

2000 – present: Testing of TERM products against termites or other pests

Below is a summary of termite exclusion testing, with additional testing for exclusion of other insects.

The summary does not include tests in process, of which there are several

The summary excludes several tests where a developmental product failed, as we do not want to show competition what not to do.

Finally, there were several successful tests which represent potential future products. These are excluded for reasons of confidentiality.

If you are a researcher or a regulator, we will be happy to send you a copy of any of these tests.

Year	Product Tested	Tested by	Description of test
2000	TERM Membrane	Texas A&M University	This was a lab test of the first prototype TERM Membrane Barrier. Both Eastern subterranean termites <i>Genus Reticulitermes</i> and Formosan subterranean termites <i>Genus Coptotermes</i> were tested. This was a “no choice” test.
<u>Results and notes:</u> Neither genus of termites was could penetrate the membrane barrier			

Year	Product Tested	Tested by	Description of test
2003	TERM Membrane	Texas A&M University	ASTM F2130 - 01 Standard Test Method for Measuring Repellency, Retention, and Penetration of Liquid Pesticide Formulation Through Protective Clothing Materials.
<u>Results and notes:</u> Today, a good deal of development is built on land historically used for farming. Prior to EPA regulations, farmers used pesticides such as chlordane, which is highly poisonous and can remain active in the soil for > 50 years. Over years some farmland became a “pesticide brownfield”. The result of the test was no penetration of TERM Membrane by the pesticides.			

Year	Product Tested	Tested by	Description of test
2008	TERM Membrane	Texas A&M University	This was an interim review of long-term field testing which had begun in 2003. TERM Membrane was tested at 5 sites, against both <i>R. flavipes</i> and <i>C. formosanus</i> .
<u>Results and notes:</u> There was no damage to any of the wood which had been treated with TERM Membrane. Wood damage was found on the untreated controls at all 3 <i>R flavipes</i> sites. None of the wood at the 2 <i>C. formosanus</i> sites was damaged.			

Year	Product Tested	Tested by	Description of test
2010	TERM Particle Barrier	Texas A&M University	This was a “ <i>reduced to practice</i> ” test. 15 Houston/Galveston area homes, all with live termite activity, received perimeter treatments of TERM Particle Barrier in 2005.
<u>Results and notes:</u> After 5 years, inspections showed no termite activity in any of the homes.			

Year	Product Tested	Tested by	Description of test
2011	TERM Membrane	Texas A&M University	5-year field trials were conducted to test TERM Membrane Barrier against <i>Coptotermes formosanus</i> and <i>Reticulitermes flavipes</i> . The tests were performed at four termite dense locations near the Texas Gulf Coast.
<u>Results and notes:</u> All wood control replicates at all 4 locations were destroyed. All wood replicated protected by TERM Membrane Barrier at all 4 locations were undamaged.			

Year	Product Tested	Tested by	Description of test
2012	TERM Particle Barrier	Texas A&M University	This was a paper published in <i>The Southwest Entomologist</i> showing the results of efficacy of various size combinations of particles as termite barriers,
<u>Results and notes:</u> The study showed that particle sizes of 8, 10, and 12 were effective in blocking both <i>Reticulitermes flavipes</i> and <i>Coptotermes formosanus</i> . It also concluded that angularity, weighted particle size, and fineness modulus were additional factors in barrier performance.			

Year	Product Tested	Tested by	Description of test
2013	TERM Membrane	Texas A&M University	This laboratory trial measured the effectiveness of TERM Membrane as a barrier against <i>S. Invicta</i> (red imported fire ants). This was a “ <i>no choice</i> ” test, which means that the fire ants had no alternate food source available.
<u>Results and notes:</u> None of the TERM Membrane treatments were breached by the fire ants attempting to reach the food source on the other side of the membrane.			

Year	Product Tested	Tested by	Description of test
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2013	TERM Particle Barrier	Texas A&M University	This lab test against both <i>R. flavipes</i> and <i>C. formosanus</i> applied the Texas A&M property criteria developed in 2011 – 2012 to two raw material sources.
<u>Results and notes:</u> Both raw material sources were determined to be acceptable.			

Year	Product Tested	Tested by	Description of test
2015	TERM Sealant Barrier	LSU – Wood Durability Laboratory	Formosan termite resistance of TERM Sealant was determined by testing using the American Wood Preservative Association (AWPA) E-1. Both “choice” and “no choice” tests were performed.
<u>Results and notes:</u> Samples protected by the TERM Sealant were not damaged in either test.			

Year	Product Tested	Tested by	Description of test
2015	TERM Particle Barrier	University of Georgia	This test evaluated TERM Particle Barrier against <i>Reticulitermes flavipes</i> .
<u>Results and notes:</u> TERM Particle Barrier blocked the termites in every treatment replicate. All controls failed.			

Year	Product Tested	Tested by	Description of test
2015	TERM Particle Barrier	Texas A&M University	This test evaluated the performance of TERM Particle Barrier against sandblasting sand, “16 grit sand”, and plain sand.
This evaluation was done to disprove the large amount of misinformation about sand particle barriers. Misinformation is found, both on the Internet and several other places. The misinformation advises that “sandblasting sand” or “16 grit sand” or even plain “sand” are effective as termite barriers. All university research on particle barriers contradicts this advice. This test was performed to call the unscientific advice into question.			

Year	Product Tested	Tested by	Description of test
2015	TERM Particle Barrier	LSU Department of Entomology	This test evaluated TERM Particle Barrier against <i>Coptotermes formosanus</i> .

Results and notes:

In control replicates, termites reached the bottom within 24 hours. In the TERM Particle Barrier replicates, no termites reached the bottom after 8 weeks.

Year	Product Tested	Tested by	Description of test
2015	TERM Micromesh Screen	Texas A&M University	Screens were tested for their ability to block scorpions and carpenter ants.

Results and notes:

The tests showed us what screen types and sizes are needed to exclude these two insects.

Year	Product Tested	Tested by	Description of test
2016	TERM Membrane	Texas A&M University	This is a background and summary of field trial testing and results obtained of TERM Membrane Barrier tested against <i>Coptotermes formosanus</i> and <i>Reticulitermes flavipes</i> in the period between 2003 and 2011.

Results and notes:

In all 5-year field tests, termites never penetrated the TERM Membrane Barrier. Untreated wood controls were all destroyed.

Year	Product Tested	Tested by	Description of test
2017	TERM Sealant	Texas A&M University	TERM Sealant Barrier was tested against Formosan subterranean termites at simulated plumbing slab penetration treatments. Two different treatment methods were used, and sealant cure times of 7, 30, 60, 90, and 360 days were tested.

Results and notes:

All treatment variations and sealant cure time variations have been completed and monitored. No termites penetrated the sealant to reach the food on the other side of the simulated slab penetrations.

Year	Product Tested	Tested by	Description of test
2018	TERM Particle Barrier	Polyguard Technical Personnel	This 3-year Demonstration Project installed TERM Particle Barrier around the exposed perimeter of seven structures in the Houston/Gulf Coast area.

			All homes had termite infestations at the time of the installation. The objective was to monitor performance after 2 weeks, and after 1, 3, 6, 9, 18, 24, and 36 months.
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Results and notes:

The project is complete. Throughout the demonstration, none of the structures had termite reinfestation at any of the inspections.