

Indoor Ant Baiting Protocol

Objective: To provide a guide for the treatment of interior ant activity using bait on only those occasions where the source of an interior infestation or the avenue of entry cannot be located.

Massey Services' Pest Prevention Program focuses on eliminating ways for pests to become established inside of a structure. It is designed to reduce pest activity in and around structures through the application of preventive treatments and exclusionary tactics that take into consideration the Conditions, Avenues and Sources conducive to pest survival.

While the core of Massey Services' Pest Prevention Program focuses on preventative exterior and perimeter treatments, there will be times when Customers contact us regarding pest activity inside the structure and interior treatments are necessary to eliminate the problem. One of the most frequent requests for interior services received is for ants.

Inspection and Identification

The first step in eliminating any pest issue is to determine the species of pest you are dealing with. To many people, ants look alike, but each species we deal with has its own distinctive characteristics that will influence your product selection and treatment method. Improper identification will in most cases, lead to an ineffective treatment.

When arriving at the structure, interview the Customer to determine all of the areas where they have observed ants trailing. Your job is to figure out how the ants are getting into the structure and what is allowing for their success. The majority of ant species that we deal with originate from outside so do not limit your inspection to just interior areas. Inspect room(s) where the ants are present, surrounding rooms and the exterior of the structure to determine the source of the infestation, any conditions allowing for the success of the colony and avenue of entry into the structure. The treatment strategy you choose will be determined by the species of ant encountered. For most pest species that are present in the geographical region that Massey Services is located, there is a Pest Specific Protocol that covers identification, behavior, biology and treatment options. Once the species of ant has been determined, refer to the Pest Specific Protocol for that particular ant for treatment instructions and product selection.

Treatment Options

While the protocols for interior ant treatments will vary depending on the species, the majority focus on

1. Inspection
2. Identification
3. Physical removal
 - a. Ants



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- b. Minor food debris
4. Removal/repair of Conditions, Avenues and Sources conducive to pest activity
5. Crack and crevice or spot treatment with a non-repellant liquid residual
6. Wall void treatment with dust
7. Exterior treatment with one or more of the following:
 - a. Bait
 - b. Liquid residual
 - c. Dust
8. Exclusionary techniques

As everyone knows, it's not always that simple. There will be times that you arrive at a structure and you are unable to locate:

- trailing ants inside or outside of the structure
- the avenue of entry into the structure
- the source of the infestation
- any conducive conditions that would allow for the success of the pest

Because of the sensitivity of some ants to certain products, you cannot simply dust wall voids or apply liquid residuals to random areas in the vicinity the Customer states they have observed activity.

As a company, Massey Services has made the decision to limit the amount of baiting for ants that occurs on the inside of a structure. Bait formulations contain food additives and a slow acting active ingredient. The food additive makes the bait an attractive food source to foraging ants and when consumed the active ingredient is passed from one ant to another via trophallaxis. This makes bait is an extremely effective tool in ant control, but because of the attractiveness of the bait, when applied indoors, has the potential to draw ants into the structure. However, ants are opportunistic and will take advantage of the many hidden areas that are located throughout a structure. Wall voids, under cabinets, cracks in the slab, inside appliances are not only perfect nesting environments they are hidden areas that cannot be accessed making it very difficult to determine a colony's exact location. In situations where you cannot pinpoint the area where the nesting site is located or where they are entering the structure, bait may be the most effective treatment option.

Prebaiting for Ants

Prebaiting serves 2 purposes: 1) Ants may change their food preferences at certain times of the year to meet the nutritional needs of the colony. A species that generally prefers sweet, carbohydrate based baits will sometimes take advantage of protein based baits, and vice versa. Knowing which type of food they are seeking at that moment is critical in the effectiveness of the treatment. 2) Once a preferable food source is found, foraging ants will recruit other ants towards it. As ants forage towards a



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food source, they lay a pheromone trail and the more ants foraging along a trail, the stronger the pheromone; indicating there is a good food source to other ants in the colony.

To determine food preference, place insect detection traps near where ants are foraging or in areas where the Customer has observed ant activity with a sweet and protein based food attractant. (The Customer may show you items that the ants are feeding on. If this is the case, the pheromone trail is established and their food preference is clear.)

Once you have placed a few prebaited insect detection traps in the area, allow the ants to find it. This may take several minutes or longer depending on the level of infestation. Some items you can use to determine food preferences are:

- Sweet
 - Honey
 - Liquid ant bait
 - Ant gel bait (you may need to test more than one brand)
- Protein
 - Crushed potato chips
 - Peanut butter

Once food preference has been determined, discard the insect detection traps and select the most effective bait formulation(s) to eliminate the infestation.

Application of Baits

Ant baits come in several different formulations: gel, granular and liquid. It is up to you to determine the most effective formulation for the given environment and ant species you are dealing with.

- Ant gel baits are effective on both sweet and protein feeding ants but depending on the species and size of the population, may not be the first, best choice. Refer to Pest Specific Protocols for product selection.
- Granular baits: there are several granular baits that are available and labeled for indoor and/or wall void application.
- Liquid baits: the majority of liquid baits on the market are sweet based. Liquid baits work well with large populations of sweet feeding ants.

Regardless of the formulation, you must ensure

- Proper placement
 - Place bait in areas of known foraging or suspected activity
 - Bait is to be placed out of the reach of people and pets and away from areas where it may become contaminated.
 - Gel bait

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- Applied to cracks and crevices, back side of electrical and light switch plate covers
- Placed in small bait stations in areas where ants are foraging and crack/crevice is not available
- For wall void applications, cut drinking straws into 1-inch sections and fill with bait. The straw will provide protection from dust and debris that may be present in wall voids.
- Granular bait
 - Using a Centrobulb duster, apply bait into wall voids (ensure product is labeled for this type of application)
 - Placed in small bait stations in areas where ants are foraging outside of wall voids
- Liquid bait
 - For use only in bait stations
- Quantity
 - Ensure that the amount of bait you have used will be effective for the population present in the environment. It's better to have more bait than necessary than not enough.
 - Depending on the size of the colony, proactive follow-ups may be necessary to replenish the bait.
- Sanitation
 - Communicate to the Customer the importance of keeping other food sources to a minimum so there is no competition with the bait.
 - Remove as much food debris as possible
 - Wipe up spills as soon as they occur

Communication

Explain to the Customer that ants will not immediately disappear but they will see a decline in population over the days to follow. Baits are slow acting, which is a beneficial aspect to this treatment type because it allows the ants bring the product back to the nest and spread it throughout the colony. It is also important that the Customer understand that if they see ants trailing, they must NOT use any over the counter aerosols to kill the ants as this will inhibit the action of the bait.

Exterior Treatments and Follow-Ups

As stated previously, the majority of the interior ant infestations originate from an exterior source. While you may not be able to pinpoint the exact entry point into a structure, it is imperative you inspect outside. If an exterior treatment is deemed necessary, follow treatment methods outlined in the Pest Specific Protocol for the pest in question.