

**Just think!** The design choices you are considering for room refurbishing may also be creating a welcoming environment for bed bugs. Bed bugs are elusive pests and an intrusive guest no hotel wants. They can easily be introduced into a hotel room by anyone that walks through its doors, from hotel guests to service staff or even a shipment. Their small size, ability to reproduce rapidly, withstand long periods between meals, and nocturnal tendencies make them difficult to detect. The effects of an infestation can be devastating to a business. Hotel reputations can be irrevocably tarnished if reports land on travel websites, treatment costs are high and profits lost when rooms have to go unrented. That's not to mention reimbursements to guests affected and the potential negative impact on stakeholder equity if a guest chooses to pursue an aggressive legal course of action.

So what does hotel room design have to do with infestations? It could mean the difference between a full-blown infestation being uncovered at 2AM by an irate guest and minimizing the likelihood that a single bed bug introduced into a room ever transitions into an infestation.

Given our experience in handling the bed bug scourge that is canvassing our nation, we provide the following suggestions for hotel room design consideration. Making tweaks to current hotel room configurations, considering these changes in future design plans or implementing a preventive bed bug measure can certainly assist in lowering the incidence of bed bug infestations in hotel rooms.

# 1. HEADBOARD DESIGN



Upwards of 85% of bed bugs are found within a 5-foot radius of the bed, with headboards being notorious for egg deposition. Removing upholstery in its design would be a marked step forward in reducing harborage, given the folds and tufts (similar to a mattress and box spring) routinely found in this furniture. Also, straight design with little to no textured woodwork reduces areas susceptible to egg deposits. In addition, attention should be drawn to the backside of the head board (that which affixes to the wall) as this area is routinely a 'hot spot' for bed bug activity.

## 2. BOX SPRING DUST RUFFLES



Dust ruffles that cascade onto the floor are an easy entrance ramp for bed bugs to crawl onto bedding. These ruffles are often highly pleated and cinched making favorite hiding and bed bug egg repositories. Highly suggested are the new decorative fabric covers available that fit snuggly onto the box spring (foundation).

#### 3. BOX SPRING PLATFORMS



Typical railed box spring frames are replete with 'nooks and crannies' that are commonly strewn with bed bug eggs when an infestation occurs. In contrast, the use of metal box spring platforms are far less conducive toward bed bug harborage in the event that a room is challenged.

# 4. ACTIVE LINERS



Unlike an encasement that simply protects the bed, an active liner protects not only the mattress and/or box spring but also the guest that is sleeping in the bed. As easy to install as a fitted sheet, an active liner such as *Active*Guard® Mattress Liners can prevent a bed bug infestation as they kill bed bugs that come into contact with the liner continuously for two years. Installation of this simple preventive measure can stop bed bugs introduced into the room from turning into a full-fledged infestation.

## 5. PICTURES



Wall coverings (e.g., pictures) that are secured with nails or other implements that puncture the wall are commonly found as harborage sites for bed bugs and their eggs. While it is probably not reasonable to suggest that pictures not adorn hotel room walls, it is recommended not placing them on the wall on which the bed and headboard rests.

#### 6. WINDOW TREATMENTS



Draperies and most specifically valances are notorious sites for bed bug harborage. Design choices that use the least amount of tufting and pleating should be considered in room design to reduce the likelihood of these design elements becoming sites for egg deposition. Alternatively, wooden or other non-upholstered valances would further reduce these areas as harborage sites.

#### 7. SEATING FURNITURE



While aesthetics and comfort are often key elements in selection, upholstered couches and chairs do pose risks for bed bug harborage. If upholstered seating is chosen, those with fixed seating and backrests (as compared to loose pillow design) are recommended.

## 8. LUGGAGE RACK AVAILABILITY



Guests dropping their suitcases on beds represent the most likely introduction of bed bugs onto bedding or other upholstered furniture. In lieu of a luggage rack often stowed in a closet, a hard surfaced furniture element designed for placement of luggage is preferred and does not render an easily hidden bed bug harborage site. Operationally, a simple reconfiguration in room layout to make certain that the luggage rack is openly available, easier to inspect and utilize, would be highly advantageous.