

6. If you suspect a problem with the liquid termiticide applicator, such as not enough time spent on the site, too small of a tank for the job, etc., contact this group for assistance:
 - a. the Entomology and Nematology Department at the University of Florida
 - b. the Florida Department of Agriculture and Consumer Services
 - c. the Florida Department of Pest Control Agency
 - d. the Florida Department of Environmental Protection
7. If soil treatment is used, chemical soil treatment shall also be applied under all exterior concrete or grade within how many inches from the primary structure sidewalls?
 - a. 6
 - b. 8
 - c. 10
 - d. 12
8. True or False. If you are using soil treatment and disturb any soil, including spaces boxed or formed, you have to call the pest management company back out to retreat the disturbed areas.
 - a. True
 - b. False
9. On the job site, the Treatment Certificate should provide which of the following for each separate application:
 - a. identity of the applicator
 - b. time and date of the treatment
 - c. site location and area treated
 - d. product and chemical used including percent concentration and number of gallons used
 - e. all of the above
10. The permanent notice of termite protection that is posted near the water heater or electric panel has to contain:
 - a. the termite treatment provider, number of gallons used and need for re-inspection
 - b. the number of gallons used, need for contract renewal and name of termite treatment provider
 - c. the termite treatment provider, need for re-inspection and treatment contract renewal
 - d. none of the above

Post-test

1. What is the minimum number of trips a pest control operator should make to your new construction site when applying liquid termiticides?
 - a. 1
 - b. 2
 - c. 3
 - d. 4

2. Clearance between earth and insulated concrete forms (ICF) shall be not less than how many inches:
 - a. 4
 - b. 6
 - c. 8
 - d. 10

3. The Florida Building Code prohibits burying of construction and other materials within how many feet of any building?
 - a. 1
 - b. 5
 - c. 10
 - d. 15

4. Condensate lines and roof downspouts shall discharge at least how far away from the structure sidewall?
 - a. 6 inches
 - b. 1 foot
 - c. 2 feet
 - d. 3 feet

5. In general, to provide for termite inspection, clearance between exterior wall coverings and final earth grade on the exterior of a building shall not be less than how many inches?
 - a. 2
 - b. 4
 - c. 6
 - d. 8

Course Evaluation

Course Title: *Florida Building Code Advanced Training: Termites*

Course #: _____

Date: _____ **Location:** _____

Please circle your response:

	Strongly Disagree				Strongly Agree
Question 1: The course objectives were accomplished.	1	2	3	4	5
Question 2: The course started and finished on time.	1	2	3	4	5
Question 3: The instructor(s) was well-versed in their topic and well-prepared.	1	2	3	4	5
Question 4: The materials presented were effective.	1	2	3	4	5

What did you like most about the course?

What did you like least about the course?

Please list other comments about this course, including ways to improve the course or suggestions for other Florida Building Code Advanced Training Courses.

P A R T B :

How long would it take the pest management professional to complete the whole job if the spray nozzle delivers 7 gallons per minute?

The site requires how many gallons? _____

To properly complete the job would take how many minutes (without any breaks or interruptions).

total gallons needed \div 7 gallons/minute = _____

P A R T C :

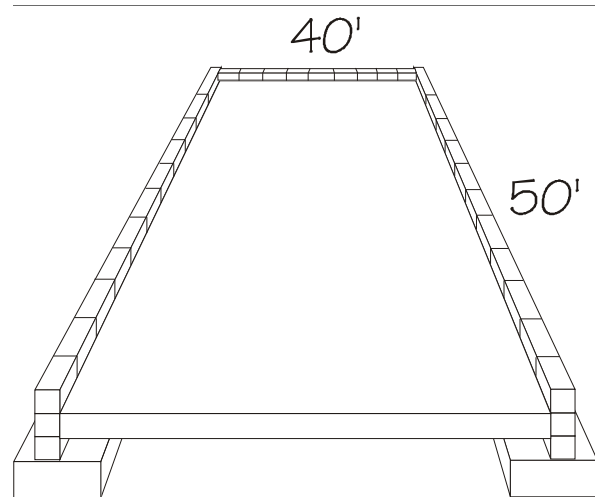
How many trips would the pest management professional make to this site? _____

Explain your answer.

Activity 2

Pre-Construction Treatment: Floating Slab

- 50' × 40'
- 1 foot at footing
- no porches/patios/walkways



P A R T A :

How many square feet are there in the home? _____

How many linear feet are there in the home? _____

Interior vertical treatment required:

4 gallons/10 linear feet/foot of depth × _____ = _____

Block void: 2 gallons/10 linear feet × _____ = _____

Horizontal barrier: 1 gallon/10 square feet × _____ = _____

Exterior vertical barrier around perimeter:

4 gallons/10 linear feet/foot of depth × _____ = _____

Total chemical treatment required for site = _____

Interior vertical treatment required:

$$4 \text{ gallons}/10 \text{ linear feet}/\text{foot of depth} = \text{N/A}$$

Block void: 2 gallons/10 linear feet = N/A

Horizontal barrier: 1 gallon/10 square feet \times _____ = _____

Exterior vertical barrier around perimeter:

$$4 \text{ gallons}/10 \text{ linear feet}/\text{foot of depth} \times \text{_____} = \text{_____}$$

Total chemical treatment required for site = _____

P A R T B :

How long would it take the pest management professional to complete the whole job if the spray nozzle delivers 7 gallons per minute?

The site requires how many gallons? _____

To properly complete the job would take how many minutes (without any breaks or interruptions).

$$\text{total gallons needed} \div 7 \text{ gallons/minute} = \text{_____}$$

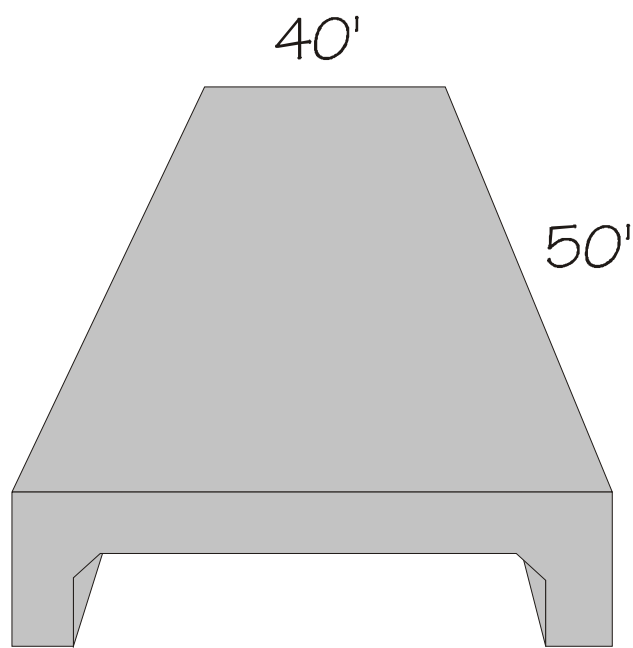
P A R T C :

How many trips would the pest management professional make to this site? _____

Explain your answer.

Activities

Note: Builders often subcontract out liquid termiticide applications. The following activities are designed to inform you about the application process. Answers are found on the last two pages of this booklet.



Activity 1

Pre-Construction Treatment: Monolithic Slab

- 50' × 40'
- 1 foot at footing
- no porches/patios/walkways

P A R T A :

How many square feet are there in the home? _____

How many linear feet are there in the home? _____

Chapter 26 Plastics

H. Plastics (including Insulated Concrete Forms and EFIS)

2603.9 PROTECTION FROM TERMITE DAMAGE

2603.9.1 Foam-plastic insulation including, but not limited to extruded or expanded polystyrene or polyisocyanurate shall not be installed below grade on foundation walls or below grade on the exterior of slab foundations.

Exceptions

1. When in addition to the requirements of Section 2304.11.6, an approved method of protecting the foam plastic and structure from subterranean termite damage is provided.
2. Within Types I, II-B construction
3. On the interior side of basement walls.]

2603.9.2 Clearance between earth and foam plastics applied to the exterior wall shall be not less than 6 inches (152 mm).

The six-inch clearance is designed to allow for easy visual inspection for termite tunnels.

G. (Wood) Construction practices

2304 GENERAL CONSTRUCTION REQUIREMENTS

2304.13 Preparation of building site and removal of debris

2304.13.1 All building sites shall be graded to provide drainage under all portions of the building not occupied by basements.

2304.13.2 The foundation and the area encompassed within 1 foot (305 mm) therein shall have all vegetation, stumps, dead roots, cardboard, trash, and foreign material removed and the fill material shall be free of vegetation and foreign material. The fill shall be compacted to assure adequate support of the foundation.

2304.13.3 After all work is completed, loose wood and debris shall be completely removed from under the building and within 1 foot (305 mm) thereof. All wood forms and supports shall be completely removed. This includes, but is not limited to: wooden grade stakes, forms, contraction spacers, tub trap boxes, plumbing supports, bracing, shoring, forms, or other cellulose-containing material placed in any location where such materials are not clearly visible and readily removable prior to completion of the work. Wood shall not be stored in contact with the ground under any building.

Foreign cellulose material such as stumps, cardboard, form boards, paper facing on drywall and the like can become food sources for termites and thus brings more termites to the vicinity.

2304.11.10 Buried Debris: In order to reduce the chances of termite infestation, no wood, vegetation, stumps, dead roots, cardboard, trash, or other cellulose-containing material shall be buried on the building lot within 15 feet (4.6 m) of any building or the position of any proposed building proposed to be built.

2304.11.3 Laminated Timbers Those portions of glued laminated timbers which form the structural supports of a building or other structure and are exposed to weather and not properly protected by a roof, eave or similar covering shall be pressure treated with preservative or be manufactured from naturally durable wood or preservative-treated wood.

2304.11.4 Wood in contact with the ground or fresh water

Wood in contact with ground (exposed earth) that supports permanent structures shall be of naturally durable (species for both decay and termite resistance) or preservative-treated wood using water-borne preservatives and shall be treated in accordance with AWPA C2, C9 or other applicable AWPA standard for soil or fresh water contact, where used in the locations specified in Section 2304.4.1 (Posts or Columns) and Section 2304.4.2 (Wood Structural members).

Exception:

Untreated wood is permitted where such wood is continuously below ground water level or submerged in fresh water.

2304.11.4.2 WOOD STRUCTURAL MEMBERS: Wood structural members that support moisture-permeable floors or roofs that are exposed to the weather, such as concrete or masonry slabs, shall be of naturally durable or preservative-treated wood unless separated from such floors or roofs by an impervious moisture barrier.

2304.11.4.3 Decks, Fences, patios, planters, or other wooden building components that directly abut the side wall of the foundation or structure shall be constructed so as to provide:

1. Eighteen-inch (457 mm) clearance beneath or,
2. Six-inch (152 mm) clearance between the top of the component and the exterior wall covering or
3. have components that are easily removable by screws or hinges to allow access for inspection of the foundation sidewall and treatment for termites.

2304.11.5 Supporting member for permanent appurtenances. Naturally durable or preservative treated wood shall be utilized for those portions of wood members that form the structural supports of buildings, balconies, porches or similar permanent building appurtenances where such members are exposed to the weather without adequate protection from a roof, eave, overhang or other covering to prevent moisture or water accumulation on the surface or at joints between members.

Exception: When a building is located in a geographical region where experience has demonstrated that climatic conditions preclude the need to use durable materials where the structure is exposed to the weather. **(not here)**

2304.11.6 Termite protection shall be provided by floor framing of naturally durable wood, preservative-treated wood, soil treatment or other approved methods.

2304.11.7 Wood used in retaining or crib walls shall be preservative-treated wood.

2304.11.10 Foam plastic insulation

2304.11.10.1 The provisions of Section 2603.9 shall apply to the installation of foam plastic installation in close proximity to the ground.

Exception: Materials which are naturally durable wood or are pressure treated for ground contact, and which are installed with at least 6 inches (152 mm) clear space from the structure to allow for inspection and treatment for termites.

In order to reduce chances of termite infestation, no wood, vegetation, stumps, dead roots, cardboard, trash, or other cellulose-containing material shall be buried on the building lot within 15 feet (4.6m) of any building or position of any building proposed to be built.

F. Wood

2302 DEFINITIONS: Naturally Durable Wood: The heartwood of the following species with the exception that an occasional piece with corner sapwood may be included if 90% or more of the width of each side on which it occurs is heartwood:

- Decay resistant – Redwood, Cedars, Black Locust and Black Walnut.
- Termite resistant – Redwood, Eastern Red Cedar.

2303.1.8.1 Identification

Wood required by Section 2304.11 to be preservative treated shall bear the quality mark of an inspection agency that maintains continuing supervision, testing and inspection over the quality of the preservative-treated wood. Inspection agencies for preservative-treated wood shall be listed by an accreditation body that complies with the requirements of the American Lumber Standards Treated Wood Program, or equivalent. The quality mark shall be on a stamp or label affixed to the preservative-treated wood, and shall include the following information:

1. *Identification of treating manufacturer.*
2. *Type of preservative used.*
3. *Minimum preservative retention (pcf).*
4. *End use for which the product is treated.*
5. *AWPA standard to which the product was treated.*
6. *Identity of the accredited inspection agency.”*

2304 GENERAL CONSTRUCTION REQUIREMENTS

2304.11 PROTECTION AGAINST DECAY AND TERMITES

2304.11.1 GENERAL: Where required by this section, protection from decay and termites shall be provided by the use of naturally durable or preservative –treated wood.

2304.11.2 Wood Used Above Ground Wood installed above ground in the locations specified in Sections 2304.11.2.1 through 2304.11.2.6 shall be naturally durable wood or preservative-treated wood uses water-borne preservatives, and shall be treated in accordance with AWPA (American Wood Preservers Association) C2 (Lumber specifications) or C9 (Plywood specifications) .

2304.11.2.1 Joists, girders and subfloor. Where wood joists or the bottom of a wood structural floor with out joists are closer than 18 inches (457 mm) or wood girders are closer than 12 inches (305 mm) to the exposed ground in craw spaces or unexcavated areas located within the perimeter of a building foundation, the floor assembly (including posts, girders, joists and subfloor) shall be of naturally durable or preservative-treated wood.

2304.11.2.2 Framing. Wood framing members, including wood sheathing, which rest on exterior foundation walls and are less than 8 inches (203 mm) from exposed earth shall be of naturally durable or preservative-treated wood. Wood framing members and furring strips attached directly to masonry or concrete walls shall be of approved naturally durable or preservative-treated wood.

2304.11.2.3 Sleepers and sills. Sleepers and sills on a concrete or masonry slab that is in direct contact with the earth shall be of naturally durable or preservative wood.

2304.11.2.4 Girder Ends. The ends of wood girders entering exterior masonry or concrete walls shall be provided with a ½ inch (12.7 mm) air space on top, sides and end, unless naturally durable or preservative treated wood is used.

2304.11.2.5 Wood Siding Clearance between wood siding and earth on the exterior of a building shall be not less than 6 inches (152 mm) except where siding, sheathing and wall framing are of preservative-treated wood or naturally durable wood.

2304.11.2.6 POSTS OR COLUMNS: Posts and columns supporting permanent structures and supported by a concrete or masonry slab or footings that is in direct contact with the earth shall be of naturally durable or preservative-treated wood..

E. Foundation masonry

2114 TERMITE INSPECTION

2114.1 Cleaning. Cells and cavities in masonry units and air gaps between brick, stone, or masonry veneers and the structure shall be cleaned of all non-preservative treated or non-naturally durable wood, or other cellulose-containing material prior to concrete placement.

Exception: Inorganic material manufactured for closing cells in foundation concrete masonry unit construction or clean earth fill placed in concrete masonry unit voids below slab level before termite treatment is performed.

2114.2. Concrete bearing ledge. Brick, stone, or other veneer shall be supported by a concrete bearing ledge at least equal to the total thickness of the brick, stone or other veneer, which is poured integrally with the concrete foundation. No supplemental concrete foundation pours which will create a hidden cold joint shall be used without supplemental treatment in the foundation unless there is an approved physical barrier. An approved physical barrier shall also be installed from below the wall sill plate or first block course horizontally to embed in a mortar joint. If masonry veneer extends below grade, a termite protective treatment must be applied to the cavity created between the veneer and the foundation, in lieu of a physical barrier.

Exception: Veneer supported by a shelf, angle or lintel secured to the foundation sidewall in accordance with ACI 530/ASCE5/TMS 402, provided at least a six inch (152 mm) clear inspection space of the foundation sidewall exterior exists between the veneer and the top of any soil, sod, mulch or other organic landscaping component, deck, apron, porch, walk, or any other work immediately adjacent to or adjoining the structure.]

Chapter 18 Soils and Foundations

1816.1.7 Bait System: If a registered termiticide formulated and registered as a bait system is used for subterranean termite prevention, Sections 1816.1.1 through 1816.1.6 do not apply: however, a signed contract assuring installation, maintenance, and monitoring of the baiting system for a minimum of five years from the issue of the certificate of occupancy shall be provided to the building official prior to the pouring of the slab, and the system must be installed prior to the final building approval. If the baiting system directions for use require a monitoring phase prior to installation of the pesticide active ingredient, the installation of the monitoring phase components shall be deemed to constitute installation of the system.

1816.1.8 Wood Treatment: If a registered termiticide formulated and registered as a wood treatment is used for subterranean termite prevention, Sections 1816.1.1 through 1816.1.6 do not apply. Application of the wood treatment termiticide shall be as required by label directions for use, and must be completed prior to final building approval.

Rules and laws established by the Florida Department of Agriculture and Consumer Services generally refer to Chapters 487 (Pesticides) and 482 (Pest Control) of the Florida Statutes. In broad terms, Chapter 487 is satisfied if the product is labeled for the intended use and the label is followed. Chapter 482 is generally satisfied if a licensed pest control company does the treatment, the label is followed and a contract is issued. The entire text of these two statutes is found at

Online Sunshine is Official site of the Florida state legislature. Links to the Florida House of Representatives and Senate, legislative publications, the Florida Constitution ...
<http://www.leg.state.fl.us/>

Chapters 487 (Pesticides)
Chapter 482 (Pest Control)

1816.2 Penetration. Protective sleeves around metallic piping penetrating concrete slab-on-grade floors shall not be of cellulose-containing materials and shall receive application of a termiticide in annular space between sleeve and pipe.

1820 HIGH VELOCITY HURRICANE ZONES- CONCRETE SLABS ON FILL

1820.2 Where it is proposed to place concrete slabs directly on the supporting soil, a subgrade shall be thoroughly compacted by approved methods. All fill placed under slabs shall be clean sand or rock, free of debris and other deleterious materials. The maximum size of rock within 12 inches below the floor slab in compacted fill shall be 3 inches in diameter. Where fill material includes rock, large rocks shall not be allowed to nest and all voids shall be carefully filled with small stones or sand, and properly compacted.

1820.5 Concrete slabs outside of buildings, other than patios and pool slabs, where placed directly on the supporting soil, for minor accessory uses such as, but not limited to, walkways, driveways, minor equipment pads, etc., shall be not less than 4 inches thick. Such slabs shall be placed on clean, thoroughly compacted sand or crushed rock free from organics, debris or other deleterious materials.]

Chapter 18 Soils and Foundations

D. Soils

SECTION 1816 TERMITE PROTECTION

1816.1 Termite Protection. Termite protection shall be provided by registered termiticides, including soil applied pesticides, baiting systems, and pesticides applied to wood, or other approved methods of termite protection labeled for use as a preventative treatment to new construction. Upon completion of the application of termite protective treatment, a certificate of completion shall be issued to the building department by the licensed pest control company that contains the following statement: "The building has received a complete treatment for the prevention of subterranean termites. Treatment is in accordance with rules and laws established by the Florida Department of Agriculture and Consumer Services."

1816.1.1 If soil treatment is used for subterranean termite prevention, the initial chemical soil treatment inside the foundation perimeter shall be done after all excavation, backfilling, and compaction is complete.

1816.1.2 If soil treatment is used for subterranean termite prevention, soil area disturbed after initial chemical soil treatment shall be retreated with a chemical soil treatment, including spaces boxed or formed.

1816.1.3 If soil treatment is used for subterranean termite prevention, space in concrete floors boxed out or formed for the subsequent installation of plumbing traps, drains or any other purpose shall be created by using plastic or metal permanently placed forms of sufficient depth to eliminate any planned soil disturbance after initial chemical soil treatment.

1816.1.4 If soil treatment is used for subterranean termite prevention, chemically treated soil shall be protected with a minimum 6 mil vapor retarder to protect against rainfall dilution. If rainfall occurs before vapor retarder placement, retreatment is required. Any work, including placement of reinforcing steel, done after chemical treatment until the concrete floor is poured, shall be done in such manner as to avoid penetrating or disturbing treated soil.]

Workers should minimize the amount of walking on treated soil and should try to walk flat-footed without digging their heels and toes into the soil. Even when walking on the vapor retarder, while installing the reinforcement wire, the horizontal soil barrier can and is likely disturbed.

Take special care to minimize disturbances, especially near cold/construction joints, expansion joints, around slab penetrations, i.e., plumbing, or places where cracks in slab will occur. Retreat these areas if disturbance occurs.

1816.1.5 If soil treatment is used for subterranean termite prevention, concrete overpour or mortar accumulated along the exterior foundation perimeter shall be removed prior to exterior chemical soil treatment, to enhance vertical penetration of the chemicals.

1816.1.6 If soil treatment is used for subterranean termite prevention, chemical soil treatments shall also be applied under all exterior concrete or grade within 1 foot (305 mm) of the primary structure sidewalls. Also, a vertical chemical barrier shall be applied promptly after construction is completed, including initial landscaping and irrigation/sprinkler installation. Any soil disturbed after the chemical vertical barrier is applied shall be promptly retreated.]

Note that the vertical barrier is part of the entire pre-treatment requirement and should be completed after final grade. Any soil within 1 foot of structure disturbed after the chemical vertical barrier is applied shall be promptly retreated. This includes the addition of a driveway, sidewalk, air conditioner compressor pad, patio, etc.

CHAPTER 15 ROOF ASSEMBLIES

C. Weather protection

(note that irrigation/sprinkler systems are included, the code for irrigation is located in the PLUMBING edition)

1503 WEATHER PROTECTION

1503.6 Protection against decay and termites. Condensate lines and roof downspouts shall discharge at least 1 foot (305 mm) away from the structure sidewall, whether by underground piping, tail extensions, or splash blocks. Gutters with downspouts are required on all buildings with eaves of less than 6 inches (152 mm) horizontal projection except for gable end rakes or on a roof above another roof.

FBC PLUMBING, Section 316 Irrigation

316.1 General:

Irrigation/sprinkler systems and risers for spray heads shall not be installed within 1 foot (305 mm) of the building sidewall.]

The purpose of this section is to limit all possible soil disturbances near the foundations of buildings. Liquid soil termiticide applied to these areas during construction can be easily disturbed by subsequent landscape operations and water input rendering a failed termiticide barrier. Inclusion of drought tolerant plants into landscape plans can aid in achieving this goal.

Table 1. Exterior Finishes Used in Residential Construction and Susceptibility to Termite Infestation and Moisture Conditions

Type of Finish	Method of Attachment to Structure	Susceptibility to Termite Infestation	Susceptibility to Moisture Infiltration
Stucco on lath on wood	Wire lath nailed to sheathing on studs	<ul style="list-style-type: none"> • If extended below grade, high susceptibility; • If terminated 4–6" or more above grade, low susceptibility. 	<ul style="list-style-type: none"> • If extended below grade, high susceptibility; • If terminated 4–6" or more above grade, low susceptibility.
Stucco on masonry	Stucco on masonry (usually concrete block)	<ul style="list-style-type: none"> • Low susceptibility if good adhesion of stucco to masonry obtained. 	<ul style="list-style-type: none"> • Low susceptibility if good adhesion of stucco to masonry obtained.
Brick veneer	Metal ties to studs or to concrete block—ties every 2 feet	<ul style="list-style-type: none"> • Low susceptibility if veneer is placed on slab footing; • High if veneer is placed on a dedicated footing (cold/construction joint). • Infestation behind veneer is expensive to treat. 	<ul style="list-style-type: none"> • Brick not moisture proof • Still need weep-holes to regulate moisture developed due to condensation
Synthetic finish on foam (Exterior Insulation and Finish System—EIFS; should be installed by a Certified Contractor)	Foam nailed to wall, finish placed on foam	<ul style="list-style-type: none"> • Low susceptibility if foam is kept 6" above grade. 	<ul style="list-style-type: none"> • Low susceptibility if foam is kept 6" above grade.
Wooden siding (T-111, etc.)	Nailed to studs	<ul style="list-style-type: none"> • Low susceptibility if kept 8" above grade. 	<ul style="list-style-type: none"> • Low susceptibility if kept 8" above grade.
Textured concrete siding (Hardiboard)	Nailed to studs	<ul style="list-style-type: none"> • Low susceptibility if kept 8" above grade. 	<ul style="list-style-type: none"> • Low susceptibility if kept 8" above grade.
Manufactured cellulose-containing siding (Masonite, L-P)	Nailed to studs	<ul style="list-style-type: none"> • Low susceptibility if kept 8" above grade. 	<ul style="list-style-type: none"> • Low susceptibility if kept 8" above grade.

Original source: Florida Department of Agriculture and Consumer Services, Bureau of Entomology and Pest Control, Memorandum #686, 10/97.

B. Exterior siding (wall covering)

1403 Performance Requirements

1403.8 In order to provide for inspection for termite infestation, clearance between exterior wall coverings and final earth grade on the exterior of a building shall not be less than 6 inches (152 mm).

Exceptions:

1. Paint or decorative cementitious finish less than 5/8 inch (17.1 mm) thick adhered directly to the masonry foundation sidewall.
2. Access or vehicle ramps which rise to the interior finish floor elevation for the width of such ramps only.
3. A 4-inch (102 mm) inspection space above patio and garage slabs and entry areas.
4. If the patio has been soil treated for termites, the finish elevation may match the building interior finish floor elevations on masonry construction only.
5. Masonry veneers.]

The six-inch clearance is designed to allow for easy visual inspection for termite tunnels. The way in which exterior finishes are constructed for residential structures can affect the effectiveness of termite control practices. Initially written to provide information to the pest management industry, Table 1 (with additions by the authors), found on the next page, summarizes some of the exterior finishes common today and contains the following information about each type: method of attachment to structure, susceptibility to termite infestation, and susceptibility to moisture infiltration (excerpted from FDACS, Bureau of Entomology and Pest Control, Memorandum 686, October 29, 1997). Keep in mind that poor construction techniques, for example around joints and windows, also can allow moisture to enter the structure and termites to infest.

A. Permits and inspections

105 PERMITS

105.10 Certificate of Protective Treatment for prevention of termites. A weather resistant job site posting board shall be provided to receive duplicate Treatment Certificates as each required protective treatment is completed, providing a copy for the person the permit is issued to and another copy for the building permit files. The Treatment Certificate shall provide the product used, identity of the applicator, time and date of the treatment, site location, area treated, chemical used, percent concentration and number of gallons used, to establish a verifiable record of protective treatment. If the soil chemical barrier method for termite prevention is used, final exterior treatment shall be completed prior to final building approval.

105.11 Notice of termite protection. A permanent sign which identifies the termite treatment provider and need for re-inspection and treatment contract renewal shall be provided. The sign shall be posted near the water heater or electric panel.

109 INSPECTIONS

109.3.4 Termites. Building components and building surroundings required to be protected from termite damage in accordance with Section 1503.6, Section 2304.13 or Section 2304.11.6, specifically required to be inspected for termites in accordance with 2114, or required to have chemical soil treatment in accordance with 1816 shall not be covered or concealed until the release from the building official has been received.]

Building Practices and Standards

The following Florida Building Code sections and additional information should be observed to construct a building that is less conducive to termite infestation. Keep in mind that these are minimum requirements. While it is not possible to build a structure that is “termite proof”, it is possible to avoid creating conditions that favor termite infestation or make it difficult or impossible to control termites. Construction professionals who do not follow the building code place themselves in a greatly weakened liability position. Given the prevalence of termite damage in Florida, the risks of overlooking provisions of the code are too great to subject one’s company and reputation to.

The outline of this section is as follows:

- Chapter 1 Administration
 - Permits and inspections
- Chapter 14 Exterior Walls
 - Exterior siding (wall covering)
- Chapter 15 Roof Assemblies
 - Weather protection (note that irrigation/sprinkler systems are included)
- Chapter 18 Soils and Foundations
 - Foundations and retaining walls
- Chapter 21 Masonry
 - Foundation masonry
- Chapter 23 Wood
 - Construction practices
- Chapter 26 Plastic

Objectives

Participants will:

Describe the differences between termites and ants

Know the different termite species of economic importance in Florida

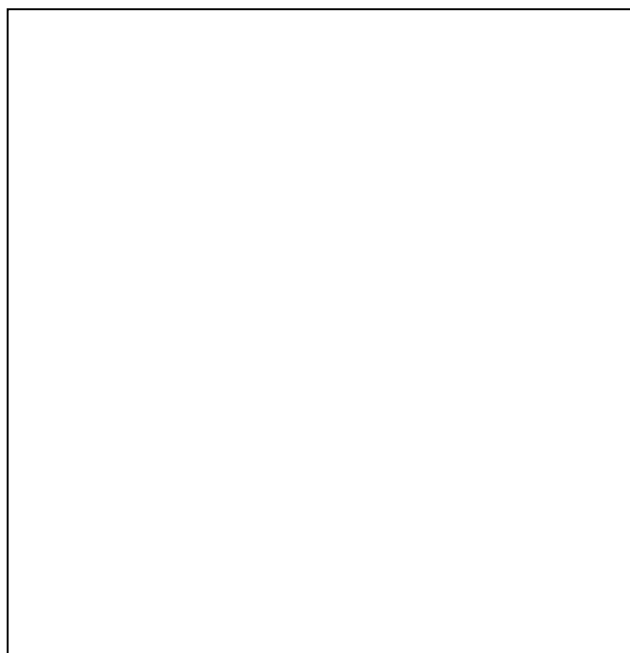
Understand subterranean termite biology, behavior, and habitat

Be able to recognize subterranean termite infestations

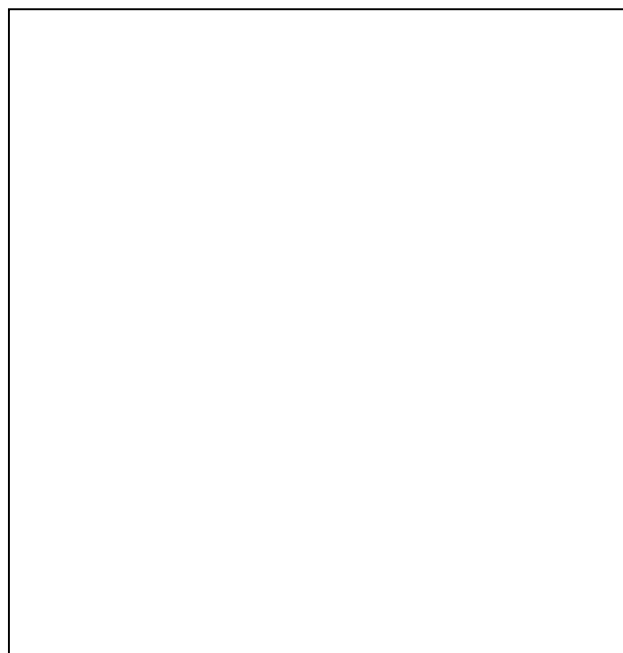
Understand sections of the Florida Building Code related to possibly lessening the potential for future termite problems

Name the different treatment methods and practices currently available

Be aware of how liquid termiticides are applied (in what quantity, where, and when) during the construction process



Draw a termite swarmer.



Draw an ant swarmer.

6. If you suspect a problem with the liquid termiticide applicator, such as not enough time spent on the site, too small of a tank for the job, etc., contact this group for assistance:
 - a. the Entomology and Nematology Department at the University of Florida
 - b. the Florida Department of Agriculture and Consumer Services
 - c. the Florida Department of Pest Control Agency
 - d. the Florida Department of Environmental Protection
7. The Florida Building Code prohibits burying of construction and other materials within how many feet of any building?
 - a. 1
 - b. 5
 - c. 10
 - d. 15
8. On the job site, the Treatment Certificate should provide which of the following for each separate application:
 - a. identity of the applicator
 - b. time and date of the treatment
 - c. site location and area treated
 - d. product and chemical used including percent concentration and number of gallons used
 - e. all of the above
9. Condensate lines and roof downspouts shall discharge at least how far away from the structure sidewall?
 - a. 6 inches
 - b. 1 foot
 - c. 2 feet
 - d. 3 feet
10. In general, to provide for termite inspection, clearance between exterior wall coverings and final earth grade on the exterior of a building shall not be less than how many inches?
 - a. 2
 - b. 4
 - c. 6
 - d. 8

Pre-test

1. The permanent notice of termite protection that is posted near the water heater or electric panel has to contain:
 - a. the termite treatment provider, number of gallons used and need for re-inspection
 - b. the number of gallons used, need for contract renewal and name of termite treatment provider
 - c. the termite treatment provider, need for re-inspection and treatment contract renewal
 - d. none of the above

2. Clearance between earth and insulated concrete forms (ICF) shall be not less than how many inches:
 - a. 4
 - b. 6
 - c. 8
 - d. 10

3. If soil treatment is used, chemical soil treatment shall also be applied under all exterior concrete or grade within how many inches from the primary structure sidewalls?
 - a. 6
 - b. 8
 - c. 10
 - d. 12

4. True or False. If you are using soil treatment and disturb any soil, including spaces boxed or formed, you have to call the pest management company back out to retreat the disturbed areas.
 - a. True
 - b. False

5. What is the minimum number of trips a pest control operator should make to your new construction site when applying liquid termiticides?
 - a. 1
 - b. 2
 - c. 3
 - d. 4

Content Overview

The materials included in this document have been assembled to provide a concise review of the *Florida Building Code* as it relates to termites. In addition to containing termite-related sections of the *Florida Building Code*, other relevant topics such as termite biology, species and behavior, and different treatment methods and practices are included.

The Participant Guide contains the following items:

- the pre-test
- the objectives
- the “Building Practices and Standards” part containing termite-related sections of the *Florida Building Code*. Keep in mind that the *Florida Building Code* contains minimum requirements—the building professional can exceed these requirements.
- the entire PowerPoint presentation (Participant version), as well as the notes for each slide
- the activities
- the evaluation form
- the post-test, which your instructor removed before giving you this Guide

Preface

This document is the *Participant Guide* that supports the *Florida Building Code Advanced Training: Termites* program. It contains termite-related sections of the *Florida Building Code* in addition to other relevant topics such as termite biology, species and behavior, and different treatment methods and practices.

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The Florida Department of Community Affairs Building Code Information System web site:

<http://www.floridabuilding.org>

To obtain a complete copy of the Florida Building Code contact:

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FLORIDA BUILDING CODE

Advanced Training **Termites**

Participant Guide

2004 Code with
Section 11/22/05 Supplements

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