

TERMITE PROTECTION IN BUILDINGS

Protection of homes and businesses from termites in Florida requires the combined efforts of builders, pest management professionals, and building inspectors. The Florida Building Code contains provisions that prevent certain building practices that make buildings more vulnerable to termite invasion, other practices that protect the measures applied by pest control companies, and other practices that ensure that the building owners get the information they need to continue to protect their structures from termites.

Building Inspectors have a critical role in protecting structures from termites. Unless the provisions of the code are complied with, building owners will face expensive termite control and damage repair costs over the life of the structure.

Termite Protection Provisions of the Code are found in the following code sections:

104.2.6 Certificate of Protective Treatment for Prevention of Termites requires posting of applications - No "final approval" if all the applications not made, including vertical barriers

104.2.7 Notice of Termite Protection requires posting of consumer notice inside the house - will inform owner of the need to renew his contract and inspect annually

1403.1.6 **Veneered Walls.** Require at least a 6 inch space between the grade and siding for termite inspection.

1503.4.4 **Roof Assemblies.** Protection against decay and termites requires discharge lines and gutter downspouts to terminate at least one foot from the foundation.

1816.1- 1816.2 **Foundations and Retaining Walls** - Termite protection requires foundations to have some form of protection from termites ("labeled for use as a preventative treatment to new construction"). If soil treatment is used, it must be done after compaction. Disturbed areas must be re-treated. Forms and traps must be plastic or metal. A vapor barrier must be installed. Concrete overpour must be removed. Applications must also be made within one foot of the foundation under adjoining slabs. Protective sleeves around slab penetrations must not be cellulose. Protective sleeves around slab penetrations must not be cellulose.

2116. **Masonry** - Termite Inspection (Cleaning) Cells in blocks must not contain cellulosic debris. Concrete Bearing Ledge Brick veneers must be on an integral ledge or a soil treatment must be made

2301.4.6 Preservative treated wood must meet a standard.

2303.1 **Wood Construction** Practices. Sites must be graded to provide drainage. Cellulose debris must be removed from the foundation. Wooden grade stakes, form boards, etc. must be removed. No cellulose material can be buried within 15 feet of the foundation.

2304 **Wood Construction** - Protection against decay and termites requires preservative or naturally decaying resistant wood in certain areas. Clearance between wood siding and the ground must be 6 inches. Decks fences and patios must have an inspection clearance or be built to allow inspection for termites.

2603.3 **Foam Plastic Insulation.** Plastic foam insulation cannot be installed below grade. A 6 inch clearance is required between foam plastic insulation on the exterior of buildings and earth grade.

Frequently asked questions:

1. Can I use the baiting system for termite prevention?

Section 1816.1 of the Code states that termite preventive treatments can be provided by soil applied insecticides, termite bait systems, and wood treatments. DCA 03 - DEC-222, also addresses baiting systems.

2. With regard to termite bait systems, when does the clock start for the five years for the contract/monitoring?

Chapter 482, Florida Statutes, requires that pest control licensees provide a contract to property owners for which preventive treatment for termites is provided. This contract must include a warranty for retreatment only or for retreatment and damage repair for one year with the option for automatic renewal for up to four additional years upon the payment of an annual renewal fee, with no increase in the renewal fee for the first four renewals per the contract. An increase in renewal fee is allowed if the contract specifies that the fee may be increased. The time period begins with the effective date of the contract, typically the date the treatment is performed.

3. What happens if a contract for maintenance and monitoring is terminated after the CO is issued, but prior to the conclusion of the required five years?

If the property owner does not choose to pay for the renewal of the termite protection contract, the pest control licensee is not obligated to renew the contract. The pest control licensee must renew the contract if the annual renewal fee is paid. This applies to all types of preventive treatment.

4. Is a termite baiting system which consists of monitoring stations containing wooden stakes an acceptable product for use in new construction for the purpose of protecting new homes from termites?

Preventive treatment must be provided by a registered termiticide or alternative means approved by building officials (Section 1816.1) A termite bait system registered as a pesticide for the preventive treatment for new construction will consist of more than wooden stakes, but will also include a pesticide active ingredient. The system will also have to meet the performance standards established in Chapter 5E-2.0311, FAC to be eligible for registration. Some registered termite bait systems include a component for monitoring that consist of wooden stakes or equivalent. Provided that these are used in a manner that is consistent with the directions for use of the registered termite baiting system, they are part of the protection system for the structure.

5. When a baiting system is used, at what time would application of a pesticide be required?

Some baiting systems registered as preventive treatments for new construction contain the pesticide active ingredient as part of the initial installation, others require installation of the active ingredient after termite activity is detected. The time of installation of the active ingredient is specified in the directions for use on the label of the pesticide.

6. What type of termite protection products/systems are required by the code?

The Code requires that termite protection be provided by a registered termiticide, including soil applied termiticides, bait systems, or pesticides labeled for direct application to wood, or an alternative method approved by the building official. All three kinds of products are registered in Florida.

7. Does the code require treatment of ground for structures which will not have wood products in it; e.g. preengineered metal buildings, or aluminum buildings?

The code requires preventive treatment for any structure with a foundation. Termite infestations occur in any structure that contains cellulose, and even metal buildings will contain cellulose in the form of wood finishing and

furnishings, stored paper or other cellulose articles, etc.

8. What is the minimum clearance between exterior wall coverings and final earth grade on the exterior of a building in order to provide for inspection for termite infestation?

Section 1403.1.6 requires a minimum of six inches clearance to allow for detection of termite foraging and mud tubes entering a structure. If this gap is not provided, termite infestation may occur undetected.

9. How far should condensate lines and roof downspouts discharge from a structure's sidewall, to prevent decay and termites?

Section - 1503.4.4 of the Code requires a discharge at least 12 inches from the foundation. This will aid in minimizing moisture at the foundation which is conducive to termite infestation.

10. Is termite treatment required when Foam plastic insulation is installed below grade on foundation walls?

Section - 2603.3.1 of the Code prohibits installation of foam plastic below grade on foundation walls with certain exceptions. Installation of foam plastic insulation below grade creates an avenue for termite infestation and can defeat termite preventive measures.

11. At what stage of construction should soil treatment for subterranean termite prevention, be applied?

The application of soil applied insecticides for preventive treatment of new construction depends on the creation of a treated zone under and around the foundation of a structure. This is accomplished by three stages of application - to the compacted soil of a foundation prior to the pouring of a slab, along both sides of stem walls, under adjoining slabs, and along the exterior of the foundation when construction is completed. This final application has to be accomplished prior to the issuance of the certificate of occupancy.

12. If the soil is disturbed after initial chemical soil treatment, is there a requirement to re-treat?

Section 1816 of the Code, requires this to be done.

13. Who is responsible to retreat when soil is disturbed, the contractor or the pest control company?

In order to be in compliance with the Code, the contractor should contact the pest control company to conduct a retreatment.

14. Is a vapor retarder required to protect the treated soil against rainfall dilution?

Installation of a vapor barrier is a requirement of the label directions of soil applied insecticides when applied prior to the pouring of concrete slabs. The vapor barrier also protects flooring from sub-slab moisture penetration.

15. The code requires a protective sleeve around metallic piping penetrating concrete slab-on-grade floors when soil treatment is used for subterranean termite protection. Is the annular space between protective sleeve and pipe required to be treated?

Treatment of the annular space is a requirement by Section 1816.2 of the code. It is necessary to prevent termites from breaching the treated soil zone under a slab when the soil treatment is the preventive method used.

16. What is the minimum required clearance between the ground and insulated concrete forms.

Section - 1916.7.5.1 requires clearance between earth and insulated concrete forms (ICF) to be not less than 6 inches.

17. What is the role of the Department of Agriculture relative to termite protection?

The Department of Agriculture and Consumer Services licenses and inspects pest control companies and registers the pesticides used for preventive treatment for new construction.

18. Are products for termite protection required to be approved? If so, who is responsible for the approval?

The products used for this purpose are pesticides, and are not “approved” as such, but are either eligible for registration or not eligible. Pesticides that include directions for use as preventive treatments for new construction can be registered if they meet the requirements of Chapter 5E-2.0311, Florida Administrative Code. This rule is administered by the Florida Department of Agriculture and Consumer Services. A list of pesticides registered as preventive treatment for new construction can be accessed at www.flaes.org.

19. What are the Statutes and Rule (FAC) that governs termite protection?

Chapter 482, Florida Statutes and Chapter 5E-14, Florida Administrative Code, govern structural pest control in Florida. The Bureau of Entomology and Pest Control of the Department of Agriculture and Consumer Services is the regulatory body responsible for administering this statute and rule.

20. When is a vertical treatment required and what are the specifications relative to the distance from the perimeter of the building?

Vertical treatment is the application of a soil applied termiticide to the soil around the exterior of a foundation. The specifications for this application are included in the directions for application on the label of the pesticide. Typically the directions are for an application of four gallons of insecticide mixture per ten linear feet of foundation, immediately adjacent to the foundation.

21. What is the responsibility of local building departments relative to the inspection of the termite system and what specific things should they inspect?

Termite bait systems are registered pesticides and contain label directions that include inspection intervals. It is the responsibility of the licensed pest control operator to follow label directions in the use of these pesticides. Section 105.11 of the Code requires that building components and surroundings required by the Code to be protected from termite damage must not be covered or concealed until approved by the building official. Questions regarding compliance with label directions for use by the pest control operator should be directed to the Florida Department of Agriculture and Consumer Services Bureau of Entomology and Pest Control at 850-617-7997.

22. Should inspections be made per manufacturer’s requirements or as required based on the approval of the system?

Termite bait systems are registered pesticides and contain label directions that include inspection intervals. It is the responsibility of the licensed pest control operator to follow label directions in the use of these pesticides. Where the Code does not provide specific installation instructions for the termite protection system, inspection by the building official must be in accordance with system approval. For all bait systems currently registered, a single inspection by the building official when construction is completed should be sufficient to verify that the system has been installed.

23. Is a license required to apply pesticides, and if so, would that include a contractor’s license?

The application of pesticides (including use of termite bait systems) as preventive treatment of new construction is considered pest control. In Florida, a license from the Florida Department of Agriculture and Consumer Services is required to perform pest control on property other than your own. Performing pest control without a valid license is illegal.

24. Are wood treatments such as borates allowable as stand alone treatments for new construction?

Currently there is one product registered as a preventive treatment for new construction as a direct treatment to

wood. This product is a borate containing insecticide. As a registered pesticide, this material may legally be used as a stand alone preventive treatment.

25. What should the building official do if the Certificate of Protective Treatment for Prevention of Termites has not been provided by the pest control operator but the final inspection has been completed and passed?

The Certificate of Protective Treatment for Prevention of Termites must be provided prior to the issuance of the Certificate of Occupancy as per Section 104.2.6 of the code.

More information on the Termite Provisions of the Building Code is available from the following sources:

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