Proper treatment for the prevention of subterranean termites in new construction

A Guide for Residential Homeowners

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The Department of Agriculture and Consumer Services (DACS) licenses pest control operators and regulates the application of pesticides for the prevention or control of subterranean termites.

Most residential structures built in Florida are treated during construction to prevent subterranean termite infestation. This publication is a guide for individual’s planning to hire pest control operators for these preventative termite treatments, commonly referred to as pretreats.

Termiticide labels have specific directions about the product’s use. PCO’s must follow these directions, including its use at the prescribed rate, to protect the home from termites and to comply with state regulations.

SOIL APPLICATIONS

Pesticides used to treat the soil for termites (termiticides) are diluted before application. A proper treatment requires use of the correct dilution ratio and application of the correct volume of that solution in, on, or around various structural elements.

Dilution ratios are specified on each termiticide label, so it is important to review the actual label to know the correct rate.

SOIL TREATMENTS

The total volume of solution used to treat various structural elements is the same on all termiticide labels:

1. Fill material to be covered by a slab is treated with 1 gallon of solution per 10 square feet (soil fill). For coarse fill (gravel), 1.5 gallons per 10 square feet are used.

2. Soil areas next to walls (both inside and outside), piers, pipes and under “critical areas” such as slab expansion joints are treated with 4 gallons per 10 linear feet per foot of depth. (This includes fill areas inside chimneys and earth-filled porches).

3. Voids in hollow masonry receive 2 gallons of solution per 10 linear feet. (It does not matter how many chambers a concrete block may have.)
EXAMPLE TREATMENT OF A SLAB STRUCTURE

Q
A 2,400 square foot residential structure is built on a slab with a concrete block perimeter foundation wall. How much chemical should I expect?

A
Proper treatment would require 498 gallons as follows:
240 gallons applied to the fill, 116 gallons for the interior vertical barrier (290 lin. ft.) along the foundation walls (includes both sides of the interior garage walls), 50 gallons for the block voids (250 lin. ft.) and 92 gallons for the exterior vertical barrier (230 lin. ft.) performed after the final grade is established.

A monolithic slab foundation of the same size and dimensions as the example would require a lesser amount of gallons to treat due to the absence of the concrete block foundation wall.

A REMINDER ABOUT CALCULATIONS

For slab structures, a good rule of thumb for a rough calculation is to first figure one gallon per linear foot of concrete block. Then divide the total slab area (square feet) by 10 to get the number of gallons for the fill treatment. Add these two numbers together.

The exact volume needed to treat two structures of equal “ground floor” size may vary depending upon the type of construction (monolithic construction needs less). However, the following guide shows the approximate volume needed for concrete block foundation construction.

<table>
<thead>
<tr>
<th>Structure Size</th>
<th>Approx. Gallons</th>
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</thead>
<tbody>
<tr>
<td>1,000 square feet</td>
<td>230 gallons</td>
</tr>
<tr>
<td>2,000 square feet</td>
<td>380 gallons</td>
</tr>
<tr>
<td>2,400 square feet</td>
<td>498 gallons</td>
</tr>
<tr>
<td>3,000 square feet</td>
<td>570 gallons</td>
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</tbody>
</table>

*Note
Under certain conditions, the termiticide label allows for decreasing the number of gallons of solution to be applied by increasing the chemical concentration.

ALTERNATE TREATMENTS FOR THE PREVENTION OF SUBTERRANEAN TERMITES

Building regulations also allow the use of two other methods of pest control as treatment for the prevention of subterranean termites in new construction.

BAITING/MONITORING SYSTEMS

Structures receiving these treatments must have an active contract at time of construction that specifies it WILL BE treated with a baiting or monitoring system. This contract must be transferable to the homeowner for them to continue this service.

Baiting stations are installed around the exterior perimeter of the structure after final grade and landscaping are established to prevent them from being disturbed or damaged during the construction process.

The labeling of these baiting systems may or may not allow a pre-construction soil treatment to be established around critical construction elements (such as plumbing protrusions and expansion joints) in conjunction with the baiting system which is installed later.
These systems must be regularly inspected by the pest control company so that remedial action can be taken if termites are discovered to be feeding in the station or structure.

Contract warranty terms will disclose the remedial steps that a company will take if there is a subsequent infestation or if there is any damage repair warranty associated with the treatment.

DIRECT TREATMENT OF WOOD

The wooden construction elements of a house under construction can also be treated directly with borates.

Use of this product depends on the amount of wood material used as baseplates within the structure. The borate material is sprayed directly on the exposed wood from the floor to about three feet from the floor. Most companies use a green or blue colored dye so that the applicator can determine that their application was evenly applied and thorough.

The label does not allow this material to be applied over any construction debris or to any lumber that is painted or otherwise sealed.

The Department inspects treatments during routine compliance inspections of PCO operations and randomly makes inspections of job sites where treatments are in progress. Also, the Department of Agriculture and Consumer Services will inspect specific treatments in response to consumer complaints that indicate a possible improper treatment.

For the homeowner, an incorrect treatment places the structure at risk of termite attack.

As an added layer of protection, Florida law requires that a contract be issued whenever a termite treatment is conducted. Contracts and warranties for termite treatments will vary from company to company.

CONTRACT REQUIREMENTS

The law requires that the warranty clearly state whether it is a “RETREATMENT AND REPAIR”, “RETREATMENT ONLY”, or “NO WARRANTY OR GUARANTEE”. A prominent statement on the front of the contract must also disclose if there are any terms, conditions and disclaimers (which are normally on the reverse side of the contract) that could affect your warranty terms.

For all preconstruction treatments for the prevention of termites, your builder has negotiated a warranty with the subcontractor (a licensed pest control company).

The duration of the contract/warranty is usually for one year from DATE OF TREATMENT.

This can sometimes cause confusion for the consumer because the renewal notice may arrive after only one or two months of occupancy.

The Bureau recommends that these warranties be maintained to protect your property and to protect your contractual rights.

Florida law requires that these warranties be transferable to the property owner and extended for up to an additional four years as long as the annual renewal is paid and maintained. Normally this renewal fee will remain the same during the term of the contract.

Remember, if you do not renew your contract, it automatically becomes null and void, and you will have lost your protection.