

TERM® Particle Barrier for Termites

Product Data Sheet

EPA Establishment No. 89537-TX-1



TERM Particle Barrier installation – Oklahoma medical center



DESCRIPTION

Particle termite barriers were invented by entomologist Dr. Walter Eberling, University of California at Berkeley, in 1956. Significant developmental work at the University of Hawaii in the 1980's led to commercial application in Hawaii, Australia, and other parts of the world. However, particle barriers have not been available in the mainland United States until now.

The principle behind particle barriers is simple. According to the expired University of Hawaii patent 5,094,045, Exactly sized particles fitting screen size 8 to 14 will form a non-chemical barrier to both Formosan and Eastern subterranean termites;

granules in the material have at least one dimension ranging from 1.7 millimeters to 2.4 millimeters in diameter. Granules of this particular size prove to be too large for termites to move, too small when packed together to find space for tunneling, and too hard to chew. The granules can be made of sand, gravel, rock or basalt....."

[Link to expired University of Hawaii particle barrier patent](#)

ADVANTAGES

TERM Particle Barrier is a termite exclusion product. Used around the building perimeter, it can greatly reduce the quantity of termiticides needed over the years of the structures life.

All TERM barriers are classified by pest control regulators as "barriers", since they contain no toxic components.

Termites trying to enter a structure at the exposed concrete perimeter are unable to penetrate *TERM Particle Barrier*. Also, in the case of the Eastern subterranean termite (*Reticuletermes flavipes* species) termites are unable to get out of a structure which they previously penetrated. In most infested structures, there is not sufficient moisture for *Reticuletermes flavipes*, so they must return to the soil for moisture.

The picture below shows the end of a *Reticuletermes flavipes* mud tube. The *Reticuletermes flavipes* built a mud tube from a weep hole in the brick down to ground level. At ground level, the termites were unable to penetrate the barrier, so they built a new mud tube horizontally, searching for a place where they could breach the barrier. At that point the *Reticuletermes flavipes* stopped tunneling, either because they were desiccated or because they ran out of mud.



Reticuletermes flavipes were blocked from leaving a structure to replenish moisture

REFERENCES

The Green Building Certification Institute (GBCI) has approved the use of the Polyguard TERM Particle Barrier as eligible for credit when used as a physical termite barrier for the LEED for Homes v4 Sustainable Sites Credit: Nontoxic Pest Control.

Click here for [LEED v4 Documentation](#).

USES OF TERM PARTICLE BARRIER

The uses listed below are for either new construction, or on existing structures:

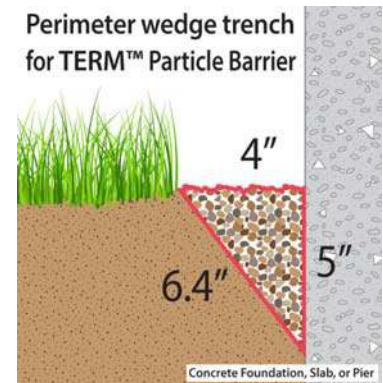
1. Properly installed and maintained around the perimeter of a structure, the barrier will block access of termites to the home.
2. As a termite barrier at bath traps.
3. As part of a TERM All Pest Bath Trap Barrier which excludes termites, fire ants, rodents, snakes, and moles. (See data sheet for TERM All Pest Bath Trap Barrier)

Important: TERM Particle Barrier should be installed and maintained by a Polyguard approved Pest Management Professional who is licensed in that jurisdiction. Contact Polyguard for details.

INSTRUCTIONS FOR USE AS A PERIMETER TRENCH AROUND STRUCTURE

[View TERM Particle Barrier YouTube Installation Video](#)

1. Dig a wedge-shaped trench, minimum 4" across the top, and at least 5" deep down the vertical concrete face. The trench should be installed wherever vertical concrete surfaces of the structure are exposed around the building perimeter.
2. *Note: For most soils the TERM Trencher, a tool designed to create a trench of the correct depth and width, can be used, and will give a significant reduction of installation effort. Pictured below is a sequence showing the TERM Trencher creating a properly sized wedge.*
3. Clean the vertical face of the concrete so that the surface is completely clean of mud and debris. A quick way to do this is with a hosing of the exposed area of the wall.
4. Fill the trench to grade level with TERM Particle Barrier.



Inspection and Repairs

Note the necessity for regular inspection (minimum once/year, more if the judgment of the PMP calls for it) and repair (if necessary) of the TERM Particle Barrier perimeter. The following are some things which can compromise the barrier:

- a. Cats using the barrier as litter.
- b. Dogs digging up the barrier.
- c. Landscaping or construction activities which displace the barrier or cover it with dirt.
- d. Overgrowth by vegetation
- e. Debris or mulch.
- f. Children playing in the area.
- g. Settlement of the dirt
- h. Washout by rain



Aim Trencher



Fire Trencher



Pull Trencher



Until step is level with soil

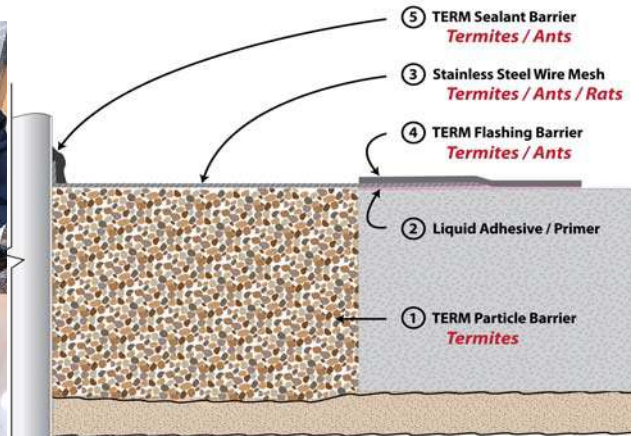
INSTRUCTIONS FOR TERM Bath Trap Barrier



Particle Barrier stops termites



All Pest Barrier excludes all pests



Graphic with construction of TERM All Pest Bath Trap Barrier

TERM Particle Barrier is a key component of the TERM Bath Trap, required as a subterranean termite barrier. The remainder of the components protects against fire ants, rodents, snakes, moles, etc.

The TERM Full Bath Trap System has a separate data sheet.

<http://www.polyguardproducts.com/wp-content/uploads/2017/12/14.-TERM-All-Pest-Bath-Trap-Barrier-R-12-07-17.pdf>

Under normal circumstances bath trap installations should not require maintenance.

Material Storage: Barrier and accessories should be unloaded and stored carefully. 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.

LIMITATIONS

CRAWL SPACE / PIER AND BEAM WARNING AND EXCLUSION

Polyguard TERM Particle Barrier is generally unsuitable for crawl spaces or pier and beam construction under new or existing structures.

The reason for this exclusion is the typical tight spaces, which create difficulty of making a proper installation, checking for correct installation, regular inspection and maintenance, and checking the quality of regular maintenance. We advise against depending upon TERM Particle Barrier to exclude subterranean termites in crawl spaces and pier and beam structures, unless the structure has generous space and sufficient lighting - for easy access and installation, inspection, and maintenance at all points underneath the structure.

Proper installation, regular inspection and maintenance are critical for TERM Particle Barrier, and too important for situations which encourages people to cut corners.

Contact Polyguard if you need more details. e-mail: jheidorf@polyguardproducts.com

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.

PHYSICAL PROPERTIES

TERM Particle Barrier - Physical Property	Typical
Fineness Modulus	3.83
ASTM D451 - 17 Standard Test Method for Sieve Analysis of Granular Mineral Surfacing for Asphalt Roofing Products Minimum % retained of sieve size 8 - 14	> 85%
Hardness – Mohrs Hardness Scale	> 6
Gradient Angularity <i>Mean gradient angularity</i>	2000-3000

PACKAGING INFORMATION

Product	Unit of Measure	Weight / Unit
Polyguard TERM Particle Barrier	Bag	50 lb.