

TERM™ Tile Underlayment Barrier

Product Data Sheet

EPA Establishment # 89537-TX-1

DESCRIPTION

TERM™ Tile Underlayment Barrier is a composite membrane of fabric and *TERM™ Sealant Barrier*, 60 mils in thickness. This elastomeric, self-adhesive barrier is wound on cores with a disposable silicone coated release sheet.



TERM Tile Underlayment Barrier installed in
The New American Home – 2017, built by NAHB in Orlando, FL

USES AND ADVANTAGES

TERM Tile Underlayment Barrier is a non-structural, non-chemical barrier which, when properly constructed as part of the building envelope, acts as a barrier to **T**ermites and other insects, **E**nergy leaks, radioactive **R**adon gas, and **M**oisture. Documentation of these attributes can be found at www.polyguardbarriers.com.

Additionally, *TERM Tile Underlayment Barrier* fills the traditional role of anti-fracture tile underlayment, helping to prevent cracks in the subfloor from appearing in the tile surface above by absorbing stress created by the crack.

Plus *TERM Tile Underlayment Barrier* has sound absorbing and insulating qualities making the floor quieter and warmer in winter.

REFERENCES

There are several ways in which LEED credits might be earned by incorporating TERM Barrier System components into the structure.

1. Increasingly, LEED has incorporated Integrated Pest Management (IPM) into standards.

LEED calls for IPM protocols in order to “*minimize pest problems and exposure to pesticides*”.

A key IPM element is; “*Nonchemical pest preventative measures.....designed into the structure...*”. *TERM Barriers* are nonchemical pest preventative measures.

2. LEED rating systems for homes incorporate (SSC5) *Non-toxic pest control*”. Two components found in the *TERM Barrier System* are mentioned; they are steel mesh and sand barriers. Both are used as termite barriers.

TERM Sealant Barrier / membranes are not mentioned, as they are only now entering the field for sustainable construction alternatives.

3. The incorporation of *TERM Sealant Barrier / membranes* into the building envelope should be a strong candidate for Innovation credit.
4. Finally, if the project site is former agriculture land with residual pesticide contamination, *TERM Barriers* may qualify under LEED IAQ Credit 5 - Indoor Chemical and Pollutant Source Control (below grade toxin barrier) or SS3 - Brownfield redevelopment.

INSTALLATION

Safety

All *Polyguard* products must be handled in a safe manner. Some products (some packaged sealants or primers) contain solvents, and these deserve special attention to safety since their vapors are both flammable and harmful if inhaled. Read both the product label and the Material Safety Data Sheet (MSDS) before use. MSDS sheets can be obtained at our website www.polyguardbarriers.com. Call *Polyguard* at 214-515-5000 if you have any questions.

Purchaser is responsible for complying with all applicable federal, state, or local laws and regulations

Cool Weather: When applied in cool temperature conditions, the adhesive surface of *TERM Tile Underlayment Barrier* may lose a portion of its adhesiveness. The following measures will improve adhesion in cool installation conditions:

1. Keep rolls of barrier in a warm storage area prior to using.
2. On exterior surfaces, *Polyguard 650 LT Liquid Adhesive* may be used.

Preparatory Work

Handling Materials: *Polyguard* membranes should be handled and stored so as to prevent injury to packages. Material should be stored in a cool, dry place, kept from contact with earth and protected from weather. Materials should be stored in heated buildings during cold weather.

Surface Preparation: The subfloor shall be clean, dry, and dust free. Non-moving cracks >3/16” should be filled prior to application. Apply *ShurTac™ Waterbase Liquid Adhesive* at the rate of approximately 250-350 ft²/gallon, being sure to stir the liquid adhesive prior to use. Allow liquid adhesive to dry to a slight tacky surface. Can be applied with brush, short nap roller or spray applied, but do not multicoat or apply excess amounts.

Application: The important thing to remember is that the *TERM Tile Underlayment Barrier*, when completely installed, should form a 100%

seal across the entire horizontal surface of the floor. There should be no gaps between the barrier sealant of adjacent rolls, or between the *TERM Sill Plate Barrier* sealant extending out from the edge of the sill plate.

Cut roll to desired length. Remove the silicone coated release sheet immediately before application. Place the exposed adhesive bottom onto the subfloor, butting against, but not overlapping, the adjacent piece. Smooth into place as you go, trying to avoid air blisters. If blisters do occur, they can be slit and the membrane pressed flat. Use pressure from a roller or other wise to insure that the barrier is well conformed to the subfloor surface. If thin set mortar is used, then it is recommended to use a latex modified thin set.

TERM Tile Underlayment Barrier PACKAGING DATA		
ROLL SIZE	ROLLS / CARTON	LBS / CTN
37" x 50.3'	1	60#

Inspection and Repairs: If at completion any gaps are found between adjacent sealant areas, they should be filled with *TERM Penetration Sealant Barrier*.

PHYSICAL PROPERTIES

TERM Tile Underlayment Barrier		
Property	Test Method	Typical Result
Long Term Testing against Termite Penetration	ASTM D 1758-06 Texas A&M 4 Sites over 5 years vs. controls	100% effective
Elongation of Barrier Sealant – Percent Stretch Before Failure	ASTM D 412	> 1000%
Pesticide Repellency (<i>Chlorodane, fipronil, permethrin</i>)	ASTM F 2130	0%
Permeance to Moisture and Water Vapor	ASTM E 96-B Grains/ft2/hr/in HGF (<i>grains/hr/m2</i>)	.035
Water Absorption	ASTM D 570	0.1%
Low Temperature Flexibility	ASTM D 146 180° bend over 1" mandrel at -25°F (-32°C)	No cracking or delamination
Total Thickness	ASTM D 1000	.060"
Peel Adhesion	ASTM D1000 – per inch width	>10 lbs
Robinson Test – load cycling	ASTM C 627	Rated for light commercial
Impact Sound Transmission Test <i>6" slab / 40 mil barrier / quarry tile / ceiling</i>	ASTM E 492 04 ASTM E 989 89	IIC = 69 dB
Impact Transmission Loss Test <i>6" slab / 40 mil barrier / quarry tile / ceiling</i>	ASTM E 90 04 ASTM E 413 04	STC = 69 dB

LIMITATIONS AND PRECAUTIONS

This material is not recommended for use on subfloor surfaces where water vapor transmission or head pressure exists (example shower stalls or shower pans). This material is not recommended where cracks exceed 3/8", areas with horizontal movement > 1/4" or expansion joints that move vertically and horizontally.

Polyguard's TERM™ Barrier has been extensively tested, both in the laboratory and in long term field trials at multiple sites, against *Reticulitermes flavipes* and *Coptotermes formosanus* subterranean termites, which can be said to be the most voracious insects in the United States measured in terms of property damage.

There are a number of other termite species, not known to be present in the United States, which are equally or more voracious than the U.S. species which were tested. A limited amount of

testing outside of the United States has been done or is in progress. Contact Polyguard for up to date information about non-domestic testing.

The information in this data sheet is designed to be helpful to the reader. It is based on experience and information considered to be accurate and true. Readers should carefully consider and verify the information with investigation of any areas with uncertainty. *Polyguard* does not warrant the results to be obtained. Additionally, please read everything here in conjunction with *Polyguard's* conditions of sale, which are applicable to everything supplied by us. No statement here is intended for any use which would infringe any patent or copyright.

Purchaser is responsible for complying with all applicable federal, state, or local laws and regulations covering use of the product including waste disposal.

Contact *Polyguard Products, Inc.* for further information.

WARRANTY

Polyguard Products, Inc. will replace F.O.B. Ennis, Texas, material not meeting our manufacturer's specifications one year from date of sale. Made in the U.S.A.

TECHNICAL SERVICE / INFORMATION

Technical assistance and information about *Polyguard* products is available by contacting *Polyguard Products, Inc.*

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