Proposed
Product Charts

January 2022

Please Read These Instructions before Using This Guide

1. This is a guide showing some of the most common and/or most useful approved pesticides for common pests. These charts should guide the selection of products to treat specific pests. This is not a list of all approved pesticide products nor does it necessarily represent the best option for every pest situation (i.e., when more than one product is listed, the order in which they appear is not a ranking of their efficacy).
2. ALL MATERIALS MUST BE USED ACCORDING TO LABEL DIRECTIONS. For specific treatment instructions on where and how a particular pesticide should be applied, consult and follow the product label. Remember to wear all required personal protective equipment (PPE) and always review pesticide label precautionary statements and environmental restrictions.
3. Care must be taken not to contaminate food or food contact surfaces (including dishes, silverware, and/or storage cabinets). Items should be removed by the customer before treatment. Any food contact surfaces on which pesticides were applied must be washed by the customer before being used. This applies to both residential as well as commercial customers.
4. Consult your Branch Management, Region Service Manager, or Division Technical/Service Manager with questions or concerns regarding the use of any products prior to application, or for product-related questions regarding target pests not listed in this document. For additional information, contact the Rollins Technical Services Department at (404) 877-4607.

Pesticide Formulations

All pesticide formulations consist of two or more components: a biologically or chemically active portion called the active ingredient (AI) and an inactive portion called the inert ingredient(s). The AI is the part of a formulation that controls the pest while inert ingredients have little or no toxic effects. The inert ingredients can include a carrier (a solvent or mineral clay that 'carries' the active ingredient) and/or adjuvants such as spreaders, stickers/stabilizers, foaming (or de-foaming) agents, or other synergists. A synergist is an additive that helps make the active ingredient 'more active' against a pest. There are many different types of pesticide formulations with specific advantages and disadvantages. Some of the factors to consider when choosing a certain type of pesticide formulation include:

- The type of substrate to which the pesticide will be applied
  - (e.g., concrete, wood, soil, tiles, carpet)
- Potential exposure to non-target organisms
  - (e.g., humans, pets, other animals)
- Potential disturbance of the pesticide application area
  - (e.g., exposure to sunlight, high temperature, cleaning, removal)
- Type of application equipment
  - (e.g., hand held compression sprayer, duster, power sprayer, foam machine, backpack sprayer, bait station)
- Environmental safety
  - (e.g., chance for water runoff/erosion, proximity of wells and bodies of water, use of the area by humans and pets)

Types of Pesticide Formulations (followed by abbreviation in parentheses)

Aerosol (A)

Aerosols are usually liquid formulations of an AI and solvent in a ready-to-use product available in sealed pressurized containers. A's are very portable and easily stored, but there is risk of skin exposure, inhalation exposure or flammability. A's will rupture if punctured or overheated. It can be difficult to make direct application to target sites or pests without can attachments or injector tips. A's can be applied using crack and crevice, foam treatment, general surface spray, space treatment, spot (2 square feet or less), or ultra-low volume (ULV) methods. Applicators should wear gloves and consider respiratory protection when using.

Bait (B)

Baits are a formulation of a pesticide designed to be eaten or swallowed, are generally marketed as ready-to-use and can be dispensed as a dust, granular, pellet or a semi-liquid gel or liquid. B's usually contain different materials to make the formulation 'taste good' to the pest. Pesticide baits can be contained within a specially designed station or come in a ready-to-use device for directed application that are intended to reduce the chance of non-target exposure. B's are typically easy to apply. However, they must compete with other available foods and can be attractive to humans or domestic animals. B's can be applied using bait placement, broadcast, crack and crevice, placement, or void treatment methods. Applicators should wear gloves and ensure placements are not accessible to non-targets.

Capsulated Suspension or Microencapsulated (CS or ME)

Microencapsulated formulations are composed of a liquid or dry pesticide AI covered in a plastic coating. These are mixed with water and used in the same way as other liquid formulations. After application, the plastic coating slowly breaks down and releases the active ingredient(s). Due to a slower release of the active ingredient, these pesticides are often more effective over a longer period of time. There is usually less odor and fewer hazards to the skin than other formulations. However, CS/ME formulations may pose increased hazards to bees. These formulations can be applied by crack and crevice, foam treatment, general surface spray, mist application, space treatment, spot (2 square feet or less), or void treatment.

Dusts (D)

Dusts are ready to use and typically contain less than 10% AI by weight. These require no mixing and are often used when moisture from a liquid application might cause damage. They are effective in hard to reach indoor areas and are easy to apply. However they can drift off target and are easily moved by air and water. However, certain dust products (boric acid-based and desiccants) can be mixed in solution and applied. Dry D's do not adhere to surfaces easily and it can be difficult to get even distribution when applying. D's can be applied by crack and crevice, foam treatment, and void treatment.

Emulsifiable Concentrate (EC)

Emulsifiable concentrates are a liquid formulation consisting of a pesticide mixed with a solvent and an emulsifier (e.g., detergent like material that aids in pesticide suspension). EC's, when mixed, appear milky. EC's will remain mixed for hours with moderate agitation as the detergent prevents the AI from settling out of the tank mix. EC's are easy to mix, won't clog application equipment screens or nozzles, and typically leave no visible residue on treated surfaces. This formulation contains solvents which makes it easily absorbed through skin of humans or animals (Follow label PPE requirements!) as well as by porous surfaces., This formulation type may also damage application equipment if left in equipment overnight, discolor painted finishes, or harm plants. EC's can be applied using crack and crevice, foam application, general surface spray, or spot (2 square feet or less) methods.

Flowables (F)

A flowable formulation combines many of the characteristics of EC's and wettable powders. Manufacturers use these formulations when the AI is a solid that does not dissolve in either water or oil. The active ingredient, impregnated on a substance such as clay, is ground to a very fine powder. The powder is then suspended in a small amount of liquid. The resulting liquid product is quite thick. They require moderate agitation to keep them in suspension and leave visible residues similar to those of wettable powders. F's are easy to handle and apply. Always shake them thoroughly before pouring and mixing. F's can be applied using crack and crevice, general surface spray, mist application, or spot (2 square feet or less) methods. Applicators should wear gloves when mixing or applying.

Granule (G)
Granular pesticides are dry formulations with particle sizes that are not uniform and much larger than dust. G formulations must be kept dry until application. G's act as contact insecticides and are not intended to be eaten by the target pest. G's are designed to absorb moisture and slowly release the AI; however, heavy rains after application can shorten the residual life of this type of pesticide formulation. Just the same, dry conditions will not allow G's to release the pesticide. G's are pre-mixed and have a low drift hazard due to their large particle size. Particle size can affect the ability for uniform application. G's can be applied using broadcast method. Applicators should wear gloves and ensure that G's are not dispersed into water sources unless labeled for that application.

Ready-To-Use (RTU)
Ready-To-Use pesticides are pre-mixed liquid pesticide products. They contain a single or number of AI's and a dilution agent (typically either a solvent or water based solution). RTU products require no further dilution and often contain less than 1% AI. RTU application methods include: crack and crevice, general surface spray, space treatment, spot treatment (2 square feet or less), and void treatment. PPE requirements will be product specific and depend on the type of dilution agent in the RTU product.

Suspension Concentrate (SC)
Suspension concentrates contain tiny particles of AI suspended in a liquid (usually water). For AI's that are denser than water (most are), suspension agents are added to prevent the solid AI from settling in the packaged product. SC's allow products previously available as dry formulations (e.g. D or wettable powders) to be in liquid form, further reducing applicator safety issues associated with them. SC's are typically easy to use and provide long residual activity. However, SC's are prone to settling to the bottom of tank-mix solutions and agitation is often required. Additionally, SC's in solution are often quite foamy (many SC formulated products already contain de-foaming agents in their inert ingredients) and may leave a visible residue on surfaces (test a small section first before spraying an entire area). SC formulations can be applied by crack and crevice, foam treatment, general surface spray, space treatment, spot (2 square feet or less), or void treatment.

Water Soluble Granules (WSG)
Water soluble granules dissolve readily when mixed with water and form a true solution. After they are mixed, no additional agitation is necessary. These have the advantages of wettable powders but less inhalation hazard due to being a granule instead of a dust. There is usually a high amount of AI by weight (up to 95%). When used, much of the pesticide remains on the surface of treated porous materials such as concrete and untreated wood. WSG's can be applied by crack and crevice, general surface spray, space treatment, spot (2 square feet or less), or void treatment.

Wettable Powder (W or WP)
Wettable powders are a dry formulation that has the AI attached to a dust-like (powder) particle. A wetting agent is added to the powder so it can be mixed with water prior to application. The wetting agent increases the ability of the powder to mix with water to form a suspension. A suspension means that the WP stays suspended (floating/sinking) in the dilution. This formulation remains on the surface of porous materials. WP's typically have low toxicity to plants and are not readily absorbed by the skin of humans or domestic animals. WP's require frequent agitation to keep the powder from settling to the bottom of the tank and can leave a visible residue on dark surfaces. WP's can be applied using crack and crevice, foam treatment, general surface spray, or spot (2 square feet or less) methods. Applicators should wear gloves and respiratory protection (when mixing).

Ultra-Low Volume (ULV)
Ultra-low volume formulations contain a concentrated form of the AI in a carrier or solvent (e.g. water or oil-based concentrates). ULV formulations require special application equipment (typically a gasoline or electric fogger). They are applied at very low volumes usually outdoors or in limited indoor settings as a contact insecticide. ULV application methods include fogging and space treatments. ULV treatments provide quick knockdowns and leave little visible residue on treated surfaces. Oil-based ULV products contain solvents that may damage plastics/rubber, wire-insulation, or sprayer-parts and are also readily absorbed through the skin of animals and into porous surfaces. ULV application equipment calibration and application must be carefully conducted because of the high concentration of active ingredient. Applicators applying ULV formulations should wear all label-required PPE including respiratory protection due to the significant risk of inhalation exposure.

Ants

Ants are social insects. Foraging individuals will be seen but the majority of individuals will be in the colony nest. As such, treatments must address the main colony, not just foraging adults. Find and treat the main colony if at all possible. Baits are a great option because the foraging adults will bring the product back and distribute it throughout the colony. Each different species of ant has different feeding preferences and nesting locations which may change over the course of the year. Correct identification of the ant species is necessary to pick the most effective bait or chemical treatment.

Examples include: Argentine, acrobat, carpenter, crazy/tawny crazy, odorous house, pavement, etc.

Product Type	Formulation	Recommended Product Choices
Liquid sprays	WSG	Arilon
	WSG	Alpine WSG
	SC	Phantom Termiticide Insecticide
	SC	Termidor SC Termiticide Insecticide
	WP	Transport GHP
	F	Talstar Professional
	SC	Temprid FX
Dusts	D	Alpine D Dust Insecticide
	D	BorActin
	D	DeltaDust
	D	Drione
Baits/Granules	B	Advance Baits (Gel, Granular, Station)
	B	Advion Ant Bait Arena/Gel
	B	Intice Baits (Gel, Granular, Station)
	B	Maxforce Baits (Gel, Granular, Station)
	G	Talstar PL Granular
	G	Taurus Trio G
RTUs	A	Phantom II Pressurized Insecticide

Bed Bugs

Bed bugs are parasites on humans and feed on human blood. When not feeding, they are hiding in cracks, crevices, mattress seams or folds, or other concealed areas near a potential host. Bed bugs are frequently found around areas where people rest (beds, couches, chairs, etc.) but can be found nearly anywhere (because they can be hitchhikers on humans as they move from place to place). It's important to inspect thoroughly to find all areas bed bugs may be harbored in and treat accordingly.

Product Type	Formulation	Recommended Product Choices
Liquid sprays	SC	Phantom Termiticide Insecticide
	WP	Transport GHP
	SC	Temprid FX
Dusts	D	Cimexa
	D	Drione
RTUs	A	Bedlam Insecticide
	A	PT Phantom II Pressurized Insecticide
	A	PT Alpine Flea and Bed Bug Aerosol
	RTU - Liquid	Sterifab

Cockroaches

Cockroach management requires thorough inspection, sanitation, exclusion, and monitoring. Inspection and monitoring of populations will help find hotspots and sanitation issues that must be addressed. IGRs are very important for long term reductions in areas with chronic sanitation issues. Baits are often the first choice because a single cockroach can transfer the product back to harborage spots thereby impacting many other individuals. Correct identification of the cockroach species will lead to a better understanding of feeding behavior, likely harborage areas, and more effective control.

Examples include: German, American, Oriental, brown banded, woods, etc.

Product Type	Formulation	Recommended Product Choices
Liquid sprays	WSG	Alpine WSG
	SC	Phantom Termiticide Insecticide
	CS/ME	Onslaught
	SC	Temprid FX
	WP	Transport GHP
	F	Talstar Professional
Dusts	D	Alpine D Dust Insecticide
	D	BorActin
	D	Cimexa
	D	Drione
Baits/Granules	B	Advion Cockroach Bait Arena/Gel
	B	Alpine Cockroach Gel Bait
	B	Avert Dry Flowable Cockroach Bait
	B	Intice 10 Perimeter Bait
	B	MaxForce Baits (Bait Arena,Gel, Granular)
	B	Talstar PL Granular
	B	Vendetta Plus Cockroach Gel Bait
ULV Space Treatment	ULV	Pyrocide 100/300
	ULV	ULD BP 100/300
IGRs	EC	Gentrol IGR Concentrate
	EC	NyGuard IGR Concentrate
	EC	Tekko Pro IGR Concentrate
RTUs	RTU - Device	Gentrol Point Source
	A	PT Phantom II Pressurized Insecticide

Fabric Pests

These pests are developing and feeding on some type of animal based product such as wool, hides, or taxidermy specimens. Identification and elimination of the infested item are keys to stopping the spread of these insects. Monitoring with pheromone traps will help to pinpoint infestation areas.

Examples include: carpet beetles, clothes moths, etc.

Product Type	Formulation	Recommended Product Choices
Liquid sprays	CS/ME	Demand CS
	SC	Temprid FX
	WP	Transport GHP
Dusts	D	Cimexa
	D	DeltaDust
ULV Space Treatment	ULV	Pyrocide 100/300
	ULV	ULD BP 100/300
IGRs	EC	Nyguard IGR Concentrate
	EC	Tekko Pro IGR Concentrate

Fleas and Ticks

Fleas and ticks can be found outside and inside and are commonly transferred by pets. Outside treatments may reduce overall populations but inside treatments may be necessary. Never treat animals and refer pet owners to veterinarians for that treatment.

Examples include: cat fleas, dog ticks, deer ticks, lone star ticks, etc.

Product Type	Formulation	Recommended Product Choices
Liquid sprays	CS/ME	Demand CS
	CS/ME	Onslaught
	SC	Tempo SC Ultra
	F	Talstar Professional
Dusts	D	Cimexa
	D	DeltaDust
IGRs	EC	Nyguard IGR Concentrate
	EC	Precor IGR Concentrate
	EC	Tekko Pro IGR Concentrate
RTUs	A	Bedlam Insecticide
	A	Precor 2625 Premise Spray
	A	PT Alpine Flea and Bed Bug Aerosol

Flies

Large flies and small flies differ significantly in habitat preference, but their presence in an area is most often associated with a sanitation issue. Eliminating that issue is the first step, followed by chemical product application, if necessary. Work with the customer to find the source and eliminate or reduce it. Check all openings (windows, doors, etc.) to prevent outside issues from moving inside the structure. Insect light traps and glue boards should be utilized to monitor treatment efficacy and further reduce populations.

Examples include: blow/bottle, flesh, house, fruit, fungus (gnat), moth (drain), phorid, etc.

Product Type	Formulation	Recommended Product Choices
Liquid sprays	WSG	Alpine WSG
	CS/ME	Demand CS
	F	Talstar Professional
	SC	Tempo SC Ultra
	WP	Transport GHP
Dusts	D	BorActin
	D	Nibor-D
Baits/Granules	G	Starbar Golden Malrin Fly Bait
	G	MaxForce Fly Spot Bait
	G	MaxForce Granular Fly Bait
ULV Space Treatment	ULV	Pyrocide 100/300
	ULV	ULD BP 100/300
IGRs	EC	Nyguard IGR Concentrate
	EC	Tekko Pro IGR Concentrate
RTUs	A	PT Alpine Pressurized Fly Bait
	A	PT 565 Plus XLO Formula 2

Mosquitoes

Mosquitoes breed in wet environments. Standing water should be eliminated if possible. Treatment for immature stages relies primarily on either granule or pellet (BTI based or IGRs) applied to the water source. The most common treatment for adults is residual spray to potential resting areas (over grown foliage, dark shaded areas, etc.). Ultra-low volume (ULV) applications may sometimes be performed. Refer to the mosquito service guidelines for specific information.

Product Type	Formulation	Recommended Product Choices
Liquid sprays	CS/ME	Demand CS
	CS/ME	Onslaught FastCap
	F	Talstar Professional
Baits/Granules	G	FourStar BTI CRG
ULV/Space Treatment	A	PT Pro-Control Plus Aerosol
	ULV	Pyrocide 100/300
IGRs	G	Altosid Pellets WSP
	G	Altosid Pro-G

Occasional Invaders

Occasional invaders are often a seasonal issue and will emerge with the onset of a certain time of year. These are outside issues but will build up in high numbers and enter structures. While causing little to no damage, they are a nuisance. Every effort should be made to exclude them from entering structures by checking and sealing all openings (doors, windows, etc.). Outside perimeter treatments are often helpful to deter individuals from being near the structure.

Examples include: boxelder bugs, clover mites, cluster flies, crickets, earwigs, ground beetles, millipedes, pill bugs, stink bugs, lady beetles, etc.

Product Type	Formulation	Recommended Product Choices
Liquid sprays	WSG	Alpine WSG
	CS/ME	Demand CS
	F	Talstar Professional
	SC	Temprid FX
	WP	Transport GHP
Dusts	D	BorActin
	D	Cimexa
	D	DeltaDust
	D	Drione Insecticide
Baits/Granules	B	InTice 10 Perimeter Bait
	G	Advion Insect Granule
	G	Talstar PL
	B	Maxforce Complete Granular Insect Bait
IGRs	EC	Nyguard IGR Concentrate
	EC	Tekko Pro IGR Concentrate
RTUs	A	PT Cy-Kick CS Pressurized Insecticide
	A	PT Phantom II Pressurized Insecticide

Pantry/Stored Product Insects

These insects will infest food, feed, and animal-based products. If infested product can be found, dispose of it immediately to prevent nearby products from becoming infested. Sanitation and exclusion are keys to reducing populations and preventing re-infestations. Extreme care should be taken when applying pesticides to ensure no contamination of food or food contact surfaces.

Examples include: flour beetles, warehouse beetles, cigarette beetles, Indian meal moths, weevils, etc.

Product Type	Formulation	Recommended Product Choices
Liquid sprays	CS/ME	Demand CS
	SC	Tempo SC Ultra
Dusts	D	Cimexa
	D	DeltaDust
Baits/Granules	B	Maxforce FC Magnum
ULV Space Treatment	ULV	Pyrocide 100/300
	ULV	Shockwave
	ULV	ULD BP 100/300
IGRs	RTU - Device	Cidetrak IMM
	EC	Gentrol IGR Concentrate
	EC	Nyguard IGR Concentrate
	EC	Tekko Pro IGR Concentrate
RTUs	A	PT Cy-Kick CS Pressurized Insecticide
	A	PT Tri-Die Pressurized Dust

Rodents (Mice and Rats)

Rodent baits must be applied in a locking, secured bait station. Bait stations should be strategically placed along rodent pathways for optimal results. Baits should be rotated on a regular basis (dependent upon service agreement, rodent pressure, environmental conditions, etc.), making sure to rotate the active ingredient. Non-toxic baits and lures may be helpful in identifying activity and enticing rodents to traps.

Product Type	Formulation	Recommended Product Choices
Block Baits	B	Contrac with Lumitrack
	B	Ditrac All Weather Blox
	B	Fastrac All Weather Blox
	B	Final All Weather Blox
	B	Terad 3 Blox
Soft Baits	B	Final Soft Bait with Lumitrack
	B	First Strike Soft Bait
Pellets	B	Contrac Bulk Pellets
Non-Toxic	B	Detex Blox with Lumitrack
	B	Provoke Mouse/Rat Attractant
Products for Other Species	B	Kaput D Pocket Gopher Bait
	B	PCQ Pro Pelleted Rodent Bait
	B	Talpirid Mole Bait
	B	Wilco Ground Squirrel Bait

Scorpions and Spiders

Though typically considered beneficial since they eat insects and other arthropods, scorpions and spiders can invade structures. Check all exclusion points to ensure they cannot gain entry into structures. Outside perimeter treatments are beneficial in helping keep them away from structures. Sanitation (keeping the outside clean, neat, and debris-free) will ensure smaller outside populations. Spider webs should be removed with a Webster.

Product Type	Formulation	Recommended Product Choices
Liquid sprays	CS/ME	Demand CS
	EC	EcoVia EC
	CS/ME	Onslaught FastCap
	SC	Temprid FX
Dusts	D	Alpine D Dust Insecticide
	D	Drione Insecticide
Baits/Granules	G	Talstar PL Granular
RTUs	A	PT Tri-Die Pressurized Dust

Stinging Insects

It is important to find and treat the nest for full efficacy. Honey bees are of special concern due to being beneficial pollinators and chemical treatments are not recommended or might even be unlawful (consider contacting a local beekeeper to relocate the hive). Overall, populations can be reduced by cleaning up food sources so adults will forage elsewhere.

Examples include: bumblebee, carpenter bee, honey bee, hornets, paper wasps, yellow jackets, etc.

Product Type	Formulation	Recommended Product Choices
Liquid sprays	CS/ME	Demand CS
	SC	Tempo SC Ultra
	F	Talstar Professional
	WP	Tempo Ultra WP
Dusts	D	Alpine D Dust Insecticide
	D	DeltaDust
	D	Tempo 1% Dust
RTUs	A	PT Wasp Freeze II

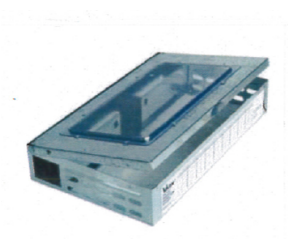
Orkin Vendor Business Partners – Made In America

Orkin is proud to use equipment and products that are Made In America.

Equipment List & Manufacturers Information*

B &G Equipment Company 135 Region South Drive Jackson, GA 30233 678-688-5601 **Equipment** **Backpack Sprayers** **HandHeld Sprayers** **Primeline Sprayers**	**Bell Laboratories** 3699 Kinsman Blvd. Madison, WI 53704 608-241-020 **Equipment** **Outdoor Rodent Stations** **Glueboards**
Farnham Companies, Inc. 301 West Osborn Phoenix, AZ 85013 800-234-2269 **Equipment** **Fly Bait Stations**	**Gardner Insect Control** 100 Industrial Drive Horicon, WI 53032 920-485-0139 **Equipment** **Insect Light Traps** **Insect Electrocutors**
Victor Pest (Woodstream Corp.) 69 North Locust Street Litiz, PA 17543 800-800-1819 **Equipment** **Tincats** **Snaptraps** **Glueboards**	**Bayer Environmental Science AG** 95 Chestnut Road Montvale, NJ 07645 201-307-9700 **Equipment** **MaxForce Bait Stations**

**Per information from the manufacturers, their websites and product labels, the equipment and products listed and used by Orkin, LLC are manufactured in the United States.*



Sentricon Baiting System Information

KEY BENEFITS OF SENTRICON

Using scientific information about termite behavior, the Sentricon System eliminates the queen and her colony by ending the food chain they need for survival. With the proven power to wipe out future house-hungry termite generations, Sentricon gives you complete termite protection.

- **The results are in: Sentricon works**. U.S. Department of Agriculture (USDA) Forest Service field tests plus research conducted by 30 universities and external researchers have independently produced evidence showing Sentricon eliminates termite colonies.
- **Sentricon is the no-hassle approach** to property protection. With Sentricon there's no structural drilling, trenching or pumping. And you don't have to deal with hundreds or even thousands of gallons of chemical solution.
- **Considerate of the environment and human health.** The original Sentricon® System is the only termite product to receive the Presidential Green Chemistry Award from the U.S. Environmental Protection Agency (EPA). So you, your residents and workers have even more peace of mind.
- **Strong protection. Low risk.** The active ingredient used in the Sentricon System was the first pesticide registered under the EPA's Reduced Risk Pesticide Initiative.
- **Immediate protection against termites.** Sentricon with Always Active™ technology means all stations are baited and start working from Day One.

HOW SENTRICON WORKS

1 Stations are placed around the structure in the ground and, if necessary, Recruit AG termite bait stations are installed above ground inside. Sentricon even can be installed below concrete surfaces using a proven coring technique. The bait is available to begin working immediately.

2 Termites prefer Recruit HD, the bait used in Sentricon, nearly 10 times more than wood. The active ingredient, noviflumuron, prevents termites from molting.

3 The termite colony is eliminated, including the queen. When termites can't molt, they die. When the colony dies, the queen dies.

4 With ongoing service from a Orkin Certified Sentricon Specialist, your property is always protected from termites year after year. A protective ring of Sentricon stations remains in place where new invasions of termites will find and feed on the bait.

Sentricon Baiting System Information

Termite Biology 101

Swarming termites and ants look similar and are easily misidentified. The clearest way to distinguish them is to examine the wings (C). Termite swarmers have two sets of wings of equal length. The front pair of wings on a swarmer ant is longer than the back pair. There are other distinguishing characteristics: An ant's waist (B) is narrower than a termite's. And ants have a joint in their antenna (A), while termites do not. But here's the biggest difference: Ants are usually just a nuisance. Termites damage your home.

WORKERS

Workers make up the overwhelming majority of the colony because they are responsible for feeding it, including the queen. These soft-bodied, clear to light-colored termites are about the size of grains of rice. They rarely leave the dark, damp tunnels that run from the colony through the soil and into the wood of buildings. Workers continuously forage for food, maintain the nest and tend to the queen and her brood.

SOLDIERS

Soldiers are the defenders of the colony. They have long heads and powerful jaws, and are responsible for colony defense against natural termite enemies such as ants.

REPRODUCTIVE PAIRS (SWARMERS)

Male and female reproductive termites develop wings, leave the parent colony in a swarm, mate and start new colonies.

THE QUEEN

Hail to the queen! She is the largest and most important colony member because she can lay eggs at a rate of one every second — as many as a million eggs in her lifetime. She is large, up to 4 inches long, and can live for a decade or longer under ideal conditions. If she dies, a new queen will arise to take her place and keep the colony going.

Signs of Termites

Termites often swarm in warmer weather and after a rain shower to start new colonies. The swarming event can be brief, so even if you do not see flying termites, you are likely to see the discarded wings around window sills, doors, heating vents, bathtubs and sinks after a swarm takes place. Termite swarmers use their wings to move away from their original colony. Their wings break off and they pair up and find locations with a wood source where the male and female can begin a new colony.

Sentricon Baiting System Information

MUD TUBES

Foraging worker termites, the ones that eat wood to feed the rest of the colony, must stay in moist conditions and away from natural enemies like ants. To get across barriers between the soil and the wood above, termites construct small, meandering “mud” tubes from moist soil and excrement. The tubes are about the diameter of a pencil, though they can become wider. Tubes can be seen on foundation walls or inside walls, on plumbing pipes and spanning crawl spaces between the ground and the subfloor.

DAMAGING WOOD

Termites eat wood from the inside out along the grain, so damage often isn’t visible until it becomes significant. Termite inspectors often will tap to listen for hollow-sounding wall studs, baseboards and floors. If the wood gives way, it may reveal a hollowed-out honeycomb pattern. The wood also will include some “mud” similar to mud tubes, plus live termites.

Formosan termites are an especially robust, destructive species with large colonies. Walls of infested buildings may contain carton nests that hold enough moisture to allow the colony to live entirely above ground, sometimes causing bulging walls.

LIVE INSECTS

When building or remodeling in your home, keep an eye out for soft-bodied, light-colored insects about the size of a grain of rice. Termites avoid light, so they are seldom visible in open areas.

Orkin Sentricon Treatment Plan

Termite baits can be deployed as a stand- alone system with no additional pesticides used for control /prevention of termite infestations and can be used in the most sensitive of situations. Baits, however do not work if they are installed but not maintained and/or forgotten. It's important to maintain the renewals to ensure diligent monitoring and surveillance by Orkin professionals.

Identify and inspect location of indoor and outdoor critical areas known to be favored by termites including, but not limited to:

- Foundation penetrated by utility service: gas, electric, water, drains, etc.
- Settlement (shrinkage) cracks
- Expansion joints
- Plumbing inspection access (bath traps) - install if not already installed
- Interior raised slab expansion joints
- Adjoining slabs
- Interior step down slab expansion joints
- Addition to main structure foundation walls and expansion joints
- Form boards
- Wood support timber in crawl space
- Wood-to-ground contact in crawl space
- Cellulose debris on ground in crawl space
- Leaking water faucets
- Sunken window wells
- Poorly drained or constantly moist areas in landscape around the structure
- Fence post – (attached to structure)
- Tree stumps
- Mulched areas - Bark chips, straw, leaves, wood chips
- Air conditioner evaporation drain lines
- Exterior planter boxes
- Wood to ground contacts
- Dead tree roots
- Dead plants
- Shrubbery close to the structure-minimum 12 inches

- Orkin will start at the right of the front door and work in a counter clockwise pattern and will use a gas-powered auger and/or a manual auger to dig holes between 35 – 40 holes 10" - 12" in depth to house the Sentricon bait stations.
  - In areas where soil access is restricted due to concrete, asphalt, etc., coring of the restricting membrane must be completed to ensure label compliance with station installation requirements.
  - In these situations ONLY, coring may be done at an extended spacing distance, but not to exceed label directions.
  - Place the stations in areas conducive to termite activity, in proximity to the structure:

- Away from foundation wall
- One foot outside the roof overhang
- Close to the drip line
- Moist soil in shaded area
- Irrigation sprinkler heads
- Roof downspouts
- Planting beds or other areas with plant root systems

- The bait stations will contain the active ingredient, Recruit HD- hexaflumuron.
  - Hexaflumuron is a slow acting insect growth regulator, which disrupts the molting process in termites. Due to the time interval between molts, death occurs about 1-2 months after the baits are ingested. This technology was developed and continues to be modified by Dow, to increase the efficiency and effectiveness.

- Holes will be dug 10 to 12 feet apart around the perimeter of the building; approximately 10-12 inches from the foundation.

- The bait stations containing the Recruit HD bait will be placed in the holes and Numbered with a permanent black magic marker /placed on a graph for easy identification and reporting
  - The bait stations will be placed ground level
  - Using a paint stick or laundry marker, make a small mark on the foundation wall near ground level. Install the station directly in line with the mark on the foundation
  - Identify infestations, or suspected infestations, inside the structure, and install a monitoring station on the exterior of the structure, as close as possible to the infested area

- Orkin branch management will inspect the site within 30 days of the installation to ensure the stations have all been installed and working properly.

- An Orkin Service Technician will check the baits annually (1 time per year) and replace what is damaged and/or consumed by the termites. Orkin will replace / repair any stations that have been damaged by weather or other means.

- Orkin will perform an interior and exterior visual property inspection (at the time of the annual bait station inspection).

With baits, ongoing monitoring is crucial because no long term residual pesticide is in place when baiting is discontinued. Originally Sentricon stations were monitored quarterly but due to advances and more durable baits, the inspections have been moved to once per year.