The New American Home 2017

Incorporating TERM® Sustainable Insect Barriers

TERM®
sustainable pest barriers

TERM® Sustainable Insect Barriers and The New American Home (2017)

The New American Home – 2017 incorporates a number of Polyguard's **TERM® Sustainable Insect Barriers.**

TERM® Sustainable Insect Barriers were conceived in 1999, when Polyguard started work with Texas A&M Urban Entomology scientists. Architects and builders had used Polyguard barriers for decades for protection of buildings against moisture and energy leaks. The goal for our work with Texas A&M was to add sustainable insect barrier properties to the moisture and energy leak protection properties. In other words, the goal was: add the ability to physically block insect entry points without using components classified as "chemicals of concern".

If almost all insect entry points are blocked, the need for pesticide treatment is greatly reduced over the life of the home. Additionally, comfort and liveability of the home is enhanced by the greatly reduced occurrence of insect discoveries.

The first decade of work with Texas A&M was devoted to developing a subterranean termite barrier. Subterranean termites aren't just the most destructive insects; they are also the most invasive. They can enter through openings larger than 1/55th of an inch. And if subterranean termites can't squeeze through, they can often chew through.

Termites can eat through many building materials besides wood. On top of all that, there can be millions of subterranean termites nesting around a home.

After 11 years of development and testing, we had proof that our new moisture/energy leak/insect barrier stopped subterranean termites. Since then,

1. Barrier development has expanded to exclusion of other insect species and pests.
2. Two supplemental barriers (screens and stone particles) were proven and added.
3. Testing has expanded to other universities across the southeast U.S.

The New American Home (2017) incorporates almost 100% coverage of TERM Sustainable Barriers over the slab

The problem of insect entry from underground is rarely addressed in home construction. Concrete floors have joints, and insects enter through them. More importantly, concrete almost always cracks, creating new entry points for subterranean termites and other pests.

It can't be predicted where cracks will appear in a concrete slab, so **TERM® Barrier** must cover 100% of the horizontal surface. The objective is: wherever insects and pests enter from underground, they should be blocked.

The New American Home (2017) incorporates close to 100% protection of horizontal floor space with **TERM® Sustainable Insect Barriers**. Barrier coverage starts with **TERM® Sealant Barrier** at slab penetrations. Before framing is constructed, **TERM® Sill Plate Barrier** is installed. Bath traps are protected from subterranean termites and other pests with **TERM® Particle Barrier** and **TERM® All Pest Bath Trap Barrier**. Finally, **TERM® Tile Flooring Underlayment Barrier** is installed underneath tile flooring. These five **TERM® Barriers** are all tied together to give almost 100% horizontal protection

Additional protection of exterior concrete surfaces at ground level is also required. The dreaded "termite mud tubes" are tunnels built up from the ground by subterranean termites as pathways to enter the home from outside. Once colonies are created within the home, termites can use the mud tubes to return to the ground for moisture.

To prevent subterranean termite entry via vertical exterior concrete perimeter, two exterior barriers are incorporated in the New American Home. **TERM® Isolation Joint Barrier** protects cold joints, where the interior slab connects with outside slabs such as driveways and entryways. Exposed concrete perimeter is protected with **TERM® Particle Barrier**.

+ PLUMBING PENETRATIONS

Location

Plumbing penetrations through the slab are a major entry point for subterranean termites. Even though it appears that concrete has been poured tightly against the pipe penetration, termites, which can penetrate openings larger than 0.018", frequently enter here.

Treatment

TERM® Sealant Barrier, applied to clean, dry, and primed concrete around the base of the pipe penetration, blocks termite entry.

+ SILL PLATE

Location

Sill plates of framing installed on ground level slabs are vulnerable to entry by subterranean termites from underground through joints and cracks in the concrete.

Treatment

TERM® Sill Plate Barrier, tied into TERM® Flooring Underlayment, blocks subterranean termite entry through joints and cracks. Moisture from the slab is also blocked from reaching the framing.

+ BATH TRAP

Location

Bath traps are intentional openings built into concrete slabs during slab construction. If you are a subterranean termite, fire ant, rodent, or other pest, a bath trap is an open gate with a "welcome to the party" sign.

Treatment

TERM® Particle Barrier blocks entry of subterranean termites. TERM® All Pest Bath Trap blocks entry by almost any pest.

In The New American Home, the cleaned out trap was filled with particle barrier, then the wire mesh, membrane and sealant barriers were applied over the particle barrier.

+ TILE UNDERLAYMENT

Location

The New American Homes, as many Florida homes, incorporates ceramic tile flooring. TERM Tile Underlayment Barrier was applied prior to tile installation. The underlayment was tied into the barriers described above, creating almost 100% barrier coverage against pest entry from underground.

Treatment

TERM® Tile Underlayment Barrier is also an "anti-fracture membrane" which protects the tile from breaking when the concrete cracks. It also provides moisture barrier and sound deadening properties.

Following the installation of TERM® Tile Underlayment Barrier ceramic tile flooring was installed.

+ ISOLATION JOINTS

Location

Isolation joints, or cold joints, are areas where exterior concrete, such as driveways, sidewalks, and patios, have been poured against the slab of the structure. Cold joints are considered by entomologists as entry points for subterranean termites.

Treatment

In the New American Homes, TERM® Isolation Joint Barrier creates a termite sealant barrier between the two adjacent bodies of concrete.

+ EXPOSED CONCRETE PERIMETER

Location

In 1956, Dr. Walter Eberling of the University of California at Berkeley discovered that subterranean termites could not get through a bed of exactly sized hard mineral particles.

Today particle barriers are widely used throughout the Pacific Rim, particularly in Hawaii and Australia, which have severe subterranean termite problems.

Treatment

TERM® Particle Barrier was installed around The New American Home after completion of landscaping.

Enlarged area shows a 4" wide trench with TERM® Particle Barrier around the concrete perimeter.

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Polyguard®

Innovation based. Employee owned. Expect more.

Our Company Our People

INNOVATION BASED
EMPLOYEE OWNED
EXPECT MORE

"Innovation Based" - we introduce innovative products. Products innovated by Polyguard represent almost 2/3 of our sales volume.
"Employee Owned" - 100% of Polyguard's stock is owned by its Employee Stock Ownership Plan (ESOP).
"Expect more" - when you talk to Polyguard, you are usually talking to an owner. Our employee owners have led Polyguard to 24 successive years of sales growth. Know of any business who can match 24 successive years?

Polyguard offers a wide range of barrier systems designed to seal your home from pests. Those include products for pre-construction as well as options for existing structures. Think of Polyguard as an innovator and manufacturer of barriers – not just barriers against moisture and corrosion, but against contaminants like radioactive radon gas and methane. No sick buildings here.

TERM Barrier products are built in during construction, blocking almost every insect entry point around the home. TERM Sustainable Insect Barriers were developed by Polyguard Products, a manufacturer of waterproofing and energy saving products since 1952. Polyguard materials protect homes, hospitals, stadiums, and other major structures across the country and around the world.

24 Consecutive years of sales growth | 47 years of building envelope barriers

214 - 515 - 5000 **www.PolyguardBarriers.com**