# **City of New Orleans Mosquito & Termite Control Board**

## **Coring Through Concrete, Brick, or Asphalt for Installation of Subterranean Termite Bait Stations**

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#### Introduction

Subterranean termite bait systems take advantage of the termite's natural foraging behavior. Monitoring stations used in bait systems are installed in the soil around the perimeter of the structure. In cities, historic districts and commercial properties, soil access may be limited or even absent around structures needing termite protection. This limitation may require a pest control company to install subterranean termite bait stations through concrete, brick, or asphalt outdoors and/or indoors to properly protect the entire structure.

#### **Coring Concrete/Brick/Asphalt**

Before drilling and installation of the termite bait system, all underground electrical, communication, and other utilities should be located and marked to avoid accidents and costly repairs. Contact your local underground utilities safety hotline in order to have the lines marked. The best method to create ports in concrete/brick/asphalt for placement of the monitoring stations is to use a core drill specifically designed for cutting the designated medium. The *outside diameter* of the core drill bit needs to be 3 inches. Sealing the opening with a water-resistant cap prevents entry of water into the hole.

#### **Station Placement**

Core drilling for placement of termite bait stations may be costly and adding auxiliary stations is usually not feasible. For this reason, bait stations should be placed close enough to adequately cover the area to be protected. Bait station placement should follow the product's label and manufacturer's recommendations. Bait stations should be installed 12 to 16 inches away from the foundation in critical areas where termites have access to the structure. Concrete may vary in thickness and it is generally thicker at the edge of the footing. If possible, drill holes far enough away from the foundation to avoid the footing.

A long handled garden shovel, pick, or other hand tool is useful to probe cored holes to assure penetration through all potential layers of concrete/brick/asphalt. A hammer-drill may be required to break and remove stubborn pieces from the holes. In addition, reinforcement bars or concrete wire may be present, so it is useful to have wire or bolt cutters available to allow drilling to continue unobstructed.

Drilling in liquid termiticide treated soil should be avoided. If this is not possible, core drill, remove treated soil from the hole, and replace with non-chemically treated topsoil or potting soil as needed. When refilling holes, sand or sandy soils should be avoided because the sand tends to fill in the hole. If sandy soils must be used, wrap the bait station with cardboard or paper before inserting into the hole. Some commercially available bait stations have tabs or flanges that prevent the station from being readily inserted into the 3-inch diameter hole. If tabs are present on the bait station, remove one tab and insert the station to a depth of at least 2½ inches below the surface to allow ample space for the bar-coded locking cap and the water-resistant top cap.

### Water-resistant Top Cap

New Orleans Mosquito and Termite Control Board developed a cap for use when installing bait stations through concrete. The cap seals the 3 inch diameter hole with a metal (aluminum, steel, or brass), water resistant cap that, when inserted properly, is flush with the surface. The cap is designed to fit both the metric and US equivalent size cores. Caps in a variety of materials that will blend into the drilled material is available.

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Doc. NOMTCB 2-2007, 5-2014 update

### Instructions for Coring Through Concrete, Brick, or Asphalt for Installation of Subterranean Termite Bait Stations



**1.** Have all underground electrical, communication, and other utilities marked. Paint drilling locations every 10 feet or less and at least 12 to 16 inches away from the foundation.



**2.** Drill 3 inch diameter holes all the way through to the soil.

4. One tab may need to be removed from the station housing before inserting into the hole. Note: If the concrete is too deep or the soil level is too low, add non-treated top soil or potting soil.

- 5. Install the termite bait station to a depth of  $2\frac{1}{2}$  to 3 inches below the surface.
- 6. Secure the bait station and cover it with the water-resistant metal cap.

**7.** A cordless drill with a snake-eye bit facilitates opening and tightening the top cap during inspection.









#### **Things to Remember About Coring**

Allows placement of monitoring stations in areas where soil is not otherwise accessible.

Always have utilities marked to avoid injury and costly repairs.

A hammer-drill may be needed if brick or rocks are encountered.

Consider subcontracting the drilling. The service is listed under "concrete breaking", "cutting", or "sawing" in the phone book.



**3.** After the holes are drilled, use a hand or power auger to remove soil allowing for adequate depth for placement of the bait station.

A diamond-tipped 3-inch outside-diameter core bit provides the fastest cut and smoothest holes.



The hole should have a 3 inch inside-diameter.