

TECH-BOND™ TPO BONDING ADHESIVE

DESCRIPTION:

TECH-Bond™ TPO Bonding Adhesive is a solvent-based adhesive designed specifically for bonding Duro-TECH™ TPO non-fleece membranes to approved substrates.

The adhesive may be used on the following substrates, after they have been properly prepared, as described in the Duro-TECH TPO Adhered Roofing Systems specification:

- Structural Concrete (poured in place or precast)
- Lightweight Structural Concrete
- Lightweight Insulating Concrete
- Wood (Plywood, OSB, Lumber)
- Polyisocyanurate Insulation Boards
- Duro-Guard® Cover Boards
- Duro-Last® Vapor Barrier

ORDERING:

Adhesive is available in 5-gallon (18.9-L) pails.

- 5-gallon pail (Item #1112T)

COVERAGE RATES		
	Per Pail	Per 100 ft ² (9.3 m ²)
Roof Deck (Two-Sided Application)	225 – 300 ft ² (20.9 – 27.9 m ²) finished coverage	0.33 – 0.44 pail finished coverage
Parapet (Two-Sided Application)	Same as Roof Deck	Same as Roof Deck

STORAGE AND HANDLING:

- Protect adhesive from freezing.
- Adhesive must not be shipped in temperatures less than 40° F (4.4° C).

SHELF LIFE:

- Store adhesive between 60° – 80° F (16° – 27° C), out of direct sunlight, for maximum shelf life. Shelf life is one year in an unopened pail, from date of manufacture printed on the pail, when following recommended storage procedures.



PRECAUTIONS:

• WARNING: EXTREMELY FLAMMABLE

Keep away from heat / sparks / open flames / hot surfaces. **Do not smoke while applying.**

- Keep away from ignition sources.
- Read Safety Data Sheets (SDS) prior to using.
- Wear proper personal protective equipment, such as gloves and eye protection, per the SDS.
- Harmful or fatal if swallowed.
- Avoid breathing vapors. Use only in well ventilated areas.
- Cover tightly when not in use.

TECH-BOND TPO BONDING ADHESIVE PROPERTIES		
Weight	8.2 lb/gal (982.6 g/L)	41 lb/pail (18.6 kg/pail)
Color	Yellow	
VOC Content	0.005 lb/gal (0.63 g/L)	
Viscosity	3,300 – 3,800 cps, with R.V.F. spindle at 10 rpm	
Base	A blend of Polychloroprene and SBR rubbers	
Solvents	A blend of acetone, hexane, toluene, and xylene properties	
Solids	≥ 23%	
Specific Gravity	0.8 – 0.9	

INSTALLATION:

1. General

- Do not exceed open time of one hour.
- Do not thin this product.
- Do not use for splicing.
- Do not use with fleece membranes.
- Do not apply adhesive where (hot-air) welding will be performed.
- **Do not allow adhesive to contact expanded polystyrene (EPS) or extruded polystyrene (XPS). Damage to EPS and XPS will occur. Squeegees must not be used when EPS or XPS are within the roofing system.**
- Apply to surfaces which are clean, smooth, dry and free of oil and grease.
- **Only apply adhesive when the ambient temperature is at least 40° F (5° C) and rising. adhesive must be stored between 60° – 80° F (16° – 27° C) for 24 hours prior to installation.**
- Stir the adhesive thoroughly before and during use, achieving a uniform mix with no sediment on the bottom and no marbling evident. Apply adhesive evenly, avoiding globs and puddles, at about the same time to both the membrane and the receiving substrate to allow similar flash-off time.
- Do not apply adhesive over any lap area that will be spliced to adjacent membrane panels.
- Allow adhesive to flash-off until tacky. Touch the adhesive surface with a clean, dry finger to be certain that the adhesive does not stick or string. Push down and 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.
- **Flash off time will vary significantly depending on ambient conditions, and will be extended during cool, cloudy conditions. Use when ambient and substrate temperatures exceed 45° F (7.2° C).**
- Starting at the fold, roll the adhesive coated portion of the membrane into the adhesive coated substrate slowly and evenly to minimize wrinkles.

Roof Deck and Parapet

- a. Using a 3/8-inch (9.5-mm) medium-nap solvent-resistant roller, apply adhesive evenly at a coverage rate of 45 – 60 ft²/gal (1.1 – 1.5 m²/L), to BOTH the backside of the membrane and to the substrate. This gives a net coverage rate of 60 ft²/gal (1.5 m²/L). The coverage rate will vary depending upon the porosity of the substrate.
- b. Allow adhesive to dry approximately (5 – 10 minutes) until it does not stick or form strings when a dry finger is pushed into it and removed. Dry time will vary according to weather conditions.
- c. Open time, prior to adhering the membrane to the substrate, may extend up to 60 minutes depending on weather conditions. Apply the membrane to the substrate as soon as the adhesive is ready.
- d. Roll the adhesive coated membrane onto the adhesive coated substrate slowly and evenly to avoid trapping air and to minimize wrinkles.
- e. Apply pressure, by means of a heavy roller or push broom, to ensure proper bonding.
- f. Refer to the Duro-TECH TPO Adhered Roofing Systems specification for guidelines regarding membrane installation.

CLEANING

- Wet adhesive can be cleaned with toluene.