NSW FIRE BRIGADES

Guide Sheet No. 7

Security in Apartment Complexes

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This document clarifies the NSW Fire Brigades (NSWFB) position regarding the installation of security and screen doors to a Sole Occupancy Unit (SOU) in an appartment or unit complex i.e. a Class 2 or 3 building under the Building Code of Australia (BCA).

Currently there exists confusion regarding NSWFB support for these doors being fitted, and thus confusion also exists for Local Government and certifiers trying to grant certification of statutory fire safety measures for units fitted with security/screen doors.

Types of doors

The following types of doors are sought by owners and occupants to be fitted to SOU's in apartment complexes:

- Screen door a door fitted to the door of an SOU with a single locking point, standard "acli-mesh" type meshing with a fly screen material attached and easily forced by emergency crews using standard entry tools;
- Security door a door either fitted to the existing door jamb of an SOU or having its own inner jamb of steel construction with steel bars, inserts and friezes normally welded to the frame of the door. A security door is usually fitted with heavy duty hinges and a dual or triple locking mechanism that locks vertically, horizontally and centrally, thus requiring special equipment to force the door open;
- Security Screen Doors is similar to a security door but is fitted with steel or high tensile fly screen mesh, and likewise requires special equipment to force the door open.

NSWFB position on screen doors

The NSWFB is not concerned with screen doors being fitted as long as they have a single locking point and their installation does not compromise the integrity of the SOU's main fire rated door. The NSWFB acknowledges that a screen door may be legitimately sought by occupants as an interim security barrier when opening the main door to greet quests.

However, the main front door of an SOU should not be left open for ventilation purposes even though the screen door is providing security; this contravenes building code requirements. An open fire compartment allows fire, heat and smoke to enter the SOU and overcome the occupants inside, and if fire starts in the unit, the fire, heat and smoke can spread from the SOU into common areas to endanger other occupants or hinder their safe egress.

NSWFB position on security doors and security screen doors

The NSWFB recommends against the fitting of security doors and security screen doors because these doors will require either hydraulic rescue equipment or oxyacetylene equipment to force entry into the SOU for rescue. This method of entry is time and resource intensive and directly impacts on the life safety of both firefighters and occupants in the event of an emergency.

Furthermore, these doors do not normally have a door closer attached and thus have the potential to impede on the egress path or exit corridor width.

Background

A fire occuring on boxing day in 1986 resulted in the deaths of all eight occupants in a unit. The occupants were in a top floor unit of a multi-level complex and the door to the SOU was held open by a brick on a hot and balmy night. A fire started in the foyer area and quickly raced up the stairs into the open SOU due to the 'chimney' effect. Other units which had their doors closed only suffered charring to their doors and occupants within those units were unharmed.

Although no screen/security doors were involved in this incident, this event does highlight the importance of a closed fire rated door on each SOU and its function of preventing the products of fire (including heat and smoke) from entering or escaping the unit.

Conclusion

The NSWFB recommends against the fitting of security doors and security screen doors. Where an occupant desires added security beyond the main front door to the unit, the NSWFB prefers occupants use a screen door which has a single locking point.

The NSWFB acknowledges that the fitting of these types of doors is an exempt development and may not go to Council for approval, but where requested, the following should be recommended:

- the screen door must not be fitted with any special locking device that will render the door difficult to open by firefighters and other emergency service personnel;
- the screen door must not compromise the integrity of the SOU's main fire rated door including the door jamb, and certification of these doors is to be made on this basis;
- the screen door must be fitted in a manner which will not impact on safe entry/egress for the occupant/s nor impede travel onto an exit stair (e.g. at top of stairs or within stairs);
- each screen door must be fitted with a self closing device to ensure the door always returns to a closed position and cannot be held open.

The use of a screen door for ventilation purposes where occupants prop open the main fire door is a compliance issue for Councils to address through issuing of Fire Safety Orders and/or Penalty Infringement Notices (PINS).