

HOME UNITS & FLATS

Introduction

Flats and home units are among the many types of buildings which, as a result of providing a comfortable environment for people, also provide many opportunities for insects and other pests to flourish. However, a review of pest control surveys, complaints by customers, or even one's own experience as an occupant, indicates that this type of building is perhaps more prone to pest problems than many other buildings. These pests include the following:

- Pests of stored food – cockroaches, flour beetles, etc.
- Pests of clothing and other fabrics – carpet beetles, bedbugs & clothes moth.
- Pests of pets (and people) – fleas.
- Pests of garbage and other waste – houseflies.
- Pests of the structure – termites.
- Pests which are nuisance invaders – fleas, flies, ants.

Before considering a pest management program for home units and flats, it is important to recognize the various factors which favour pests in such buildings, as well as factors which can make eradication or prevention of pests difficult.

Factors Favouring Pests

Factors Favouring Pest Entry

- New occupants may introduce pests in their belongings, perhaps after

furnishings have become infested in storage or transit.

- Food provisions purchased by every occupant are a possible source of pests.
- The need for services of contractors for maintenance, etc. can be a source of pests via boxes, supplies, etc.
- Pets may pick up fleas from outside areas.
- Outside lighting may attract flying insects to buildings.

Factors Favouring Pest Survival

- Warm buildings.
- Food and water in every unit (e.g. human food, pet food, carpets, clothes)
- Management of household waste.
- Lack of awareness of pests by occupants.
- Tolerance of pests by some occupants.

Factors Favouring Pest Dispersal Within Building.

- Cracks in internal walls allow pest movement between units.
- Conduits for water, electricity and heating or cooling systems allow lateral and vertical movement of pests.
- Lift shafts provide vertical access to each floor level.
- Common rubbish chutes provide vertical access between units or utility areas on each floor.

Factors Making Pest Management Difficult.

- Some of the units are occupied 24 hours each day.

- Children may be present.
- Pets, including tropical fish, may be present.
- The furnishings and other contents are not standard and some may be susceptible to damage from some control agents. (e.g. carpets).
- Some occupants may be uncooperative in terms of improving hygiene, emptying cabinets for insecticide application, etc.
- Access to some units may be difficult.
- There may be a reluctance to spend money on pest eradication and even more reluctance to spend money on pest prevention.

Planning a Pest Management Programme

Despite their serious problems, some apartment complexes seek and often obtain very low cost pest control service, usually on the basis of accepting the lowest bid. This kind of service may satisfy a corporate body's obligation to provide pest control service, but it will seldom achieve pest eradication. Moreover, in the long term the indirect costs of dealing with disgruntled occupants or the reduced rental of property value resulting from pest activity will make cheap pest control a false economy.

The details of pest management programs in flats and home units will vary from place to place, depending on climatic factors, site factors (e.g. plantings, soil types), management policies regarding pets, construction methods and materials, maintenance standards and hygiene levels. Nonetheless the guidelines below indicate how to approach implementing a pest management program with the

objective of both eradicating existing pests and preventing future problems. These guidelines involve the integrated use of non-chemical methods, as well as a range of modern control agents used by Adelaide Pest Control particularly suited for use in blocks of flats and home units.

The Adelaide Pest Control Pest Management System involves coming to grips with those factors favouring pests and not favouring pest management. It contains the following elements:

1. Obtaining management co-operation.
2. Inspection of premises.
3. Developing recommendations for non-chemical treatments.
4. Developing recommendations for chemical treatment.
5. Obtaining co-operation of occupants.
6. Implementation of initial treatments.
7. Implementation of follow-up treatments.
8. Monitoring the results.

1. Obtaining Management Co-operation.

It will be impossible to implement an effective program unless the management, residents committee, or whoever else is responsible, co-operates.

It will be the role of management to ensure access to all units. The management must serve as the communication route to occupants for the purposes of notifying them of inspections and treatments, gaining compliance in hygiene measures and logging complaints. The management must also be told about the fundamentals of pest biology, including such facts as the mobility of German cockroaches, and that solely treating

units of complaining occupants will not eradicate this pest.

Lastly, the management of the building will be responsible for making improvements that help deter pests. Perhaps more than any other action, such improvements provide evidence of a real commitment to deal with pest problems, and will obtain the co-operation of the occupants.

2. Inspection of Premises

An initial inspection of every unit and common areas must be conducted for the purposes of identifying the type and extent of pest problems and the factors which contribute to these problems. A record should be made of the situation in every unit and for other areas of the building, such as storage or laundry rooms. In particular, the location of problem areas must be recorded, since these may be a prime reservoir of pests from which the rest of the building may become infested. Notes should also be made of special factors such as the presence of fish tanks, children, etc. so that suitable precautions can be taken.

A good inspection is an essential part of any serious program and it provides a baseline for future comparisons. Since inspections and reporting constitute an integral part of service work, this part of the programme should be charged for. This is especially important when no decision has yet been reached on who will implement a pest management programme.

3. Developing Recommendations for Non-Chemical treatments

The inspection will form the basis of recommending non-chemical treatments.

These may include the following:

- Fitting tight, self-closing exterior doors.
- Caulking crevices around doors, windows and vents.
- Trimming or removing foundation plantings, creepers and overhanging trees.
- Establishing a bare strip of gravel or concrete against the foundation of the building.
- Cleaning gutters and outside drains.
- Fitting screens to windows.
- Clearing debris from rubbish or collection rooms (also sealing cracks and crevices, and painting these areas white for easier cleaning and inspection).
- Caulking crevices around plumbing fixtures in units, cabinets, counter tops, etc.
- Fixed plumbing leaks.
- Keeping food in sealed containers.
- Disposing of waste, including garbage and paper sacks, quickly.
- Eliminating lint accumulations from the edges of carpets and floors.
- Replacing exterior lighting, which attracts insects, with non-attractant lamps.

Most of these non-chemical measures will be conducted by maintenance staff or occupants, but it is the role of the pest management specialist to point out needs and prioritize such work.

4. Developing Recommendations for Chemical Treatments.

Chemical treatments must be customized to the particular pest situation based on the findings of the inspection. Nonetheless, if a single type of pest (such as German cockroaches) is predominant, a standard treatment procedure can be worked out which applies to all units.

For German cockroaches this might include the following recommendations:

- Treat all cracks and crevices in and around cabinets, shelves and sinks in the kitchen and bathroom.
- Treat kitchen voids under refrigerators, dishwashers, garbage disposers and stoves.
- Treat kitchen and bathroom wall voids by injecting existing accesses around electrical switch plates, door jambs and pipes.
- Drill accesses to other infested voids, particularly the kickplate under kitchen sink and units and bathroom vanities.

For those units which have major pest problems, it may also be necessary to treat cracks, crevices and voids in living rooms, dining rooms and bedrooms. However, in most units, if pests are not observed in these areas, the emphasis should be on kitchens and bathrooms.

The time and materials it takes to conduct a standard procedure for each unit will form the basis of pricing the job. However, the number of problem units and the severity of infestations in those units may substantially affect the workload. In addition, areas outside the units will need to be treated, including rubbish areas, laundry rooms and foyers. In some cases, it may be necessary to treat infested rubbish chutes or lift shafts.

For occasional invaders, perimeter treatments around the foundation (with particular emphasis around doorways) control agents can be planned since these will provide weeks of control. Where nests of

invading pests can be identified, such as ants, these could be targeted for spot applications. If substantial populations of fleas, etc. are noted around the building, the surroundings can be targeted for general ground and vegetation spraying.

5. Obtaining Co-operation of Occupants.

The achievement of pest-free conditions is difficult and more expensive without the co-operation of the occupants. Such co-operation is greatest when people fully understand the potential of pests to damage health of property. Therefore one of the tasks of the pest management specialist is to inform the occupants of the risks from pests and how they can co-operate in the planned program. This can be achieved by mailing information to each unit, but more commitment can usually be obtained by explaining the proposed program and dealing with responses at an announced meeting. A meeting allows more scope for reassuring occupants about such aspects as the safety of the proposed procedures, and it helps initiate the spirit of teamwork between management, occupants and Adelaide Pest Control that will help ensure success.

In some situations, the management of flats and home units will resist the idea of a tenant meeting because of fears it will become an uncontrollable complaint session. If the management cannot handle complaints, it is unlikely they will commit to carrying out those activities, such as plumbing maintenance which will help eradicate pests. For whatever reason, if a meeting is impossible, mailings must suffice. In any case, when it comes to carrying out treatments, all occupants must be informed in writing and given instructions on how to prepare for the treatments. These instructions for preparation would include the following:

- Empty and clean all kitchen cabinets.
- Empty and clean bathroom cabinets, medicine cabinets and linen cupboards.
- Check containers of spices, flour, cereals, etc. and if these show signs of infestation by stored product insects, dispose of them.
- Place open food or drink in the refrigerator or oven.
- Place other items removed from kitchen or bathroom cabinets in another room or, in the case of dishes, pans and cutlery, stack them on the kitchen table covered with a plastic sheet or cloth.
- Preferably remove children and pets from the unit during pesticide treatments.
- Cover fish tanks and air pumps serving fish tanks with a clean plastic sheet or cloth during the application of pesticides.
- Dispose of all garbage.
- Vacuum all carpets, especially the edges of fitted carpets, and dispose of the vacuum bags.

6. Implementation of Initial Treatments

The day (or days) of treatment should have been well publicized within the building so that every unit is prepared. Before carrying out any treatments, quickly check all units to make sure there has been full compliance. If some units are not prepared, ask the occupants to comply. If the occupants are absent, take steps to remove or cover exposed food, dishes, utensils, etc. and inform the building manager or residents committee what you have done.

Try to commit sufficient manpower resources to treat a whole building in one day to avoid disruption over

a long period. This also increases the chances of pest elimination because any pests disturbed by the treatment will not have any untreated areas to move into. In large buildings treatment is not possible on one day, commence work on the top floor and work down. With some pests, such as German cockroaches, infestations are often heaviest on the lower floors, so it is best to work down towards the problem floors rather than risk driving the insects up to less-infested floors.

For insects which spend a lot of time avoiding light or resting in harbourages, the treatments will focus on harbourage sealing, or injecting control agents into cracks, crevices and voids. For such pests, surface applications of insecticide will be minimal. Most important, whatever the target pest, all applications of pesticides must be in accordance with label directions.

Before leaving treated units, the occupants should be told of any special precautions such as not allowing children or pets on treated surfaces until the spray has dried. When the occupants are absent during the treatment, such precautions can be posted in writing on the door.

Special attention should be paid to treating those units which have been identified as having severe pest or hygiene problems. These units may take five or more times longer to treat than a clean, uninfested unit. Records should be kept of treatments in each unit as well as for corridors and other areas.

7. Implementation of Follow up Treatments

Follow up treatments should automatically be scheduled for the worst units, or other problem areas. These should be carried out two to four weeks after the initial treatment.

Where pests are invading from outside, a program of treatments aimed at intercepting the invaders and treating outside nest sites should be carried out. The frequency of outside treatments will depend on the pest pressure and on the vulnerability of the building to invasion.

It is worthwhile to thoroughly treat units whenever they become vacant. This is so that if new occupants introduce pests on their belongings, these pests will be killed by residual action when they seek food or water resources or enter harbourages.