

SECTION 31 31 16

SOIL TREATMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Treatment of building subgrade for termites.

1.2 ACTION SUBMITTALS

- A. Product Data: Submit product data and application instructions for termite treatment chemicals.
 - 1. Contractor shall maintain material data safety sheets on project site for duration of subsoil treatment in accordance with applicable laws and ordinances.

1.3 INFORMATIONAL SUBMITTALS

- A. Certificates:
 - 1. Submit evidence that applicator of termite control chemicals is licensed by [the Structural Pest Control Board of Texas][State of Arizona Office of Pest Management].
 - 2. Submit certificate of complete liability and property damage insurance from applicator with minimum limit of \$1,000,000.
 - 3. Submit minimum three references for pest control performed by applicator within previous three years.

1.4 EXISTING CONDITIONS

- A. Notify Architect immediately of existing job conditions that affect application of pest control materials required under this Section, or conditions that affect or alter scope of work of this Section, including unforeseen conditions.

1.5 QUALITY ASSURANCE

- A. Applicator of pest control chemicals shall be [licensed by the Structural Pest Control Board of Texas][State of Arizona Office of Pest Management] to handle proposed chemicals, and shall have minimum five years commercial experience applying termite treatment chemicals.
- B. Contractor and applicator shall both attend Pre-Construction Conference. At that time, tour of existing site will be conducted, and sequencing of application will be discussed.

1.6 WARRANTY

- A. Upon completion of Work, and as condition for final acceptance of Work, provide to Owner with written guarantee stating following and jointly signed by both applicator and Contractor:
1. Soil treatment was made with not less than specified concentration rates, with materials and methods specified.
 2. Effectiveness of treatment is guaranteed for period of one year from date of application to prevent infestation of subterranean termites.
 3. Contractor has right during warranty period to make period examination of property.
 4. Owner will have right to renew warranty on annual basis.

PART 2 - PRODUCTS

A. MANUFACTURERS

1. Substitutions: Comply with Section 01 25 00.

2.2 MATERIALS

- A. Acceptable Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Bayer Environmental Science
 2. FMC Corporation
 3. Syngenta Professional Products.
- B. Termiticide: Provide an EPA-registered termiticide complying with requirements of authorities having jurisdiction in a soluble or emulsible, concentrated formulation that dilutes with water or foaming agent, and formulated to prevent termite infestation. Use only soil treatment solutions that are not harmful to plants. Provide quantity required for application at the label volume and rate for the maximum termiticide concentration allowed for each specific use, according to the product's EPA-Registered Label.

PART 3 - EXECUTION

3.1 PREPARATION

A. Surface Preparation:

1. Remove foreign matter that could decrease treatment effectiveness on areas to be treated.
2. Loosen, rake, and level soil to be treated, except previously compacted areas under slabs and foundations.

3.2 APPLICATION

- A. Application Rates: Apply chemicals in rates listed below unless instructions on product label require greater rates or are restricted by governmental regulations.
 - 1. Under slabs on grade structures, treat soil before concrete slabs are placed, using the following application rates:
 - a. Apply 4 gallons of chemical solution per 10 linear feet to soil in critical areas under slabs, including entire inside perimeter of foundation walls, along both sides of interior partition walls, around plumbing pipes and electrical conduit penetrating slab, around interior column footers and along expansion and control joints.
 - b. Apply 1 gallon of chemical solution per 10 sq. ft. as an overall treatment under slab and attached slab areas where fill material is soil or unwashed gravel.
 - c. Apply 1-1/2 gallons of chemical solution per 10 sq. ft. as an overall treatment under slab and attached slab areas where fill material is washed gravel or other coarse non-absorbent washed material.
 - d. Dig a trench 6 to 8 inches wide along outside of foundation wall to a depth of not less than 12 inches with punched holes to top of footing at not more than 12 inches o.c. and apply 4 gallons of chemical solution per 10 linear feet of trench for each foot of depth from grade to top of footing. Mix chemical solution with soil as it is being replaced in trench.
 - 2. At grade beams, treat voids at rate of 2 gallons per 10 linear feet, poured directly into hollow spaces.

3.3 CLEANING

- A. After completion of chemical application, remove debris and spillage.

3.4 ADJUSTING

- A. If subterranean termite activity is discovered during warranty period, re-apply soil treatment with acceptable remedial techniques, and repair or replace damage caused by termite infestation up to limit of \$100,000/occurrence, with no aggregate limit on claims during warranty period.

END OF SECTION

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