

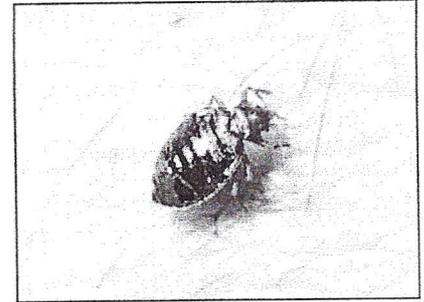
Heat Treatment For Bed Bugs

What are Bed Bugs

Bed bugs, which are wingless, parasitic insects, have made a huge comeback in recent years. With the development of DDT, they were virtually eliminated and almost nonexistent until the mid-90s, when pest-control companies began baiting (rather than spraying) for cockroaches and ants. As a result of this change in technique, bed bugs were no longer being killed along with roaches and ants. At the same time, immigrants from third-world countries, where resistant strains of bed bugs have developed, started carrying them into major metropolitan areas. In Massachusetts, the Alston-Brighton area of Boston has been particularly affected.

Bed bugs are prolific breeders. An interesting aspect of their biology is that males can fertilize multiple females within a period of 24 hours. After a female is fertilized, she can lay up to 5 eggs per day by gluing them to surfaces with her own excretions. The eggs then hatch in 6 to 10 days under warm conditions, and longer if it is cool. Bed bugs can live from 6 months to 1 ½ years. Females are able to lay a total of 200 eggs in their lifetimes.

Bed bugs require meals of blood to survive. Young bed bugs, or nymphs, take 3 minutes of feeding to become fully engorged, while adults take 15 minutes to do the same. In the absence of food, bed bugs can live for several hundred days, making them hardy creatures.



Historically

Bed bug treatments have primarily used chemicals to reduce and control the pest. Recently, pesticides have shown to be ineffective in managing infestations with single bed bug treatments. An informal survey of pest control operators conducted by an entomologist at the University of Massachusetts found that 68% of all bedbug infestations require three or more treatments, 26% require two treatments, and 6% require just one.

Thermal Remediation

Thermal remediation uses heat to kill all life cycles of bed bugs. Target temperature during treatment is between 120-135°F, the temperature necessary for heat to penetrate bed bug living areas. This safe, effective, and environmentally friendly process uses dry heat to kill the entire life cycle of bed bugs, while reducing the application of insecticides.

This non-chemical, non-toxic treatment penetrates wall cavities, closets, furniture, and other hard to reach locations to eradicate all life cycles of bed bugs. A heat treatment done correctly will kill all stages of the bed bugs including the eggs in one application.

Why is Heat Better Than Insecticides?

Bed bugs are one of the hardest insects to control in the industry today. They are showing resistance (immunity) to almost all of the most common types of insecticides used by the pest control industry. There are various references throughout the internet pertaining to pyrethroid insecticide resistance of bed bugs. Even with rotation of various types of insecticides control is extremely hard to achieve. An informal survey of pest control operators conducted by an entomologist at the University of Massachusetts found that 68% of all bedbug infestations require three or more treatments, 26% require two treatments, and 6% require just one.

Preparation is also another factor when treating for bed bugs, when treating for bed bugs with insecticides the property being treated needs to be completely prepared which can take an average of 4 hours for a standard apartment, and a day for a small house. Heat treatment in contrast needs little preparation as the property is completely heated along with all the belongings inside the property.