



Bed Bug Control Protocol



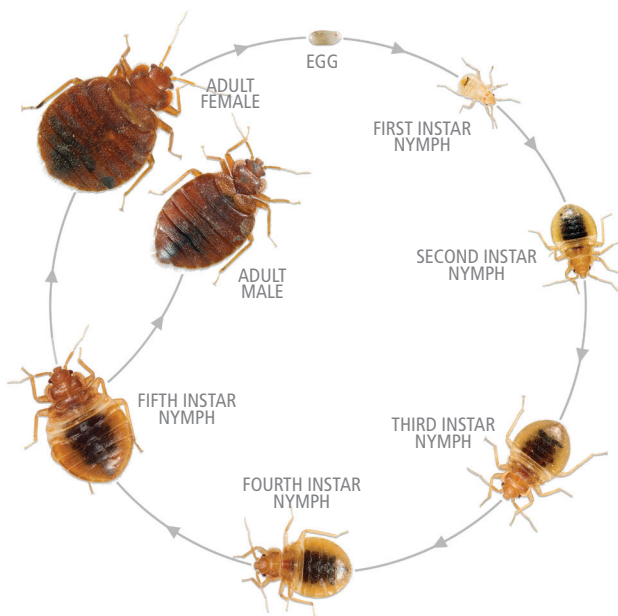
Understanding Bed Bug Habits and Life Cycle

- Bed Bugs have three life stages (eggs, nymphs and adults).
- Bed Bugs are most active at night and can feed on multiple hosts, including but not limited to humans and pets. Bed Bugs typically travel 5–20 ft. to feed.
- Females can lay 2 to 5 eggs a day (up to 200–500 within her lifetime) using a sticky substance to attach the eggs (4-8 clusters) in and on surfaces. Eggs hatch in 6 to 10 days.
- Bed Bugs hide in bed tufts, cracks and crevices, and even electronics, and can be difficult to locate.
- Nymphs have five nymphal instars (molts), each requiring a blood meal.
- In most Bed Bug populations, the life stages consist of approximately 12% adults, 54% nymphs and 34% eggs.

Key Signs of Infestation

Early detection of bed bugs is critical when performing an inspection. Common signs of infestation include:

- Shed or Cast Skins
- Fecal Deposits (dried excreted blood)
- Bed Bug Carcasses
- Egg Deposits
- Live Bugs



Life Cycle

Mated female bed bugs lay 2 to 5 eggs a day and about 200 to 500 total in their lifetime. Eggs take about 10 days to hatch. When the eggs hatch the tiny bed bug that crawls out is a 1st instar nymph. The nymphs look like miniature versions of the adult bed bug, except that they start out almost colorless, get darker with each molt, and are reddish brown as adults. Bed bugs have 5 instars before they become adults and each instar requires a blood meal to complete development into the next stage. The lifecycle takes about 6 to 7 weeks under optimal conditions to go from egg to egg. When temperature is not optimal or blood meals are scarce, the length of the life cycle can be dramatically increased.



Inspection & Vacuuming

- Inspect the entire infestation area with a flashlight to identify all pockets of infestation.
- Bed Bugs may be found in uncommon places such as smoke detectors, books, electronic equipment, etc.
- Remove all items from the floor, underside of bed, and closet floors. Inspect, treat or carefully dispose of all infested items.
- Move furniture 2–3 ft. from wall. Vacuum all visible Bed Bugs. Thoroughly vacuum carpet throughout room, beneath furniture and in closets. Add insecticide dust to vacuum bag before disposing.

Pre-Treatment

- Listen carefully to the customer and communicate treatment plan and expectations to the occupants, including removing clutter, and laundering clothes and bedding at high heat, etc.
- Explain that Bed Bug treatments often require multiple visits and continued cooperation of the customer.

Treatment

- Consider all choices for IPM control of Bed Bugs including non-chemical options.
- Treat high and low. Remember to treat infested areas above eye level, such as behind strip wallpaper, textured ceilings and around fire alarms.

Dust Applications

- When using **Evergreen Dust**, pull back carpet from the baseboard and spot treat. Treat wall voids, and behind light switches and socket covers. Also treat around cracks and crevices.

Aerosol Applications

- Treat furniture voids, behind picture frames, behind bed headboards, bed frames, carpeted surfaces and cracks and crevices. Apply an appropriately labeled aerosol as a surface spray to mattresses and box springs. Encase mattresses and box springs after drying.

Liquid Applications

- Spot treat baseboards and floorboards with **CrossFire Concentrate** in a tank mix. Apply CrossFire as a surface spray to mattresses and box springs. Treat all harborage sites and migration paths.

Use Rates

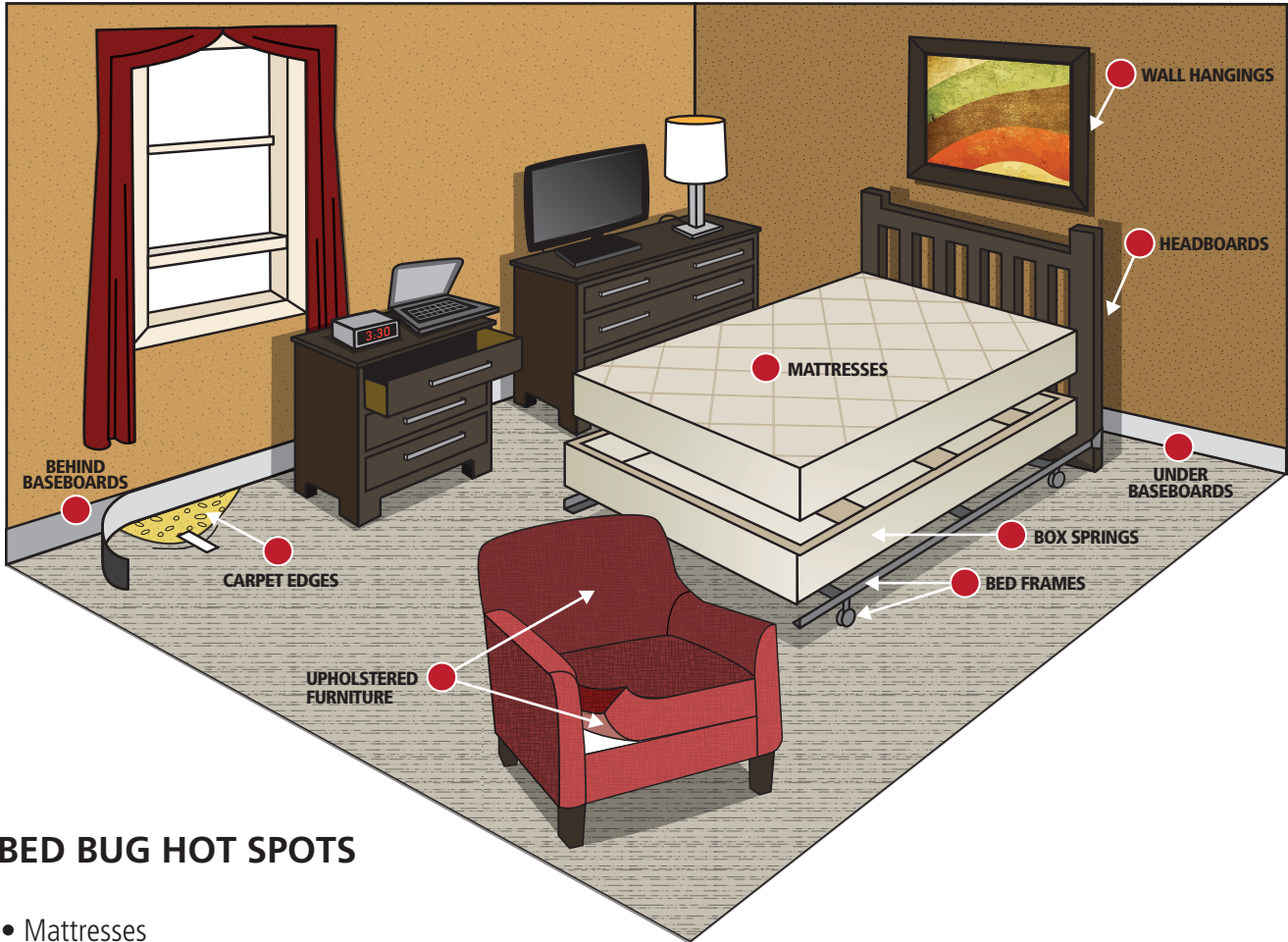
Mix CrossFire Concentrate according to the following table:		
Product	Dilution in Water	Application Rate of Mixed Solution
CrossFire Concentrate	13 fl. oz. / Finished Gallon	1 Gallon/1,000 sq. ft.

Post Treatment

- Re-inspect in 1–2 weeks. Always be aware of product retreatment intervals prior to reapplying.
- Consider use of traps as part of your post-treatment monitoring plan.



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BED BUG HOT SPOTS

- Mattresses
- Box Springs
- Bed Frames
- Headboards
- Upholstered Furniture
- Desk Chairs
- Carpet Edges
- Wall Hangings
- Under and Behind Baseboards



The Integrated Bed Bug Solution for Superior Results



Bedlam® Insecticide



Bedlam® Plus Insecticide



CrossFire® Aerosol



CrossFire® Concentrate



EverGreen® Dust



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