



German Roaches (*Blattella Germanica*) Treatment Expectations

German Roach Biology

Before you can understand what to expect you need to understand the capabilities and behaviors of the pest we are trying to deal with:

- Roaches are prolific breeders. Each female can produce 30-40 eggs in a single egg capsule, and produce 4-8 capsules in her lifetime.
- They are for the most part solitary insects that live or aggregate in similar areas for survival. They feel a sense of comfort in these habits.
- Roaches like tight, dark areas, and are nocturnal.
 - You generally will not see them during the daytime as they typically find comfort in harborage areas like cracks and crevices around electrical outlet covers, walls voids, behind and in utility appliances like microwaves, stoves and refrigerators, as well as in close proximity to areas like these that are warm, damp, dark and remote from daily human activity.
 - We recommend always keeping these areas clean of any food debris build up in order to expedite control. The presence of food debris can hinder control as it will allow the opportunity for roaches to avoid our treatment methods.
 - If you are seeing roaches during the day, and prior to treatments, it is likely that you have a significant population.

NOTE: After treatments, if you are seeing roaches in lower populations during the day, with slow movement and possibly walking in the middle of a surface, these are signs that the applications are taking effect and causing disoriented behavior. This means they will soon perish in 3 to 5 days.

- **We also recommend not to render any structural repair work until after the activity has been controlled. Sealing up any cracks, crevices and openings may just trap them into the voids, which will allow them to reproduce in larger populations and reintroduce themselves elsewhere into the structure. Once activity is controlled, please consult with your technician to review recommended areas of repair if any.**
 - They can be found in the worst of places, which is why they are of great concern.
- Roaches are foul creatures which:
 - Eat their own dead
 - Eat their own feces
 - And eat their own young
- Roaches are vectors of disease, capable of transmitting them into your food as they travel and forage.
- When cohabitating with very large populations, they are also known to cause asthma in children.

Up-front Considerations

As with any pests, there can be different levels of infestations and when dealing with roaches there are many challenges to be taken into consideration before, during, and after treatment.

- The first thing to be taken into consideration is the level of activity found during the initial inspection and prior to each additional treatment. Initially, the numbers found can help determine the severity of the issue.



- You also want to try and determine if the population is reproducing, as this would indicate a high level of activity. This can be identified by witnessing multiple life stages of roaches, small and large in body size.
- Clearly we are looking for the conducive, “hot spots” for roach activity. This comes through inspection and through communication with the client.
- Evidence of dead roaches can also be an indicator of population size, age, and locations.
- Knowing how long the problem has existed and if any steps have been taken to mitigate the problem before contracting Horizon for service is an important feedback to construct the corrective service plan.
 - Typically, the longer the problem has existed, the longer it will take to eradicate.
 - Also, if the client self-treated, or hired another company to do the work prior to Horizon, the pest issue may have been pushed deeper into the walls due to the nature of the store-bought pesticide used.
 - Many products are repellants and can drive the roaches deeper into the wall voids where they become harder to reach and kill. This can elongate the time for us to gain control.

Basic Premise When Treating for Roaches

Horizon will utilize products which are non-repellant to the roaches as much as possible, as we do not want them to scatter as we make the applications. We also do not want to drive them deeper into wall voids, or worse, drive them to new areas where they were not originally active. These treatments may include baits, residual spray applications, dusts, and very necessary insect monitoring tools. The insect monitors are glue traps that act as our eyes in between services and give us an indication of where the roaches are likely harboring and breeding.

Significant Infestation Levels

- Typically, these are the times when the Health Department or some other regulating body is threatening to shut the company down. These are the times when we may need to use every tool in the arsenal. In these cases, tools like fogging machines may be necessary, pesticides like residual repellant dusts, flushing agents, usually from an aerosol can, insect growth regulator and inhibitor materials, and quick acting, ‘knock-down’ liquid residual pesticides to kill the roaches when they begin to run.
- These measures are typically saved for emergency situations where there is threat of closure, or the numbers are so high that in order to get ahead of the population we need to hit them hard. In these cases, we can often get 85-90% of the population on the first treatment. Knowing the last 10-15% are going to be that much harder now that we may have scattered them or they may have bunkered down safely deeper in a void somewhere.
- After these types of services, it will be important to clean all the food preparation areas and tools prior to utilizing them again. This would hold true for restaurants, catering halls, hospital kitchens, and anywhere where high levels of food are prepared. This would also hold true for houses and/or apartment units with kitchen areas where there is significant roach activity.
- As part of the intensive treatment we would also be applying insect monitor devices for future indications of roach activity levels.

Treatment of Light Infestations and/or After the Major Infestation Has Been Addressed

- Non-repellent products are paramount in addressing the remaining issues or when handling small infestations. These products have a domino effect on the population. This domino effect is based



on the fact that they eat their own dead. So when one roach feeds or travels across a treated zone and then returns to the harborage area and dies, other roaches will feed on that dead roach and also die.

- As we go through the treatment process, communication is vital to our success. We use your team of employees, colleagues, family members and tenants to share with us what they are, or have been seeing. They spend much more time on site than we do. We will also share with you our assessments and will review any structural and/or sanitation issues that may be perpetuating the problem.

Once Roach Activity Issue is Mitigated

- Once we have the activity under control, the insect monitoring tools will continue to be maintained as an early detection system.
- THE IMPORTANCE OF MONITORS:
 - They are also used to help pinpoint the pockets after the majority of the population has been eliminated.
 - The monitors indicate the direction that the roaches are likely migrating from and will also give an indication of the amounts and if we still have breeding occurring.
 - It is important that staff and/or household members leave the monitors in place as they act as our eyes in between services.
 - We will do our best to make sure that they are as discreet as possible and out of the way of food preparation areas.
 - If employees or family members see these monitors and they have roaches in them, please do not throw them out. It is important to leave them where they are, or minimally take note as to where they were found and report it to the technician.
- Communication will continue to be vital, and applications of non-repellent pesticide products will be made on occasion to make sure any future introduction of roach activity can be addressed pro-actively.
- Repellant products also serve an important role in maintaining a facility. They can be used proactively to prevent any new roaches which may be introduced over time from being able to enter conducive areas for survival, making them uninhabitable.

In short, German Roach control is a process. Regardless of the infestation level, eliminating them completely takes time. It may also take time to determine how they get into the facility in the first place (deliveries, employees, vendors, from neighbors through common walls).

Thank you for taking the time to read this, thank you for choosing Horizon, and thank you for your understanding.

The Horizon Team.