

SECTION 31 31 16  
SOIL TREATMENT FOR SUBTERRANEAN TERMITE CONTROL  
[UNIFIED FACILITIES GUIDE SPECIFICATIONS]

NOTE TO VAMC - The VA Master specifications do not include a specification for Termite Treatment. This specification has been obtained from the Unified Facilities Guide Specifications for DOD Facilities. The CONTRACTOR shall meet all Federal and State requirements for termite treatment beneath new buildings in the state of Florida.

**PART 1 - GENERAL**

**1.1 REFERENCES**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

7 USC Section 136.....Federal Insecticide, Fungicide, and  
Rodenticide Act

**1.2 SUBMITTALS**

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. Submit the following in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES:

SD-03 Product Data

Termiticides; G

Manufacturer's label and Material Safety Data Sheet (MSDS) for termiticides proposed for use.

Foundation Exterior; G

Written verification that other site work will not disturb the treatment.

Utilities and Vents; G

Verification of Measurement; G

Application Equipment; G

Warranty; G

Copy of Contractor's warranty.

SD-04 Samples

Termiticides; G

Submit on request samples of the pesticides used in this work or the COR may draw, at any time and without prior notice, from stocks at the job site. Should analysis, performed by the Government, indicate such samples to contain less than the amount of active ingredient specified on the label, work performed with such products shall be repeated, with pesticides conforming to this specification, at no additional cost to the Government.

SD-06 Test Reports

Equipment Calibration and Tank Measurement; G

Certification of calibration tests conducted on the equipment used in the termiticide application.

Quality Assurance

Pest Management Report and copies of daily records signed by an officer of the Contractor.

SD-07 Certificates

Qualifications; G

Qualifications and state license number of the termiticide applicator, licensed in the State of Florida.

### 1.3 QUALITY ASSURANCE

Comply with 7 USC Section 136 for requirements on Contractor's licensing, certification, and record keeping. Maintain daily records using Pest Management Maintenance Record, DD Form 1532-1 or similar and submit copies of records when requested by the COR. A copy of this form or similar: <http://www.dtic.mil/whs/directives/forms/eforms/dd1532-1.pdf>

Upon completion of this work, submit Pest Management Report identifying target pest, type of operation, brand name and manufacturer of pesticide, formulation, concentration or rate of application used.

### **1.3.1 QUALIFICATIONS**

For the application of pesticides, use the services of a subcontractor whose principal business is pest control. The subcontractor shall be licensed and certified in the state where the work is to be performed [Florida]. Termiticide applicators shall also be certified in the U.S. Environmental Protection Agency (EPA) pesticide applicator category which includes structural pest control. The subcontractor shall:

- a. Have personnel with a state of Florida certification as required by Pesticide Law of 1971 as amended.
- b. Check in with insect vectors personnel prior to application of pesticide and herbicides for projects located at the Medical Center.
- c. Provide a submittal with the following information to the COR:
  - (1) Quantity of pesticide used.
  - (2) Rate of dispersion.
  - (3) Percent of use.
  - (4) Total amount used.

### **1.3.2 SAFETY REQUIREMENTS**

Formulate, treat, and dispose of termiticides and their containers in accordance with label directions. Draw water for formulating only from sites designated by the COR, and fit the filling hose with a backflow preventer meeting local plumbing codes or standards. The filling operation shall be under the direct and continuous observation of a contractor's representative to prevent overflow. Secure pesticides and related materials under lock and key when unattended. Ensure that proper protective clothing and equipment are worn and used during all phases of termiticide application. Dispose of used pesticide containers off Medical Center property.

### **1.4 DELIVERY, STORAGE, AND HANDLING**

#### **1.4.1 DELIVERY**

Deliver termiticide material to the site in the original unopened containers bearing legible labels indicating the EPA registration number and manufacturer's registered uses. All other materials, to be used on site for the purpose of termite control, shall be delivered in new or otherwise good condition as supplied by the manufacturer or formulator.

#### **1.4.2 INSPECTION**

Inspect termiticides upon arrival at the job site for conformity to type and quality in accordance with paragraph TERMITICIDES. Each label shall bear evidence of registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended or under appropriate regulations of the host county. Other materials shall be inspected for conformance with specified requirements. Remove unacceptable materials from the job site.

#### **1.4.3 STORAGE**

Store materials in designated areas and in accordance with manufacturer's labels. Termiticides and related materials shall be kept under lock and key when unattended.

#### **1.4.4 HANDLING**

Observe manufacturer's warnings and precautions. Termiticides shall be handled in accordance with manufacturer's labels, preventing contamination by dirt, water, and organic material. Protect termiticides from sunlight as recommended by the manufacturer.

#### **1.5 SITE CONDITIONS**

The following conditions will determine the time of application.

##### **1.5.1 SOIL MOISTURE**

Soils to be treated shall be tested immediately before application. Test soil moisture content to a minimum depth of 3 inches. The soil moisture shall be as recommended by the termiticide manufacturer. The termiticide will not be applied when soil moisture exceeds manufacturer's recommendations because termiticides do not adhere to the soil particles in saturated soils.

##### **1.5.2 RUNOFF AND WIND DRIFT**

Do not apply termiticide during or immediately following heavy rains. Applications shall not be performed when conditions may cause runoff or create an environmental hazard. Applications shall not be performed when average wind speed exceeds 10 miles per hour. The termiticide shall not be allowed to enter water systems, aquifers, or endanger humans or animals.

##### **1.5.2.1 VAPOR BARRIERS AND WATERPROOF MEMBRANES**

Termiticide shall be applied prior to placement of a vapor barrier or waterproof membrane.

#### **1.5.2.2 UTILITIES AND VENTS**

Prior to application, HVAC ducts and vents located in treatment area shall be turned off and blocked to protect people and animals from termiticide.

#### **1.5.3 PLACEMENT OF CONCRETE**

Place concrete covering treated soils as soon as the termiticide has reached maximum penetration into the soil. Time for maximum penetration shall be as recommended by the manufacturer.

#### **1.6 WARRANTY**

The Contractor shall provide a 5-year written warranty against infestations or reinfestations by subterranean termites of the buildings constructed under this contract. Warranty shall include annual inspections of the buildings or building additions. If live subterranean termite infestation or subterranean termite damage is discovered during the warranty period, and the soil and building conditions have not been altered in the interim, the Contractor shall:

- a. Retreat the soil and perform other treatment as may be necessary for elimination of subterranean termite infestation;
- b. Repair damage caused by termite infestation; and
- c. Reinspect the building approximately 180 days after the retreatment.

### **PART 2 - PRODUCTS**

#### **2.1 TERMITICIDES**

Provide termiticides currently registered by the EPA or approved for such use by the appropriate agency of the host county. Select non-repellant termiticide for maximum effectiveness and duration after application. The selected termiticide shall be suitable for the soil and climatic conditions at the project site.

### **PART 3 - EXECUTION**

#### **3.1 VERIFICATION OF MEASUREMENT**

Once termiticide application has been completed, measure tank contents to determine the remaining volume. The total volume measurement of used contents for the application shall equal the established application rate for the project site conditions. Provide written verification of the measurements.

### **3.2 TECHNICAL REPRESENTATIVE**

The certified installation pest management coordinator shall be the technical representative, shall be present at all meetings concerning treatment measures for subterranean termites, and may be present during treatment application. The command Pest Control Coordinator shall be contacted prior to starting work.

### **3.3 SITE PREPARATION**

Site preparation shall be in accordance with Section 31 20 00, EARTHWORK. Work related to final grades, landscape plantings, foundations, or any other alterations to finished construction which might alter the condition of treated soils, shall be coordinated with this specification.

#### **3.3.1 GROUND PREPARATION**

Food sources shall be eliminated by removing debris from clearing/grubbing and post construction wood scraps such as ground stakes, form boards, and scrap lumber from the site, before termiticide application begins.

#### **3.3.2 VERIFICATION**

Before work starts, verify that final grades are as indicated and smooth grading has been completed in accordance with Section 31 20 00, EARTHWORK. Soil particles shall be finely graded with particles no larger than 1 inch and compacted to eliminate soil movement to the greatest degree.

#### **3.3.3 FOUNDATION EXTERIOR**

Provide written verification that final grading and landscape planting operations will not disturb treatment of the soil on the exterior sides of foundation walls, grade beams, and similar structures.

#### **3.3.4 UTILITIES AND VENTS**

Provide written verification that the location and identity of HVAC ducts and vents, water and sewer lines, and plumbing have been accomplished prior to the termiticide application.

### **3.4 TERMITICIDE TREATMENT**

#### **3.4.1 EQUIPMENT CALIBRATION AND TANK MEASUREMENT**

Immediately prior to commencement of termiticide application, calibration tests shall be conducted on the application equipment to be used and the application tank shall be measured to determine the volume and contents. These tests shall confirm that the application equipment is operating within the manufacturer's specifications and will meet the specified

requirements. Provide written certification of the equipment calibration test results within 1 week of testing.

#### **3.4.2 MIXING AND APPLICATION**

Formulating, mixing, and application shall be performed in the presence of the COR. A closed system is recommended as it prevents the termiticide from coming into contact with the applicator or other persons. Water for formulating shall only come from designated locations. Filling hoses shall be fitted with a backflow preventer meeting local plumbing codes or standards. Overflow shall be prevented during the filling operation. Prior to each day of use, the equipment used for applying termiticides shall be inspected for leaks, clogging, wear, or damage. Any repairs are to be performed immediately.

#### **3.4.3 TREATMENT METHOD**

For areas to be treated, establish complete and unbroken vertical and/or horizontal soil poison barriers between the soil and all portions of the intended structure which may allow termite access to wood and wood related products. Application shall not be made to areas which serve as crawl spaces or for use as a plenum air space.

##### **3.4.3.1 SURFACE APPLICATION**

Use surface application for establishing horizontal barriers. Surface applicants shall be applied as a coarse spray and provide uniform distribution over the soil surface. Termiticide shall penetrate a minimum of 1 inch into the soil, or as recommended by the manufacturer.

##### **3.4.3.2 RODDING AND TRENCHING**

Use rodding and trenching for establishing vertical soil barriers. Trenching shall be to the depth of the foundation footing. Width of trench shall be as recommended by the manufacturer, or as indicated. Rodding or other approved method may be implemented for saturating the base of the trench with termiticide. Immediately after termiticide has reached maximum penetration as recommended by the manufacturer, backfilling of the trench shall commence. Backfilling shall be in 6 inch rises or layers. Each rise shall be treated with termiticide.

##### **3.4.4 SAMPLING**

The COR may draw from stocks at the job site, at any time and without prior notice, take samples of the termiticides used to determine if the amount of active ingredient specified on the label is being applied.

### **3.5 CLEAN UP, DISPOSAL, AND PROTECTION**

Once application has been completed, proceed with clean up and protection of the site without delay.

#### **3.5.1 CLEAN UP**

The site shall be cleaned of all material associated with the treatment measures, according to label instructions, and as indicated. Excess and waste material shall be removed and disposed off site.

#### **3.5.2 DISPOSAL OF TERMITICIDE**

Dispose of residual termiticides and containers off Government property, and in accordance with label instructions and EPA criteria.

#### **3.5.3 PROTECTION OF TREATED AREA**

Immediately after the application, the area shall be protected from other use by erecting barricades and providing signage as required or directed.

### **3.6 CONDITIONS FOR SATISFACTORY TREATMENT**

#### **3.6.1 EQUIPMENT CALIBRATIONS AND MEASUREMENTS**

Where results from the equipment calibration and tank measurements tests are unsatisfactory, re-treatment will be required.

#### **3.6.2 TESTING**

Should an analysis, performed by a third party, indicate that the samples of the applied termiticide contain less than the amount of active ingredient specified on the label, and/or if soils are treated to a depth less than specified or approved, re-treatment will be required.

#### **3.6.3 DISTURBANCE OF TREATED SOILS**

Soil and fill material disturbed after treatment shall be re-treated before placement of slabs or other covering structures.

#### **3.6.4 TERMITES FOUND WITHIN THE WARRANTY PERIOD**

If live subterranean termite infestation or termite damage is discovered during the warranty period, re-treat the site.

### **3.7 RE-TREATMENT**

Where re-treatment is required, comply with the requirements specified in paragraph WARRANTY.

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