PRODUCT DATA SHEET



TRM Sealant

Termite Sealant Barrier

MANUFACTURER

Polyguard Products, Inc. Ennis, TX75119 (214) 515-5000 www.polyguard.com

PRODUCT DESCRIPTION

Basic Uses

TRM Sealant is a single component sealant barrier, applied with a smoothing tool or an off-set margin trowel, used for waterproofing, termite and insect exclusion, and sealing metal termite shields installed by others.

TRM Sealant is used to seal on top of slab before framing occurs (a common termite entry point). It also seals overlaps, gaps, and penetrations where TRM membrane barriers are installed.

PRODUCT FEATURES

- Single component sealant available in quarts and gallons.
- Termite, water, and air exclusion.
- Most common uses include top of slab pipe penetrations, control joints and edge of slab to interior concrete walls.
- Sealant remains elastomeric for the life of the structure.
- The only physical termite barrier with over 2 decades of university backed testing. TRM has been evaluated by the ICC (International Code Council) against their AC 380 standard Acceptance Criteria for Termite Physical Barrier Systems.
- 30-day UV exposure.

COMPOSITION & MATERIALS

TRM Sealant is a waterproofing sealant plus a termite barrier. It is formulated from polymer asphalt which has been upgraded to incorporate a non-chemical termite and insect barrier.

TRM Sealant is a component of the non-structural TRM Barrier System which, properly installed as part of the building envelope, acts as a barrier to termites and other pests. Because almost all pests are excluded for the life of the structure, need for pesticide treatment should be over the life of the structure.

REFERENCES

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

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

LEED calls for IPM protocols to "minimize pest problems and exposure to pesticides".

A key IPM element is "Non-chemical pest preventative measures.....designed into the structure...". TRM Barriers are non-chemical pest preventative measures.

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

TRM Sealant / membranes are not mentioned, as they are only now entering the field for sustainable construction alternatives. The incorporation of TRM Sealant / membranes into the building envelope should be a strong candidate for Innovation credit.

Finally, if the project site is former agriculture land with residual pesticide contamination, TRM Barriers may qualify under LEED IAQ Credit 5 - Indoor Chemical and Pollutant Source Control (below grade toxin barrier) or SS3 - Brownfield redevelopment.

TECHNICAL DATA

See physical properties table.

INSTALLATION

Apply TRM Sealant only in fair weather, with temperatures above 30°F (-1°C) and rising.

Slab Penetrations:

- Remove any portion of plastic sleeve which is above slab level.
- Prep surface: Roughen surfaces with sandpaper or a wire brush. Sweep all dirt and dust away.
- Prime surfaces: Prime 2-inches onto the concrete and 2-inches up the pipe using a spray adhesive, such as 343
 Construction Adhesive.
- Apply TRM Sealant all around the penetration (in hydrostatic conditions, TRM Sealant can be used in conjunction with Detail Sealant PW™ or LM-95). Use enough to create a minimum 3/4-inch face after tooling.
- Tool sealant smoothly into place.

Link to installation video: <u>TRM Non-Chemical Termite Barrier</u> — <u>Sealing Slab Penetrations - Polyguard - YouTube</u>

Termite Shield Application:

Metal termite shields have been used in termite control for many years. Termite shields physically block subterranean termites trying to enter the structure from underneath. Metal termite shields don't completely stop termites – termites can't penetrate the metal, but they build "mud tubes" around the shield.

However, mud tubes built by the termites are usually visible to pest management professionals and can be treated.

Since the 1/50" wide subterranean termites can get through tiny openings, they can get through metal termite shields via gaps at rebar penetrations, at seams, or underneath the shield. This is where TRM Sealant is needed. By sealing seams, penetrations, and between the shield and concrete, TRM Sealant blocks the termites' hidden shortcut. Now the termites must build exposed mud tubes.

Sealing Cracks or Joints on Horizontal Surfaces:

If you are using TRM Sealant to seal cracks or joints on horizontal decks, there are a few limitations you should be aware of:

- Sealing joints or cracks on an existing structure:
 In order for TRM Sealant to seal, and maintain a seal, it is critical that the inside of the joint be completely clear of dust and dirt. For existing structures this is especially difficult, because enough dirt and debris have collected and can prevent a strong bond of the sealant to the walls of the joint or crack.
 - Note: 343 Construction Adhesive and Polyguard 650 WB Liquid Adhesive, a water-based primer, will not absorb enough dust to create strong bonds.
- Polyguard 650 LT Liquid Adhesive or California Sealant will be more forgiving of marginal conditions, because it can absorb some dust and soak into pores of the concrete. However, Polyguard 650 LT Liquid Adhesive and California Sealant are solvent-based products, which means that there are serious safety concerns. Polyguard

650 LT Liquid Adhesive and California Sealant should not be used indoors, or outdoors in areas which are not well ventilated. Please view the product Safety Data Sheet (SDS) for more information.

 The second limitation of TRM Sealant is practical rather than safety related. You should note that TRM Sealant may take several days to cure sufficiently to allow foot traffic

Ultraviolet Protection:

TRM Sealant can be adversely affected by ultraviolet light. The barrier material must be covered as soon as possible and not left open to sunlight for >30 days.

MAINTENANCE:

No maintenance should be required unless the product has been damaged by construction or by some other activity.

LIMITATIONS

When properly installed, TRM System products will physically block termites from entering the structure at the protected area but will not block termites from entering at other points on the structure. Installing more TRM components blocks more termite entry points but does not guarantee protection in areas the TRM products are not applied.

Polyguard's TRM System 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 numerous other termite species worldwide, 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.

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

STORAGE

All Polyguard products must be handled in a safe manner. Some products may 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. For best results, store at 50-75°F prior to application.

SAFETY

SDS documents for all Polyguard products can be obtained at our website www.polyguard.com. Call Polyguard Products, Inc. at (214) 515-5000 with questions.

WARRANTY

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product are beyond our control; such as weather, workmanship, equipment utilized and prior condition of the substrate. We will replace at no charge product proved to be defective within twelve (12) months of purchase, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided.

TECHNICAL SERVICES

Technical assistance, information and Polyguard's products are available through a nationwide network of distributors and architectural representatives, or contact Polyguard Products, Inc.

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COVERAGE	APPLICATION	APPROXIMATE COVERAGE – 1 GAL	APPROXIMATE COVERAGE – 1 QT
SEALING SLAB PENETRATIONS WITH 3/4" FACE	½" diameter penetration	600	150
	2" diameter penetration	172	43
SEALING TRM MEMBRANE TERMINATIONS WITH 1/2" FACE BEAD	LF covered	208	52

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PROPERTY	TEST METHOD	TYPICAL VALUE
COLOR	-	Black
LONG TERM TESTING AGAINST TERMITE PENETRATION	ICC AC 380	ICC AC 380 Compliance ICC ESR-3632
BARRIER SEALANT ELONGATION - % STRETCH BEFORE FAILURE	ASTM D 412	> 1000%
PERMEANCE TO MOISTURE / WATER VAPOR	ASTM E 96-B	0.035 Grains/ft²/hr./in
TENSILE STRENGTH - FILM BACKING	ASTM D 882	5470 PSI
WATER ABSORPTION	ASTM D 570	0.1%
LOW TEMPERATURE FLEXIBILITY	ASTM D146 180° bend over 1" mandrel @ -25°F (-32°C)	No cracking or delamination
VOC	Calculation based on formula	247 a/l

PACKAGING	PART NUMBER	UNIT SIZE
TRM SEALANT - Quart	TERMSEAL Q	4 – 1 qt/ctn
TRM SEALANT - Gallon	TERMSEAL GALLON	4 – 1 gal/ctn
TRM SEALANT Accessories:		
650 LT LIQUID ADHESIVE	650-5 LIQ ADH 5 GA	5-gallon pail
650 LT LIQUID ADHESIVE	650-5 LIQ ADH 1 GA	4 – 1 gal pails/ctn
CALIFORNIA SEALANT	CALSEAL5	5-gallon pail
650 WB LIQUID ADHESIVE	650-5 WB ADH	5-gallon pail
343 CONSTRUCTION ADHESIVE	343 CASE	12 – 14 oz cans
TRM MICROMESH	TERMMICROMESH02 2X4	0.018" Aperture 2' x 4'
TRM PARTICLE BARRIER	TERMPART50TX	50 lb Bag
TRM SILL	varies/size	66.7' roll

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