

# Multi-Storey Dwellings

These guidelines relate to low, medium and high-rise developments and are provided for existing premises as well as new developments. This document must be read in conjunction with New Homes.

## 1 Public Access

**1.1** The Security of the development is enhanced by discouraging casual intrusion by non-residents. Public access should, therefore, be restricted. An access control system should be provided. This may be a managed concierge system, a Proximity Access Control (PAC) system and door entry phone system, or a combination of both.

**1.2** There should be no unnecessary paths which could be used to gain unobtrusive access and escape. Good signage should be provided to deter unauthorised access and to assist emergency services, trades persons, etc.

## 2 Natural Surveillance

Optimum natural surveillance should be incorporated, whereby residents can see and be seen. Measures should include: -

**2.1** An unobstructed view from dwellings of the site, its external spaces and neighbouring homes, to include external paths, galleries, roadways, communal areas, drying areas, landscaping, garages and parking areas.

**2.2** The avoidance /elimination of recesses, blind corners, and hiding places.

## 3 Formal Surveillance

**3.1** A monitored Close Circuit Television (CCTV) system covering the site area, with particular focus on key access points may be required. Consideration may be given to providing residents with visual access control. Advice should be sought as to the most appropriate type of system - refer to ALO/CPDA.

## 4 Lighting

**4.1** Appropriate lighting should be carefully designed to cover potential high risk areas. Good lighting will deter intruders and reduce the fear of crime. The following areas must be lit: Main site access, garages, garage forecourts, car parking areas, all footpaths and associated areas to main building, refuse store, drying areas, secluded areas and similar locations around the site.

Main entrance door, secondary access doors, fire exit doors.

**4.2** All lighting must be automatically controlled by Photo-electric Cell or Time Switch. Fittings and service wiring should be vandal resistant and located to minimise vulnerability to vandalism.

## **5 Street Lighting**

**5.1** On both adopted and unadopted roads, lighting must conform to BS5489. All other lighting requirements should be discussed with the ALO/CPDA.

## **6 Landscaping**

**6.1** Landscaping is an important feature of this initiative. Landscaping should not impede natural surveillance and must not create potential hiding places for intruders, especially adjacent to footpaths or close to buildings where it may obscure doors and windows. Frontages should be in open view. Ornamental walls and hedges should not exceed one metre in height. Grass or low ground cover planting only should be used within 2 metres either side of a footpath. The location and species of trees should not allow them to obscure lighting or CCTV, or become climbing aids. The specification should take account of maintenance needs to ensure continued compliance as plants grow. The correct use of certain species of plants can help prevent graffiti and loitering, and in addition to fencing may be used to define/reinforce boundaries. Defensive planting i.e. Berberis or similar may be utilised to achieve this purpose.

## **7 Block Boundaries**

**7.1** Private gardens or patios to ground floor dwellings or communal facilities should be secured as noted previously. The estate layout should provide each block with a clearly defined defensible space, and fencing where appropriate.

## **8 Car Parking**

**8.1** In-curtilage car parking arrangements are preferred but where communal car parking areas are necessary, they must be in small groups, close and adjacent to the owners which they serve and open to view of the residents from regularly habitable rooms.

**8.2** Garages should be located to maximise opportunities for natural surveillance. Entrances to garages should be designed to be within the boundaries of the secured area. Lighting requirements should be discussed with the ALO/CPDA.

**8.3** The importance of early liaison with the designated officer in addressing resident and visitor car parking arrangements cannot be over emphasised. In certain conditions additional security features may be required and to this end the physical principles of the "Secured Car Parks" award may be referred to.

## **9 Garages**

**9.1** All doors should be secured in accordance with BS8220/86 or as specified by the designated officer. Windows should be avoided. Garage roofs should be pitched (flat roofs should be avoided), and rainwater pipes etc, should be located so as to avoid providing climbing opportunities.

## 10 Building Shell

### 10.1 Entrances

The entrances to a block should form a second line of defence. Often they form the physical barrier to access for outsiders. The minimum number of entrances compatible with resident's convenience and fire safety should be provided, and unnecessary entrances eliminated.

**10.2** Main entrances should be fitted with an access control system. This may be PAC entry system, a door entry phone system and electrical lock release or a combination of these. Entrance and exit doors and frames to blocks should be of robust, vandal-resistant material, as specified later. Vandal resistant viewing panels should be fitted. Entrances should be well lit, both internally and externally.

### 10.3 Concierge and Caretaker

Where a concierge service is provided, entrances and fire exits should be audibly alarmed to the concierge control centre. Where provided, residential caretakers' flats should be located adjacent to front entrances, and directly accessible to the concierge control centre, if applicable.

### 10.4 Balconies

Enclosures to balconies at all levels should be designed to exclude handholds and to eliminate the opportunity for climbing up, down or across between balconies. (NB: special consideration may need to be given where adjacent balconies also serve as an alternative means of escape in case of fire).

### 10.5 Communal Facilities

Communal facilities on the ground floor, such as residents' communal lounges, are best located to give natural surveillance of entrances, entrance lobbies and external areas. Bin stores and chutes, service ducts and panels, pipes, and door entrance canopies should be designed to eliminate the opportunity for unauthorised access and climbing.

Secure bicycle storage for residents and visitors should be considered.

## 11 Internal Security

**11.1** Circulation Communal internal circulation areas, staircases, entrances and lift lobbies should be brightly decorated and well lit, and a hierarchy of defensible space established. Access staircases should be linked to the minimum number of dwellings. External walkways should be eliminated wherever possible, or the number of dwellings accessed from them limited to the minimum compatible with the physical form of the block and the need for fire safety.

Where a PAC entrance system, concierge and CCTV system is provided, consideration should be given to extending these systems to cover the internal circulation areas, for example PAC entry/door entry systems may be provided on landings.

Recesses, blind corners and hiding places should be eliminated wherever possible. A means of emergency communication should be provided from lifts and adjacent lobbies, or any other vulnerable areas. Doors, frames, equipment and finishes in circulation areas, including lifts, should be designed to be vandal resistant.

## 12 Physical Security Specification

**12.1** Same as for SBD (New Homes), however, in high rise blocks particular care needs to be taken to ensure that the security measures do not conflict with fire regulations with respect to means of escape in case of fire.

The final choice of lock should be agreed in consultation with the Architectural Liaison Officer, the Fire Safety Officer and Building Control. In all cases, these locks must be able to be opened from the inside without the aid of a key, to comply with Fire Regulations and BS5588.

## 13 Windows

**13.1** Ground floor windows and those easily accessible above ground floor, must be successfully tested to BS 7950:1997 'Specification for enhanced security performance of casement and tilt/ turn windows for domestic applications', at an appropriately accredited UKAS test house, or if otherwise tested must be independently authenticated, in writing, by a test house suitably approved by UKAS. Windows installed within SBD developments must also meet the following performance standards:

- i. BS 4873 (Aluminium)
- ii. BS 7412 (PVC-U)
- iii. BS 644 (Timber) or the BWF Timber Window Accreditation Scheme (TWAS).
- iv. BS 6510 (Steel)

**13.2** All windows installed within SBD developments must be to exactly the same specification as that successfully tested. The ALO/CPDA must be supplied with a copy of the test certificate prior to completion of the SBD development (the developer should be afforded the opportunity to see a copy of the full test report). ACPO will continue to support moves towards product certification by recognised ongoing third party inspection. Where products are not certificated in this way, a manufacturers declaration that all products supplied are identical to those tested must accompany the copy of the test certificate supplied.

**13.3** Sliding sash, pivot or reversible windows are not presently covered by BS 7950. If included within the development they must meet the relevant performance criteria i.e be fit for purpose. The use of this style of window must be discussed with the ALO/CPDA.

**13.4** Windows must be securely fixed to the surrounding structure at a maximum of 600mm centres, with at least two fixing points per side.

**13.5** Ground floor windows and those that are easily accessible to entry must have key operated locks. Where necessary, opening restrictors or similar built-in mechanisms will be required. Where windows are required under the Building Regulations to act as a fire escape route (inner room situation), the opening window must not have key operated locks. These escape windows must not be restricted in any way to prevent emergency exit from building. In these circumstances any glazing must be laminated to 6.4mm minimum thickness.