform coverage of both surfaces that will be adhered. **Care must be taken not to apply Bonding Adhesive over seam areas.**
5. UltraPly Bonding Adhesive can be dispensed by means of power rollers or industrial spray equipment. Other equipment may be used as recommended by the manufacturer for application of this adhesive. **NOTE:** Spray applied bonding adhesive requires back-rolling with 9" (228.6 mm) wide solvent resistant roller (medium nap) to insure 100% coverage of the adhesive on the substrate and membrane.
6. Allow Bonding Adhesive to flash off until tacky. Touch down on the Bonding Adhesive surface with a clean, dry finger to be certain that the adhesive does not 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 solvents have flashed off and are ready throughout its thickness. If either motion exposes wet areas or sticking when the finger is lifted, then it is not ready for mating. Flash off time will vary depending on ambient conditions.
7. Starting at the fold, roll the previously coated portion of the sheet into the coated substrate slowly and evenly so as to maintain position and minimize wrinkles.
8. To ensure proper contact, compress the bonded half of the sheet to the substrate with a stiff push broom using heavy pressure immediately after mating.
9. Contact your Firestone Technical Services Advisor at 1-800-428-4511 for specific application information.

**Storage:**

- Store in original unopened containers at temperatures between 60 °F - 80 °F (16 °C - 27 °C) until ready for use.
- For optimum results, rotate stock to ensure stored material has not exceeded the shelf life of one year.
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Shelf Life:
Shelf life of one year can be expected if stored in original sealed container at temperatures between 60 °F - 80 °F (16 °C - 27 °C). If exposed to lower temperatures, restore to room temperature prior to use. Shelf life will be shortened if exposed to elevated temperatures for a prolonged period of time.

Coverage:
A coverage rate of 45 - 60 ft² per gallon (1.10 – 1.47 m² per liter) may be obtained depending on the substrate. Some insulation surfaces are more uneven and porous and will result in a lower coverage rate while smooth non-porous substrates will result in higher coverage rates. Rates are based on roller application to both mating surfaces.
Very porous substrates (rough wood, concrete block) may require two coats of UltraPly Bonding Adhesive, to ensure proper adhesion. This can be determined by testing a small area. Check by adhering a small piece of membrane to the porous substrate to verify the bonding strength.

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.
- Do not use with EPDM or XR membranes.
- Use only in well ventilated areas.
- Cover tightly when not in use.
- Recommended cleaner is Toluene (while fluid).

Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Minimum Performance</th>
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<tbody>
<tr>
<td>Base</td>
<td>A blend of Polychloroprene and SBR rubbers</td>
</tr>
<tr>
<td>Color</td>
<td>Yellow</td>
</tr>
<tr>
<td>Solvents</td>
<td>A blend of Acetone, Hexane, Toluene and Xylene</td>
</tr>
<tr>
<td>Solids</td>
<td>≥ 23</td>
</tr>
<tr>
<td>Viscosity</td>
<td>3,300-3,800 cps, with R.V.F. spindle @ 10 rpm</td>
</tr>
<tr>
<td>Weight/Gallon</td>
<td>6.6-7.4 lb/gal</td>
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<tr>
<td>Specific Gravity</td>
<td>0.7909-0.8868</td>
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<tr>
<td>V.O.C. Content</td>
<td>5.282 lb/gal (633 g/L)</td>
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</tbody>
</table>
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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.

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

Approved Power 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 Pressure (minimum), 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 Tip: .023 to .031 diameter hose

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 Tip: .019 to .025 diameter hose (1850 psi operating pressure)

Graco Spray Equipment:
P70EC4-70 – 70:1 Xtreme Sprayer Package w/Heavy Duty car, Hopper package, w/NXT motor and Data Track, Xtreme-Duty high pressure hose, ¾” x 50’, 7250 psi, with ¼” x 6’ whip hose, XTR-7 applicator with XHD821-825 tip

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

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