

## TERM® Sill Plate Barrier

## Product Data Sheet

### DESCRIPTION

*TERM Sill Plate Barrier* is an adhesive sealant barrier designed to prevent termites from accessing wood framing members from a concrete crack or joint in the floor. *TERM Sill Plate Barrier* adheres to the subfloor and blocks termite access to the sill plate.



### ADVANTAGES

Concrete cracks and joints are one of the main access points for subterranean termites into structures. *TERM Sill Plate Barrier* installed underneath the sill plate provides 5 advantages:

1. *TERM Sill Plate Barrier* is a non-chemical barrier to subterranean termites. The barrier has been tested against termites since 2000 by Texas A&M University and is classified as a non-pesticide "device" by EPA regulators.
2. *TERM Sill Plate Barrier* provides a full waterproofing and vapor proofing barrier for wood framing against moisture from the concrete.
3. *TERM Sill Plate Barrier* blocks moisture and cold air from the exterior, and energy leaks from the interior.
4. *TERM Sill Plate Barrier* excludes foraging insects such as ants and cockroaches from entering at gaps between the sill plate and the not quite level slab.
5. *TERM Sill Plate Barrier* provides supplemental protection to sodium borate treatment of wood framing.

<http://polyguardbarriers.com/ant-termite-barrier.htm.com>.

### DESCRIPTION OF COMPONENTS

*TERM Sill Plate Barrier* is a 68 mil thickness of high strength film backed barrier sealant. *TERM Sill Plate Barrier* is formulated for low temperature application down to 30°F (-1°C). *TERM Sill Plate Barrier* is wound onto a disposable treated release sheet, which can be peeled away to expose the adhesive face just prior to application. Standard roll widths are in ½" increments from 3.5" x 61' (.088 m x 17.2 m) to 6.5" x 61' (.216 m x 17.2m).

*Polyguard 650 LT Liquid Adhesive* is a fast drying, high tack rubber-based adhesive primer at temperatures above 30°F (-1°C).

*TERM 343 Spray Adhesive* is a spray applied adhesive, for use when VOC limitations do not permit the use of *Polyguard 650 LT Liquid Adhesive*.

*Polyguard TERM Sealant Barrier* is a solvent based form of the *TERM Sealant* suitable for application with a caulking gun.

### 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 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 Safety Data Sheet (SDS) before use. SDS sheets can be obtained at our website

<http://polyguardbarriers.com/datasheets.htm>.

Please call *Polyguard* at 214-515-5000 with 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.

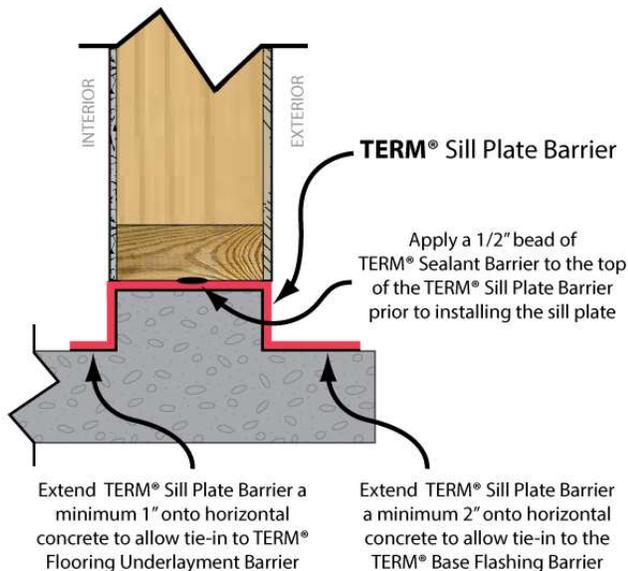
Avoid prolonged contact with skin and breathing of vapor or spray mist from liquid adhesive. *In confined areas, use adequate forced ventilation, fresh air masks, and explosion-proof equipment.*

### General

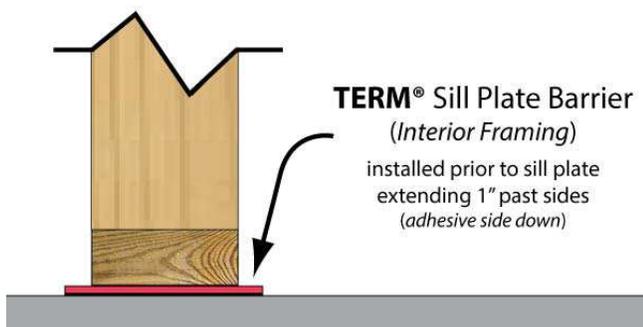
If the horizontal slab at ground level is 100% protected by TERM Underslab Barrier, *TERM Sill Plate Barrier* is only required for protection of perimeter framing.

If the horizontal slab at ground level is to be 100% protected by TERM above slab flooring underlayment, *TERM Sill Plate Barrier* is required under both perimeter and interior framing.

## TERM® Sill Plate Barrier Exterior Perimeter



## TERM® Sill Plate Barrier Interior Framing



### Preparatory Work

#### Required width of TERM Sill Plate Barrier

**For TERM Sill Plate Barrier underneath interior framing:** Barrier should be 2" wider than the width of the base plate.

**For TERM Sill Plate Barrier underneath perimeter framing:** On the interior side, the sill plate barrier must extend 1" across the horizontal surface. On the exterior side, sill plate barrier must extend a minimum 2" across the horizontal. This extra barrier width should tie into the *TERM Base Flashing Barrier*.

If a concrete curb has been built into the slab, 2 X the height of the curb must be added to the width of the sill plate barrier.

**Weather Conditions:** 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 343 Spray Adhesive will assist initial adhesion.

**Surface Preparation:** A smooth monolithic concrete surface is required. Broom surfaces are not recommended. Concrete should be dry, frost free and cured a minimum of seven days prior to application of *TERM Sill Plate Barrier*. Wood subflooring should be clean, dust free, and dry.

### Application of Sill Plate Barrier under Sill Plates:

One of the most important things to remember about installing the *TERM Sill Plate Barrier* is to know exactly where you want to place the barrier and the sill, and to place the material exactly. The sealant forms a very strong bond to the concrete, and it is difficult to reposition once it is in place.

Install *TERM Sill Plate Barrier* on the concrete or wood subflooring prior to placing the sill plate.

- Prime the concrete. If not in an enclosed space, use Polyguard 650 LT Liquid Adhesive. If in an enclosed space, use *TERM 343 Spray Adhesive* or 3M Super 77 Spray Adhesive.
- Cut a length of barrier from the roll. For exterior perimeter framing, the width of the roll should be wide enough to extend 1" onto the interior horizontal concrete and 2" onto the exterior horizontal concrete. For interior framing, the width of the roll should be 2" wider than the sill plate. A graphic representation of the required widths for exterior and interior framing is shown above. The length of the Sill Plate Barrier should be 1/2" longer than the sill plate which will go over it.
- Once primer is cured (tacky) place the length of barrier on the concrete, beginning about 1/2" before the beginning of the sill plate.
- Peel away one end of the release sheet about 1/2" to 1", exposing the face of the adhesive on one side.
- Adhere the adhesive to the concrete at one end of where the sill plate will be positioned, remembering to leave about 1/4" of the adhesive past the end of the sill plate, and remembering to keep the barrier exactly in line with the location of the sill plate. There should be 1" of barrier exposed horizontally on each side of all interior sill plate once installed. On perimeter sill plate, the barrier must extend 1" horizontally on the interior side, and 2" onto the horizontal concrete underneath where the base flashing will be installed.
- Without peeling away any more release sheet away, place the barrier along the full length of the sill plate location, leaving 1" exposed on either side. If the barrier is out of line with the sill plate, you can cut the tape and restart to make the barrier in line. (*Note that exact positioning is very important, since it is extremely difficult to remove the barrier once it has been adhered to the substrate.*)
- When the barrier is positioned properly, slowly peel away the remainder of the release liner, pressing the barrier down against the concrete as you go.
- Perimeter sill plate only:** Apply a 1/2" bead of *TERM Sealant Barrier* to the middle of the *TERM Sill Plate Barrier* as shown on the graphic. This bead will insure a complete seal between the barrier and the sill plate in areas of irregular level.
- Now the is concrete ready for installation of the sill plate. You can nail through the sill plate, as the sealant is self-healing..

**Inspection and Repairs:** Visually inspect barrier for gaps. These can occur where the underside of the sill plate has bare spots, where the barrier does not extend past the end on both sides of the sill plate, or where (due to irregular areas in a slab) there is a gap between the barrier and the sill plate. Make repairs by applying *TERM Sealant Barrier* to seal all void areas.

## PACKAGING INFORMATION

Product	Contents	Approximate Coverage	Weight / Unit	Palletization
<b>TERM Sill Plate Barrier</b> 5.5" x 61' (.140 m x 17.2 m) 7.5" x 61' (.190 m x 17.2 m) 8.5" x 61' (.216 m x 17.2 m) Wider widths available in 1" increments	Rolls per carton 7 5 4	LF per carton 427 305 244	LB / carton 64 58 65	30 cartons
<b>Polyguard 650 LT Liquid Adhesive</b>	5 Gal Pail or 4-1 Gal Pail	250 – 350 ft <sup>2</sup> /gallon	45 lb. 31 lb.	36 Pails 54 Cartons
<b>TERM 343 Spray Adhesive</b>	Carton (12 cans)	25 LF / can	11 lb./ctn.	90 Cartons
<b>TERM Sealant Barrier</b>	Carton with 12 10 oz. tubes	½" bead 22 LF/tube	10	100 Cartons

## PHYSICAL PROPERTIES

Typical Properties of <b>TERM Sill Plate Barrier</b>			
Property	Test Method	English	Metric
Color	--	Pink backing Black adhesive	<i>Pink backing</i> <i>Black adhesive</i>
Barrier Thickness	ASTM D 1000 inch (mm)	.068	1.52
Long Term Testing against Termite Penetration	ASTM D 1758 – 06 Texas A&M 4 Sites over 5 years vs controls <a href="http://www.polyguardbarriers.com/techref.htm">www.polyguardbarriers.com/techref.htm</a>	100% effective	<i>100% effective</i>
Elongation of Barrier Sealant – Percent Stretch Before Failure	ASTM D 412	> 1000%	> 1000%
Low Temperature Flexibility	ASTM D 146 180° bend over 1" mandral at -25°F (-32°C)	No cracking or delamination	No cracking or delamination
Permeance to Moisture / Water Vapor	ASTM E 96-B Grains/ft <sup>2</sup> /hr/in HGF (grains/hr/m <sup>2</sup> )	.03	.02

### Ultraviolet Protection:

**TERM Sill Plate Barrier** can be adversely affected by ultraviolet light. The barrier material must be covered as soon as possible and not left exposed to sunlight for over 30 days.

**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.