



BEST PRACTICE

Bed Bug Treatment



The Bed Bug Challenge

Dense urban populations, major movements of people and increasing restrictions on residual insecticides have contributed to a major resurgence in bed bug problems in recent years.

Although bedrooms continue to be the site of most infestations, the ability of bed bugs to travel over great distances on clothing, luggage and furniture, in particular, means they are found in a wide range of locations – including offices, schools, shops, cinemas and public transport.

As well as being alert to such possibilities, this means controllers should always extend inspections and, if necessary, treatments to other parts of premises found to be infested.

Recent European research further shows that, even without significant resistance problems, bed bugs are by far the most difficult insect pest to control.

These multiple challenges make it especially important to tackle bed bugs with a sound BASF Integrated Pest Management strategy combining proven chemical and non-chemical methods.

This approach should be based around five key essentials:

1. Inspect to establish the extent and location of the infestation.
2. Prescribe the best treatment strategy for the particular situation.
3. Communicate to set the right expectations and gain sufficient co-operation.
4. Treat using the most effective products in the best and safest ways.
5. Follow-up to assess results and re-treat if necessary.

Pinpointing the Problem

Wherever bed bug infestations are suspected a thorough inspection of the main problem areas is vital to verify their presence and identify all sites of activity and harbourage for treatment.

This is crucial because bed bugs are seldom active during the day and can shelter deep inside very narrow cracks and crevices.

Being small, the bugs, their eggs and faecal deposits are easy to overlook without the aid of a good torch and magnifying tool.

Key areas for inspection include:

- Tufts, seams, buttons & folds of mattresses;
- Box springs, bed frames and covers;
- Couches, chairs, cushions and curtains;
- Window and door mouldings;
- Behind loose wallpaper and pictures;
- Cracks in walls or hardwood flooring;
- Under carpets along walls (tack strip);
- Wall voids (outlets & switch plates); and
- Luggage, boxes and other portable items

Inspectors should be alert for the typical bed bug odour. They must also be prepared to move and take apart items of furniture, look inside electrical fittings and lift carpets along their edges so that no potential harbourage sites are ignored.

Wherever evidence of bed bugs is found, neighbouring rooms and other areas of the premises should also be inspected to establish the full extent of the infestation.

Preparing the Ground

With bed bugs, more than any other insect pest, good preparation of both the client and the premises ahead of treatment is central to success.



Clients need to be prepared for the fact that an initial bed bug treatment may take five hours or more and involve considerable disruption, as well as the likelihood that repeat treatment will be required to achieve complete control.

They also need to be aware that the amount of time and number of treatments needed – and hence the cost – will increase markedly with the degree of clutter in the environment; active client and occupant engagement and co-operation in the process being essential to its cost-effectiveness.

Laundry

Beds must be completely stripped down before insecticide treatment, with all sheets, duvets, blankets, valances and other bedding placed in a bin liner and either laundered or professionally cleaned.

Curtains, soft furnishings and any clothing that may provide potential harbourages should also be removed for thorough washing or dry cleaning.

To kill all bed bug stages, materials need to be washed in hot water (>49°C for >10 min.) with soap or detergent before drying in a hot dryer (>60°C for >20 min).

Vacuuming

Although their eggs tend to be stuck too tightly to harbourage surfaces to be easily removed, vacuuming exposed surfaces or resting sites is valuable in removing a significant number of nymphs and adult bed bugs.

Using a high efficiency particulate air (HEPA) filtered vacuum will ensure the many allergens associated with bed bugs and their debris are also removed.

Vacuum bags should be removed immediately, sealed tightly inside a plastic bag and either incinerated or placed in the normal rubbish collection.

Additional Considerations

Because bed bugs will move from treated to untreated areas it is important to ensure that any neighbouring rooms are also treated.

Although not a statutory requirement, access to treated areas should be restricted until the deposit is dry. The time this takes will depend on conditions, with good ventilation speeding drying. As a rule, a one hour exclusion period should generally be sufficient.

Follow-Up

Within approximately 10 days a return visit should be undertaken and the premises again inspected thoroughly.

Any areas where bed bugs persist should be re-treated along with any new areas to which they may have moved to avoid the initial treatment.

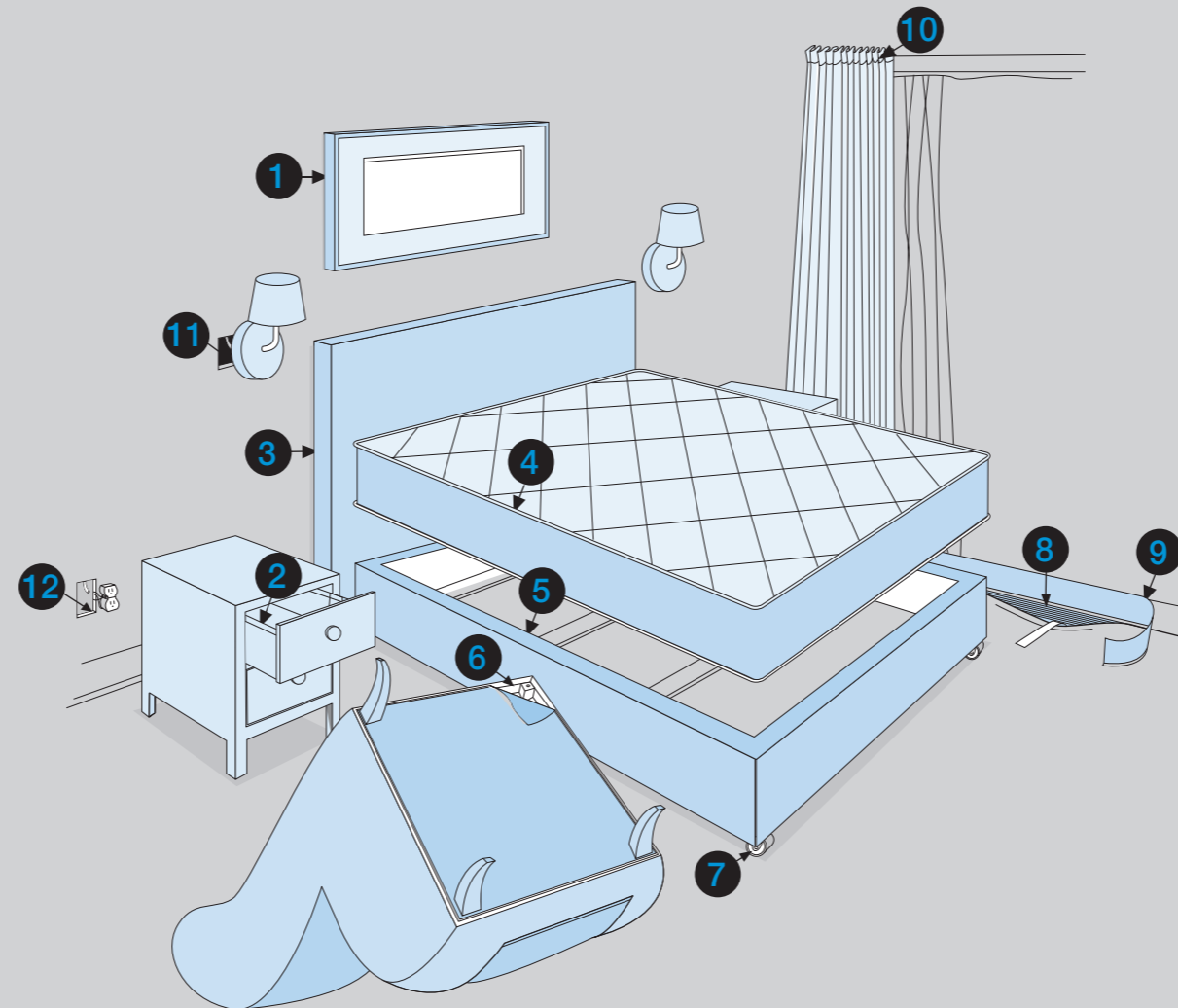
This follow-up is essential as bed bug eggs will hatch after the initial treatment.

It is also valuable in identifying any areas of infestation that may have been overlooked initially.

Where infestations are heavy a third visit – after a further 10 days – is recommended.

If possible, hotels should be requested to leave treated rooms unoccupied until the infestation is eliminated.

Treating the Infestation



Although both heat treatment and freezing will kill bed bugs, for most practical purposes effective control demands thorough treatment of all infested areas with an insecticide specifically approved for bed bug control.

Initial Treatment

All harborage areas should be sprayed in strict accordance with the label. In particular, in bedrooms:

- 1 All pictures and other wall hangings should be removed from wall for thorough crack & crevice treatment.
- 2 Drawers should be removed for easy access to all cracks and crevices on the interior of the cabinet, as well as the tracks and drawer supports. Undersides should also be treated.
- 3 Headboards should be removed from the wall or dismantled to allow thorough treatment to cracks, crevices and voids on or behind them.
- 4 Mattress seams and buttons etc should be dealt with carefully and generally vacuuming or non residual insecticide treatments are recommended.
- 5 Box springs and bed platforms should be lifted and turned over for thorough treatment to all sides, including the underside and internal areas.
- 6 Upholstered furniture should be inspected and treated in a way very similar to bed and box springs with particular attention paid to all seams and folds as well as legs and dust liners on the underside.
- 7 Wheels, casters, posts, and legs of all furniture should be closely examined and treated.
- 8 Carpets should be pulled back from the wall so that any voids beneath baseboard mouldings can be treated.
- 9 Baseboards should be spot-treated, especially in dark, undisturbed areas behind the bed or other furniture. Treatment should include any unsealed seams along baseboard tops and bottoms.
- 10 Curtains should be removed from the window and taken away for separate treatment (either in a dryer or steam cleaned).
- 11 Wall fixtures, such as mounted lamps, should be detached to vacuum and treat voids behind them with a residual dust.
- 12 Electrical faceplates should be removed and wall voids behind them also be vacuumed and treated with a residual dust.

