

Termite World

► PAUL HARDY'S VIEW ON TREATMENT AND TRENDS

Drywood termite IPM

It is often difficult for residents to vacate their homes for termite treatment, due to health problems or the cost of relocation. It's especially difficult to get all the residents of an apartment or condominium complex to vacate their homes at the same time.



PAUL HARDY

However, inspection techniques and changes in termiticides have made it possible to control termites with directed treatment — in many cases,

without having to do a complete conventional treatment.

For example, in October we successfully completed a drywood termite treatment on an apartment complex in Deland, FL, using only directed treatment. The residents didn't have to leave their apartments for an extended period of time or prepare for conventional fumigation. In fact, all they had to do was leave the area where the work was being performed and wait until the equipment was removed and the area was returned to normal condition. Instead of taking two to three days, the treatment of each infested apartment unit was completed in about three hours.



Figure 1: Drywood termite damage

The apartment complex was built in the 1950s. Construction type was monolithic slab — a typical two-story with brick veneer siding on the front and sides and stucco on the rear of the building, with enclosed patios. Drywood termites had infested the sliding door cases of several first-floor apartments, and the infestation had spread up the wall to the hardwood floors, the studs in the wall and the window frames on the second floor.

After talking with the apartment manager and tenants, we were able to determine that each infestation had started in the door framing and door case of the sliding door before the patios were enclosed with screening several years ago. Close inspection showed evidence that the doors had been repaired previously in an effort to get rid of the drywood termite infestations, but each time the termites only reappeared in the same areas (see figure 1).

A NOISY PEST

We began treatment by inspecting the complex with an acoustical emission detector (see figure 2). With the AED, it is possible to test wood members for the presence of active termites and with a measure of accuracy determine the location and the approximate size of the infestation.

Termites make distinct sounds by chewing on wood and “head-banging.” These sounds are amplified by the AED while filtering out background sound such as water movement and other vibrations. As you move closer to the termite infestation, the sound becomes louder and more distinct. With the AED, we were able to determine the infestation was limited to two areas in each of the apartment units.

Dealing with known infestations made it possible to approach the treatment as a directed treatment instead of having to perform a standard fumiga-



Figure 2: Orkin Termite Technician Jessie Skeen uses an AED at the account.



Figure 3: Skeen uses a resistograph.

tion or a heat treatment — another control option.

Next, we used a resistograph (see figure 3) to drill into the suspected infested area to locate the gallery of drywood termites. The resistograph uses a toothpick-sized precision drill bit. These drilled holes connect to the galleries, and were treated with handheld foam/liquid injection equipment using .082 stainless steel tips. The holes are easy to plug with wood filler or caulk after treatment. Termiticide treatment is made using either liquid- or foam-diluted Premise at 0.05% or Termidor at 0.06%.

To prevent reinfestation, the wall void around the infested area was treated using a specially designed mini-mister applicator. The mister produces a heavy mist of termiticide that is designed to treat the surface of wood timbers inside the wall voids and between support timbers (see figure 4, next page).

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The termiticide inside the gallery, whether in foam or liquid, changes the temperature of the wood. An infrared camera is used to pick up the difference in temperature, letting us trace the termiticide spread in the wood. This step allows us to verify that the termiticide did reach the gallery and was distributed in the suspected area.

Using a nonrepellent termiticide and foaming agent in the directed treatment process lets termites transport the termiticide through the infested area, since they do not appear to be immediately affected by the treatment (see figure 5).

EASY FOLLOW-UP

Follow-up inspections using the AED have shown no activity after the directed treatment process is performed. Control is easy to confirm, because a



Figure 4: Skeen treats with a mini-mister.

record of the location of activity is recorded at the initial inspection. When these locations are rechecked after treatment, the sound indicating activity of termites is no longer detected.

The directed treatment approach used on drywood termites is also currently being tested as a method of termite control for subterranean and



Figure 5: Skeen foams, while Orkin's Raymond Meyers uses an infrared camera.

Formosan termites. The IPM approach — less is best — may prove to apply to termite control just as well as to other household pest control. **PC**

With more than four decades of industry experience, Paul Hardy is technical director of Orkin, Inc., Atlanta, GA. Contact him at phardy@advanstar.com.