



POLYFOAM PRODUCTS, INC.

A 3M Company

TITE-SET®

Commercial Roofing Insulation Adhesive

TECH DATA SHEET

PRODUCT DESCRIPTION

TITE-SET® Adhesive is a two component self-leveling elastomeric polyurethane froth adhesive. TITE-SET® is specifically designed to provide outstanding adhesive properties as well as controlled gap fill without lifting the insulation boards. The adhesive is dispensed utilizing Polyfoam's proprietary FOAMPRO® dispensing equipment or disposable plastic applicator. The "A" and "B" components are available in 17 gallon refillable cylinders or in pre-pressurized disposable 5.84-gallon cylinders.

BASIC USE

TITE-SET® is specifically designed to adhere a variety of insulation board stock to various substrates in both new and recover applications. It can also be used to adhere insulation board to insulation board where multiple layers are required. The adhesive is applied in a bead form directly to an approved substrate. The insulation board is placed onto the adhesive. A chemical cure takes place several minutes after application, depending on temperature and weather conditions.

COMPATIBLE ROOF DECKS AND SUBSTRATES

- Structural Concrete
- Asphalt Primed Concrete
- Pre-cast Concrete
- Various BUR (smooth or gravel)
- Base Sheets
- Steel-22 gauge or lower with approved cross section
- Lightweight Structural Concrete
- Cementitious Wood Fiber Planks
- Insulating Concrete
- Vapor Retarders (hot, cold, torch-applied)
- Gypsum

PRODUCT	A-COMPONENT	B-COMPONENT
Base	Polymeric Isocyanate	Polyol Amines
Blowing Agent	134a	134a
Net Wt. lbs. ProPack 100: 17 gal. cylinder:	40 150	35 140
Volatile Organic Compounds (VOC) When used as intended with both parts	67.5 g/L	

PROPERTIES	MIXED COMPONENTS
Tack Free Time	1 - 10 minutes ¹
Work Life in Mixing Nozzle	1 minute ¹
Set-up Time	10 - 20 minutes ¹
Time to Full Cure	24 hours
Coverage ² (2.5" bead, 12" on center rows) ProPack 100: 17 gal. cylinder:	1800 - 2000 sq. ft. 7000 - 7700 sq. ft.

1 - Times may be affected by temperature and weather conditions
2 - The application rate must be increased for rougher surfaces and will vary depending on the roughness.

COMPATIBLE ROOF INSULATIONS AND COVER BOARDS

- Polyisocyanurate (flat or tapered panels)
- Extruded or Expanded Polystyrene
- High density wood fiber
- Dens-Deck® and other gypsum boards
- SecureRock® roof board

Contact Polyfoam Products for compatibility and surface preparation instructions for:

- Cold Tar Pitch BUR
- Gravel Surfaced BUR

APPLICATION AND PRODUCT FEATURES

- No structural deck damage caused by mechanical fasteners
- No fear of drilling through electrical conduit or damaged concrete surface
- No fastener back out
- No deck damage when removing Fasteners for reroofing
- No asphalt contamination or offensive fumes
- No potential burns
- Continuous walk-in of insulating board is not required
- Very rapid application
- No extensive set-up or breakdown time
- Achieves maximum wind uplift resistance
- No external power source required
- ProPack 100 is a complete, self-contained system that is portable and easy to maneuver

LIMITATIONS

- TITE-SET® is not recommended for use with insulating board stock larger than 4' x 4'
- TITE-SET® is not recommended for application when ambient or substrate temperatures are below 40° F
- TITE-SET® is not recommended for use during inclement weather
- TITE-SET® is not recommended for use on wet surfaces
- TITE-SET® is not recommended for use on any roof deck that shows signs of deterioration or loss of structural integrity
- TITE-SET® is not recommended for use on excessively dirty or grease laden surfaces
- TITE-SET® is not recommended for use after the expiration date

STORAGE AND HANDLING

The "A" and "B" containers should be stored between 45° F and 95° F. The shelf life, at these temperatures, is 18 months from the date of production.

The product temperature prior to application should be between 70° F and 90° F. The minimum ambient and surface temperature should be 40° F and rising.

LISTINGS AND APPROVALS

TITE-SET® is approved by the following agencies:

Factory Mutual (FM)
Underwriters Laboratories (UL)
Florida Building Code (FBC)
Metro-Dade

and is being evaluated by many system manufacturers.

SURFACE PREPARATION

Lightweight concrete, structural concrete, and plywood: These surfaces must be free of any debris, dirt, oil, grease, and water before applying TITE-SET®.

Built-ups (BUR) and Modifieds: Surfaces must be free of any debris, dirt, oil, grease, and water. Contact Polyfoam Products for details.

Steel: The upper flange of the steel deck (bonding surface) surfaces must be free of any debris, dirt, oil, grease, and water. On new steel, the shop oil coating must be removed. The bonding surface must be free of any cleaner before applying TITE-SET®.

PRODUCT INSTALLATION

The TITE-SET® insulation adhesive is applied in rows placed a maximum of 12" OC.

Insulation boards are to be placed immediately on the wet adhesive *but not walked into place or compressed into the adhesive until the Tite-Set has begun to thicken and started to develop its initial bond.*

The time involved in this process is contingent on the ambient as well as deck surface temperature. The chart below illustrates the approximate time required *prior to walking in* or adding ballast to the boards.

AMBIENT/DECK TEMPERATURE	TIME BEFORE WALKING IN
40° - 60°F	6 - 10 minutes
60° - 80°F	3 - 6 minutes
80° - 100°F	1 - 3 minutes

After the adhesive has attained its initial bond strength the boards can be “walked-in” and will be compressed to the deck or substrate exhibiting minimal slippage or movement. The boards should be exposed to minimum traffic for at least 10-20 minutes (depending on temperature) after they have been “walked-in-

place” to avoid breaking the freshly formed bond.

NOTE: Membranes can be applied once the adhesive has achieved sufficient bond strength to the immediate substrate to which it is adhered. It is recommended that the contractor inspect the installed insulation for proper adhesion and re-adhere any boards and/or corners that are not adequately attached.

NOTE: Boards that will not lay flat due to cupping, warping or crowning, or surface irregularities of the substrate, should have weights placed on the boards until the TITE-SET® has achieved adequate adhesion to hold the boards in place.

AVAILABILITY AND COST

TITE-SET® is available for sale from roofing material distributors. Contact Polyfoam Products Inc. at (888) 774-1099 or visit our website at www.polyfoam.cc for the nearest distributor of TITE-SET®

WARRANTY

Polyfoam Products, Inc., issues a 10 year limited material warranty on all TITE-SET® purchases. A full adhesion warranty is available by contacting Polyfoam Products prior to starting the project and submitting a **PROJECT MATERIAL PROFILE** and a completed **REQUEST FOR WARRANTY** form.

CYLINDER RETURN AND DISPOSAL

Refillable cylinders should be closed and capped when empty and returned to:

Polyfoam Products Inc.
11715 Boudreaux Rd.,
Tomball, Texas 77375

Disposable cylinders should be disposed of in accordance with local, state and federal regulations. Consult MSDS on file.

ENVIRONMENTAL HAZARD

Do not discharge into lakes, streams, ponds or public waters. For guidance, contact your regional office of the EPA.

FIRST AID

Inhalation: Remove to fresh air. If breathing is difficult contact a physician.

Eye Contact: Flush with running water for at least 15 minutes. Contact a physician if irritation persists.

Skin Contact: Wash thoroughly with soap and water. Remove and wash contaminated clothing before re-use.

Ingestion: If ingested, induce vomiting and call a physician at once

For additional information regarding application or product specifics, please reference the TITE-SET® Use and Care DVD. To request a copy, contact Polyfoam Products at **888.774.1099** or view the video online at *www.polyfoam.cc*.