

# DESIGNING FOR COMMUNITY SAFETY SUPPLEMENTARY PLANNING DOCUMENT

November 2009

## 1 Foreword

This Supplementary Planning Document has been produced following discussion and consultation with the Architectural Liaison Service of Northumbria Police and Development Management Officers. This document gives guidance on the design and layout of the physical environment so as to reduce crime, the fear of crime and anti-social behaviour. The Designing for Community Safety Supplementary Planning Document (SPD) will be used to help assess and determine planning applications.

This SPD expands on the Newcastle City Council's saved Unitary Development Plan policies, and once these are formally superseded, those policies of the Local Development Framework. Once adopted it will be a material consideration in the determination of planning applications.

The SPD aims to complement Newcastle's Crime and Disorder Strategy and the Police's "Secured by Design" initiative.

## 2 Design and crime and the need for an SPD.

Crime and the fear of crime can have a significant impact on the quality of life for individuals and the community. Whilst the planning system cannot solve the problem of crime it has a key role in promoting well managed environments and secure buildings which can influence the levels of crime and anti-social behaviour. **Section 17 of the Crime and Disorder Act 1998** places a responsibility upon the local authority to consider crime and disorder implications of every aspect of their activities and the need to do all they reasonably can to prevent crime and disorder in their area.

It is important that community safety considerations should be an integral part of the design process and should be considered at the earliest possible stage to prevent the need for costly and unsightly retro-fitting of developments at a later stage. Saved Policy EN1.1 states that all development will be required to meet high standards of design including design measures to minimise opportunities for crime.

Design and Access Statements should adequately address the crime prevention component required to be included in Design and Access Statements (DAS). PPS1 makes it clear that new developments should create safe and accessible environments where crime and disorder or fear of crime does not undermine quality of life or community cohesion. Design and Access Statements for outline and detailed planning applications should therefore demonstrate how crime prevention measures have been considered in the design of the proposal and how the design reflects the attributes of safe sustainable places set out in **Safer Places**.

The Government's guide '**Safer Places – The Planning System and Crime Prevention**' sets out a number of key principles and lists 7 attributes of sustainable communities that are particularly relevant to crime prevention. These are integral to this SPD and are shown below:

- **Access and movement:** places with well designed routes, spaces and entrances that provide for convenient movement without compromising security;
- **Structure:** places that are structured so that different uses do not cause conflict;
- **Surveillance:** places where all publicly accessible spaces are overlooked;
- **Ownership:** places that promote a sense of ownership, respect, territorial responsibility and community;
- **Physical protection:** places that include necessary, well-designed security features;
- **Activity:** places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times; and
- **Management and maintenance:** places that are designed with management and maintenance in mind, to discourage crime in the present and the future.

The Government have recently published **Safer Places: A Counter Terrorism Supplement**. This is intended to be practical guide on how best to incorporate counter terrorism measures into proposed new development schemes whilst ensuring that they are of high design quality. The guidance is particularly relevant to crowded places which are preferred targets for international terrorists. This guide supplements Safer Places and together they support the design policy PPS1. LPA must have regard to this guidance and it is capable of being a material consideration in the determination of planning applications. Appendix 1 lists the type of developments which should be referred to the ALO and Counter Terrorism Security Adviser for their input.

**Secured by Design** (SBD) is a police initiative to encourage the building industry to incorporate crime prevention measures in to the design of security features such as doors and windows as well as the layout and design of estates and buildings. Northumbria Police offer certification for developments that meet the Secured by Design standards through its Architectural Liaison Officer (ALO). Information on the SBD guidelines and how to apply for certification can be found at [www.securedbydesign.com](http://www.securedbydesign.com) or by contacting the ALO. Developers should contact the ALO during the initial design stage to ensure that measures to achieve SBD are designed into developments.

## **3 How to use this supplementary planning document**

### **3.1 Development Management**

The development management process is key to ensuring proposals incorporate designs and layouts that reduce crime, fear of crime and anti-social behaviour, as far as is possible, when all other relevant local, regional and national policies and material considerations are taken into consideration. Officers within Development Management will use this document as a basis for pre-application advice and to inform decisions on planning applications.

The SPD is intended to guide architects, developers, landscape architects and urban designers.

There is recognition that some security measures, such as fencing may conflict with other principles of good design. In such situations the objective should be to achieve a design solution which minimises opportunities for crime without taking a 'fortress mentality' approach as far as possible.

### **3.2 Pre-application stage**

From the earliest stages of project development, developers, architects and applicants should contact Development Management Officers who will co-ordinate discussions about the proposal and involve the Council's Community Safety Officers and / or Northumbria Police Architectural Liaison Officers when necessary.

### **3.3 Planning application stage**

Crime prevention can be a material consideration in the determination of planning applications. All development proposals should have regard to the community safety / design out crime principles set out in this document in order to satisfy saved Policy EN1.1 of the UDP. The LPA will expect all Design and Access Statements submitted with major applications to demonstrate how the guidance in this document are addressed in the design and layout of the proposal, taking account of local circumstances. Other planning applications may also be required to show how these guidelines have been taken into account if crime prevention issues are potentially significant.

## **4 Producing this document**

This SPD has been produced in accordance with the advice contained in PPS12: Local Development Frameworks and the requirements of the Town and Country Planning (Local Development) (England) Regulations 2004.

The document has been subject to a Sustainability Appraisal at all stages. The SA considers the implication of the SPD from social, economic and environmental

perspectives by assessing options and the draft SPD against available baseline data and sustainability objectives.

A copy of the SA is available to view at the Council's website at [www.newcastle.gov.uk/ldf](http://www.newcastle.gov.uk/ldf) Supplementary Planning Document page.

A Consultation Statement is available on the Council's website which sets out who has been consulted in the preparation of the SPD, how they were consulted, a summary of the main issues raised, and how those issues have been addressed.

## 5 General principles

Crime Prevention through Environmental Design (CPTED) is a crime prevention approach which promotes a physical environment that positively influences behaviour. It aims to make people feel safe in their surroundings and make criminals feel at risk by being in the area and so less likely to commit crime. It is an approach that relies on the simple premise that the way space is designed can have an effect on the behaviour of people.

The key CPTED principles are surveillance, defensible space, territoriality, anonymity, escape routes and hiding places. These principles should be considered as a whole as they can be ineffective when used in isolation. They should also be considered early on in the development process so as to incorporate them with other design concepts to avoid conflict.

### 5.1 Surveillance

Natural surveillance is an important mechanism in preventing crime and strongly complements defensible space. Criminals feel least comfortable where legitimate users of a space or building have a high degree of visibility over the area, so where criminal activity can easily be seen.

There are 3 types of surveillance:

- **Natural surveillance** occurs when there are few obstacles to vision, areas of concealment do not exist and there is good lighting. This encourages people to feel safe – where they can see and be seen and encourages people to use the area.
- **Passive surveillance** simply provided by people legitimately walking or driving through an area.
- **Formal Surveillance** which is usually employed when natural surveillance alone cannot protect an area. This can take the form of CCTV and security patrols.

## 5.2 Defensible space

Creating an environment where residents exercise a greater degree of control is the key concept of defensible space. There is a hierarchy of the 4 areas of space:

- **Private** – under the total control of the occupier and is not physically accessible to the public, for example a rear garden.
- **Semi-private** – under the control and ownership of the occupier but is open and accessible to the public if they have a legitimate reason to be there. A good example is the front path to a front door giving access to postal deliveries.
- **Semi-public** – under the control of or within the responsibility of a specific group of occupants **and** accessible to the public if they have a legitimate reason. These are communal areas such as communal parking areas or the entrance lobby to a block of flats.
- **Public** – where the public has a right to fully access the area e.g. a park or pavement.

Divisions are mostly defined by some type of barrier; a physical barrier could be a fence, low brick wall or hedge. Symbolic barriers can be as simple as a flower bed or change of surface or colour of a footpath. The important condition is that people using the area are in no doubt about crossing from one type of space to another. Well defined defensible space is vital in enabling residents to exercise control.

## 5.3 Territoriality

Territoriality is achieved by design that allows for easy identification of an area and its purpose as the exclusive domain of a particular group or individual. A sense of ownership prevails even though the ownership may not be legal; it is more to do with the positive relationship of the group or individual with their environment, for instance a group of children who regularly use a play area.

If an area and its use has to be questioned it can be classed as ambiguous and is less likely to be “owned” and cared for. These areas often facilitate anti-social behaviour and residents are less likely to challenge any behaviour that happens there.

## 5.4 Anonymity

An offender prefers not to be seen when they are in a particular area with the intention of committing crime. They will avoid carrying out the offence where they can be seen or when they are leaving the scene. They will try to become anonymous in any situation and by designing the built environment in such a way as to promote people’s curiosity and ownership of an area it is possible to reduce the offender’s comfort of being in an area. A good example of this is a cul-de sac where there is

often a certain level of social control as residents are more likely to know each other and recognise strangers.

## 5.5 Escape routes and hiding places

Most crimes are carried out when the opportunity presents itself and are not due to careful planning by the criminal. The chances of deterring the offender are largely determined by their ability to get away on escapes routes without surveillance and without areas to hide and evade capture.

Layouts and routes which assist the offender:-

- Lanes and alleyways that have poor surveillance, poor lighting and may be overgrown or poorly maintained. These areas become less desirable to legitimate users and so offenders are more comfortable in these areas
- Any route or path that runs to the rear of a dwelling or commercial building
- Acute angles in subways or alleys
- Deep recesses in walls, fences or building line

## 6. Residential

The following section provides a checklist for residential developments in relation to design and physical security and is based on guidance provided by Secured by Design:-

### 6.1 Layout

#### **Key objective**

*To generate a sense of identity and maximise natural surveillance to generate a sense that the area is under the control of the people living which in turn can deter offenders and provide them with security.*

- Defined entrances are created using real or symbolic barriers, such as brick piers, changes in road surfaces colour and texture, or the colour, position and intensity of lights.
- Vehicle and pedestrian routes should be designed to be open, direct and well used with good natural surveillance.
- Communal open space or facilities are designed so they do not conflict with surrounding residential properties, are overlooked for good natural surveillance and unauthorised vehicle access is prevented.

- No ambiguous space is left over within the layout which has no function and can become the focus of anti-social behaviour.
- Houses are positioned to face each other to facilitate natural surveillance. House numbers or names are clearly displayed.
- Elevations of houses provide an opportunity for natural surveillance through gable end windows or positioning of end houses around corners.
- Illegitimate access to the rear of properties will be denied through:-
  - back to back garden layout
  - access paths to the side of the house will be securely gated on or as near to the front building line
  - rear access footpaths to a number of properties has been avoided or gated at the entrance to the footpath

## 6.2 Access and movement

### Key objective

*Movement through an area should be designed to provide clear, direct well lit routes which will not raise the fear of crime and will be well used.*

- The movement framework is based on a hierarchy of well defined primary routes and shared spaces which do not compromise security.
- Grid layouts can also deter the offender where there is a high level of activity along the street and it is well overlooked.
- Extensive, intricate and meandering cul-de-sac layouts are avoided. Where cul-de-sacs are incorporated they are 'closed' i.e. without footpaths at the end.
- Access routes are kept to a minimum so they are subject to high levels of use and surveillance.
- Pedestrian and cycle routes should not be separated from the road network
- Pedestrian and cycle routes should be designed to be wide, without sharp bends or hiding places, overlooked and well lit and should not run to the rear or side of residential properties.

## 6.3 Landscaping & lighting

### Key Objective

*To complement the built environment whilst not compromising natural surveillance.*

- Landscaping provides clear sight lines and avoids the creation of hiding places.
- The correct use of spiny or thorny shrubs to enhance perimeter security.
- Climbing plants on blank walls that abut public space to prevent or reduce graffiti.
- Maturing trees are not positioned close to properties so they can be used as scaling aids.
- Trees are free of foliage below 2 metres and shrubs do not exceed 1 metre in height so clear views are possible.
- Planting will not compromise the view from windows and will not conflict with street lighting or CCTV.
- Planting next to footpaths will not restrict natural surveillance or provide hiding places.
- Street lighting conforms to the requirements of BS 5489 (2003): part 1 and BS EN 13201 (2003): part 2.
- Lighting should function effectively alongside existing and proposed trees.
- Columns should not be located in areas where they can be used as climbing aids to access dwellings.
- Lighting should be designed to achieve a uniform balanced even light without glare and avoid pools of light and darkness.

## 6.4 Parking

### Key Objective

*To provide adequate security and reduce the opportunities for vehicle crime.*



- Garages should be adjacent to the dwelling and designed so they cannot be used as a climbing ad to access the property.
- Where dwellings only have curtilage parking this should be overlooked by the householder.
- Courtyard parking within residential schemes should have good sightlines and be near to and observable by the owners. Direct pedestrian routes provided from the dwellings to the parking spaces.
- Courtyard parking areas should be restricted in size and have only one entry / exit point to avoid unnecessary through routes. Entrances to courtyards should be overlooked by active rooms. Any boundary treatment should not restrict visibility into the parking area.
- Courtyard parking should be lit to BS 5489 (2003): part 1.
- Remote communal parking courts should be avoided.

## 6.5 Boundary treatment

### Key Objectives

*To provide barriers that maximise the principles of defensible space to all boundaries of the property.*

- Boundaries should be clearly defined to provide a standard dwelling with semi-private front space and a fully private and secure rear space.
- To the front of dwellings any walls, fences or hedges should be no more than 1 metre high and kept as low as possible.
- Rear and side boundary treatment should be a minimum of 1.8 metres.
- Side access should be protected by lockable gates, with a minimum height of 1.8 metres and sited as close to the front of the building line as possible.
- If a rear boundary adjoins open land or a public footpath an additional height of 300mm should be added in the form of 300mm trellis or external defensive planting.
- Where a side elevations of a dwelling is adjacent to a public area or public highway, for example at the end of a terrace, a 1 metre buffer zone, using 1.2 – 1.4 metre railings or a mature height hedge should be provided to prevent graffiti and anti-social behaviour.

- The height of boundaries between properties should be determined by local crime patterns. A standard 1.8 metre high boundary treatment should be erected from the rear boundary and then a timber fence topped with a trellis closer to the dwelling.

## 6.6 Flats and apartments

### **Key Objectives**

*To provide adequate security for multiple occupants through the principles of access control.*

- A single and well defined entrance should be provided.
- Communal parking areas should be properly overlooked and illuminated and provided with boundary treatment, although this should not restrict visibility into the parking area.
- The development should feature an uncomplicated footprint to provide clear sightlines, remove hiding places and maximise natural surveillance.
- Meters sited within semi-public space on the ground floor, which denies further access into the building.
- An area for individual and secure letter boxes should be designed into developments.
- Subject to fire safety regulations, fire escapes to be alarmed or fitted with anti tamper devices.

## 6.7 Public open space and play areas

### **Key Objectives**

*To provide safe unambiguous areas with clearly designated use.*

- Open space and play areas should be designed to be located within residential schemes and not in remote or vulnerable locations at the edge of residential developments.
- Overlooked by the habitable rooms of surrounding dwellings especially at the entrance points to the open / play space.

- Unauthorised vehicle and motorbike access is prevented by the use of bollards.
- Consideration should be given to whether play areas are locked at night, if so, the boundary treatment should be robust, visually permeable and have gates of the same height.

## 6.8 Physical security

The physical security standards laid down in the Secured by Design guide to New Homes are the minimum requirements needed in order for a development to be awarded a SBD certificate. These measures are outside the remit of the planning system, however, the Architectural Liaison Officer and /or the Local Authority's Community Safety Unit will be able to provide developers with further information on physical security required to achieve SBD or refer to Appendix 3 for the relevant Secured by Design standards and the grading of risk.

## 7 City centre, local and neighbourhood centres

The following section provides guidance on designing out crime in commercial centres.

### **Key Objective**

*To provide a mix of uses for a range of people, avoid the inappropriate siting of facilities that has the potential to generate crime and promote a pedestrian orientated environment to help control and reduce criminal activity.*

- Shopping centres should be safe for retailers and customers and be designed so as to promote a good level of security particularly during the hours of darkness.
- Entrances to developments are positioned to ensure surveillance from neighbouring buildings, busy streets and highway.
- Where possible developments incorporate a mix of uses to promote legitimate activity with active frontage at street level to enhance the street scene.
- Landscaping allows clear views and is not incorporated into raised beds.
- Lighting is planned to avoid pools of light and shade.
- Delivery areas are secure particularly after darkness.

- Parking is overlooked and can be observed with clearly defined parking bays.
- Bus stops are in close proximity to the main entrance of the shopping centres and people waiting can be seen clearly from the highway.
- ALOs and Development Management Officers should be involved in discussions about the design of major developments; for example transport interchanges and public buildings, at the earliest opportunity in light of the Government's counter terrorism measures. Appendix 1 includes more information.

## **7.1 Shop frontages**

- Shop windows should be laminated.
- Entrances and frontages should be well lit.
- Any recesses to shop fronts should be splayed to provide increased visibility and should not be deep enough to provide a hiding place.
- The LPA has produced specific shopfront guidance for the design of traditional style shopfronts and acceptable security measures in listed buildings and conservation areas. Security measures should be designed into the shopfront and not fitted retrospectively.

## **7.2 Security shutters and grilles**

- Blank solid shutters can reinforce the fear of crime and attract criminal activity such as graffiti and fly posting therefore internal open grilles to windows and doors are recommended and should be as transparent as possible.
- Where internal shopfront security measures are not considered sufficient, open grille shutters should be favoured over shutters with punched holes or small perforations.
- Shutter boxes should be located behind the fascia board and should not project from the front elevation.
- In traditional shopfronts the use of internal lattice grilles behind the shop windows is acceptable, however, if external measures are necessary, they should be removable mesh grilles fitted over doors and windows which relate to door and window openings and do not obscure shopfront features such as sub fascias, pilasters or stallrisers.

## 7.3 ATMs

- Should be located on well used routes where there is a good level of natural surveillance and lighting.
- Mounted flush to the wall and not located in a recess.
- Overlooked by CCTV.
- A customer safe zone is designated e.g. a hatched zone on the highway to define an area of personal space for the person using the machine.
- ATMs should not be combined with other on street facilities such as electronic information points.

## 8 Car Parks

### Key objective

In all proposals for commercial, multi-storey or surface car parks, developers should have regard to best practice guidelines to seek to achieve and maintain the national Safer Parking status 'Park Mark' where appropriate.

### 8.1 Surface car parks

- Should be a pedestrian friendly environment with level surface areas provided for those with disabilities and clearly defined pathways which lead to the facilities they are serving.
- Pathways should be located away from high walls or densely landscaped areas.
- All parking spaces, pathways and circulation routes should be well lit with good natural surveillance from buildings and well used routes, particularly where car parks serve recreational or entertainment facilities with high night time usage.
- Landscaping to subdivide large parking areas should not obscure views or vehicles or create hiding places or forming litter traps.
- All proposals for car parks should incorporate CCTV.

## 8.2 Underground / Undercroft and Multi- Storey Car Parks

- Vehicular access points should be electronically controlled.
- External pedestrian entrances should be separate from vehicular access and also have controlled or monitored access.
- Designed to allow as much natural daylight as possible into the area.
- Artificial light should achieve minimum standards and create uniform lighting with minimum colour distortion and no shadowed areas or pools of darkness.
- Light coloured walls and ceiling should be used throughout.
- CCTV should be incorporated in all car parks to Home Office standards.
- Proposals for multi-storey car parks should seek to accommodate a suitable mix of ground floor uses such as shops or offices and / or be wrapped by single aspect residential units.
- Design and layout should maximise natural surveillance by
  - arranging parking spaces in straight rows
  - ensuring support pillars are as slim as possible
  - ensuring external pedestrian entrances and routes to them have good natural surveillance and adjacent landscaping is low level
  - maximising natural surveillance into and out of lifts, preferably with vision panel; and
  - incorporating open balustrades on stairs to enable good visibility.

## 9 Industrial Areas, Business Parks & Commercial development

Industrial areas and Business Parks are often in areas with little or no natural surveillance. The lack of activity during night time and holiday periods makes such developments vulnerable to vandalism and theft.

- Design and layout should maximise natural surveillance and incorporate measures to combat the insufficiency by incorporating the following:
  - a staffed gatehouse into larger industrial developments or a physical or symbolic threshold to indicate the boundary between public domain and private domain.
  - back to back service yards to ensure mutual overlooking.
  - transparent building entrances directly accessed from the street wherever possible.

- external storage areas should be designed to avoid easy unauthorised access.
- all access routes and service areas should be overlooked.
- CCTV plays an important role in deterring and monitoring crime in high risk locations where natural surveillance is insufficient.

A recently published guide in relation to commercial development has been produced by the Secured by Design initiative. It provides detailed development layout and building shell security guidance on:-

- Warehouses
- Offices
- Retail premises

The guidance is too detailed to reproduce as a checklist for the purposes of this document. The guidance can be found at [www.securedbydesign.com](http://www.securedbydesign.com) SBD Design Guide publications.

## 10 Lighting, CCTV & alarms

### 10.1 Lighting

#### **Key Objective**

*To maximise surveillance security for people and property during the hours of darkness and to increase the feeling of safety.*

- In a commercial development, lighting should be sufficient for the CCTV operator to observe and record images.
- Lighting should function effectively alongside new and existing trees.
- Columns should be sited where they cannot be used as climbing aids to property.
- Lighting should be designed to achieve a uniform, balanced even light without glare. Pools of light and darkness should be avoided.
- Lamps have a high colour rendering index (white light) and provide a natural appearance. Monochromatic lights should be avoided.
- Lighting is provided for external doors, common areas or other vulnerable areas. Operation by photo-electric cell or passive infrared detectors, or alternatively halogen lights (150w), fully shielded, with independent sensor.

## **10.2 CCTV**

- All proposals for car parks should incorporate CCTV to current Government standards.
- Developers should consider installing good quality, high resolution, recorded CCTV and help points.

## **10.3 Intruder Alarms**

- Under the required standards now in force the system has to be graded in line with the risk to the site, the value of the contents and the type of building and can be achieved in different ways; Audio, Sequential or visual or any combination of either or all. A system installer will advise you on the best option to suit the security system design and the risk involved.



## **Appendix 1 – Counter Terrorism**

The following types of development require the input of the Northumbria Police Architectural Liaison Officer and Counter Terrorism Security Officer

- Sports stadia
- Pubs/ bars and nightclubs (particularly where they are clustered together)
- Shopping centres
- Visitor attractions
- Cinemas and theatres
- Schools and Places of Higher Education
- Places of Worship and Faith Centres
- Certain open spaces and public realms that may be crowded at certain times, e.g. for sporting events or open air events.

They should be involved at the earliest opportunity in pre-application discussions and formally consulted on applications.

## **Appendix 2 – Contact details**

### **Development Management**

Development Management  
Strategic Housing, Planning & Transportation  
Civic Centre  
Barras Bridge  
Newcastle upon Tyne  
NE1 8PR

0191 211 5654

[Planning.control@newcastle.gov.uk](mailto:Planning.control@newcastle.gov.uk)

### **The Community Safety Unit**

The Community Safety Unit is located within the City Council and operates in partnership with other crime reduction agencies in the City under the umbrella of the Safe Newcastle Partnership. Community Safety Officers also work closely with the Local Planning Authority. There are a number of officers in the unit who are qualified to give advice on designing out crime in existing and proposed developments as well as CCTV operation and legislation.

The Community Safety Unit  
Room 34 Civic Centre  
Barras Bridge  
Newcastle upon Tyne  
NE1 8PR  
0191 277 7832

## **Northumbria Police Architectural Liaison Officers**

Architectural Liaison Officers (ALO) are located within Northumbria Police and are qualified to give advice on designing out crime for new and proposed developments. In particular the officers can advise on both the Secured by Design Award and Safer Parking Scheme Award and can certificate these developments.



[www.saferparking.co.uk](http://www.saferparking.co.uk)

[www.securedbydesign.com](http://www.securedbydesign.com)

**Appendix 3 - Secured by Design guide to standards for doors windows and locks.**

## Guide to Security Standards for Doors & Windows May 2002

This leaflet is an aid to help you determine whether a product has the appropriate level of security for its application and risk factor. It is a clear comparison between established security standards appropriate for the protection of windows and doors against burglary. For more details please refer to the actual standards or see the websites listed below.

To ensure that a product conforms to these standards, it is important that products be certified by a UKAS accredited certification body rather than be type tested. Certification ensures that the manufacturer continues to produce products to this high standard, particularly relevant for higher risk situations.

To verify certification, ask to see a valid certificate or check with the relevant certification body.

Application	Minimum Performance Required	Notes	
<p><b>Very high security Doorsets.</b> LPS1175 SR 5 certification is a minimum standard for high risk situations.</p>	LPS1175 Security Rating (SR) 6	Products certified to these security standards have resisted a series of professional attack tests each lasting up to 30 minutes using a wide variety of powerful mains operated tools.	
	LPS1175 SR 5		
	<p><b>Doorsets or Rolling Shutters for door and window openings.</b> LPS1175 SR 3 certification is a minimum standard for medium risk situations.</p>	LPS1175 SR 4	Products certified to these security standards have resisted a series of professional attacks, each lasting up to 30 minutes (SR 4) or 20 minutes (SR 3), using a wide variety of battery operated power tools.
		LPS1175 SR 3	
<p><b>Doorsets, Rolling Shutters, Security Grilles or Windows for door and window openings.</b> BS.PAS 24 or LPS1175 SR 1 certification is a minimum standard for low risk situations.</p>	LPS1175 SR 2	Products certified to these security standards have resisted a series of professional attacks, each lasting up to 15 minutes (SR 2 & PAS 24) or 10 minutes (SR 1) using a variety of hand tools such as hammers, crowbars, chisels and hacksaws.	
	BS.PAS 24 <sup>1</sup>		
	LPS1175 SR 1 and BS7950 <sup>2</sup>		
<p><b>Locking devices for doors &amp; windows.</b> Locks should be independently certified to BS3621 or incorporate cylinders that have been independently certified to EN1303, as a minimum protection.</p>	BS3621 and EN1303 Grades 4-6	These standards cover the mechanical performance of the lock-set or cylinder for doors. They do not guarantee the resistance of the door to which they are fitted, although they can enhance the resistance to certain forms of attack.	

The selection of the appropriate physical protection for windows and doors will depend on a number of issues including the following:

- The location of the door/window.
- The location of the property.
- The value of the property.
- The value or desirability of the goods or information within the premises.
- The risks relating to the loss of, or interruption to business.
- The use of additional security products and technology, including CCTV, intruder detection equipment and asset market systems.

The standards of product performance specified in this chart should therefore be considered to be a **MINIMUM** of risk the levels of risk.

These standards relate to levels of physical security and do not cover other aspects of performance that may be desirable, such as fire resistance, weather tightness and durability. Standards exist which cover these other aspects and should be considered according to intended use of the product.  
1) Door glazing may influence security and should therefore be a minimum of 6.5mm laminated glass. PAS 24 excludes the glazing from the test. For comparison, PAS 24 can be considered higher than SR 1, but lower than SR 2.  
2) BS7950 is a standard for windows, but excludes resistance to breakage of the glazing and attack of frame fixings. It is therefore not a comprehensive security test.



[www.brecertification.co.uk](http://www.brecertification.co.uk)



[www.securedbydesign.com](http://www.securedbydesign.com)



[www.bsia.co.uk](http://www.bsia.co.uk)

This leaflet has been prepared with the support of the above organizations. It should not be inferred that these organizations endorse specific products that meet these security standards, as each organization has criteria for accrediting a particular company or product. No commercial reference to these organizations or their logos may be made without the written agreement of the organizations concerned.

## Standards & Testing

### Windows

**BS: 7950: 1997. Specification for enhanced security performance of casements, tilt/turn windows for domestic applications.**

**BS 7950** must be supported by performance standards relevant to the materials used:

- BS 4873: 1986 Specification for aluminium windows.
- BS 7412:1991 Specification for plastic windows made from PVC-U extruded hollow profiles.
- BS 644-1: 1989 Wood windows. Specification for factory assembled windows - various types.
- BWF:TWAS Timber window accreditation scheme.
- BS 6510: 1984 Specification for steel windows, sills, window boards & doors.

**LPS 1175: Issue 5.1, 2004 Specification for testing and classifying the burglary resistance of building components, strong-points and security enclosures.**

This includes windows for higher risk premises and is graded levels 1 to 6.

**LPS 1270 (Draft) Specification for testing and classifying the burglary resistance of security glazing and glazing films.** Based on LPS 1175 this standard enables specifiers to select glazing films that offer resistance to manual attack equivalent to the building products in which the glass or film is to be used.

### Doors & Locks

**BS 3621:2004 Thief resistant locks. Key egress.** The minimum standard for locks on external or entrance doors to be acceptable to the Association of British Insurers (ABI) and the police service. The effectiveness of the lock also depends on the quality of the door, frame and other hardware which is not tested by this standard and which may fail before the lock.

**BS 8621:2004 Thief resistant locks. Keyless egress.** As above but accommodating locks that offer egress without the use of a key.

**BS:EN 1303:2005 Building Hardware Cylinder for locks requirements & specified test methods.** The minimum standard for the cylinder on locks for multi-point locking on external or entrance doors. The effectiveness of the lock depends on the quality of the door, frame and other hardware which is not tested by this standard and which may fail before the lock cylinder.

**LPS 1242: Issue 1, 2003 Requirements for testing procedures for the approval and listing of cylinders for locks.** Based on EN 1303 this standard incorporates additional requirements to address critical issues relating to the security provided by cylinders and associated keys.

**BS: PAS 23-1: 1999 General performance requirements for door assemblies. Part 1, single leaf, external door assemblies (including all material relevant annexes).** A performance standard for door sets, which certifies that a particular door set, is fit for purpose. The security rating is not sufficient for police/insurance purposes and products must also have PAS24.

**BS: PAS 24-1: 1999 Enhanced security performance requirements for door assemblies.** Part 1 single leaf, external door assemblies. An attack test standard for door sets which certifies that a particular door, frame, lock and hardware set has withstood a series of physical tests based on common methods of burglary. This is the minimum police requirement for Secured by Design dwellings.

**LPS 1175: Issue 6, 2004: Specification for testing and classifying the burglary resistance of building components, strong-points and security enclosures.** This includes doors, shutters and grilles for commercial premises and higher risk domestic premises and is acceptable to the ABI and the Police. The standard has 6 levels, 6 being the highest and levels 1 and 2 equivalent in many respects to BS: PAS24 in relation to doors.

**LPS 1268 (Draft) Specification for testing and classification of hotel doorsets.** This test takes elements from both BS: PAS 24 and LPS 1175. Doorsets are subjected to a number of additional tests, e.g. Fire/smoke resistance, acoustic performance, etc. Although developed to reduce thefts from hotel bedrooms this standard can also be used in other multi occupancy environments at risk of crime.

**LPS 1270 (Draft) Specification for testing and classifying the burglary resistance of security glazing and glazing films.** Based on LPS 1175 this standard enables specifiers to select glazing films that offer resistance to manual attack equivalent to the building products in which the glass or film is to be used.