Guidelines for Installing Stations for the Hex-Pro[™] Termite Baiting System Through Concrete or Pavement

October, 2007

Why to Install:

- Drilling through asphalt, concrete, or other commercial surfaces to install the Hex-Pro[™] Termite Baiting System stations should only be done as a last resort, i.e., when the requirements detailed below under "Coring is Required" cannot be met without coring. A preferred method is to install Hex-Pro stations using the standard in-ground method. After considering areas such as accessible soil in Planters, Flower Beds, or Lawns, then, the only alternative may be coring.
- There are several reasons <u>not</u> to drill through concrete, **unless absolutely necessary.** The most significant is that there may be safety considerations because of obstacles like utility conduits. Also, it is a labor-intensive way of installing Hex-Pro stations. Finally, we know termites generally forage over large areas and will eventually find and feed on Hex-Pro stations at moderate distances from a structure. However, under certain situations, coring may be necessary for the protection of the structure.

Coring is Required:

• If Hex-ProTM stations cannot be placed over 3/4 (75%) or more of the perimeter linear footage of the structure using standard station placement in soil that is accessible within 50 feet of the structure.

Or:

• Average Hex-Pro station spacing will be less than 1 station for every 20 feet if coring is not used.

At the technician's discretion, coring may be conducted at sites not meeting these criteria.

Guidelines

Where to Install through Concrete/Asphalt:

- Install Hex-Pro stations at intervals of not greater than 20 feet where there will not be excessive traffic as per label directions. Shorter intervals may improve performance.
- Auxiliary Hex-Pro stations are not recommended for stations placed through concrete or asphalt because the disturbance of core drilling may interrupt feeding in the "hit" station.

Suggestions for Thin Surfaces Such as Asphalt:

- If the asphalt is up to 3" thick, use a drill bit and drill through the surface into the soil below. During colder weather a rocky soil auger may be necessary (available from a Hex-Pro[™] System distributor) to bore a 2" diameter hole through the asphalt. During warmer weather your standard soil auger, or hand auger, should work fine. If the asphalt is greater than 3", then you may need to use the guidelines for concrete coring found in the next section.
- If a locking port cap is used, inserting a 3" inside diameter PVC "sleeve" into the hole can stabilize the asphalt and create a better seal with the port cap.
- Using a locking port cap creates a more secure seal than using the Hex-Pro station alone. If a port cap is not used, it may be necessary to use Liquid Nails or a latex sealant under the soil cover to hold the Hex-Pro station in place and minimize flooding and incidence of occasional invaders.
- For numbering a Hex-Pro station, consider writing the number on the underside of the top cap with a "fine line" permanent marker, but **do not write on the barcode label.**
- Insert the extractor and monitoring devices into the Hex-Pro station and secure the top cap with the top cap key.

Suggestions for Thicker Surfaces such as Concrete:

- For concrete surfaces thicker than 3", you can obtain a concrete coring kit from your Hex-Pro[™] System distributor, or possibly through other tool and equipment suppliers. (See attached drawing for descriptions and part numbers).
- Consider using a commercial coring contractor for this service.
- If the concrete is more than 4-4¹/₂" thick, it may be necessary to core through the concrete to the maximum depth of the tool, then use a cold chisel and hammer to break up the upper surface of the core. This will allow the core-drilling bit to cut deeper through the entire thickness of the concrete to reach the soil level below.
- Remove any loose particles (gravel, concrete chips, etc.) from the hole, to allow access to the soil level below.
- Use your soil auger to drill into the soil below the slab. The entire Hex-Pro station should be in contact with the soil whenever possible. Consider allowing for, or removing and replacing, soil that may have been chemically pretreated prior to installation of the concrete.

Suggestions for Installing the Hex-Pro[™] Station:

• **Do not use the soil cover on Hex-Pro stations installed through concrete.** The top of the Hex-Pro station may be 6-8" below the top of the concrete. In some geographic areas with higher water tables, this may cause Hex-Pro stations to flood. To correct this problem, add untreated soil into the hole so the Hex-Pro station top actually rests about 2-3 inches below the surface of the concrete and just under the concrete port cover.

- The top cap should still be used so that the Hex-ProTM station can be scanned. Place the top cap on the Hex-Pro station as in a standard installation (this will help minimize air movement and occurrence of occasional invaders), but **do not tighten or lock the cap onto the Hex-Pro** station or it may be very difficult to remove during the next visit.
- Insert one of the Concrete Port Covers (available through your Dow AgroSciences Supplier) into the 3"diameter hole in the concrete. The Port Cover is secured with the special spanner driver. When properly inserted, this cap will help prevent surface water from invading the Hex-Pro station.
- If the Hex-Pro station fits loosely in the cored hole, use untreated soil (such as topsoil from a garden center) in the hole so that it fits snugly. When soil has receded under a slab, or for very thick slabs, some technicians have reported favorable results from using monitoring devices placed below the Hex-Pro station, and filling in the core with soil so that the top of the Hex-ProTM station sits just below the port cap.

Monitoring:

- Build a tool for removing the extractor by bending a heavy gauge wire or welding rod to form a hook on one end. Shape a handle on the other. This will allow you to adjust the length as needed to reach the extractor when checking a monitoring Hex-Pro station.
- Core Drilled Hex-Pro Station placements should be monitored at the same interval as recommended for other stations in the technician's area.

Safety and Precautions:

- Locate all underground plumbing, electrical, and other utility conduits prior to drilling any concrete.
- Placement of Hex-Pro stations through concrete floors below grade, such as in basements, is not recommended. Water pressure below a slab in a basement can be extreme. Drilling through these slabs may allow an entry point for water when the water table is high or during wet seasons of the year. Termites will tend to remain above the water table in most instances so Hex-Pro stations at that depth may not provide any efficacy value. Therefore, coring should not be done in these situations.

Other:

- At your option, you may consider spray painting the surface of a Hex-Pro station <u>placed on</u> <u>asphalt</u> with a paint to match the surrounding surface. Keep in mind that plastic surfaces may not allow for some paints to adhere well. Therefore, the proper choice of paint is critical to maintaining a professional appearance at the site. Also, be aware that some paints or their propellants may deter termites.
- This guideline will be updated or changed as needed to further enhance performance.

Attachments: Drawings