

## TERM® All Pest Bath Trap Barrier

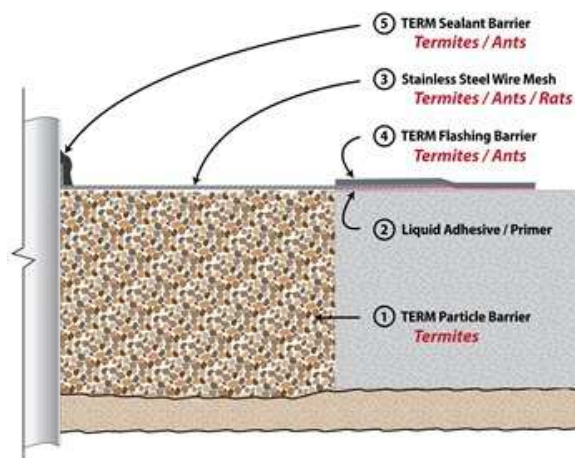
Patent Pending

### DESCRIPTION

Polyguard's *TERM All Pest Bath Trap Barrier*, installed after the concrete slab is poured and rough plumbing is complete, is a non-chemical barrier, installed by a Polyguard authorized pest management professional. *TERM All Pest Bath Trap Barrier* blocks termites, fire ants, rats, mice, and moles from entry through bath traps (blockouts) in a slab.



*TERM All Pest Bath Trap Barrier* being installed in *The New American Home 2017*, an NAHB concept home to be introduced at the January 2017 International Builders Show in Orlando, FL



**Graphic of TERM™ All Pest Bath Trap Barrier – illustrating construction and functions**

### ADVANTAGES

Bath traps have traditionally been an open door for a variety of pests. The *TERM All Pest Bath Trap Barrier* is a combination barrier which blocks entry of any pest through this opening. Although the *TERM All Pest Bath Trap Barrier* blocks pests, the porous nature of its components allows water to drain from the bath area into the base below. Under normal circumstances, application of pesticides to the bath trap area should be unnecessary during the life of the structure, and no maintenance should be required. The *TERM All Pest Bath Trap* does not contain pesticides and is classified by the EPA as a physical barrier.

### DESCRIPTION OF COMPONENTS (see numbering on graphic above)

1. *TERM Particle Barrier*, installed by a Polyguard authorized pest management professional, is installed in the bath trap cavity after rough plumbing is complete.

Particle barriers, of quartz or other hard mineral aggregates, are sized within exacting ranges to create a blend of particles which are too large for termites to move away, and too small for termites to crawl between. Testing of Polyguard's *TERM Particle Barrier* has been done by Texas A&M. ([http://particlebarrier.com/A&M\\_Report.pdf](http://particlebarrier.com/A&M_Report.pdf)). Earlier particle barrier testing has been done by the University of Hawaii, [http://www2.hawaii.edu/~entomol/research/r\\_btb.htm](http://www2.hawaii.edu/~entomol/research/r_btb.htm) and CSIRO, the Australian National Research Laboratory <http://www.csiro.au/Outcomes/Safeguarding-Australia/Termites/Prevention.aspx>

2. Liquid adhesive/primer is applied to create bond between the flashing, wire mesh, and concrete perimeter.

3. *TERM 018 Micro Mesh Barrier* is a stainless steel wire mesh, installed on top of the slab over the particle barrier, acts as a physical barrier to larger pests such as rats, mice, or moles, as well as a backup barrier to termites. The mesh is a barrier which cannot be gnawed or clawed through.

4. *TERM Flashing Barrier*, installed over the wire mesh and onto the concrete, seals the mesh to the concrete perimeter of the bath trap. The flashing barrier consists of a strong, puncture resistant backing, laminated to a layer of *TERM Sealant Barrier*. Installing the flashing secures the wire mesh to the concrete, and seals off all pests from entry.

5. *TERM Sealant Barrier*, used to seal gaps where the plumbing penetration comes through the wire mesh, acts as both an adhesive and as a barrier sealant. The sealant barrier has been tested by Texas A&M University to block termites (<http://polyguardbarriers.com/Subsites/TechRef/Texas%20A&M%20Termite%20Report%206-5-13.pdf>) and fire ants <http://polyguardbarriers.com/Subsites/TechRef/Texas%20A%20M%20TERM%20vs%20fire%20ants%202013.pdf>.

### 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




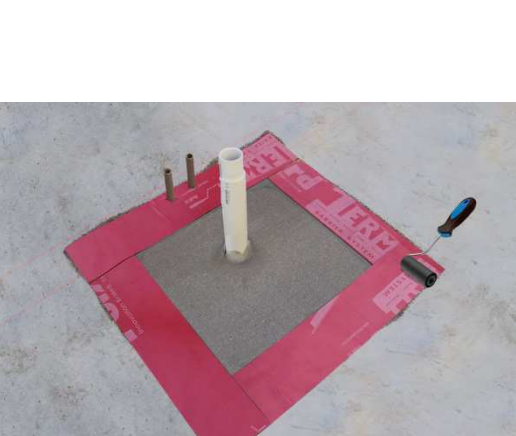
### Safety:

All *Polyguard* products must be handled in a safe manner. *TERM Sealant Barrier* when furnished in a caulking tube, contains solvent, and deserves special attention to safety since it is 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.polyguardproducts.com](http://www.polyguardproducts.com). Call *Polyguard* at 214-515-5000 if you have any questions.

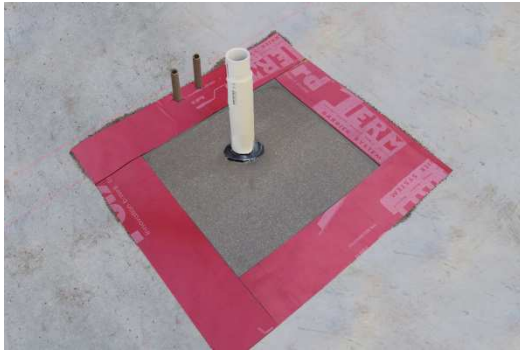
Prohibit flames, sparks, welding and smoking during application. In confined areas, use adequate forced ventilation, fresh air masks, explosion-proof equipment and clean clothing.

## Installation of TERM All Pest Bath Trap Barrier

| STEP | ILLUSTRATION  | INSTRUCTIONS  |
|------|---|---|
| 1    |  | <p>Any wood or cellulose forms should be removed from the inside of the bath trap. The bath trap should be cleaned of any concrete debris, and any dirt on the walls of the trap removed.</p> <p>Vertical portion of pipe penetration should be clean and dry. Any protective sleeve on the pipe should be removed. Use sandpaper or other abrasive to roughen the surface of the pipe.</p> |
| 2    |  | <p>Pour <i>TERM Particle Barrier</i> into the bath trap until the top of the particles are even with the top of the slab.</p>   |

| STEP | ILLUSTRATION  | INSTRUCTIONS  |
|------|---|---|
| 3    |    | <p>Cut <i>TERM Micromesh 018</i> to size so that it extends completely over the bath trap and 2" beyond onto the horizontal concrete surface on each side of the mesh.</p> <p>Cut an "X" shaped opening in the wire mesh where the pipe penetration is to come through. This opening should be placed so that the wire mesh maintains the 2" overlap onto the concrete perimeter.</p>   |
| 4    |    | <p>Spray apply <i>TERM 343 Spray Adhesive</i> or brush apply <i>Polyguard 650 LT Liquid Adhesive</i> (if outside). Adhesive should extend 4" from each edge of the bath trap cavity. If liquid adhesive is used, allow to cure until tacky (usually about 30 minutes).</p>  |
| 5    |   | <p>When the adhesive/primer is tacky, place the wire mesh over the bath trap. Install the mesh over the penetration pipe and extend the wire mesh 2" onto the horizontal perimeter of the slab.</p>   |
| 6    |  | <p>Cut four strips of <i>TERMFLASH04</i>. The length of each strip should be 2" longer than the side of the wire mesh which that strip is to seal.</p> <p>Seal the wire mesh to the slab with <i>TERMFLASH04</i> by peeling away the paper release liner, exposing the adhesive, and installing the flashing 2" over the wire mesh, and 2" onto the concrete perimeter outside of the mesh. Flashing should extend a minimum 1" past each end of the wire mesh being sealed.</p> <p>Roll the flashing, applying pressure so that good adhesion is created between the concrete and flashing, and between the flashing and the wire mesh.</p> <p>When finished, there should be no gaps anywhere around the perimeter.</p> |

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Apply *TERM Sealant Barrier* with caulking gun or trowel to seal all gaps where the pipe comes through the wire mesh. Any gaps should be covered with a minimum 3/8" coating of sealant.

**ADDITIONAL INSTRUCTIONS:**

Coverage rate of sealant tube is approximately 15 LF per tube with a 1/4" wide bead. Dispose of content and container in accordance with all local, regional, state, and federal regulations.

This product will only block termites and pests in areas where it has been properly installed in accordance with the above instructions.

**NOT A STANDALONE TREATMENT:**

This product is not a standalone treatment for termites, During construction, it should be considered as a supplemental treatment to any termite pretreatment required by code

**LIMITATIONS:** The structure should be inspected a minimum of one time per year for the presence of termites and other pests by a pest management professional who has been certified by the state or appropriate jurisdiction for the location of the structure.

Polyguard's *TERM Barrier System* products are part of an Integrated Pest Management (IPM) program and where local regulations require, may be used to supplement termiticide applications.

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.

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

| Physical Properties  |  |                                    |                                    |
|--|--|------------------------------------|------------------------------------|
| Property   | Method   | English                            | Metric                             |
| <b>TERM 018 Micro Mesh Barrier</b>                             |  |                                    |                                    |
| Metal – type and grade   | -  | Stainless steel – Marine grade 316 | Stainless steel – Marine grade 316 |
| Aperture size of mesh opening                                  | ASTM E 11 (maximum)                                    | 0.018"                             | 0.46mm                             |
| <b>TERM Sealant Barrier</b>                                    |  |                                    |                                    |
| 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%                              |
| <b>TERM Flashing Barrier</b>                                   |  |                                    |                                    |
| Tensile Strength – Film Backing                                | ASTM D 882 PSI / (N/mm <sup>2</sup> )                  | 6500                               | 44.82                              |
| Tensile Strength – Barrier Composite                           | ASTM D 412 (Modified Die C) PSI / (N/mm <sup>2</sup> ) | 325                                | 2.24                               |
| Peel Adhesion  | ASTM D 1000 lb/in width / (N/mm)                       | 10.0                               | 1.75                               |