

TERM™ Seam and Window Barrier

EPA Establishment No. 89537-TX-1

DESCRIPTION

TERM Seam and Window Barrier is a “peel and stick” non-chemical barrier membrane applied over joints of sheathing, and as a window flashing where both waterproofing and termite exclusion is desired.

Sheathing joints are potential entry points for termites which have accessed the exterior wall via the exterior foundation wall, and climbing over the *TERM Flashing Barrier* installed at the base of exterior sheathing. Windows are a frequent entry point of both climbing and swarming termites.

ADVANTAGES

TERM Seam and Window 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/techref.htm.

DESCRIPTION OF COMPONENTS

TERM Seam and Window Barrier is a strong, pliable, self-adhesive sheet consisting of a 4 mil high density polyethylene film bonded to 36 mils of sealant. *TERM Seam and Window Barrier* is formulated for low temperature application down to 30°F (-1°C). *TERM Seam and Window Barrier* is wound on a disposable treated release sheet which can be peeled away to expose the adhesive face. Standard roll sizes are 4” x 75” (.1 m x 22.9 m), 6” x 75” (.15 m x 22.9 m), and 8” x 75” (.2 m x 22.9 m).

TERM Seam and Window Barrier is the same composition as *TERM Flashing Barrier*. The only difference is in roll widths: the *TERM Seam and Window Barrier* is available in widths of 4”, 6”, and 8”, and *TERM Flashing Barrier* is available in widths between 12” and 48”.

Polyguard Shur-Tac Water-Base Liquid Adhesive is available where VOC concerns or limitations apply

Polyguard 650 LT Liquid Adhesive is a fast drying, high tack rubber-based adhesive used on horizontal and vertical surfaces at temperatures above 30°F (-1°C). This solvent base product cannot be used on ICF surfaces.

Polyguard 650 Mastic is asphalt mastic with a low solvent content. It is used to waterproof exposed edges of *TERM Barrier* products. The mastic itself is not a barrier against insects, and should only be used to protect the exposed edges of *TERM Barriers*.

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.

Product Data Sheet

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 mastics 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.

The *650 LT Liquid Adhesive* is an industrial coating and would be harmful or fatal if swallowed. It is marked as red label from the stand-point of flash point.

Prohibit flames, sparks, welding and smoking during application.

Refer to product label for handling, using and storage precautions.

Solvents could be irritating to the eyes, flush with water and contact physician.

Avoid prolonged contact with skin and breathing of vapor or spray mist from liquid adhesive. *In confined areas, use adequate forced ventilation, fresh air masks, explosion-proof equipment and clean clothing.*

Preparatory Work

Apply *TERM Barrier* only in fair weather, when temperatures are above 30°F (-1°C) and rising. If weather is cold and/or damp, making initial adhesion marginal, application of *650 LT Liquid Adhesive* or *Shur-Tac Water-Base Liquid Adhesive* will assist the initial adhesion.

Application of Seam Barrier:

When installing *TERM Seam Barrier*, center the material on seams and work from the bottom up. This will ensure that the barrier is shingle lapped.

After installation, always roll firmly into place using a hand roller.

Sequence of Application – Window Barrier:

The sequence of window barrier installation is important, because all edges must be shingle lapped to prevent entry of water, which will also create gaps allowing termite entry:

1. Make sure that any seams intersecting with the bottom of the window are taped before window is flashed. Likewise, do not tape seams above window until window flashing is completed.
2. Install horizontal strip on sill
3. Set window frame
4. Adhere vertical strips to jamb flanges and sheathing
5. Adhere horizontal strip to straight head flange and sheathing.
6. Roll all tape surfaces with a hand roller.

Barrier Application:

Make sure the surface is clean, dust free, smooth, and dry. Adhesive surface of the tape should not be in contact with any caulks or sealants containing plasticizers or solvents.

This includes most silicone or polyurethane sealants.

Test adhesion of tape to sheathing. Some sheathing boards contain components which reduce tape adhesion. If adhesion is inadequate, prime with *Polyguard Liquid Adhesive*. If *Polyguard Adhesive* is not available, 3M Company #77 Spray Adhesive may be used.

Cut the length you want to use from the roll with utility knife or Scissors.

Remove 12" or more of the release film and center the tape over the area to be sealed.

Firmly press the tape to the area being sealed. As you go along, pull more of the release film from the tape, exposing the adhesive surface, pressing down the tape and keeping the tape smooth. When through with the strip, roll it firmly into place using a hand roller.

Ultraviolet Protection:

TERM Seam and Window Barrier can be adversely affected by ultraviolet light. The waterproofing system must be covered as soon as possible and not left exposed to sunlight for over 30 days.

Inspection and Repairs

Visually inspect barrier for tears, punctures, pinholes, air blisters and "fishmouths" where water or insects could gain entry. Make repairs by removing all damaged barrier so that only well bonded barrier remains. Care should be taken to obtain good adhesion between barrier used for repairs and originally applied barrier.

PACKAGING INFORMATION

Product	Unit of Measure	Approximate Coverage	Weight / Unit	Palletization
TERM Seam and Window Barrier 4" x 75' (.1 m x 22.9 m) 6" x 75' (.15 m x 22.9 m) 8" x 75' (.2 m x 22.9 m)	Carton (1 roll)	300 ft2	76 lb.	25 cartons
Polyguard Shur-Tac Water Base Liquid Adhesive	5 Gal Pail or 4-1 Gal Pail	250 – 350 ft2/gallon	50 lb. 37 lb.	36 Pails 54 Cartons
Polyguard 650 LT Liquid Adhesive	5 Gal Pail or 4-1 Gal Pail	250 – 350 ft2/gallon	45 lb. 31 lb.	36 Pails 54 Cartons
Polyguard Detail Sealant	Carton with 12 30 oz. tubes	1/8" bead – 293 lf/tube 1/4" bead – 73 lf/tube 3/8" bead – 30 lf/tube	32 lb.	25 Cartons
Polyguard 650 Mastic	5 Gal Pail or Ctn. with 12 30 oz. tubes	1/2" bead 65 LF/tube 1" bead 100 LF/gallon	48 lb./Pail	36 Pails 25 Cartons

PHYSICAL PROPERTIES

Typical Properties of TERM Seam and Window Barrier			
Property	Test Method	English	Metric
Color	--	Red	Red
Barrier Thickness	ASTM D 1000 inch (mm)	.040	1.0
Long Term Testing against Termite Penetration	Texas A&M 4 Sites over 5 years vs controls	100% effective	100% effective
Elongation of Barrier Sealant – Percent Stretch Before Failure	ASTM D 412	>500%	>500%
Resistance to Radioactive Radon Gas	Radon Reduction Technology Laboratory % reduction in radon gas diffusion	97.1%	97.1%
Pesticide Repellency (Chlorodane, fipronil, permethrin)	ASTM F 2130	0%	0%
Permeance to Moisture and Water Vapor	ASTM E 96-B Grains/ft2/hr/in HGF (grains/hr/m2)	.035	.023
Tensile Strength – Film Backing	ASTM D 882 PSI / (N/mm2)	6500	44.82

Tensile Strength – Barrier Composite	ASTM D 412 (Modified Die C) PSI / (N/mm ²)	325	2.24
Peel Adhesion	ASTM D 1000 lb/in width / (N/mm)	10.0	1.75
Overlap Bond	ASTM D 1000 lb/in width / (N/mm)	8.0	1.4
Low Temperature Flexibility	ASTM D 146 180° bend over 1" mandral at -25°F(-32°C)	No cracking or delamination	No cracking or delamination
Barrier Puncture Resistance	ASTM E 154 (Blunt Instrument) lb / (N)	50	182

Material Storage: Barrier and accessories should be unloaded and stored carefully. Cartons and containers must be protected from weather, sparks, flames, excessive heat, cold and lack of ventilation. DO NOT stack barrier material higher than 5' (1.5m) vertically, nor double stack pallets. Cartons should be stored on pallets and covered to prevent water damage. For best results, barrier should be stored 50-75°F prior to application.

LIMITATIONS

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.