

## How to Prevent Termite Intrusion

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## **How to Prevent Termite Intrusion**

**Learn the Useful Information Needed To Identify  
Termites and Realize If You Have an Infestation**

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## **Introduction**

### **“IT’S AN INVASION! EVERYBODY RUN!”**

A long time ago, Orson Welles struck fear into the heart of many people with those very words when he aired the radio program “War of the Worlds”. He had people believing that our world was being invaded by aliens and we were set for sure destruction.

In this book, however, the invasion is by a far more frightening invader than aliens. In this book, we’re talking about ---- TERMITES! Just as with “War of the Worlds”, termites can cause destruction, but the breakdown that termites can cause is far worse than anything any fictional aliens can do because termites are real!

Termites are living, breathing, eating annoyances that every home or building owner should be worried about. They can make their way into your structure and cause devastation before you even realize its happening. That’s why, if you own property with a structure on it, you need to be diligent about termites.

You should know what they look like, what kind of damage they can inflict, and what you can do to keep them from taking over your home. I am a property owner, and, before writing this book, never really gave a second thought to termite infestation.

Now, I am constantly outside looking at the foundation of my home, in the basement inspecting the rafters, and in the yard looking for places where these little scavengers can live.

Many people are just like me – they don’t really think about termites unless they are buying a new home that requires a termite inspection. After the home is

declared termite free, the home owner puts the thought of an infestation out of his or her mind and goes about life with no thought to a possible visit from these little creatures.

The truth is that you can have an infestation of termites even when your house has been declared termite free. There are a lot of reasons for this which we will get into inside the pages of this book.

Even though someone has said “You have no termites” doesn’t mean you never will which is why you need to always be aware of how to find termites and know what to do to make them go away and stay away!

Of course, you always hear the advice that you should educate yourself, and nothing could be further from the truth. When you take the time to get to know the common termite as well as know what type of damage that termite can do, you are taking the first step toward protecting your home or building. You can never have too much education for termite control that will protect your investment!

So what we are going to do with this book is give you a crash course in termites. We’ll show you what they look like, educate you on how they live, show you what to look for when inspecting for damage, and what to do if you think you have termites.

Don’t worry if you think there’s an invasion! The aliens aren’t coming. They’re just termites. And they can be controlled. So let’s begin our journey into the world of termites – as disgusting as they are!

## **Chapter 1 - What Are Termites?**

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In the basic definition, termites are small, burrowing insects that eat wood – especially damp wood – and resemble small white ants. But there's so much more than that! In actuality, termites are social creatures – just like we are – that live with a specific social order to take care of the colony that they live in.

That's right – there are actually levels of termite hierarchy, just like in human life. Because they are social insects, this type of setup works best for them because they don't possess the same skills that we humans do in order to get things done. But, get things done, they certainly do!

There are basically five levels of termites: the worker, the soldier, the reproductive, the king, and the queen. Each distinctive level has its own duties when it comes to the colony. Termites have long been referred to as “little white ants”, and there are a few – very few – similarities between the two species.

Ants also live in colonies with each level performing specific functions within the community. They all work together to make sure that they all live in relative peace having food and protection. Not so unlike humans, right? But termites as well as ants can be damaging to our structures which is why we don't want them around.

That's why we need to better understand how the colonies work. When we understand this part of their living environment, we can better combat them. We are, of course, talking about termites – which is what this book is about.

Let's start with the worker termite. The worker termite is the lowest on the totem pole in the termite colony. They are the ones who put out the most effort with the least amount of appreciation and satisfaction in a job well done. It's a good thing

they aren't humans or there could be an uprising! It's especially good there's no little termite union demanding respect for the work they do!

Worker termites have soft, light-colored bodies rarely more than 10 mm long, like grains of rice. They rarely leave the dark tunnels that run from the colony through the soil and into the wooden frames of buildings. Twenty-four hours a day, they forage for food, maintain the nest, and tend the queen and her brood. Juveniles, called nymphs, groom and feed one another and others in the colony.

The worker termites are the ones that people most commonly refer to as "little white ants" as that is what they most closely resemble. Workers represent the majority of the colony population and are responsible for caring for eggs, constructing and maintaining tunnels, foraging for food and feeding and grooming of other caste members.

Worker termites are usually seen when a piece of infested wood is broken, exposing the termites. When exposed to light, you will notice that the insects quickly run for cover. They instinctively know that heat and sunlight are enemies.

Now is where the not so great part comes – we're going to show you a picture. Please be advised that the worker termite is not an attractive part of nature. However, you should know what they look like. So be prepared.....

Here it comes.....





EWWW, right? Well, I guess if you are a termite fan, it's not such a horrible visual image, but for the average person like me, this picture just sends chills up my spine thinking of them being in my home!

But then we move up to the next level of the termite colony – the soldier termites. Soldier termites are the defenders of the colony – especially from ants that can come in and destroy the colony.

Soldier termites have an orange colored rectangular armored head with mandibulate pinchers which they use to crush member of the ant family - their arch enemy in the insect world.

The Western subterranean termite soldier has a fontanelle (frontal gland pore or hole) on their forehead used to squirt a white sticky latex substance, mainly as a defense mechanism against ants.

The soldier termite is usually the first to be seen in large numbers when any active termite workings (mud shelter tubes or damaged timber) are opened. Soldier termites will rush out to guard the opening while worker termites repair the breach.

Here is a picture of a soldier termite:



The next level of termites in the colony would be the termite alarm swarmers and are also known as the reproductives. They are commonly seen when they swarm during daylight; they have eyes; are poor fliers but are swept along by the wind. They land, drop their wings, and find a mate to become king and queen of a new termite colony.

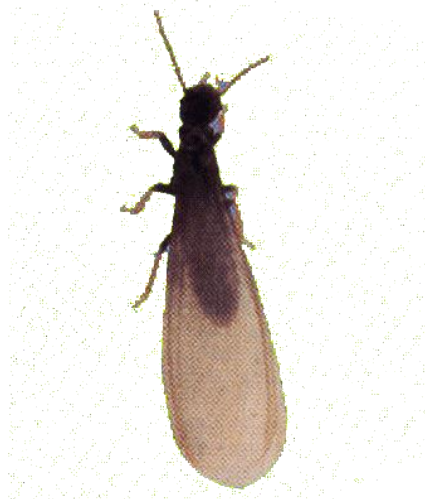
The western subterranean termite swarmers are about 3/8" long (including wings) with a dark brown body and a small fontanelle (frontal gland pore) on its head.

Their wings are brownish grey with two dark solid veins along the forefront of the front wings. The front wing is distinctly larger than hind wing.

In the northern part of their range, swarming takes place in the spring, but without rain. In the southern areas, swarming usually follows rain. The swarmers are emitted in their thousands when a mature termite nest is large and well established.

Western subterranean termites swarm in large numbers over a wide area to find a mate from another colony nest to start up a new colony. A suitable location for nesting should provide moisture and a readily available timber food source close by.

Here is what a typical swarmer termite looks like:



At the next level in the colony are the king termites. The King termite assists the queen in creating and attending to the colony during its initial formation. He will continue to mate throughout his life to help increase the colony size.

The King's body will range from 1/2" to 5/8" long and have two pairs of wings that are equal in size and shape that extend beyond their abdomen. The King termite



is slightly smaller than the queen in size and is usually darker in color on the abdomen.

Here is a picture of a King termite alongside with the Queen so you can compare the two:



The Queen is the “ruler” of the colony and was once a swarmer or reproductive termite. The Queen termite creates the colony by laying eggs and tending to the colony until enough workers and nymphs are produced to care for the colony. She can live for more than ten years and produce hundreds of eggs each year. Colonies can reach several million termites with the help of secondary queens who also produce eggs.

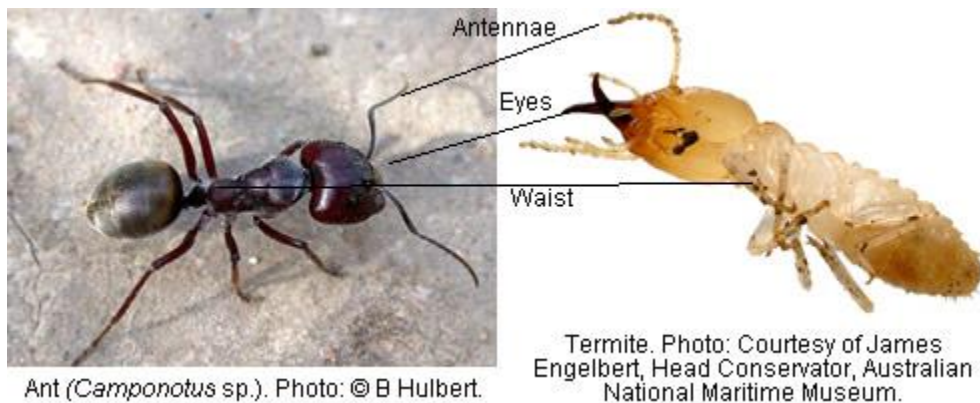
She is slightly longer in length than the King but will still measure somewhere between ½” and 5/8”. Her abdomen is lighter than the King’s and will usually be striped.

Since most people think of termites as small ants, we probably should tell you how to tell the difference between the two. Actually, ants and termites are quite different other than the fact that they are social animals. Here's how you can tell the difference between the two.

First, ants and termites both have antennae, but the ant's antennae are elbowed while the termite's antennae are a simple string of bead-like segments. Ants have eyes while termites do not.

Ants have a waist that falls between the thorax and the abdomen while termites do not. The termite's abdomen is blunt at the end, but in an ant, the abdomen is pointed at the end.

Here's a picture of an ant and a termite side by side so that you can see the differences first hand:



There are basically two types of termite groups: Ground termites and Drywood termites. While they are essentially similar, there are still some big differences. Let's explore them next.

## **Chapter 2 - Ground and Drywood Termites**

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Most people just think a termite is a termite. However, that isn't true. The two types of termites are ground and drywood. Some of their characteristics are similar and some are different. Let's compare the two:

	<b>Drywood Termites</b>	<b>Ground Termites</b>
<b>Food</b>	Cellulose (derived from wood and wood based products)	Cellulose (derived from wood and wood based products)
<b>Moisture</b>	No outside moisture needed. Can survive on a small amount of moisture within wood.	Require an outside moisture source. This may be from the soil, leaky plumbing, roof tops, etc...
<b>Environment</b>	Colonies live within the wood and do not require contact with the soil.	Normally live and forage in the soil. Can establish a nest above the soil if an acceptable moisture source is found. Build protective mud tubes that lead from the soil to the home. Can move colony within soil when environmental conditions require.
<b>Colony Size</b>	SMALL (few hundred to a thousand termite members.)	LARGE (A well established colony may contain over 7 million termites. Some species have numerous smaller colonies of several thousand termite members.)
<b>Evidence of Activity</b>	"Sand-Like" pellets or "droppings". Kick-out holes on the walls, ceilings or wood. Infestation may take two years before evidence of droppings is present.	1) Mud Tubes ascending from the ground to the structure or protruding from walls and/or trim. 2) Heavy termite swarming within the structure 3) Slits in the wood (flight slits)

		4) Uncharacteristic waviness in the wood.
<b>Preventative Measures</b>	1) Use treated lumber during construction. 2) Coat any untreated wood or exposed wood end cuts with an appropriate termiticide. 3) Seal all cracks and crevices with caulking.	1) Install a termite monitoring or detection system at the home or structure. 2) Perform treatment to the soil before construction with an appropriate termiticide. 3) Eliminate conditions conducive to infestation.
<b>Control Measures</b>	Light Activity: 1) locate kick-out holes 2) lightly puncture kick-out hole 3) inject appropriate insecticide in kick-out hole. 4) Seal kick-out hole with caulk.  Heavy Activity: Tent fumigation	<b>**Prevention through education, detection and elimination of conducive conditions are the most effective and cost efficient control measures. When activity is already present, treat the structure with a liquid termiticide.</b>
<b>Damage Level</b>	Minimal* * When compared to subterranean (ground) termites. Takes up to two years for evidence of activity to be present.	Some species of subterranean termites can consume 15 pounds of wood per week.

As you can see from the above table, ground termites are the ones that you really don't want to have infesting your home. Of course, ideally, you want NO termites in your home, but ground termites will cause the most amount of damage in the least amount of time. Remember that some species can eat as much as 15 pounds of wood per week!

At the surface ground termites create mud tubes from the soil to wooden portions of a structure. These tubes provide a protective "highway" for termites to attack your home.

Other less obvious access points include:

- through construction joints
- through retaining wall joints and cracks
- through floor cracks over 1/16th"
- through plumbing, electrical, or other slab penetrations

Ground termites can create secondary nests above the ground called "aerial colonies". These independent nests may survive independently of the ground if a water source is available. Common interior water sources include; roof leaks, plumbing leaks, leaky showers or tubs, toilet leaks, etc... Aerial infestations must be located for effective control.

Because of dehydration, ground termites die rather quickly when exposed to the environment due to their thin exoskeleton. To maintain the needed humidity and protect them from predators they build protective mud tubes and remain unseen most of the time.

These pests also produce a chemical odor called a pheromone, which other termites, in the colony follow to find food and water.

We spoke earlier about where ground termites live. They construct mud tubes to live in, and many of those tubes can be quite impressive. These tubes extend over foundation walls, support piers, sill plates, floor joists, etc. They can also stand alone. The mud tubes are typically about the diameter of a pencil, but sometimes can be thicker and much, much larger.

Termites construct these tubes for shelter as they travel between their underground colonies and the structure. To help determine if an infestation is



active, the tubes may be broken open and checked for the presence of small, creamy-white worker termites.

If a tube happens to be vacant, it does not necessarily mean that the infestation is inactive; termites often abandon sections of tube while foraging elsewhere in the structure. But if you do find mud tubes, you probably have termites.

This is what a typical termite mud tube will look like around your home:



In some places of the world, termite mud tubes are quite large and amazing structures. Check out some of these gigantic mud tubes:



Cathedral Mounds in Australia



A field of mounds also in Australia



More cathedral mounds in Northern Africa

So, you know that if you have mud tubes present around your foundation or even on your walls, chances are very good that you have termites. But what else should you look for when trying to determine if you have termites?

## **Chapter 3 - How to Detect Termites**

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Besides the obvious presence of small ant-like insects or flying swarmers, you can look around your home to try and find out if termites have taken up residence with you in your home or building.

Basically, termites are discovered by property owners in one of three ways. First, when a colony swarms in the first warm part of early spring, winged adults can be seen on the inside or outside of a building moving toward the light, a window, or other lit opening.

Second, as we have already said, termites build mud tubes to travel between the ground and a structure. These mud tubes can often be found on the outside of a slab between the earth and brick line, or on piers which form the foundation of a building.

Finally, because termites like to eat the paper surface of sheetrock, pin holes are left behind when sheetrock has been damaged. There also will be some tubes in the wood indicating that termites have been eating through the wood and making their way from one side of the area to the other.

You will probably rarely see any actual termites because they tend to avoid light and open air spaces. The tunnels give them the ability to go virtually undetected while reaching their food source, wood. Therefore, destruction can be "undetected" as well.

There are a few ways that termites can infest buildings. Since they like to eat damp, cellulose such as is found in wood and leaves, they will stick to where their food sources are most abundant. Your structure is probably framed in wood,

but they also like drywall as well. Here are some places that allow termites to come into your home:

- Wood to ground contact
- Foundation cracks
- Debris beneath the house
- Uneven drainage
- Joints between porches and foundations
- Pipes and the insulation around them

If there is any area of your home where water has accumulated, chances are good that termites are going to be in that area. We'll talk about prevention later on, but just about the only way you can tell on your own if you have termites is to look for tell-tale signs that they may be around.

While we have already described the damage, you might be better served with some visuals to help you identify termite damage.

Here is an example of termite damage to a floor joist. Note the burrowing tunnels as this is typically indicative of the presence of termites.





In the following picture, you will not only see the burrowing holes, but you can also see the pinpoint holes where the termites have entered the wood.



Here is another photo of some more extensive termite damage:



As you can see, the damage that termites can cause could be quite extensive. If the infestation is left to continue, it can cause thousands of dollars of damage to a structure and even completely destroy a home beyond repair.

You should also look for the following signs of possible termite infestation:

- Swarming insects during the day and often after rainfall
- Discarded wings on window sills or along walls
- Baseboards and floors that sound hollow when tapped
- Cracked or bubbling paint
- Mud tubes and mud protruding from cracks between boards, beams and/or foundation.

Because the evidence of termite damage cannot usually be seen by the naked eye or the untrained eye, you probably will want to employ the expertise of a professional to check for any evidence of termites and/or termite damage.

Usually, people find out they have termites when they go to buy or sell a home. Most realtors – at least responsible ones will insist on a termite inspection prior to

the closing. They will call in an experienced pest control company to perform the inspection and then report on the condition of the home.

You should consult with several different companies before obtaining and inspection and get price estimates before you choose a company. If you are getting a termite inspection for a home sale or purchase, the realtor will be able to suggest some firms, but you don't have to stick with the one that they want you to use.

Get several different price estimates and ask questions about credentials. The company and its inspectors should be members of professional organizations and be able to present you with proof of their certification. You will be spending money for an inspection, so you want someone you can trust.

A termite inspection is a visual inspection of the readily accessible areas of a home for evidence of wood-destroying insects (WDI) and wood-destroying organisms (WDO). The inspector will conduct the termite inspection by visually looking at the entire interior of a home (including accessing and entering any sub-space such as basements and crawlspaces) and exterior of the property.

In areas where drywood termites are prevalent, and in houses where there are no sub-areas, the attic may also be accessed and inspected during a termite inspection.

After the termite inspection has been performed, the findings are reported on the applicable/appropriate form. The average termite inspection takes approximately 30 to 45 minutes for a thorough inspection, depending on the size and conditions (e.g. clutter; storage of personal items, etc.) of the home and property.



You want your inspector to be thorough during the termite inspection and be able to identify any existing damage as well as check for any possible future damage, so be patient with them and take heed of any findings.

The inspector should be very thorough, and whoever you choose should be fully licensed, certified, and insured. He or she will present you with a thorough report on anything that they find on the appropriate forms.

They may also give you a suggested route of treatment or prevention depending on what they find. Since most termite inspectors work for pest control companies, they know how to most effectively treat the problem.

Once you get a termite inspection, it might be a good idea to get a second opinion – especially if the estimate is higher than you think it should be. There are a lot of companies and inspectors out there who will try to pad an estimate so that they can make more money off of treatment. That makes them fraudulent, and they are out there more than you can know.

Take a look at your original list of estimates and choose another company to come out and inspect the property. Of course, when you get a second opinion, you will have to pay for it too, but if you are looking at a huge treatment estimate, spending that extra couple of hundred dollars can be well worth the investment.

So you've found out that you have termites – now what? Well, aside from screaming in agony and crying your eyes out, first, get hold of your emotions and realize that this is not a problem that can't be solved. Now, you need to get treatment.

## **Chapter 4 - Treating For Termites**

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While you can try treating your house for termites yourself, you will probably want to leave it up to a professional so that you know it's done right. There are many pest control companies who specialize in termite eradication and control. Much like choosing a termite inspector, you want a company you can trust.

Again, ask for credentials and certifications. See if the company is a member of any pest control societies and organizations. Do they have recommendation letters from previous customers? If so, ask to see them. They'll probably be more than willing to whip them out for you. You can even take it a step further and call the Better Business Bureau to see if any complaints have been filed against the company.

You'll probably want to know what the company will do to get rid of your termite problem. The easy thing to do is just ask them for a complete explanation of their treatment methods. But we'll cover some of them in this section if, for nothing else, just general information so you know what they are talking about.

### **Tenting**

If you have a particularly bad termite problem, the exterminator may suggest that you have a tent fumigation done. This is for bad infestations that extend throughout the structure, and it is probably the most radical of all termite treatments.

With tent fumigation, you will be required to leave your home for a minimum of three days. The chemicals that the company uses are strong although they won't cause damage to anything in your home except for exposed food.

There are some preparations you will need to go through to get ready for the tenting. You may want to ask your pest control operator specifically what you need to do before they come, but here is a general list of guidelines:

- All food will need to be double bagged with special bags that are usually provided by the pest control company. You may want to remove foods packaged in plastic bags and cardboard boxes; items where the seal has been broken and items are stored in a resealed container; eggs, fruits and vegetables; opened bottled drinking water; and bags and opened cans of pet food and bird seed. You should also remove food from your refrigerator and freezer. A good rule of thumb is “When in doubt, take it out!”
- Items that don't need to be bagged or removed include unopened cans; cosmetics, such as lipsticks; unopened soda cans and glass bottles; shampoo, soaps and unopened toothpaste and mouthwash; and unopened bottles of liquor and wine (stored horizontally).
- All people, plants, and pets must be removed from the home.
- Medications not factory sealed should be removed from the home.
- Remove all mattresses enveloped with plastic covers such as baby mattresses, etc. or remove covers (except water beds). Unzip plastic covers over clothing.
- Some companies ask you to soak the soil outside the foundation of your home at least one foot away and remove all yard debris close to the foundation of the home.
- Advise your neighbors that your home is being fumigated so they can keep their pets away from your home.
- Turn off all air conditioners and furnaces and extinguish any pilot lights
- Vehicles including boats, motorcycles, RV's and lawn mowers must be removed from the garage and the property
- Access to all areas of the home must be made possible
- Exterior doors must be able to be locked
- Take with you any valuables such as jewelry and antiques

- All drawers and closets must be left open

Your fumigator may ask that other things be done prior to tenting, so be sure to ask them prior to the procedure. They will probably provide you with a sheet indicating they have advised you of the preparations.

They will also probably give you an information about the specific gas they will be using and ask you to sign a piece of paper that acknowledges you have been advised of all this.

The first day of fumigation, your home is covered with a tent or tarp. The idea of this is to make sure that the gas they use stays inside the structure and that all areas of the home will be treated with the gas. Here's what a tented home looks like on day 1:



After the home is covered with the tent, Vikane gas or some other type of chemical is sent inside the home and circulated with fans placed throughout the home. The purpose of the fans is to move the gas throughout the home so that all areas are covered and treated.

The property is then left alone for the gas to work through and kill the termites. Since Vikane is odorless, chloropicrin (tear gas) is added as a warning agent. Warning signs are also posted around the perimeter of the tent.

Day 2 is when the tent is removed from the home and the gas is released. All the windows and doors will be opened and the fans will still run so that all the gas is taken out of the structure.

In pure form, the gas can be lethal to breathe in, but when the home is aired out, the level of gas can be brought down to levels that have been found to cause no harm to animals or humans.

On the third day, the inspectors will come in with special measuring instruments to measure the level of gas in the air and determine whether or not it is safe for you to come back in the home. They will do another visual inspection to make sure that all live termites have been eradicated that were inside the structure.

They will provide you with a certification form showing that your home is termite free and then give you suggestions as to how to prevent an infestation from happening again.

While the tenting will kill all live termites, however, subterranean termites are in the soil and the gas won't be able to reach and kill them. That's why a prevention plan is so important because you want to avoid re-infestation by the presence of these bugs.

The gas will not kill the termite eggs. Vikane is not an ovicide, meaning it will not kill the insect eggs. However, in the case of termites, even if the eggs hatch, the baby termite will eventually die because there are no worker termites to feed them.

If the target pest is drywood termites, the concentration of Vikane gas will be very specific to the required dosage for drywood termites. However, even at this dosage, Vikane will kill many other insects like cockroaches, silverfish, ants, even rats and mice.

You may continue to see evidence of termite droppings around your home. Though fumigation kills all termites inside the house, the droppings will still be inside the termite galleries or tunnels inside the wood.

Through constant movement of the house, for example, doors closing hard, natural movements, and the gravitational pull, you will still see termite droppings occasionally.

You will be allowed back into your home after the certification process is completed on the third day. The gas won't harm anything in your home such as furniture, etc.

You may want to wash down cabinets and countertops, but this isn't really necessary as Vikane gas will not stick to any surface because of its non-residual properties. Many people do this anyway for their own piece of mind anyway.

Tenting, however, isn't always necessary to treat for termites. You can also have other treatments done to get rid of your termites. Most of these procedures are also used as preventative measures when you are trying to keep termites from infesting your home.

There are several different methods used to treat a home for termites. Let's first look at chemical treatments.

## **Chemical Treatments**

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Here are some of the more common ways to treat termites with chemicals. Please note these chemical treatments are also used as preventative treatments as well.

- **Liquid Termiticide** - Liquid termiticides are usually applied completely around and underneath a structure covering all areas where termites might gain access.

For new construction, this is accomplished by treating the graded soil before the slab is poured. For an existing building, the perimeter of the foundation is trenched and drilled then treated with termiticide.

The goal of the treatment is to put a chemical barrier between the termites in the soil and the structure above. The chemical barrier can also affect those termites inside a building by preventing their return to the soil. In many cases these termites will die of dehydration.

- **Repellant Termiticide** - There are several repellent termiticides on the market. These termiticides are all pyrethroids. Pyrethroids are fast acting nerve poisons that are highly toxic to termites but have low toxicity to mammals.

Some of the pyrethoid termite products include Dragnet FT, Cynoff, and Talstar (FMC Corporation, Philadelphia, PA) and Demon and Prelude (Syngenta, Inc., Greensboro, NC).

The pyrethroids are also highly repellent to termites. In most cases, they are so repellent that termites foraging under the soil will avoid coming into contact with the termiticide and forage elsewhere.

There are advantages and disadvantages to repellent termiticides. One advantage is that a complete barrier will effectively keep termites from coming into the structure. Also, the pyrethroids used for these barriers are relatively inexpensive and last for several years.

The disadvantage is that termites are able to detect this termiticide barrier in the soil and avoid lethal contact with them. This is important because applying a perfect barrier under a fully constructed house is very difficult.

Construction features, plumbing lines, and landscaping are just a few of the obstacles that hinder liquid termiticide application. Because of these difficulties, there are often gaps in the treatment where the termiticide was not applied completely.

Eventually, foraging termites may locate these gaps and gain access into the structure. If these termites find the structural wood, they will tunnel back through the untreated gap and recruit other termites into the building.

- **Non-Repellant Termiticides** - At the time of this writing there are two non-repellent termiticide treatments available on the commercial market. Both are nerve poisons like the pyrethroids, but they attack different sites on the nerve.

These chemicals are not repellant and termites cannot detect them in the soil. Therefore, the termites tunnel into the termiticide while foraging, contact the chemical, and die.

Premise (Bayer Corporation, Kansas City, MO.) contains the active ingredient imidocloprid. Imidocloprid is unique because it not only kills termites that contact a lethal dose, but it also kills them at doses too small to cause immediate death.



If a termite contacts even a very small amount of imidocloprid it will become lethargic and forget to eat and feed other termites. It will also forget to groom itself so it soon becomes infested with soil fungi.

The termite eventually dies as a result of these indirect symptoms of imidocloprid exposure. A disadvantage to Premise is that it is somewhat more expensive than the pyrethroid termiticides and in some cases may not last as long in the soil.

Termidor (Aventis Environmental Science, Montvale, NJ) is the newest termiticide on the market. Termidor became available in February 2000 for use as a non-repellent termiticide. The active ingredient is fipronil.

Fipronil is unique in that it can be transferred from one termite to another through contact and trophallaxis (communal feeding). This allows it to affect more termites than those that contact the chemical directly.

The advantage of this product is its long-term effectiveness in the soil. Test data indicate that fipronil may be effective longer after the initial application than other liquid termiticide products. A disadvantage is that Termidor is more expensive than other liquid termiticides.

One of the best-selling and most used termiticide products on the market being used by pest control companies today is called Phantom. Phantom termite treatment has caused a buzz in the pest control community since being introduced.

Phantom is used for the extermination and prevention of termite infestation. Phantom termiticide-insecticide is a remarkable termite control product,

employing the world's most advanced termite pest control technology. It is also the most vital component of an effective termite treatment plan.

In some of the most extensive testing a pest control product has ever been subjected to, Phantom has consistently proven to provide superior termite control under almost any condition.

Phantom is also proving to be highly impressive at keeping termites from coming back. Long-term field trials by the U.S. Department of Agriculture Forest Service showed no signs of re-infestation at over 98% of study sites seven years after treatment by Phantom.

Phantom termite treatment is highly flexible, utilizing effective non-repellent technology. In fact, nearly 500 Experimental Use Permit trials on actual real-world structures have proven Phantom effective against every key subterranean termite species- even in structures where other leading termiticides have failed.

Phantom termite treatment came onto the market in 2001, and since then, it has had consistently proven to be overly effective in the treatment and eradication of termites.

As most homeowners know, termites can cause huge, devastating damage to a wood structure. Often, that damage can cost hundreds to repair if it is even repairable. That's why it is so important to have a termite treatment plan for your structure that you stick to faithfully.

Once termites get into the wood of your structure and take over, it's not all that difficult to get rid of them and prevent them from coming back.

Pest control companies all over the country agree that Phantom termite treatment is one of the best termiticides on the market and should always be

included in all termite treatment programs that they develop. Phantom termite treatment has even been called revolutionary because of its effectiveness in preventing and getting rid of termites.

You should not try to get rid of termites on your own. This is a complex project that requires certain skills that the everyday person doesn't have. Working with pesticides such as Phantom termite treatment requires special training which is why you really need to have the services of a professional pest control company treat your home.

When you call the pest control company, be sure to let them know you want them to treat your home with Phantom termite treatment. Let them know you want nothing but the best for your home and Phantom termite treatment is just that – the best!

Of course, there are other advantages and disadvantages to liquid termiticides.

The pros are that they are intended to provide immediate protection for the structure and are relatively inexpensive compared to baiting systems. They last for multiple years in the soil and the non-repellant termiticides eliminate the problem of termites locating the gaps in the treatment and being able to gain access to the structure.

On the downside, even the most conscientious pest control operator will have difficulty putting down a chemical barrier that is free of "gaps." Gaps in repellent termiticide applications may later provide access to termites.

Liquid termiticides applied within 50 feet of a body of water, well or cistern is a water contamination risk. However, it is not illegal to use liquid termiticide near these areas. A treatment method where the soil around a structure is removed,

treated, dried and replaced is frequently used where water contamination is a concern.

However, this treatment method does not eliminate the risk of the chemical leaching into a water source over time. In areas of potential water contamination, termite baiting is a better option.

### **Termite Baiting**

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Termite baiting is becoming increasingly popular as a way to treat for and prevent termites. Instead of attempting to protect a structure by creating a barrier between it and the termites, baiting targets the termites themselves. Termite baits are designed to suppress or eliminate the termite colony living in the soil.

Commercial termite bait systems are a relatively new technology. The most widely used bait products are applied very similarly. The initial installation of any baiting system involves plastic stations being inserted into the ground around the periphery of the structure approximately every 10 feet.

Inside these stations are untreated wood monitors. The stations are usually inspected every month for termite activity. If live termites are found in the station, a toxic bait will be placed inside and the infested monitor may or may not be removed.

The idea is to get the termites that have been recruited to the wood monitor to now pick up the bait instead. Certain bait products are intended to be used by themselves, while others can be used in combination with spot applications of liquid termiticide (applied only to areas where termites are active) or a complete liquid treatment.

Because the in-ground bait stations are placed outside the structure, they do not directly affect termites that are already foraging inside. To address these inside infestations certain manufacturers provide above ground stations.

Above ground stations are basically plastic boxes that contain a paper matrix (bait) laced with the active ingredient (toxicant). The boxes can be attached over a termite mud tube or directly onto infested wood. The termites forage inside the box and consume the paper bait.

Probably the most popular termite bait system on the market today is the Sentricon System. This was the first termite baiting system commercially available. It is now the most widely used bait system within the United States and internationally.

It was developed in 1990 by Dow AgroSciences (Indianapolis, IN) and the University of Florida. Sentricon is a stand-alone system and is not intended for use in combination with liquid termiticide.

The bait system consists of in-ground stations that contain 2 pieces of untreated wood ("monitors"). The stations are checked on a monthly schedule to see if termites have invaded or "hit" the monitors.

If so, the termites are collected from the monitors and placed inside a tube of bait. The bait then replaces the monitors in the station and the termites must then eat their way out of the bait tube.

The Sentricon system is marketed as a termite colony elimination system. In order for a colony elimination system to work, the bait must affect every termite in the colony. Worker termites do all of the foraging, so how does the bait get from the worker termites to the rest of the colony?

Remember that the worker termites are responsible for feeding all of their nestmates. They do this by consuming food themselves then regurgitating part of it into the mouths of the other colony members. This same natural behavior is exploited by the Sentricon system to disperse the bait toxicant throughout the termite nest.

It is important to note that the bait cannot work too fast. If the active ingredient killed the termites too rapidly, the worker termites would die before they could pass the bait to other colony members.

The active ingredient in the Sentricon bait is hexaflumuron, a slow acting toxicant. Hexaflumuron is an insect growth regulator (IGR). IGRs interfere with the insect's physical development. This particular IGR interferes with the insect's ability to molt. Insects have their skeleton on the outside of their bodies, an exoskeleton.

In order to grow larger they must periodically shed this exoskeleton in a process called molting. Hexaflumuron does not allow the termite to molt properly so it dies in the process.

When hexaflumuron is passed from one termite to another the affected termites die during their next molt. In time, there are too few termites left to take care of the colony and feed the queen. When the queen dies the colony is eliminated.

The Sentricon system also supplies above ground stations that the pest control operator (PCO) can place directly on termite mud tubes or infested wood. Hexaflumuron is the active ingredient in the above ground stations as well.

Another very popular termite baiting system now being used is the First Line System marketed by the FMC Corporation of Philadelphia. The First Line bait system was developed for use in combination with spot treatments of liquid termiticide.

The bait system resembles the Sentricon system in that the stations are inspected monthly and the untreated wood monitors inside the stations are replaced with bait if there is a termite hit.

The active ingredient in the FirstLine system is sulfluramid. Sulfluramid is a stomach toxicant that interferes with the termite's ability to produce energy. Sulfluramid is faster acting than either hexaflumuron or diflubenzuron. However, in the First Line system the concentration of sulfluramid is so low that exposed termites survive for approximately 3 weeks.

This allows them enough time to pass the toxicant to other members of the colony. However, the First Line system does not eliminate termite colonies but is a colony suppression system only.

Therefore, remediation of an active infestation comes from the combined treatment of baiting the termite colony and applying liquid termiticide at the site of infestation. FMC also provides above ground bait stations as part of the First Line system.

Finally, you have the Advance termite system which is also another very popular termite baiting system in use with pest control companies.

The Advance termite system is a bait control product that is placed in certain places around the perimeter of your home and is non-invasive to the home itself. With some termite control products, the landscaping must be disturbed or holes must be drilled into your home's slab base. The Advance termite system doesn't require any of this.

The bait that is used in the Advance termite system is placed and locked into secure stations that don't allow access by unwanted guests. That means that this bait is safe to have around children and pets.

The bait is specifically tailored to catch termites before they get into your home and start to devastate the wood that your structure is built with.

The Advance termite system will kill the entire colony or colonies that are attacking or could attack your home. This is advantageous because chemical treatments only address parts of the colony – not the entire colony.

If you ignore part of the colony, you will risk the continuation of termite damage and infestation, so it is best to eliminate them entirely and have peace of mind that you won't have future problems.

The Advance termite system provides home and building owners with the latest advancement in termite bait technology by utilizing a dual-stage process. This process features an ultra low disturbance design to pattern the termite's natural feeding behaviors.

That alone will lead to enhanced colony elimination. The Advance termite system also has a unique second food source that has been shown to be preferred by termites over the wood used in most homes along with other baiting systems.

With a baiting system used to eliminate termites, you need to provide the termites with a maximum amount of food to detract them from the wood in your structure. The Advance termite system uses a very large containerized bait load which allows for maximum bait to be fed to the colony in a shorter time frame. This allows for elimination of the colony faster and gives you a peace of mind that other baiting systems can't provide.



The baiting stations provided by the Advance termite system are very sturdy. This is advantageous because it minimizes the possibility of tampering or damage from lawn mowers, children, and pets.

The Advance termite system is definitely one of the more non-invasive options you can consider for termite control and one you should consider because of its proven ability to eliminate entire colonies of termites and protect your valuable home.

Again, there are pros and cons to termite baiting systems as a means to termite control and prevention.

Advantages are that baits are very environmentally friendly because there is considerably less active ingredient put into the environment compared to the hundreds of gallons of diluted insecticide used in liquid treatments.

Termite baits are ideal for use around structures inhabited by persons with chemical sensitivity. In situations where the infested structure is within 50 feet of a well or 100 feet of a body of water, termite baits may be the only treatment option.

Among the disadvantages are that there are no means of coaxing termites into stations that are being monitored so it may take months before baiting can begin. Professional baiting systems are generally more expensive than barrier treatments because of the monthly inspections.

Termite baiting systems when used alone do not protect the structure directly. Termites feeding within the structure will continue to do so until the colony is eliminated or they are controlled with an above ground station.

Of course, there are people out there who like to do things themselves. While we have already said that termite treatment is probably best left to the professionals, it still is possible to treat for termites on your own.

## **Chapter 5 - Do-It-Yourself Termite Treatment**

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We are increasingly becoming a world of people who like to do things ourselves. Whether it's because we want to save money or just like the satisfaction of taking care of our own things, sometimes we like "getting our hands dirty" and learning how to do new things.

Even termite treatment is possible for the avid do-it-yourselfer. There are a variety of commercial products on the market with professional strength that you can use. They are available in many places, but we suggest you look in a home improvement store to find the best selection.

There are two ways you can approach do-it-yourself termite treatment: termite baiting and chemical application.

### **Termite Baiting**

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Let's first take a look at termite baiting. Since this is probably the easiest way to approach do-it-yourself termite control, it seems like a logical place to start. You won't be working directly with chemicals, so it is probably the safest way to start as well.

Take a quick survey of your property. Draw a rough graph of the home. On this graph...you can show locations of doors, windows, gutter down spouts, air conditioning drains, stumps, firewood, bushes, etc.

As you walk around the perimeter of your home, take note of damp conditions which are conducive to termites caused by shade, poor drainage, air conditioner condensation, etc. Mark these on your graph.

As a rule, you should position bait stations at 8-10 feet intervals. However areas that are conducive to termites such as the following conditions, it would be advisable to have bait positions placed at closer intervals. Mark these on your graph of your property:

- **EW-** Earthwood contact is where wooden portions of a structure touch soil or are embedded in concrete / flooring allowing undetectable termite access.
- **M** - Excessive moisture within 3' of a structure provides water for termites and breaks down any termiticide treatment.
- **F-** Foliage (trees, shrubs, etc.) within 3 feet of a structure reduces visual access, provides food source and may breach any termiticide barrier via the root system.
- **J-** Blind joints are areas where two concrete slabs meet and are blocked from visual access by wood or other material. This condition allows undetectable termite entry.
- **HT-** Hollow tile walls allow undetectable termite access via void chambers.
- **S-** Stucco siding embedded in the soil or concrete allows undetectable termite access.
- **C-** Concrete cracks in excess of 1/16" allow undetectable termite entry.
- **W-** Wood debris or other cellulose containing material should not abut the structure.

Next, you need to dig holes about 6" deep. ..big enough for the bait stations. Always be alert for utility wires, water pipes, gas lines, etc.

Distance from the house is not critical, but installing them 1-2 feet from the foundation would be a good choice. This is to avoid placing the bait in soil that may have been previously treated with termiticides.

You certainly wouldn't want to apply insecticides of any type directly to the ground in which bait stations have been inserted after you've gone to the trouble of avoiding likely termiticide-treated dirt when you installed the stations.

When backfilling the dirt after the station is placed in the ground, make sure there are no air pockets around the bait stations. Also, make sure the lip of the station is flush with the ground.

Make sure to mark the location of the bait stations on your graph or use small surveyor's flags or some other method of determining the placements of the bait stations. Several months from now, they will be more difficult to find than you might think.

Once installed, the bait stations should be monitored every 3 months. Monitoring more frequently than this, only serves to disturb the termites.

If termite mud tubes or live termites are found in a bait station, then the wood monitor-replacement stakes (Firstline and HexPro) or the inspection cartridges (Advance) should be replaced with the active ingredient or the toxicants.

It may be impossible to tell if you have eliminated a colony, but when the termites cease feeding, that is a positive sign of control and elimination.

Once feeding has ceased you should return the untreated wooden replacement monitors to the bait stations, then monitor as before.

Each time you have finished checking your bait stations, you should also inspect your house for signs of termite activity as we mentioned before: peeling paint, mud tubes or rotting wood could be related to a termite problem.

Since termites work from the ground up, make sure that door frames, siding, or and wood close to the ground is checked thoroughly and frequently. If you have any doubts about whether you have found active termites, you really should call a licensed pest control company and have them inspect your home.

Chemical treatments aren't as environmentally friendly, but they can be more effective than baiting systems.

### **Chemical Treatments**

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If you want to treat your property with a commercially sold termiticide, you can do this as well. Be sure you are prepared as you will be working with strong chemicals that could cause problems, so be sure to take the suggested precautions as given by the manufacturer of the chemical.

### **During Construction**

Ideally, the best time to treat for termites is before the home is constructed or during the construction. If you use pre-treated wood that has been sprayed with a chemical like Timbor, you will have less chance of termites.

After the footings are poured and the foundational walls and/or piers have been constructed, apply the termiticide to a trench in the soil about 12 inches wide and 6 inches deep adjacent to the foundation.

Soil on both sides of the exposed foundational walls and soil surrounding should be soaked down to the foundation footing at the labeled rate. Apply at the diluted rate.

Poured in with a watering can or bucket is easier than using a sprayer. There is no need to dig the trench any deeper than the top of the footing. Soil at the bottom of the trench can be loosened with a spade or iron bar to allow further penetration.

For outside basement walls (where the footing is deep) most pest control operators apply the chemical by injecting it along the foundation through a hollow rod attached at the end of the hose in place of a soil nozzle. This is called "rodding". The result is a continuous chemical barrier from footing to surface.

This should be applied to both the inside and outside of the foundation and also around piers, chimney bases, pipes, conduits, and other structures in contact to the soil. Use at the rate of 4 gallons per 10 linear feet. The diluted termiticide should be mixed in with the soil, as it replaced.

For effective pretreatment termite proofing, much of the chemical barrier needs to put under the concrete slabs. Obviously it is easier to put out the barrier termite treatment BEFORE a slab has been poured.

After it has been poured, it will need to be drilled and a chemical injected under the slab to seal off termite entry points. This is not a "do it yourself project". Apply a diluted termiticide at the rate of 1 gallon per 10 sq. feet, covering the square footage.

Along both sides of the foundational walls and interior foundational walls and plumbing, apply this diluted rate at the rate of 4 gallons per 10 linear feet. A hose end sprayer hooked up to your sprayer, makes this job a lot easier.

It is also possible to do a termite treatment yourself on a house that is already built.

### **Post-Construction Treatment**

A thorough inspection is the first and most important step. Basement construction may require treatment which injects termiticides into the soil through holes drilled in the basement floor at regular intervals.

Crawl space treatment also involves trenching or rodding soil along the foundation walls and around piers and pipes, then applying termiticides to the soil.

Dig narrow trenches along both the inside and outside of foundation walls and around piers and chimney bases, applied at the rate of 4 gallons per 10 linear feet. Also be sure to trench and treat around sewer pipes, conduits and all other structural members in contact with the soil. The trench should be as deep as the top of the footing.

Mix the termiticide with the soil as it is replaced. The State regulations differ state to state on treatment and drilling activity required.

You will want to be sure and do what you can to treat inside the walls. You can do this from the attic or basement or choose to drill a small hole in a hidden place and inject the chemicals in that way.

There are a lot of people in the world who are concerned with the environment and want to prevent termites from infesting their home without the use of chemicals of any type. Is there such a thing as natural termite treatment?



## **Natural Termite Treatment**

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Many people are very cognizant about the chemicals that we use to control pests which are why there is a new trend toward natural termite treatment to rid our structures of these pesky and damaging insects.

While the use of chemicals is the most effective way to get rid of termites, you can still take measure with natural termite treatment to minimize the damage and keep termites out of your home or building.

Natural termite treatment is the use of termite prevention and control without chemical use. Instead, physical controls are installed during construction such as sand barriers or metal termite shields.

If termite infestation does occur, least toxic methods of treatment are used. What that means is that natural termite treatment is geared toward keeping those pests out instead of killing those who have already gotten in.

What you really need to do is use natural termite treatment to prevent termites from coming into your structure in the first place. That means you won't use chemicals to keep those pesky termites away, but you will use certain strategies to make sure that they have no food sources that will attract them to your place.

One of the first things you can do in natural termite treatment is to remove any source of chronic moisture since termites are attracted to damp wood for their food source. Moist soil is necessary for termites to survive.

Termites travel back and forth between soil and food sources because they must obtain moisture from the soil. In addition, capillary action and water vapor buildup can result in excessive dampness which can actually wick through a concrete slab or masonry foundation to the wood framing above it, thus attracting termites.

In above-ground foundations, moisture barrier films such as 6 mil polyethylene can be used to cover the area under the structure. This will help decrease moisture buildup in sub-flooring.

Foundation wall vents should be placed to provide cross ventilation for homes with crawl spaces. If re-grading or remodeling covers vents, additional vents may be needed. Some experts recommend the use of moisture barriers under slab foundations as well in natural termite treatment programs.

Areas subject to moisture build-up, such as bathrooms, should be given special attention since they are likely to be attack areas. Areas under tubs and drains leading to the exterior (such as air conditioner drains) should be considered vulnerable spots.

This is a very important part of natural termite treatment since elimination of moisture will take away the termite's food source and they won't come for a visit!

Natural termite treatment is a great way to keep our environment healthy and ecologically sound. We should do what we can to make sure that our Earth survives despite our use of chemicals – and natural termite treatment is a great place to start!

Of course, the best way to prevent having to treat for termites is to take steps to make their living conditions less than conducive. So what can you do to keep them from coming for a visit in the first place?

## **Chapter 6 - Termite Prevention**

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Keeping termites away from your home in the first place can be the best way to save money although you will still want to have at least annual treatments to make sure that they don't come around in the first place. But taking measures to be sure that conditions are not conducive to their survival just makes sense.

First, don't feed them. Whether you know it or not, by having certain conditions present in and around your house, you are giving the termites a food source that will sustain the colony and keep them reproducing making more and more termites that will damage your home.

Keep your gutters clean. Wet leaves provide moisture and food for the pests, and since the gutters are attached to your home, it's an easy point of entry. Clogged gutters can also contribute to moisture problems by soaking wood off the roof and fascia boards.

Wood piles and construction debris, boards left touching the ground or fences without proper ground clearance can all be food sources. Cardboard is also a favorite food of termites and damp cardboard around or under a house could provide an ideal opportunity for termites.

Building a deck? Make concrete barriers part of your plan and be sure to use borate-treated, pressurized wood. The USDA's Forest Service has a bulletin on subterranean termites with helpful hints on construction practices.

Your contractor may also have suggestions for preventing termite infestations. Stucco facades extending near or into the soil surface provide a haven for termites, allowing them to move into a home undetected.

Termites love moisture which is why they feed on damp wood. Make sure the air conditioner tank is at least four inches from your house. Don't let it leak near your house. Dryers should vent away from the house -- the warm air is moisture-saturated from dried clothes. Washers should drain away from the house, too.

Check for leaky faucets and make fixing them a priority. Flat roofs are a bad idea; they harbor moisture and invite infestation.

Summer sprinkler play is fun for kids, but make sure the faucet is turned off -- tightly -- after the water games are finished. Insulation around pipes should not extend all the way from the house to the soil. After cold spells are over, the insulation should be removed or at least have a gap large enough to allow homeowners to detect termites.

Check around the pipes in your home to make sure that there is no water leaking underneath the house. Pools of water can accumulate in the crawl space which is a breeding ground for termites -- especially subterranean termites that live in the soil.

Make sure their access to the home is limited. Keep vines, flower gardens and storage containers away from your house. Make a garden path if you must have them close by. Their roots feed the termites, and the leaves give the termites the moisture and shade they crave. Also, you won't be able to see the clay tubes the termites make to sneak into your home.

Check your house for stains, holes and other infestation signs. Wings on your window sill, particularly inside the house, are a sign that you need to have your home checked; don't just hope the problem will go away.

Look closely at the foundation of your home and check for any cracks in the concrete. These are great places for termites to enter your home since they are

so small. Any cracks should be sealed with a waterproof sealant that will make entry through these cracks impossible.

Keep all scrap wood away from your house. A wood pile for a fireplace is a haven for termites and they love to live in and around any scrap wood that is strewn about.

When it rains, they do little termite dances as it makes the wood much easier to eat. If the wood is close to your house, they may be tempted to take a vacation from the woodpile and move onto your home for a change of pace.

Make sure that all guttering downspouts point rainwater to drain away from your house. You don't want the water to butt up against your home and make the wood wet.

Any wood that is touching both the ground and your house is a threat. Eliminate all earth-to-wood contact in the structure, including scrap wood, fence posts, trellises, shrubbery or tree branches that come in contact with the house.

Keep the area around the foundation or piers of your house clear of wood debris; a piece of wood or a ladder leaning against the house can provide a termite entrance.

Don't build bridges for termites. Make sure that gardens don't mound new dirt over treated soil next to the foundation or piers. Avoid using mulch in gardens next to the house. Mulch is just wood chips and when it gets wet, it's a buffet for your local termites.

And, believe it or not, outdoor lights with white bulbs may attract night swarming termites, especially in the spring. Try replacing white bulbs with yellow or pale amber.

There are some advancement that is being made in the detection of termites and termite colonies in structures and homes. Actually, it is technology that has been around for awhile but is just now being used in the detection of termites.

## **Chapter 7 - Infrared Technology in Termite Detection**

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One of the most exciting innovations in the pest control industry is the use of infrared technology and termite inspection. Infrared technology is used to detect heat in small spaces and is perfect for use in the termite inspection because it can detect colonies that are massed together and make it easier for the pest control operator to pinpoint the location of the infestation and effectively get rid of the problem in one fell swoop.

Finding termites can be difficult, yet knowing where they are located is important when deciding on the correct eradication program. The traditional method is to simply tap on the wood with the back of a screwdriver, or to poke holes in walls or even pull them apart.

Infrared technology and termite inspect now offers a new, high technological detection system that is quick, effective and does not require any damage to houses.

Infrared technology and termite inspection is being used with an increased frequency because it can easily detect the presence of termites by simply inserting a small camera at the end of a thin rod and then manipulating the camera around to find the termite swarms.

Because termites mass together to work on the wood, where there is one, there is always more. That's why infrared technology and termite inspection go hand in hand.

Thermal imaging technology detects heat patterns. When termites invade buildings, the normal heat patterns of the walls, floors and roof are changed due

to the presence of termites. The thermal camera records this change in heat patterns and indicates the exact location of any termite infestation.

A color image shows hot spots as red or yellow and cold spots as blue or purple and these heat patterns indicate termite infestations. That means that infrared technology and termite inspection can be much more effective than the normal ways of doing a termite inspection.

However, termites are considered cold blooded insects, so how can they generate heat? Termites are hosts to bacteria, which live in their gut, and these bacteria help break down and digest cellulose, the main component of wood. It is this digestion and chemical reaction that generates the heat.

That's why infrared technology and termite inspection makes the location of termites much easier thus allowing the pest control company to target the specific areas where termites are located and make the treatment effective.

The pest control company that pairs infrared technology and termite inspection together is one that is highly effective and employing the latest tools in pest control so that they can do a great job for you – the consumer.

When the termite inspector is looking for termites, often, they will have to cause a certain amount of damage to the home in order to see if there is any evidence that termites have been there. That means opening up holes in walls, floors, etc.

With infrared technology and infrared cameras, all the pest control operator has to do is make a hole the size of the camera. The camera is mounted at the small end of a pipe much like what doctors use to perform arthroscopic surgery.



What that means is that the hole that needs to be made is very small. Once the camera is inserted through the hole, it sends back a very clear image that allows the termite inspector to see any possible damage inside walls and floors.

Of course, any type of disturbance to an area that may have termite damage will cause the active termites to move to a new location to avoid the disturbance. That can interfere with any localized treatment that the inspector will suggest.

However, the camera can move about stealthily in a way that will help the termite inspector see where they are moving and then suggest ways to target specific areas where they think the termites have moved to. That's why it is so important to have a trained and licensed inspector look at your property to determine the level of your termite infestation.

So we've had all this talk about what termites look like, where they live, and what to do to either eradicate or prevent them. But you may wonder about the damage that they can do. Is it really all that bad?

## **Chapter 8 - The Real Truth about Damage**

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So you want to know the real truth about termite damage? Can you handle the truth? The only reason we ask is because it really is disturbing when you think about these unwelcome guests coming into your home and eating to their heart's content without even bringing a dinner gift.

Some estimates place the annual damage to homes at over \$500,000. Others say it is well over a million dollars. Most of the worst termite damage is located in the Southeast portion of the United States as well as arid savannah regions in places like Africa and Australia.

It doesn't matter where you're located, termite damage can be utterly devastating for the homeowner. It is true that the worst damage can take years to cause problems, but still, that damage can cause a home to become unsafe to live in.

One woman tells us that she had no idea about the amount of damage a termite can do. She never even thought about it until she felt a floorboard that was loose. She went outside and saw a swarm of bugs around the foundation of her house, and she began to do some research.

A pest control company was called in and she found out that she did, indeed, have a termite infestation. What surprised the most was when the termite inspector showed her the amount of damage that a termite could do as she looked into the hole the inspector had cut into her wall. She was amazed and shocked.

Not only will termite damage cause a structure to be unstable, it can – and, if left untreated – even cause the structure to collapse around you. It's frightening when you think about it.

Those worker termites get inside your home and start burrowing through the studs, the door frames, and the drywall of your home.

They gnaw through the material your home is made of and make trails through the wood that can weaken the wood itself causing problems with the integrity of the wood.

The amount of damage a termite can do is multiplied by the fact that there is more than one termite working on the wood. They work together to get food for the colony and thus cause a huge amount of damage to your structure.

That is why it is so important to pay attention to what is going on around your home and always check for signs of termite damage. Many people don't do this. They just sit around hoping that their home is safe.

Repairing a home that has termite damage is no easy proposition. There are times when just a few beams in the ceiling need to be replaced. Then there are other times when whole walls need to be reconstructed. In extreme situations, the structure must be condemned and torn down.

The first step towards saving your home is to educate yourself. Do a lot of research and know what to look for when you are looking for evidence of termites in your home. Search the internet, read this book over and over again. Do whatever you have to do, but make sure you know that termites can do a huge amount of damage and cause you to lose your home.

Whatever you do, don't let your home end up looking like this due to termite damage:



## **Conclusion**

God made a lot of creature to inhabit this planet. Some of them are wonderful, but others are not so great. Termites fall into the latter category. They are pests, they destroy that which is dear to us, and they seem to serve absolutely no purpose in the chain of life.

But, they are a food source for some animals, so at least they can do something good. Unfortunately, as a homeowner, they do nothing but bad for you. They come into to your home uninvited and desecrate something that is near and dear to you.

Without a doubt, you really need to educate yourself about termites along with what they can do to your home as well as what you can do to prevent them from causing devastation. You worked hard to get what you have – the last thing you want is to lose your home to a pest like a termite.

Prevention is the key. Don't give them food to live off of, do what you can to keep moisture away from your home, and be diligent in keeping your home safe and termite free.

If you do find that you have termites or suspect that you might, call a reputable pest control company and have them come out to your home for an inspection. Then consult with a professional as to what you can do to get rid of the termites and formulate a prevention plan to keep the termites from coming back.

Even though termites are God's creatures, they are devastating to the home or building owner and you must get rid of them as soon as you possibly can to protect your investment. While they are pesky little critters, some people have actually found a little humor in their work.

Famed humorist Ogden Nash is well known for his hilarious short poetry and sharp witticisms on human life. While he hasn't written many poems to the termite, he did write one that has been studied by students in many grades and evaluated for its social relevance as well as humorous quality. His poem "The Termite" is as follows:

**Some primal termite knocked on wood  
And tasted it, and found it good!  
And that is why you're Cousin May  
Fell through the parlor floor today.**

