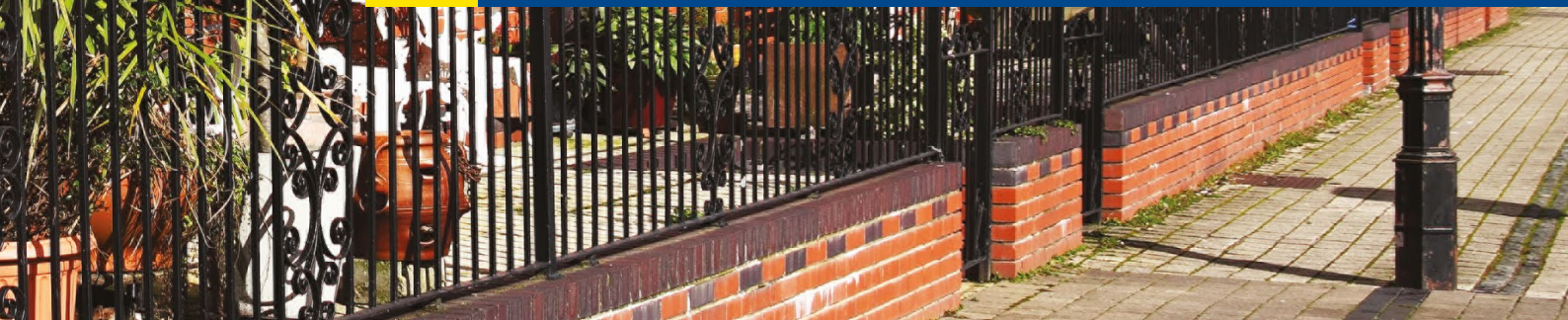




Crime Prevention Advice for
**Specialist
and Supported
Housing Schemes**



Secured by Design



Official Police Security Initiative

Preface

The changes to the English Planning and Building Control regulations following in-depth reviews by the Ministry for Housing, Communities and Local Government (MHCLG) have underlined the importance of the police advice delivered over the past 30 years; specifically in the form of the Secured by Design (SBD) initiative. The references within the National Planning Policy Framework (NPPF) and the accompanying National Planning Practice Guidance (NPPG) along with those in Scotland (Scottish Planning Policy – PAN 77) and Wales (Planning Policy Wales – TAN 12) have sought to reinforce the need for and importance of safe and secure external environments and to this end there are specific references to police service advice and the Police.uk website in particular.

This crime prevention guide is one of a series produced by Police Crime Prevention Initiatives (Police CPI) and has been developed to sit alongside the current version of the *Secured by Design Homes Guide* which offers security guidance for domestic properties. Both documents have been designed to cater for the security of new and refurbished homes, including those for disabled and older people, victims of domestic abuse or those with specific protected characteristics. It incorporates the latest security standards, developed to address emerging criminal methods of attack, and includes references to the Building Regulations and other statutory requirements across the United Kingdom.

SBD officers have become increasingly aware of the need to consider adapted, accessible and inclusive housing and neighbourhoods in their advice, so as not to create additional barriers for disabled and older residents. Such inclusive design aims to remove barriers that create undue effort and separation. It is defined as a process that ensures all buildings, places, and surrounding spaces can be easily and comfortably accessed and used by everyone.

The requirements and recommendations within this guide have been developed by SBD with various standards owners and trade associations and are based upon sound research findings that have proven to deliver significant crime reductions and cost efficiency savings for a wide range of stakeholders including local authorities, housing associations, landlords, residents and the police service. The police service continually re-evaluates the effectiveness of Secured by Design and responds to emerging crime trends and independent research findings, in conjunction with industry partners, as and when it is considered necessary and to protect the public from crime. The police service places great importance upon the need to build sustainable and inclusive communities and to raise awareness of the significant impact that low crime makes to the ongoing and long-term sustainability of a development.

Contents

Introduction	4	Glazing	24
Police Crime Prevention Initiatives	4	Door chain/limiters	25
Secured by Design	4	Door viewers	25
Doorsets and windows and their fitness for purpose	5	Secure mail delivery	25
Fire, smoke and security rated doorsets	6	Compartmentation	26
Front doors	7	Fire and Rescue Service access	27
Timber front door with single-point locking	7	Locking mechanisms for security compartmented doorsets	28
Timber front door with multi-point locking	8	Fire and Rescue Service key systems	28
PVC-U, aluminium or composite front door with single-point locking	10	Emergency door release devices	28
PVC-U, aluminium or composite front door with multi-point locking	11	Windows	29
Easily accessible doorsets	13	Timber, PVC-U, aluminium or metal windows with single-point locking	29
Side/rear doors	13	Timber, PVC-U, aluminium or metal windows with multi-point locking	30
Timber side/rear door with single-point locking	13	Emergency egress windows	31
Timber side/rear door with multi-point locking	14	Boundary security	32
PVC-U, aluminium or composite side/rear doors with single-point locking	15	Side and/or rear boundaries	32
PVC-U, aluminium or composite side/rear doors with multi-point locking	16	Apartment/flat boundaries	33
Sliding patio doors	17	Roof construction	33
Sliding patio doors with single-point locking	17	Roof lights	33
PVC or aluminium sliding patio doors with multi-point locking	19	Loft hatches	34
Glazed double/French doors	20	Intruder and hold-up alarm systems	34
Timber glazed double/French doors with single-point locking	20	Video surveillance systems	38
Timber glazed double/French doors with multi-point locking	21	Security lighting	42
PVC-U or aluminium glazed double/French doors with single-point locking	22	Secured by Design Sanctuary Scheme	43
PVC-U or aluminium glazed double/French doors with multi-point locking	23		

Introduction

Criminals are observant and opportunistic and whether they are intent on committing burglary, stealing cars or any other property, they are always on the lookout for vulnerable features to exploit. Almost all types of acquisitive crime can be defended against by the implementation of physical security measures. Burglars are keen to remain unseen, unheard and uninjured whilst committing their crimes and as a result, they look for unoccupied properties where they are less likely to be seen by neighbours or passers-by with low levels of security that is easily overcome. Everyone, from members of the public to design professionals who shape our built environment, can install physical measures to strengthen security, such as tested and accredited locks and bolts on doors and windows, to deter criminality and increase attack resistance.

It is recommended that a minimum level of physical security is installed to at least avoid casual intrusion into private spaces but, should the risks of crime increase, so should the levels of physical security be improved to ensure they are commensurate with such risks. Installing physical security has the greatest potential for gain when it is targeted at the specific types of crime a property may be vulnerable to.

Academic research shows that the appropriate combination of physical security measures can dramatically reduce offences such as burglary, other thefts, criminal damage, anti-social behaviour, etc. The best way to conduct a physical security survey is to approach it with the mindset of a potential criminal. In the case of a burglary, this is referred to as the “onion peeling principle” and can be approached by starting with the boundaries and working inwards towards the centre. A comprehensive building survey is essential to identify the areas of physical security that need improving and to prevent duplication of products, bearing in mind that most criminals will not target premises if there is a heightened risk to them of being observed and potentially apprehended.

Police Crime Prevention Initiatives

Police Crime Prevention Initiatives (Police CPI) is a police owned organisation that works to deliver a wide range of innovative and ground-breaking crime prevention and demand reduction initiatives to support the wider UK Police Service, Government and the general public. Police CPI maintains close working links with the National Police Chiefs’ Council National Leads, central government, manufacturers and companies involved in security products (within the UK and those in countries that supply the UK), standards authorities and key stakeholders such as Planners, Architects, Developers, Local Authorities, Housing Associations, academia and the public. Police CPI is a not-for-profit organisation, which raises its own money and delivers significant crime reductions at no cost to the Police Service or the public purse. Senior police officers from England, Scotland, Wales and Northern Ireland control and direct the work Police CPI carries out on behalf of the Police Service.

Secured by Design

Secured by Design (SBD) is a police initiative operating throughout the UK that encourages manufacturers of security products to have them successfully tested and third party certificated by a United Kingdom Accreditation Service (UKAS) body to police preferred standards of security. SBD is one of several crime prevention schemes operated by Police CPI, which is owned by the UK Police Service, is supported by the Home Office and is not-for-profit. SBD lists many approved crime prevention products and services. It is an invaluable resource for guidance on many things including security standards, crime prevention and product procurement. Where new builds are proposed, or a total refurbishment, Police CPI recommends that the design team applies for a Secured by Design Award and more information about this scheme is available at: www.securedbydesign.com

Doorsets and windows and their fitness for purpose

The guiding principle to employ when specifying a doorset is that it is fit for purpose in respect of its performance against the elements, that it is appropriate for its physical location and that it has a relevant security certification rating.

In the interests of clarity, when this guide refers to doorsets, what is meant is fenestration through which occupiers and visitors gain access to the building.

When this guide refers to windows, what is meant is fenestration most commonly used for ventilation.

BS 6375 (performance of doors and windows) defines the resilience and operational characteristics of both doorsets and windows which, in simple terms, means testing a doorset or a window to ensure that it will withstand the demands of being opened and closed repeatedly over a significant period of time.

BS 6375 covers performance criteria from snow loading to weather tightness but, from the Secured by Design perspective, the focus has necessarily been on the security aspects of primary doorsets and windows but importantly, whether the specification calls for a:

- i. PAS 24 (enhanced security performance requirements for doorsets and windows); or
- ii. LPS 1175 (intruder resistant building components); or
- iii. STS (enhanced security performance requirements for doorsets and windows) doorset or window to be fitted, the equipment must be able to survive many cycles of repeated use. The table at 20.13 below sets out the testing parameters in terms of repetitious use, from relatively low to higher volumes of cyclical events.

The doorsets and windows should meet the duty rating that is commensurate with their intended location and use.

For instance, Class 4 (moderate use) of BS 6375 means that a doorset or window has been through in excess of 50,000 cycles of closing and opening without failure.

As an approximate guide, in many situations the BS 6375 'moderate' level of qualification will suffice for approval. It should be borne in mind that communal doorsets can often have a high volume of use and this is especially true when they service primary entrances to, for instance, large apartment blocks. It is important that developments have the correct level of security specification for the doorsets and windows but equally important is the durability of these units as tested against the requirements of BS 6375.

Doorsets and windows shall be classified according to their intended use, for example, if an opening in a building is intended to be walked through, a doorset is required. It follows that a doorset will have more use than a window and a door is therefore subject to 5 times more testing at the moderate classification level under BS 6375 than a window is.

The minimum requirements of 'moderate' for classification under BS 6375 for both doorsets and windows are:

- Doorsets - 50,000 cycles (Classification extracted from BS EN 12400)
- Windows - 10,000 cycles (Classification extracted from BS EN 12400)

Door and window specifications can always flex between the classifications of 'normal' and 'frequent' dependent on the projected volume of foot traffic through doors or how many times a window might be opened and closed; in circumstances where projected use for primary doorsets is going to be 'severe' for doors (in excess of 1 million cycles) or 'heavy' for windows (in excess of 20,000 cycles) then it would be reasonable to expect the specifier to choose a Class 8 door or a Class 3 window respectively. Specifiers should provide proof that doorsets and windows meet the duty of rating that is commensurate with their intended location and use.

For example, in an apartment block of 100 flats it can be reasonably assumed that residents families will use the primary entrance doorset a minimum of twice a day, as they leave and re-enter the block. However, in practice, family life, deliveries and visitors dictate that this communal doorset will be used many more times per day than this, and in these circumstances, a doorset with the correct BS 6375 classification matching the projected use cycles will be appropriate.

In respect of secondary doorsets, a level of site specificity will be employed with regards to their projected use and where significantly lower cycles of use can be expected, a lower BS 6375 classification is applicable.

Table 1 – Classification

Class	Number of cycles	
0	–	Pedestrian doors only
1	5,000	
2	10,000	
3	20,000	
4	50,000	Pedestrian doors only
5	100,000	
6	200,000	
7	500,000	
8	Section 9	

Table A.1 – Window classes

Class	Duty
1	light
2	moderate
3	heavy

Table A.2 – Door classes

Class	Duty
1	occasional
2	light
3	infrequent
4	moderate
5	normal
6	frequent
7	heavy
8	severe

Fire, smoke and security rated doorsets

Where there is a requirement for a doorset to be fire, smoke and security rated, e.g. flat or apartment entrance doorsets, interconnecting garage doorsets, some doorsets aiding security compartmentation and/or meet a building regulation requirement, the manufacturer or fabricator supplying the finished product to site is required to present independent third party certification from a single UKAS accredited certification body satisfying all the performance elements. This is in order to minimise the likelihood of a doorset being presented in varying configurations for separate fire, smoke and security tests and then later being misrepresented as one product meeting all requirements. It is recognised that there are occasions where a doorset may only be required to be fire and security rated (not smoke). Again, in such circumstances the manufacturer or fabricator supplying the finished product to site is required to present independent third party certification from a single UKAS accredited certification body satisfying both performance elements. All door styles and components will need to be adequately described within the scope of certification and accompanying Technical Schedule.

Any component part of the doorset that is changed for any reason must be assessed by the certification body to ensure compliance that the certified performance requirements are maintained.

Any adjacent side panel (glazed or non-glazed) to a fire rated doorset must be included within the same scope of certification for that doorset.

The responsibility for the specification and location of fire and smoke rated security doorsets lies with the developer or the developer's agent.

The role of the flat or apartment entrance doorset (the final doorset providing access to the dwelling) should not be underestimated in the event of a fire. It is therefore imperative that fire resistance is professionally assessed/measured. Part B of the current Building Regulations and the associated guidance in Approved Document B state such doorsets should achieve at least 30 minutes of fire resistance. Additional requirements are also specified for smoke leakage.

Notwithstanding the advice written above, all door specifications must be agreed with the Fire Safety Officer.



Front doors

The following table will help you decide which front door section is relevant to your security survey:

	Timber	PVC-U	Aluminium	Composite
Single-point locking	Section 1	Section 3	Section 3	Section 3
Multi-point locking	Section 2	Section 4	Section 4	Section 4

SECTION 1

Timber front door with single-point locking

- 1.1 If the property has been awarded Secured by Design (SBD) certification, the timber front door will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 1.2 A timber front door should be at least 44mm thick and made from solid wood, free from rot or damage, not manufactured from soft wood or constructed with a hollow core. If the door is in poor repair and does not meet this criteria, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
 - PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 1.3 Alternatively, there may be documentation to prove that an existing building has had the front doorset(s) replaced to one of the following police preferred standards:
 - PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.

- 1.4 If the front door is the only means of escape, e.g. flat entrance doors, residents must be able to unlock the door from the inside with a thumb turn lock, not a key. They should be able to leave to investigate the cause of a fire or other emergency and return to raise the alarm without having to use a key. The sole purpose of the key in these circumstances is to lock and unlock the door from the outside, when leaving or returning.
- 1.5 If the door has single-point locking, the locks should meet one of the following security requirements, taking account of the fire safety regulations, if the front door is the only means of escape:
 - BS 3621 (key locking both sides);
 - BS 8621 (non-key locking thumb turn on the internal face to comply with fire safety); or
 - BS 10621 (non-key locking thumb turn on the internal face, with an external override facility to comply with fire safety).
- 1.6 If the door has single-point locking, it should have a mortice or Euro cylinder deadlock, displaying the BS Kitemark, fitted approximately one third of the way up the leading edge.
- 1.7 A deadlock guard fitted to the inside and outside face of the door will offer additional protection to a mortice deadlock.
- 1.8 If the door has single-point locking, it should also have a surface mounted BS 3621 automatic deadlocking rim latch lock or BS 8621 escape night latch lock, displaying the BS Kitemark, fitted approximately one third of the way down the leading edge. Take account of the fire safety regulations, if the front door is the only means of escape.
- 1.9 If the door is single-point locking, the frame should be reinforced with a London bar (long, flat steel bar, shaped to fit around the surface mounted automatic deadlocking rim latch lock/escape night latch) screwed to the lock side of the frame and a Birmingham bar (long, flat steel bar) screwed to the hinge side of the frame.
- 1.10 A pair of hinge bolts should also be fitted to protect the hinge side of the door, particularly if the door opens outwards as the hinge pins are exposed and vulnerable to attack.
- 1.11 A DHF TS 002 approved door viewer should be fitted at the appropriate height to provide a clear view of callers, so that the occupier is able to identify them without having to open the door first.
- 1.12 A DHF TS 003 approved door limiter (a device which has a rigid arm for the detachable connection of door to frame for the purpose of restricting the amount the door can open) should be fitted in accordance with the manufacturer's instructions and must be suitable for the door material to which it is being fitted.
- 1.13 An internal letterbox security cowl will prevent intruders gaining access to the locks through the letterbox.
- 1.14 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
 - Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 1.15 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

SECTION 2

Timber front door with multi-point locking

- 2.1 If the property has been awarded Secured by Design (SBD) certification, the timber front door will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 2.2 A timber front door should be at least 44mm thick and made from solid wood, free from rot or damage, not manufactured from soft wood or constructed with a hollow core. If the door is in poor repair and does not meet this criteria, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:

- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 2.3 Alternatively, there may be documentation to prove that an existing building has had the front doorset(s) replaced to one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 2.4 If the front door is the only means of escape, e.g. flat entrance doors, residents must be able to unlock the door from the inside with a thumb turn lock, not a key. They should be able to leave to investigate the cause of a fire or other emergency and return to raise the alarm without having to use a key. The sole purpose of the key in these circumstances is to lock and unlock the door from the outside, when leaving or returning.
- 2.5 If the timber front door has a multi-point locking system, it should meet one of the following security standards:
- PAS 3621 (key locking both sides);
 - PAS 8621 (non-key locking thumb turn on the internal face to comply with fire safety); or
 - PAS 10621 (non-key locking thumb turn on the internal face, with an external override facility to comply with fire safety).
- 2.6 The multi-point locking system will have a Euro profile lock cylinder which should be displaying the BS Kitemark and the Door and Hardware Federation (DHF) Technical Specification (TS) 007 3-star rating, or the equivalent DHF TS 007 1-star rating combined with a pair of DHF TS 007 2-star rated handles (the BS Kitemark and DHF star ratings should be visible on the lock and handles).
- 2.7 If the door has multi-point locking, the frame should be reinforced with two Birmingham bars (long, flat steel bars), screwed to each side of the frame.
- 2.8 A pair of hinge bolts should also be fitted to protect the hinge side of the door, particularly if the door opens outwards as the hinge pins are exposed and vulnerable to attack.
- 2.9 A DHF TS 002 approved door viewer should be fitted at the appropriate height to provide a clear view of callers, so that the occupier is able to identify them without having to open the door first.
- 2.10 A DHF TS 003 approved door limiter (a device which has a rigid arm for the detachable connection of door to frame for the purpose of restricting the amount the door can open) should be fitted in accordance with the manufacturer's instructions and must be suitable for the door material to which it is being fitted.
- 2.11 An internal letterbox security cowl will prevent intruders gaining access to the locks through the letterbox.
- 2.12 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 2.13 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

SECTION 3

PVC-U, aluminium or composite front door with single-point locking

- 3.1 Composite doors can be manufactured in any colour and generally comprise of two moulded surface skins, an inner door framing material and a foam insulating core, the combination of which results in a door that is strong and secure. Composite doors typically fall into three categories:
- Steel faced;
 - Thermoplastic faced, e.g. PVC-U, ABS;
 - Thermoset faced, e.g. fiberglass, carbon fibre.
- 3.2 If the property has been awarded Secured by Design (SBD) certification, the PVC-U, aluminium or composite front door will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOC) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 3.3 A PVC-U, aluminium or composite front door should be in good condition with no detrimental damage. If the door is in poor repair, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 3.4 Alternatively, there may be documentation to prove that an existing building has had the front doorset(s) replaced to one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 3.5 The Euro profile lock cylinder should be replaced if it does not meet one of the following requirements, taking account of the fire safety regulations, if the front door is the only means of escape:
- BS 3621 (key locking both sides);
 - BS 8621 (non-key locking thumb turn on the internal face to comply with fire safety); or
 - BS 10621 (non-key locking thumb turn on the internal face, with an external override facility to comply with fire safety).
- 3.6 If the front door is the only means of escape, e.g. flat entrance doors, residents must be able to unlock the door from the inside with a thumb turn lock, not a key. They should be able to leave to investigate the cause of a fire or other emergency and return to raise the alarm without having to use a key. The sole purpose of the key in these circumstances is to lock and unlock the door from the outside, when leaving or returning.
- 3.7 The Euro profile lock cylinder should be displaying the BS Kitemark and the Door and Hardware Federation (DHF) Technical Specification (TS) 007 3-star rating, or the equivalent DHF TS 007 1-star rating combined with a pair of DHF TS 007 2-star rated handles (the BS Kitemark and DHF star ratings should be visible on the lock and handles).
- 3.8 If the door has single-point locking in the form of a Euro profile cylinder fitted at approximately one third to half way up the leading edge of the door, it should also have a surface mounted BS 3621 automatic deadlocking rim latch lock or BS 8621 escape night latch lock, displaying the BS Kitemark, fitted approximately one third of the way down the leading edge. Take account of the fire safety regulations, if the front door is the only means of escape.

- 3.9 A pair of interlocking security hinges should also be fitted to protect the hinge side of the door, particularly if the door opens outwards as the hinge pins are exposed and vulnerable to attack.
- 3.10 A DHF TS 002 approved door viewer should be fitted at the appropriate height to provide a clear view of callers, so that the occupier is able to identify them without having to open the door first.
- 3.11 A DHF TS 003 approved door limiter (a device which has a rigid arm for the detachable connection of door to frame for the purpose of restricting the amount the door can open) should be fitted in accordance with the manufacturer's instructions and must be suitable for the door material to which it is being fitted.
- 3.12 An internal letterbox security cowl will prevent intruders gaining access to the locks through the letterbox.
- 3.13 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 3.14 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

SECTION 4

PVC-U, aluminium or composite front door with multi-point locking

- 4.1 Composite doors can be manufactured in any colour and generally comprise of two moulded surface skins, an inner door framing material and a foam insulating core, the combination of which results in a door that is strong and secure. Composite doors typically fall into three categories:
- Steel faced;
 - Thermoplastic faced, e.g. PVC-U, ABS;
 - Thermoset faced, e.g. fiberglass, carbon fibre.
- 4.2 If the property has been awarded Secured by Design (SBD) certification, the PVC-U, aluminium or composite front door will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 4.3 A PVC-U, aluminium or composite front door should be in good condition with no detrimental damage. If the door is in poor repair, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 4.4 Alternatively, there may be documentation to prove that an existing building has had the front doorset(s) replaced to one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or



- STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 4.5 The Euro profile lock cylinder should be replaced if it does not meet one of the following requirements:
- PAS 3621 (key locking both sides);
 - PAS 8621 (non-key locking thumb turn on the internal face to comply with fire safety); or
 - PAS 10621 (non-key locking thumb turn on the internal face, with an external override facility to comply with fire safety).
- 4.6 If the front door is the only means of escape, e.g. flat entrance doors, residents must be able to unlock the door from the inside with a thumb turn lock, not a key. They should be able to leave to investigate the cause of a fire or other emergency and return to raise the alarm without having to use a key. The sole purpose of the key in these circumstances is to lock and unlock the door from the outside, when leaving or returning.
- 4.7 The Euro profile lock cylinder should be displaying the BS Kitemark and the Door and Hardware Federation (DHF) Technical Specification (TS) 007 3-star rating, or the equivalent DHF TS 007 1-star rating combined with a pair of DHF TS 007 2-star rated handles (the BS Kitemark and DHF star ratings should be visible on the lock and handles).
- 4.8 A pair of interlocking security hinges should also be fitted to protect the hinge side of the door, particularly if the door opens outwards as the hinge pins are exposed and vulnerable to attack.
- 4.9 A DHF TS 002 approved door viewer should be fitted at the appropriate height to provide a clear view of callers, so that the occupier is able to identify them without having to open the door first.
- 4.10 A DHF TS 003 approved door limiter (a device which has a rigid arm for the detachable connection of door to frame for the purpose of restricting the amount the door can open) should be fitted in accordance with the manufacturer's instructions and must be suitable for the door material to which it is being fitted.
- 4.11 An internal letterbox security cowl will prevent intruders gaining access to the locks through the letterbox.
- 4.12 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.

- 4.13 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

Easily accessible doorsets and windows

- 4.14 Secured by Design and Approved Document Q Appendix A define easily accessible doors and windows as having any part within 2 metres vertically of an accessible level surface such as a ground or basement level, or an access balcony, or a window within 2 metres vertically of a flat roof or sloping roof (with a pitch of less than 30°) that is within 3.5 metres of ground level.

The following security provisions apply to all easily accessible doors and windows.

Side/rear doors

The following table will help you decide which side/rear door section is relevant to your security survey:

	Timber	PVC-U	Aluminium	Composite
Single-point locking	Section 5	Section 7	Section 7	Section 7
Multi-point locking	Section 6	Section 8	Section 8	Section 8

SECTION 5

Timber side/rear door with single-point locking

- 5.1 If the property has been awarded Secured by Design (SBD) certification, the timber side/rear door will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 5.2 A timber side/rear door should be at least 44mm thick and made from solid wood, free from rot or damage, not manufactured from soft wood or constructed with a hollow core. If the door is in poor repair and does not meet this criteria, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 5.3 Alternatively, there may be documentation to prove that an existing building has had the side/rear doorset(s) replaced to one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 5.4 If the door has single-point locking, it should have a BS 3621 (key locking both sides) mortice deadlock/sashlock, displaying the BS Kitemark, fitted approximately half way up the leading edge.
- 5.5 A deadlock guard fitted to the inside and outside face of the door will offer additional protection to a mortice deadlock.
- 5.6 Additional locking points are required for single-point locking to reduce the leverage points. It should have either a pair of mortice rack bolts (key operated bolts cut into the leading edge of the door, with an internal key slot only) or a pair

of surface mounted locking throw bolts, both with projections in excess of 20mm, fitted approximately one third from the top and one third from the bottom of the door to spread the force in the event of a physical attack, avoiding door leaf construction joints and taking into account any specific user requirements and the overall height of the door.

- 5.7 The frame should be reinforced with two Birmingham bars (long, flat steel bars), screwed to each side of the frame. A London bar will not be suitable as it is shaped to fit around a surface mounted rim latch lock, which typically will not be present on a side and/or rear door.
- 5.8 A pair of hinge bolts (metal pins fitted into the edge of the door that automatically engage or disengage as the door is opened or closed) should be fitted to protect the hinge side of the door. This is particularly important with outward opening doors, where the hinge pins are exposed externally and are vulnerable to attack.
- 5.9 Side and/or rear doors with panels, where the panel is at any point less than 44mm thick or made from a material other than solid timber, should be reinforced internally with a 12mm overlapping plywood panel, glued and screwed into the door. The void created between the existing panel and the overlapping plywood panel should be infilled with chipboard of an appropriate thickness.
- 5.10 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass is stronger than annealed/float glass and is designed to break up into small, safe pieces, but it does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 5.11 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

SECTION 6

Timber side/rear door with multi-point locking

- 6.1 If the property has been awarded Secured by Design (SBD) certification, the timber side/rear door will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 6.2 A timber side/rear door should be at least 44mm thick and made from solid wood, free from rot or damage, not manufactured from soft wood or constructed with a hollow core. If the door is in poor repair and does not meet this criteria, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 6.3 Alternatively, there may be documentation to prove that an existing building has had the side/rear doorset(s) replaced to one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.

- 6.4 If the door already has a multi-point locking system, the Euro profile lock cylinder should be replaced if it does not meet PAS 3621 (key locking both sides).
- 6.5 The multi-point locking system will have a Euro profile lock cylinder which should be displaying the BS Kitemark and the Door and Hardware Federation (DHF) Technical Specification (TS) 007 3-star rating, or the equivalent DHF TS 007 1-star rating combined with a pair of DHF TS 007 2-star rated handles (the BS Kitemark and DHF star ratings should be visible on the lock and handles).
- 6.6 If the door has multi-point locking, the frame should be reinforced with two Birmingham bars (long, flat steel bars), screwed to each side of the frame.
- 6.7 A pair of hinge bolts should also be fitted to protect the hinge side of the door, particularly if the door opens outwards as the hinge pins are exposed and vulnerable to attack.
- 6.8 Side/rear doors with panels, where the panel is at any point less than 44mm thick or made from a material other than solid timber, should be reinforced internally with a 12mm overlapping plywood panel, glued and screwed into the door. The void created between the existing panel and the overlapping plywood panel should be infilled with chipboard of an appropriate thickness.
- 6.9 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 6.10 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

SECTION 7

PVC-U, aluminium or composite side/rear door with single-point locking

- 7.1 Composite doors can be manufactured in any colour and generally comprise of two moulded surface skins, an inner door framing material and a foam insulating core, the combination of which results in a door that is strong and secure. Composite doors typically fall into three categories:
- Steel faced;
 - Thermoplastic faced, e.g. PVC-U, ABS;
 - Thermoset faced, e.g. fiberglass, carbon fibre.
- 7.2 If the property has been awarded Secured by Design (SBD) certification, the PVC-U, aluminium or composite side/rear door will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 7.3 A PVC-U, aluminium or composite side/rear door should be in good condition with no detrimental damage. If the door is in poor repair, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 7.4 Alternatively, there may be documentation to prove that an existing building has had the side/rear doorset(s) replaced to one of the following police preferred standards:

- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 7.5 If the door has single-point locking, it should have a BS 3621 (key locking both sides) Euro profile lock, displaying the BS Kitemark, fitted approximately half way up the leading edge.
- 7.6 The Euro profile lock cylinder should be displaying the BS Kitemark and the Door and Hardware Federation (DHF) Technical Specification (TS) 007 3-star rating, or the equivalent DHF TS 007 1-star rating combined with a pair of DHF TS 007 2-star rated handles (the BS Kitemark and DHF star ratings should be visible on the lock and handles).
- 7.7 Additional locking points are required for single-point locking to reduce the leverage points. It should have a pair of surface mounted locking throw bolts, both with projections in excess of 20mm, fitted approximately one third from the top and one third from the bottom of the door to spread the force in the event of a physical attack, avoiding door leaf construction joints and taking into account any specific user requirements and the overall height of the door.
- 7.8 A pair of interlocking security hinges should also be fitted to protect the hinge side of the door, particularly if the door opens outwards as the hinge pins are exposed and vulnerable to attack.
- 7.9 Side/rear doors with panels, where the panel is at any point less than the thickness of the door, should be reinforced internally with a powder coated overlapping metal panel, screwed into the door. The void created between the existing panel and the overlapping metal panel should be infilled with chipboard of an appropriate thickness.
- 7.10 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 7.11 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

SECTION 8

PVC-U, aluminium or composite side/rear door with multi-point locking

- 8.1 Composite doors can be manufactured in any colour and generally comprise of two moulded surface skins, an inner door framing material and a foam insulating core, the combination of which results in a door that is strong and secure. Composite doors typically fall into three categories:
- Steel faced;
 - Thermoplastic faced, e.g. PVC-U, ABS;
 - Thermoset faced, e.g. fiberglass, carbon fibre.
- 8.2 If the property has been awarded Secured by Design (SBD) certification, the PVC-U, aluminium or composite side/rear door will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 8.3 A PVC-U, aluminium or composite side/rear door should be in good condition with no detrimental damage. If the door is in poor repair, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or

- LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 8.4 Alternatively, there may be documentation to prove that an existing building has had the side/rear doorset(s) replaced to one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 8.5 If the door already has a multi-point locking system, the Euro profile lock cylinder should be replaced if it does not meet PAS 3621 (key locking both sides).
- 8.6 The multi-point locking system will have a Euro profile lock cylinder which should be displaying the BS Kitemark and the Door and Hardware Federation (DHF) Technical Specification (TS) 007 3-star rating, or the equivalent DHF TS 007 1-star rating combined with a pair of DHF TS 007 2-star rated handles (the BS Kitemark and DHF star ratings should be visible on the lock and handles).
- 8.7 A pair of interlocking security hinges should also be fitted to protect the hinge side of the door, particularly if the door opens outwards as the hinge pins are exposed and vulnerable to attack.
- 8.8 Side/rear doors with panels, where the panel is at any point less than the thickness of the door, should be reinforced internally with a powder coated overlapping metal panel, screwed into the door. The void created between the existing panel and the overlapping metal panel should be infilled with chipboard of an appropriate thickness.
- 8.9 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 8.10 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

Sliding patio doors

The following table will help you decide which sliding patio door section is relevant to your security survey:

	PVC-U	Aluminium
Single-point locking	Section 13	Section 13
Multi-point locking	Section 14	Section 14

SECTION 9

Sliding patio doors with single-point locking

- 9.1 If the property has been awarded Secured by Design (SBD) certification, the sliding patio doors will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com



- 9.2 A sliding patio door should be in good condition with no detrimental damage. If the door is in poor repair, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 9.3 Alternatively, there may be documentation to prove that an existing building has had the sliding patio doorset(s) replaced to one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 9.4 If the sliding patio doors have single-point locking, they should have a BS 3621 (key locking both sides) Euro profile lock, displaying the BS Kitemark.
- 9.5 The Euro profile lock cylinder should be displaying the BS Kitemark and the Door and Hardware Federation (DHF) Technical Specification (TS) 007 3-star rating, or the equivalent DHF TS 007 1-star rating combined with a pair of DHF TS 007 2-star rated handles (the BS Kitemark and DHF star ratings should be visible on the lock and handles).
- 9.6 Additional surface mounted, key operated patio locks should be fitted to provide a minimum of three locking points, therefore reducing the leverage points.
- 9.7 An anti-lift device should be fitted to the top of the door to prevent the sliding door being lifted off its track.
- 9.8 Glass panels in or adjacent to sliding doors can be especially vulnerable as they give access to the locks. Toughened glass is stronger than annealed/float glass and is designed to break up into small, safe pieces, but it does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating

whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:

- Laminated Kitemark code is BS EN 14449;
- Toughened Kitemark code is BS EN 12150.

- 9.9 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

SECTION 10

PVC-U or aluminium sliding patio doors with multi-point locking

- 10.1 If the property has been awarded Secured by Design (SBD) certification, the sliding patio doors will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 10.2 A sliding patio door should be in good condition with no detrimental damage. If the door is in poor repair, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 10.3 Alternatively, there may be documentation to prove that an existing building has had the sliding patio doorset(s) replaced to one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 10.4 If the door already has a multi-point locking system, the Euro profile lock cylinder should be replaced if it does not meet PAS 3621 (key locking both sides).
- 10.5 The Euro profile lock cylinder should be displaying the BS Kitemark and the Door and Hardware Federation (DHF) Technical Specification (TS) 007 3-star rating, or the equivalent DHF TS 007 1-star rating combined with a pair of DHF TS 007 2-star rated handles (the BS Kitemark and DHF star ratings should be visible on the lock and handles).
- 10.6 An anti-lift device should be fitted to the top of the door to prevent the sliding door being lifted off its track.
- 10.7 Glass panels in or adjacent to sliding doors can be especially vulnerable as they give access to the locks. Toughened glass is stronger than annealed/float glass and is designed to break up into small, safe pieces, but it does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 10.8 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

Glazed double/French doors

The following table will help you decide which glazed double/French door section is relevant to your security survey:

	Timber	PVC-U	Aluminium	Composite
Single-point locking	Section 11	Section 13	Section 13	Section 13
Multi-point locking	Section 12	Section 14	Section 14	Section 14

SECTION 11

Timber glazed double/French doors with single-point locking

- 11.1 If the property has been awarded Secured by Design (SBD) certification, the timber glazed double/French doors will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 11.2 Timber glazed double/French doors should be at least 44mm thick and made from solid wood, free from rot or damage, not manufactured from soft wood or constructed with a hollow core. If the door is in poor repair and does not meet this criteria, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
 - PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 11.3 Alternatively, there may be documentation to prove that an existing building has had the glazed double/French doorset(s) replaced to one of the following police preferred standards:
 - PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 11.4 If the doors have single-point locking, they should have a BS 3621 (key locking both sides) mortice deadlock/sashlock, displaying the BS Kitemark, fitted approximately half way up the leading edge.
- 11.5 A deadlock guard fitted to the inside and outside face of the door will offer additional protection to a mortice deadlock.
- 11.6 Additional locking points are required for single-point locking to reduce the leverage points. It should have either two pairs (one for pair for each door) of mortice rack bolts (key operated bolts with an internal key slot only) or two pairs (one pair for each door) of surface mounted locking throw bolts, with projections in excess of 20mm and both pairs fitted at the top and bottom of the doors, securing into the frame, not the opposing leaf edge.
- 11.7 A pair of hinge bolts (metal pins fitted into the edge of the door that automatically engage or disengage as the door is opened or closed) should be fitted to protect the hinge side of each door. This is particularly important with outward opening doors, where the hinge pins are exposed externally and are vulnerable to attack.
- 11.8 Glazed double/French doors with panels, where the panel is at any point less than 44mm thick or made from a material other than solid timber, should be reinforced internally with a 12mm overlapping plywood panel, glued and screwed into the door. The void created between the existing panel and the overlapping plywood panel should be infilled with chipboard of an appropriate thickness.
- 11.9 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass is stronger than annealed/float glass and is designed to break up into small, safe pieces, but it does not provide

security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:

- Laminated Kitemark code is BS EN 14449;
- Toughened Kitemark code is BS EN 12150.

11.10 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

SECTION 12

Timber glazed double/French doors with multi-point locking

- 12.1 If the property has been awarded Secured by Design (SBD) certification, the timber glazed double/French doors will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 12.2 Timber glazed double/French doors should be at least 44mm thick and made from solid wood, free from rot or damage, not manufactured from soft wood or constructed with a hollow core. If the door is in poor repair and does not meet this criteria, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 12.3 Alternatively, there may be documentation to prove that an existing building has had the glazed double/French doorset(s) replaced to one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 12.4 If the door already has a multi-point locking system, the Euro profile lock cylinder should be replaced if it does not meet PAS 3621 (key locking both sides).
- 12.5 The multi-point locking system will have a Euro profile lock cylinder which should be displaying the BS Kitemark and the Door and Hardware Federation (DHF) Technical Specification (TS) 007 3-star rating, or the equivalent DHF TS 007 1-star rating combined with a pair of DHF TS 007 2-star rated handles (the BS Kitemark and DHF star ratings should be visible on the lock and handles).
- 12.6 A pair of hinge bolts (metal pins fitted into the edge of the door that automatically engage or disengage as the door is opened or closed) should be fitted to protect the hinge side of each door. This is particularly important with outward opening doors, where the hinge pins are exposed externally and are vulnerable to attack.
- 12.7 Glazed double/French doors with panels, where the panel is at any point less than 44mm thick or made from a material other than solid timber, should be reinforced internally with a 12mm overlapping plywood panel, glued and screwed into the door. The void created between the existing panel and the overlapping plywood panel should be infilled with chipboard of an appropriate thickness.



- 12.8 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass is stronger than annealed/float glass and is designed to break up into small, safe pieces, but it does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 12.9 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

SECTION 13

PVC-U or aluminium glazed double French doors with single-point locking

- 13.1 If the property has been awarded Secured by Design (SBD) certification, the PVC-U or aluminium glazed double/French doors will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 13.2 PVC-U or aluminium glazed double/French doors should be in good condition with no detrimental damage. If the doors are in poor repair, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 13.3 Alternatively, there may be documentation to prove that an existing building has had the glazed double/French doorset(s) replaced to one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or

- LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 13.4 If the doors have single-point locking, they should have a BS 3621 (key locking both sides) Euro profile lock, displaying the BS Kitemark, fitted approximately half way up the leading edge.
- 13.5 The Euro profile lock cylinder should be displaying the BS Kitemark and the Door and Hardware Federation (DHF) Technical Specification (TS) 007 3-star rating, or the equivalent DHF TS 007 1-star rating combined with a pair of DHF TS 007 2-star rated handles (the BS Kitemark and DHF star ratings should be visible on the lock and handles).
- 13.6 Additional locking points are required for single-point locking to reduce the leverage points. They should have two pairs (one pair for each door) of surface mounted locking throw bolts, with projections in excess of 20mm and both pairs fitted at the top and bottom of the doors, securing into the frame, not the opposing leaf edge.
- 13.7 A pair of interlocking security hinges should also be fitted to protect the hinge side of the doors, particularly if the doors open outwards as the hinge pins are exposed and vulnerable to attack.
- 13.8 Glazed double/French doors with panels, where the panels are at any point less than the thickness of the doors, should be reinforced internally with powder coated overlapping metal panels, screwed into each door. The void created between the existing panel and the overlapping metal panel should be infilled with chipboard of an appropriate thickness.
- 13.9 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 13.10 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

SECTION 14

PVC-U or aluminium glazed double/French doors with multi-point locking

- 14.1 If the property has been awarded Secured by Design (SBD) certification, the PVC-U or aluminium glazed double/French doors will already be an enhanced security doorset, which includes the door, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and they can be found on the 'Contact' page at: www.securedbydesign.com
- 14.2 PVC-U or aluminium glazed double/French doors should be in good condition with no detrimental damage. If the doors are in poor repair, regardless of the standard of hardware fitted, it should be replaced with a door that meets one of the following police preferred standards:
- PAS 24:2016; or
 - STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 14.3 Alternatively, there may be documentation to prove that an existing building has had the glazed double/French doorset(s) replaced to one of the following police preferred standards:
- PAS 24:2016; or

- STS 201 Issue 7:2015; or
 - LPS 1175 Issue 7.2:2014 Security Rating 2+; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2; or
 - LPS 2081 Issue 1.1:2016 Security Rating B.
- 14.4 If the door already has a multi-point locking system, the Euro profile lock cylinder should be replaced if it does not meet PAS 3621 (key locking both sides).
- 14.5 The Euro profile lock cylinder should be displaying the BS Kitemark and the Door and Hardware Federation (DHF) Technical Specification (TS) 007 3-star rating, or the equivalent DHF TS 007 1-star rating combined with a pair of DHF TS 007 2-star rated handles (the BS Kitemark and DHF star ratings should be visible on the lock and handles).
- 14.6 A pair of interlocking security hinges should also be fitted to protect the hinge side of the doors, particularly if the doors open outwards as the hinge pins are exposed and vulnerable to attack.
- 14.7 Glazed double/French doors with panels, where the panels are at any point less than the thickness of the doors, should be reinforced internally with powder coated overlapping metal panels, screwed into each door. The void created between the existing panel and the overlapping metal panel should be infilled with chipboard of an appropriate thickness.
- 14.8 Glass panels in or adjacent to doors can be especially vulnerable as they give access to the locks. Toughened glass does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 14.9 A suitable alternative to laminated glass is anti-shatter security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading.

SECTION 15

Glazing

- 15.1 Glazed panels in and adjacent to doors, including adjacent windows within 400mm, must incorporate one pane of laminated glass meeting, or exceeding, the requirements of BS EN 356:2000 class P1A NB. This is a specific requirement within PAS 24:2016, which is referenced within the UK Building Regulations. There is no specific requirement to install laminated glazing on the inner or outer face of a double glazed unit. However, specifiers may wish to take into consideration the fact that toughened glass is usually more resistant to accidental damage by blunt objects such as a football and therefore may be best placed on the external face of the double glazed unit. It is recognised however that there are many other factors that may also need to be considered such as thermal efficiency, aesthetics and the requirement for privacy or obscured glazing, which will influence the specifier's decision.
- 15.2 The above requirement is not necessary for doorsets certificated to LPS 2081, LPS 1175 or STS 202 as glazing security requirements are significantly more stringent within these standards, even at the lowest levels. However if there is an adjacent window within 400mm, then the glazing must meet the requirements of BS EN 356:2000 class P1A.
- 15.3 When new doors are being installed and glazed panels/windows form part of the door frame then they must be shown to be part of the manufacturer's certificated range of doorsets and be specifically referenced within the Scope of Certification. Alternatively, where they are manufactured separately from the door frame, they must meet one of the following police preferred standards for new windows:
- PAS 24:2016;
 - STS 204 Issue 6:2016;
 - LPS 1175 Issue 7.2:2014 SR1
 - LPS 1175 Issue 8:2018 SR1/A1

- STS 202 Issue 7:2016 BR1;
- LPS 2081 Issue 1.1:2016 SRA.

In such cases the window shall be securely fixed to the doorset in accordance with manufacturer's specifications.

SECTION 16

Door chains/limiters

- 16.1 Door chains or opening limiters must meet the requirements of the Door and Hardware Federation Technical Specification 003 (TS 003) - see Approved Document Q, Section 1: Doors, paragraph 1.4. All such devices should be suitable for the door material to which they are fitted and be installed in accordance with the manufacturer's recommendations.

SECTION 17

Door viewers

- 17.1 A door viewer must meet the requirements of the Door & Hardware Federation Technical Specification 002 (TS 002) and must be fitted between 1200mm and 1500mm (in addition to 1050mm for wheelchair accessible dwellings) from the bottom of the door. This is not required if the doorset is installed with clear glazing or if there is a side panel with clear glazing - see Approved Document Q, Section 1: Doors, paragraph 1.

SECTION 18

Secure mail delivery

- 18.1 Ideally, new doorsets should be ordered without letterbox apertures to tackle the increasing crime problems associated with letter plate apertures, such as identity theft, arson, hate crime, lock manipulation and 'fishing' for personal items (which may include post, vehicle and house keys, credit cards, etc). Letter plate apertures in exiting doorsets can be sealed with blanking plates or have internal letterbox security cowls installed.
- 18.2 The most secure method for mail delivery is via a secure external letterbox meeting the requirements of the Door and Hardware Federation standard Technical Standard 009 (TS 009) or delivery 'through the wall' into a secure area of the dwelling. These should be easily accessible i.e. at a suitable height for a range of users.
- 18.3 Where letter plate apertures are required in new doorsets, they must form part of the certificated doorset range. Specifiers and doorset manufacturers are advised that if a letter plate aperture was not present in the doorset when it was independently assessed by a certification authority and included within the Scope of Certification of the doorset, then the subsequent installation of a letter plate aperture will invalidate the certificated doorset.
- 18.4 Doorsets certificated to LPS 2081, LPS 1175 and STS 202, with a letter plate tested to the requirements of the Door Hardware Federation's Technical Standard 008 (TS 008) will be acceptable when included within the Scope of Certification for the doorset.
- 18.5 Specifiers attention is drawn to the Door Hardware Federation's Technical Standard 008 (TS 008) which is also referenced within Approved Document Q (Section 1, paragraph 1.3). Additionally, BS EN 13724 which is referenced within TS 008 provides details regarding the test methods and requirements for private letter boxes and letter plates. One of the stipulated criteria is that the lowest mailbox aperture should be no lower 700mm from delivery floor level and the height of the highest mailbox aperture should be no higher than 1700mm from delivery floor level.
- 18.6 Where there is a concern for arson attacks, or repeat arson attacks, SBD recommends either the omission of a letter plate within a door, which is then replaced by an external letter box mounted on a wall or similar, or the installation of an 'anti-arson' container. It is important that such products are installed strictly in accordance with the manufacturer's instructions.



SECTION 19

Compartmentation

- 19.1 Compartmentation for the purposes of providing extra security is the structural division of a building, usually by means of access controlled doorsets, into discreet sections and/or areas for use by residents, their visitors, maintenance personnel and others but only under controlled conditions.
- 19.2 Compartmentation is suitable for all multi-occupancy buildings, especially those where crime and anti-social behaviour is having a detrimental effect on the lives of the residents as a result of unrestricted access to residential floors.
- 19.3 Vital to this is the creation of clearly identified spaces over which they can exercise a high level of control only realisable in multi-occupancy buildings through the creation of separate compartments.
- 19.4 Auditable access control data proves valuable to the police, landlords, building owners, housing associations and residents as an environmental management tool and also should an investigation be necessary into criminal activity.
- 19.5 In addition, compartmentation will facilitate, when complemented by access control, the means of tracking the life of a building through records of people's access and egress.
- 19.6 The following content forms part of the Secured by Design Homes Guide: Compartmentation is an established crime prevention tactic used to prevent criminal and anti-social activity especially related to gangs. This is best demonstrated by the police accredited Secured by Design award scheme – www.securedbydesign.com
- 19.7 Residents should be assigned access to communal areas and their own residential floors only. This can be achieved by either:
1. Controlling access to lifts and stairwells separately.
 2. Controlling access to lifts and stairwells jointly.
- 19.8 Both methods require the following security measures:
- Install secure doorsets to prevent access to the stairwells from the communal lobbies;
 - Install secure doorsets to prevent the lifts and stairwells providing unrestricted access onto residential landings.
 - Provide residents with security encrypted electronic keys such as a key, code, combination keypad, swipe card, biometric or proximity card on both the stairwell/landing doorsets and the lifts.
 - The compartmentation doorsets should provide unrestricted emergency egress from the building in the event of a fire.
- 19.9 In the event that a lift opens directly into an apartment a security protocol must be agreed between the occupiers and the lift maintenance company to ensure access cannot be gained without the proper authority.

SECTION 20

Fire and Rescue Service access

- 20.1 The fire and rescue service should have unrestricted access to all floors in the event of an emergency, so the internal access control system utilised should incorporate the following features:
- 20.2 If the lift forms part of the access control system, the fire service must be given access via a 'firefighter's mode' or an evacuation lift in 'evacuation mode'.
- 20.3 Dedicated external doorsets and doors leading to stairwells and landings that form part of the access control system must have an electronic release incorporated into the system to allow the fire service free access to all of the communal areas of the building. The electronic release system must be weatherproof, easily identifiable and located close to the entrance that Fire and Rescue Teams would use in the event of an emergency.
- 20.4 It has been agreed between the police and fire and rescue services that the most practical means of achieving this is to install a switch within an Access Control Box (ACB). The key system for the ACB should be of a restricted type acceptable to the local fire and rescue service. An ACB must be secure for obvious reasons and therefore shall be tested and certificated to one of the following standards:
- LPS 1175 Issue 7.2:2014 Security Rating 2; or
 - LPS 1175 Issue 8:2018 Security Rating A3+; or
 - STS 202 Issue 6:2015 Burglary Rating 2.
- 20.5 The use of an ACB is in addition to the installation of a Secure Information Box (also referred to as a Premises Information Box), which are recommended by the fire and rescue service and are referenced within clauses of BS 9991:2015. The ACB should be clearly marked with a photoluminescent identification sign in the same way as the SIB. The exact location of an ACB should be specified following consultation with the local Fire and Rescue Service.
- 20.6 The bottom edge of the SIB enclosure should be located at least 1.4m above floor level to facilitate access by fire and rescue service crews wearing protective equipment. Where required due to risk of unauthorised access and vandalism it is permissible for the bottom edge of the SIB to be located at no more than 2.5m above floor level to facilitate fire and rescue service crew access by a short ladder.



SECTION 21

Locking mechanisms for security compartmented doorsets

- 21.1 The security compartmentation strategy regarding controlling movement through stairwell and landing doorsets has been developed in consultation with the London Fire Brigade and agreed with the national Fire and Rescue Service.
- 21.2 It is the responsibility of the Local Authority through Building Control to sign off the fire strategy for the building. Building Control Officers may express a preference for the fire door rating and type of locking system to be used. The developer must ensure the fire doors are compliant.
- 21.3 Where security compartmentation is recommended, the locking mechanism must be capable of being overridden from the side approached by people escaping without the use of a key in the direction of escape and without requiring more than one mechanism to be manipulated.
- 21.4 If secure doorsets form part of the compartmentation strategy, such as those operated by key, code, combination keypad, swipe card, biometric or proximity card, it must be possible to manually override their security mechanisms from the side approached by people escaping without the use of a key in the direction of escape and without requiring more than one mechanism to be manipulated.
- 21.5 Security locking mechanisms which incorporate multi-point locking or solenoid door latches/bolts that are released electronically are not considered suitable for compartmentation because they can fail to open if they are not properly maintained.
- 21.6 Doors on escape routes must be:
- Easy to operate;
 - Operable without a key from the side approached by people escaping;
 - Operable without requiring the person escaping to manipulate more than one mechanism.
- 21.7 Electrically powered locks should return to the unlocked position in all of the following situations:
- If the fire detection and alarm system operates;
 - If there is loss of power or system error;
 - If the security mechanism override is activated, such as the Access Control Box (ACB).
- 21.8 If the PAS 24 doorsets are installed in order to maintain the integrity of the security, these need to be dual certificated fire/security doorsets and, should have been tested and certificated with the intended locking mechanisms fitted. This testing must be conducted by a UKAS accredited third party certification body.
- 21.9 If PAS 24 doorsets are not specified, suitable fire doors will be required.

SECTION 22

Fire and Rescue Service key systems

- 22.1 Restricted key systems for Access Control Box or, where they are fitted in respect of access doors, lifts, smoke ventilation or any other type of emergency override mechanism, must be the subject of agreement with the appropriate fire and rescue service.

SECTION 23

Emergency door release devices

- 23.1 Break glass emergency door exit release devices (often green in colour) on communal external doors that provide an important aid to egress in the event of an emergency have proven to be abused rendering some buildings insecure for long periods of time. Vandal resistant stainless steel self-resetting emergency exit systems can be installed as an alternative. The installation and system type must be in full compliance with the Building Regulations and achieve final 'sign-off' by local Building Control or Approved Inspector.
- 23.2 If the break glass emergency door release device provides access to residential areas as part of the emergency egress route, additional security must be provided to restrict access to the fire egress route only to maintain the security of the building line. This is also a requirement of Part Q of the Building Regulations (England and Wales).

Windows

The following table will help you decide which window section is relevant to your security review:

	Timber	PVC-U	Aluminium	Composite
Single-point locking	Section 24	Section 24	Section 24	Section 24
Multi-point locking	Section 25	Section 25	Section 25	Section 25

SECTION 24

Timber, PVC-U, aluminium or metal windows with single-point locking

- 24.1 If the property has been awarded Secured by Design (SBD) certification, the timber, PVC-U, aluminium or metal windows will already be enhanced security windows, which includes the window, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and can be found on the 'Contact' page at: www.securedbydesign.com
- 24.2 Timber, PVC-U, aluminium or metal windows should be in good condition with no detrimental damage. If the window are in poor repair, regardless of the standard of hardware fitted, it should be replaced with a window that meets one of the following police preferred standards:
- PAS 24:2016;
 - STS 204 Issue 6:2016;
 - LPS 1175 Issue 7.2:2014 SR1
 - LPS 1175 Issue 8:2018 SR1/A1
 - STS 202 Issue 7:2016 BR1;
 - LPS 2081 Issue 1.1:2016 SRA.
- 24.3 Alternatively, there may be documentation to prove that an existing building has had the windows replaced to one of the following police preferred standards:
- PAS 24:2016;
 - STS 204 Issue 6:2016;
 - LPS 1175 Issue 7.2:2014 SR1
 - LPS 1175 Issue 8:2018 SR1/A1
 - STS 202 Issue 7:2016 BR1;
 - LPS 2081 Issue 1.1:2016 SRA.
- 24.4 Windows should be in good repair and capable of closing tightly without bowing.
- 24.5 Some windows have handles that do not lock, or key operated single-point locking at the handles only. Easily accessible windows, which do not form part of the designated fire egress route, should have locking handles fitted with additional key operated locks at the end of each opener to prevent leverage.
- 24.6 Most modern PVC-U and aluminium windows are internally beaded, but older versions had external beading (plastic beading strips around the exterior of each glazed panel). This beading can be easily removed and the glass taken out quickly and relatively silently, unless the glass panels were secured in place correctly with either security clips, double-sided security tape or sealant when they were installed. If PVC-U and aluminium windows are externally beaded, they should be checked by a competent installer and where necessary, the glazing secured retrospectively, which is a relatively straight forward process.
- 24.7 Toughened glass is stronger than annealed/float glass and is designed to break up into small, safe pieces, but it does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.



24.8 A suitable alternative to laminated glass is one of the following:

- Security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading;
- Internal fixed/retractable grilles certified to either LPS 1175 SR1/A1 or STS 202 BR1;
- Secondary glazing, consisting of a fully independent internal window, certified to one of the following standards:
 - PAS 24:2016;
 - STS 204 Issue 6:2016;
 - LPS 1175 Issue 7.2:2014 SR1
 - LPS 1175 Issue 8:2018 SR1/A1
 - STS 202 Issue 7:2016 BR1;
 - LPS 2081 Issue 1.1:2016 SRA.

SECTION 25

Timber, PVC-U, aluminium or metal windows with multi-point locking

- 25.1 If the property has been awarded Secured by Design (SBD) certification, the timber, PVC-U, aluminium or metal windows will already be enhanced security windows, which includes the window, frame, locking hardware, glazing and hinges. Your local police Designing Out Crime Officer (DOCO) will be able to confirm this and can be found on the 'Contact' page at: www.securedbydesign.com
- 25.2 Timber, PVC-U, aluminium or metal windows should be in good condition with no detrimental damage. If the window are in poor repair, regardless of the standard of hardware fitted, it should be replaced with a window that meets one of the following police preferred standards:
- PAS 24:2016;
 - STS 204 Issue 6:2016;
 - LPS 1175 Issue 7.2:2014 SR1
 - LPS 1175 Issue 8:2018 SR1/A1
 - STS 202 Issue 7:2016 BR1;
 - LPS 2081 Issue 1.1:2016 SRA.
- 25.3 Alternatively, there may be documentation to prove that an existing building has had the windows replaced to one of the following police preferred standards:

- PAS 24:2016;
 - STS 204 Issue 6:2016;
 - LPS 1175 Issue 7.2:2014 SR1
 - LPS 1175 Issue 8:2018 SR1/A1
 - STS 202 Issue 7:2016 BR1;
 - LPS 2081 Issue 1.1:2016 SRA.
- 25.4 Windows should be in good repair and capable of closing tightly without bowing.
- 25.5 Most modern windows have multi-point locking handles which operate sliding metal mushroom headed studs up and down into receiving metal cups and shoot bolts that secure into the frame to prevent leverage.
- 25.6 Most modern PVC-U windows are internally beaded, but older versions had external beading (plastic beading strips around the exterior of each glazed panel). This beading can be easily removed and the glass taken out quickly and relatively silently, unless the glass panels were secured in place correctly with either security clips, double-sided security tape or sealant when they were installed. If PVC-U windows are externally beaded, they should be checked by a competent installer and where necessary, the glazing secured retrospectively, which is a relatively straight forward process.
- 25.7 Toughened glass is stronger than annealed/float glass and is designed to break up into small, safe pieces, but it does not provide security. Laminated glass which meets BS EN 356:2000 class P1A or higher is designed to hold together when shattered due to an interlayer, typically of polyvinyl butyral (PVB) or ethylene-vinyl acetate (EVA), between its two or more layers of glass. Glazing should have a visible BS Kitemark etched into the corner, stating whether it is toughened or laminated. If the Kitemark and code is not present, consult with a competent glazier for confirmation:
- Laminated Kitemark code is BS EN 14449;
 - Toughened Kitemark code is BS EN 12150.
- 25.8 A suitable alternative to laminated glass is one of the following:
- Security film that meets BS EN 356:2000 class P1A standard or higher, installed to the edge of the glass, under the window beading;
 - Internal fixed/retractable grilles certified to either LPS 1175 SR1/A1 or STS 202 BR1;
 - Secondary glazing, consisting of a fully independent internal window, certified to one of the following standards:
 - PAS 24:2016;
 - STS 204 Issue 6:2016;
 - LPS 1175 Issue 7.2:2014 SR1
 - LPS 1175 Issue 8:2018 SR1/A1
 - STS 202 Issue 7:2016 BR1;
 - LPS 2081 Issue 1.1:2016 SRA.
- 25.9 SBD define easily accessible windows as having any part within 2 metres vertically of an accessible level surface such as a ground or basement level, or an access balcony, or a window within 2 metres vertically of a flat roof or sloping roof (with a pitch of less than 30°) that is within 3.5 metres of ground level.

SECTION 26

Emergency egress windows

- 26.1 All easily accessible windows should incorporate key lockable hardware unless designated as emergency egress routes within the Building Regulations.
- 26.2 Windows that form part of a designated fire escape route, as determined by the Fire Safety Officer, may require non-key locking hardware. In these circumstances laminated glass to BS EN 356:2000 class P1A will be required.
- 26.3 If however the Fire Safety Officer accepts locking hardware as part of the designated fire escape route, then fire resistant glass may be required.

- 26.4 Windows that are not easily accessible will require either lockable hardware or an opening restrictor in the interests of child safety.
- 26.5 All window specifications must be agreed with the Fire Safety Officer.

SECTION 27

Boundary security

- 27.1 In the majority of cases it is desirable for front boundaries to be open to view, removing potential hiding places and providing good natural surveillance. Walls, fences, hedges and shrubs should be kept low, not exceeding 1m in height or alternatively feature a combination of a wall (maximum height 1m) and timber picket fence or railings, fitted to the outside edge of the brickwork to reduce potential footholds, if a more substantial front boundary is required.
- 27.2 Trees in front gardens should be open branched or produce light foliage so as not to obstruct street lighting, with a high canopy no lower than 2m, to allow good vision of the doors, windows and side access gates leading to the rear of the property.

SECTION 28

Side and/or rear boundaries

- 28.1 Side and rear boundaries should be a minimum of 1.8m overall and be capable of raking/stepping to maintain the height over different terrain. A wooden trellis topping, preferably the diamond pattern as it tends to be flimsy and more difficult to climb, increases the height of walls and fencing, but also provides a framework for thorny plants and shrubs to create a natural, defensive barrier. If trellis is attached to a brick wall, ensure that it is fitted to the outside edge of the brickwork to reduce potential footholds.
- 28.2 All gates to the side or rear of the property should be robustly constructed, be the same height as the fence (minimum 1.8m) and be capable of being locked (operable by key from both sides of the gate). Such gates must be located on or as near to the front of the building line as possible to prevent recessed areas, with little or no natural surveillance, and designed without climbing aids.
- 28.3 Local authority planning regulations should be consulted.



SECTION 29

Apartment/flat boundaries

- 29.1 If an apartment/flat is above ground floor, the communal front door can be considered a boundary for the purposes of security, as the lobby area is a semi-public space. This area should have a robust, fit for purpose communal doorset that meets Secured by Design standards and an access control system that meets the requirements of UL 293, to provide reassurance that a system has been assessed against a prescribed security test regime – see: www.securedbydesign.com

SECTION 30

Roof construction

- 30.1 Roofs are vulnerable to criminal intrusion and damage through vandalism, therefore careful consideration must be given to their construction.
- 30.2 As a minimum, lightweight roofing systems must be certified to one of the following and installed utilising the manufacturer's approved fixing system;
- LPS 1175: Issue 5 or above, SR 1; or
 - STS 202: Issue 1 or above, BR1.
- 30.3 Where traditional roofing systems are being used or already exist, additional security features such as expanded metal may be required to prevent criminals entering the building via the roof.
- 30.4 Due regard must be taken to ensure full compliance with the 'duty of care' obligations under Occupiers' Liability Act 1984.



SECTION 31

Roof lights

- 31.1 In low crime, low risk applications a roof light aperture must be protected by roof lights certificated to one of the following:
- LPS 1175: Issue 5 or above, Security Rating 1; or
 - STS 202: Issue 1 or above, Burglary Resistance 1.
- 31.2 In higher crime, higher risk applications a roof light aperture must be protected by roof lights certificated to one of the following:

- LPS 1175: Issue 5 or above, Security Rating 2 or 3; or
- STS 202: Issue 1 or above, Burglary Resistance 2 or 3.

31.3 Alternatively, a roof light may be used in conjunction with an internal grille certificated to one of the following:

- LPS 1175: Issue 5 or above, Security Rating 1 or 2; or
- STS 202: Issue 1 or above, Burglary Resistance 1 or 2.

SECTION 32

Loft hatches

- 32.1 Loft hatches located in communal areas, such as over landings in blocks of flats, must be locked to prevent access into a dwelling via the loft space. This may still be required even where the loft space has been compartmented to prevent the spread of fire and smoke (products meeting the requirements of published fire safety standards are available). There are currently no 'hinged' or 'lift out' loft hatches being manufactured to recognised security standards, but where padlocks, hasps and staples are used to secure the hatch the products must be certificated to one of the following:
- BS EN 12320:2012, Sold Secure 'Silver'; or
 - LPS 1654 Issue 1.1:2014 Security Rating 1.
- 32.2 All communal loft hatch specifications must be agreed with the Fire Safety Officer.

SECTION 33

Intruder and hold-up alarm systems

- 33.1 Intruder and hold-up alarm systems (I&HAS) have for many years provided efficient and relatively cost-effective protection against those breaking into buildings, breaching perimeters or trespassing into spaces; this guide will identify how this crime prevention technique is best employed.
- 33.2 A correctly installed and appropriately maintained intruder and hold-up alarm system can be a cost-effective means of preventing crime and deterring criminals whilst providing the reassurance required to reduce the fear of crime.
- 33.3 However, if the location or nature of the site is such that an alarm system is not appropriate, it is vital to accept this fact and to seek alternative crime prevention measures. Remote sites are not best served by audible only intruder alarms.
- 33.4 In the case of remote sites that require extra security, it may be advisable to install a remotely monitored, detector activated video surveillance system which would enable an ARC to view images and decide whether a crime is in progress. The appropriate response can then be provided by calling a keyholder, security personnel or the police for instance. Such systems can also include audio challenge, which allows the operator to give audio warnings to intruders on site.
- 33.5 A major consideration are false alarms generated by a poorly designed and installed system. The danger is that repeated false alarms will result in neighbours becoming used to them and therefore missing a legitimate call for attention.
- 33.6 Whilst committing crimes of burglary, criminals look to do so quickly, safely and as quietly as possible. The reason that criminals may avoid alarmed premises is that setting off loud bells and sirens will attract attention to their activity. Once fitted, an alarm can serve to defeat or deter the average burglar, who, when touring an area, will be looking for opportunities that present the least line of resistance and the minimum of challenges.
- 33.7 Broadly speaking there are two elements to most alarm systems, an intruder alarm that automatically detects a burglary or trespass and then a hold-up alarm that is manually activated in the event of a crime occurring. These two separate components can either be combined in one system or installed separately.
- 33.8 An intruder alarm system consists of wireless or hard-wired technical equipment, or combination of both, which when set will detect intrusion by criminals resulting in one of the following three actions;

1. Audible only system

Audible only intruder alarm systems, sometimes called bells-only, set off a loud noise or siren when activated to attract the attention of neighbours or passers-by and deter the intruder from remaining at the scene. This type of alarm provides basic protection because it relies on responsible guardians noticing its activation.

2. Auto/Speech dialler system

In addition to the features at 1 above, an auto/speech dialler will also automatically contact a number of keyholders (police numbers cannot be programmed into these systems) by phone call or text when intrusion is detected.

This type of system is more suitable to remote locations as it does not rely on passers-by noticing its activation. A keyholder is the person responsible for attending the premises in the event of an alarm activation.

3. Monitored system

A monitored system signals through to an Alarm Receiving Centre (ARC). They will determine if the activation is genuine by a process called confirmation. In the event of a confirmed activation, the ARC will inform the keyholder and/or the police. Confirmation is established by the ARC by means of:

- a. Sequential - two detectors indicating movement through the building or space.
- b. Video - cameras covering the area of detection so the presence of an intruder can be seen.
- c. Audio - microphones covering the area of detection so the presence of an intruder can be heard.

33.9 There are additional services available to protect the signalling pathway between the alarm system and the ARC which secures the signalling path against tampering for instance.

33.10 All ARCs must comply with British Standard (BS) 5979 (Cat II), or BS EN 50518 (Cat I) and BS 9518.

Hold-up alarm

33.11 The hold-up alarm element, sometimes referred to as the panic alarm, is a system consisting of fixed or wireless push buttons, which can be activated to trigger either an audible or silent alarm, in the event of an attack, to request a police response.

I&HAS security grades

33.12 BS EN 50131 defines the four different grades of intruder alarms and is the European standard for Intruder and Hold-Up Alarm systems. The four grades of alarm with a brief explanation follows:

Grade 1 – lowest

Intruders are expected to have little knowledge of the alarm system and may be restricted to a limited range of tools. This grade is not permitted to call for a police response.

Grade 2

Intruders are expected to have a little more knowledge of the alarm system and use a general range of tools and some specialist equipment.

Grade 3

Intruders are expected to be conversant with the alarm system and have a comprehensive range of tools and portable electronic equipment.

Grade 4 – highest

When security takes precedence over all other factors. Intruders are expected to have the resources to plan an intrusion in detail and have a full range of equipment, including the means to substitute vital components in the alarm system.

Types of alarm equipment

33.13 There are generally two types of alarm detection equipment, those that detect intrusion at the building perimeter e.g. door contacts and, those that detect activity within a protected premises e.g. movement detectors. In addition, premises can be split up into zones whereby only a specific part of the premises would have the alarm set within it.

33.14 It is important that the customer's requirements are met by the design, specification and installation of the alarm.

33.15 It is required to clearly identify the tasks an I&HAS will be required to complete and only after these decisions have been made can the necessary details can be intelligently discussed with an accredited installer.

33.16 In addition to fixed alarm equipment it is possible to further extend the systems use with the provision of remote handheld hold-up alarm buttons; these devices are intended to be carried by the user to be set off manually in the event of an emergency or crisis.

- 33.17 Good alarm systems are those that are discerning in their application for instance, alarm systems can be separated into discreet areas that will allow some parts to be in use whilst other areas have an alarm set which will detect unauthorised intrusion – this methodology is called zoning or partitioning.

National Police Chiefs' Council Security Systems Policy (NPCC SSP)

- 33.18 All specifications and designs for intruder alarm systems should be written with false alarm prevention in mind as these are counter-productive and can lead to activations being ignored. All system must be installed, monitored and maintained in accordance with the NPCC SSP document.
- 33.19 PCCs may benefit from the following link to the NPCC SSP which is a public document designed to provide details of how and when the police will respond to security system activations - <https://www.policesecuritysystems.com/national-police-chiefs-council-security-systems-policy>
- 33.20 It also sets out the technical and procedural requirements that the private security industry, involved in providing the installation, maintenance and monitoring of such systems, must follow in order to gain a police response to a security system on behalf of their customers. The objectives of the policy can be summarised as follows:
- To reduce the number of false calls passed to the police;
 - To provide an immediate police response to compliant security systems;
 - To provide guidance to police and the security industry on the advantages and disadvantages respectively of alarm systems that are compliant and non-complaint with the NPCC SSP;
 - To place responsibility for compliance with the policy on a UKAS (United Kingdom Accreditation Service) accredited certification body. Enforcement of standards is not a police function;
 - To achieve a unified approach to the administration process.
- 33.21 Installers who wish to be compliant with police forces in order to install, maintain and monitor security systems for police response must:
1. First of all be certified in accordance with the policy by a certification body accredited by UKAS. Details of such bodies can be found in Appendix 'H' of the NPCC Security Systems Policy.
 2. When accredited, the security company needs to apply to the home force where its principal operating/registered office is based requesting to be placed on that force's compliant list of companies. The letter of application must be accompanied with Appendix 'B' and Appendix 'C' of the policy.
 3. Once a company has been accepted by their home force, they can then request, in writing, to be placed on the compliant list of any other force (resubmitting Appendix 'B').

Legal responsibilities and some other requirements

- 33.22 If an I&HAS is linked to a video surveillance system, the Information Commissioner's Office (ICO) offers clear guidance for domestic CCTV systems at the following link – www.ico.org.uk
- 33.23 If the system is set up so that it only captures images within the boundary of the private domestic property (including the garden), then data protection laws do not apply.
- 33.24 However, if the system captures images of people outside the boundary of a private domestic property – for example, in a neighbours' home or gardens, in a shared space, or on a public footpath or street, then the GDPR and the DPA will apply and the system must comply with all the relevant laws.
- 33.25 If the CCTV system captures images outside the boundary of the private domestic property, the CCTV user needs to register as the Data Controller and ensure that the system complies with the data protection laws and upholds the rights of the people whose images it is capturing.
- 33.26 If the system is capturing images beyond the boundary, the Data Controller must:
- have a clear and justifiable reason for doing so. It is advisable to write the reasons down in case an individual or the ICO asks for an explanation;
 - let people know that CCTV is in operation by putting up signs saying that recording is taking place;
 - ensure that the system does not capture more footage than is needed to achieve the purpose in using the system;
 - ensure the security of the footage is held securely so that it cannot be watched without good reason;
 - regularly delete footage and only keep it for as long as it is needed;

- ensure the CCTV system is only operated in the way it was intended to be used and cannot be misused for other reasons – this includes making sure that all members of the household understand the importance of not misusing it.
 - respond to subject access rights (SARs) requests which means:
 - individuals have the right to access their personal data;
 - individuals can make a subject access request verbally or in writing;
 - the Data Controller must respond to the request within one month and give them a copy of the data;
 - a fee cannot be charged in most circumstances.
 - delete footage of people within one month, unless it is specifically needed for a genuine legal dispute – in which case they need to be informed of this as they can challenge it in court or complain to the ICO;
 - consider any objections about capturing future images of particular people before installation.
- 33.27 Failure to comply with the data protection laws could result in enforcement action by the ICO. This could include a fine and/or legal action by affected individuals, who could pursue court claims for compensation.
- 33.28 Publicly uploading or streaming footage of identifiable people would need more justification. In most cases it would not be justifiable.
- 33.29 The Data Controller does not need to register with the ICO or pay a fee (this is a change from the previous law). However, records must be maintained of how and why images are being captured and for how long they are being kept. These records must be made available to the ICO on request.
- 33.30 Regardless, the Information Commissioner is clear that homeowners that are found to be in breach of either the GDPR or the DPA may be subject to regulatory action, this can involve just 'words of advice' or in extreme circumstances significant monetary penalties. It should also be noted that if the images captured, and the manner in which they are stored, do not comply with the GDPR or DPA then they may not be admissible in court. In short, mass application of such products with police acting as the lead authority offering support or encouragement (no or reduced costs), in areas where it is obvious that the images captured are within shared areas or the public domain, are likely to become problematic if not dealt with in the appropriate manner.
- 33.31 In some circumstances, public space operators are legally required to have CCTV training and if so to what level. Public space operators should be licensed by the SIA and to obtain a licence must show they have been appropriately trained. Further information is available at: www.gov.uk/government/organisations/security-industry-authority/about
- 33.32 All alarm systems must comply with appropriate legal legislation in respect of noise nuisance. Please see the following link: www.gov.uk/guidance/noise-nuisances-how-councils-deal-with-complaints#noise-from-intruder-alarms

Management and maintenance

- 33.33 Intruder and hold-up alarm systems should have a maintenance programme in place that encompasses I&HAS components to ensure all aspects are working as intended, including:
- Control panel
 - Detectors
 - Door contacts
 - Alarm bell boxes
 - Audible sounders
 - Signalling equipment

Key considerations

- 33.34 Intruder and hold-up alarm systems use technical equipment with a wide range of design options that require a specialist to install; with this in mind the following four considerations are key:
1. It will be important to understand what types of I&HAS are available and how they can contribute to a security strategy but most importantly, the question must be asked as to whether an alarm system is appropriate given all relevant circumstances at the relevant site.



2. There should be firm decisions made as to exactly what tasks will be required of a proposed I&HAS and then how detection by the system is to be signalled, managed and responded to.
 3. The specification, installation and use of an I&HAS has to be compliant with all regulatory requirements and must not generate false alarms; these matters must be addressed during the design and specification stage.
 4. Only installers that are fully accredited by the intruder alarm industry should be used.
- 33.35 Where an intruder alarm system is installed then it should meet the requirements of BS EN 50131 (wired and wire free systems); all installations must be in accordance with the current electrical regulations. If an immediate police response is required then installers must meet the requirements of the National Police Chiefs' Council (NPCC) policy document – *Guidelines on Police Requirements & Response to Security Systems* are available at: www.policesecuritysystems.com/national-police-chiefs-council-security-systems-policy
- 33.36 Specifiers should be aware that a Secured by Design Alarm Standard exists for intruder alarm installations. Its creation is due to our work with the national alarm inspectorate bodies and trade organisations with the aim of improving the performance of security systems and increasing the preventative impact and detection rate emanating from them. Whilst meeting the requirements of the Secured by Design Alarm Standard is not necessary, details of the system should be shared with those charged with responsibilities in this sector. Further information is available at: www.policesecuritysystems.com/secured-by-design-alarm-standard/sbd-technical-guide

SECTION 34

Video surveillance systems

- 34.1 A VSS can be a cost-effective means of preventing crime and deterring anti-social behaviour whilst providing the reassurance required to reduce people's fear of crime. In addition, so long as the images a VSS provides are of sufficient quality, the detection of crime and the prosecution of offenders can also be facilitated by such a system. Given these considerations, it is clear that a VSS can provide the platform that collaborative crime prevention efforts between community partnership groups, local authorities and the police require. All manner of incident types can occur within operational view of a VSS, from traffic accidents and fly-tipping offences to sightings of missing persons or suspicious activity and all these are more efficiently managed with a good quality VSS in place.
- 34.2 Although the term Closed Circuit Television (CCTV) is in common use, strictly speaking a CCTV system is described as such because the signal is not openly transmitted but has cameras that transmit images back to monitors. Rather than just the term CCTV, this guide uses the term Video Surveillance System to describe all equipment capable of recording moving images or sound, from traditional CCTV systems with on-site or remote recording facilities to video doorbells that begin recording only when a doorbell is activated.
- 34.3 Video Surveillance Systems are often employed in support of other security measures, such as access and egress control, perimeter protection or in the monitoring of public and private space. Whether monitored live or subject

to a retrospective audit of any recordings, a VSS is always a valuable tool for establishing what occurred during a sequence of events and who was present at the time.

- 34.4 As stated in 'Key Considerations' below, whatever the circumstances of or purpose behind the installation of a VSS, it is critical that the system delivers a product that is as close to what the user desires as is possible. The purpose of a system's operation and the results desired from it, must be carefully detailed in the Operational Requirement so that an appropriate installation is identified and can be agreed upon with a prospective installer. Problems that could detract from the success of a VSS should be identified and a solution to them sought at this early planning stage.
- 34.5 Although a VSS cannot address all aspects of security, it can form an invaluable element within a comprehensive security strategy as long as the specification and installation meets the users Operational Requirement.
- 34.6 Whether or not a Video Surveillance System is going to be successful in combating crime problems often depends on having a realistic, accurate and detailed Operational Requirement set out in the first place.
- 34.7 A good means of developing an Operational Requirement is to take guidance from an amalgam of published works by Centre for the Protection of the National Infrastructure (CPNI), 2021 together with the Home Office, 2009 (2016), which takes the reader through the following stages of VSS development:

1. Defining the crime problem

- What types of crimes are being committed, theft, public order, criminal damage, etc.?
- Where the offences are being committed?
- The purpose of the observation as in whether the VSS is in place to identify, recognise, monitor or even detect a vehicle's number plate?
- Whether the target of the VSS observation is stationary, mobile or variable between the two?

2. Method of working

- Who will be monitoring the system, full-time security staff, members of staff not solely dedicated to monitoring the system such as receptionists or casual monitoring by passers-by?
- When will the system be monitored, in or out of business hours or only occasionally?
- Where is the system to be monitored, locally, remotely, on-site only, via a mobile platform or a combination of these circumstances?
- What response will be required to these images viewed and who will make the decision regarding this action between for instance contacting the emergency services or merely continuing to monitor?
- What training is in place to educate this decision-making process?

3. VSS specification

- Will the system visually or audibly alarm to notify or conduct notifications through some other integrated system?
- How are visual images to appear in respect of their size, types, pixilation, etc.?
- What is the recording detail to be, including image quality, frame rates, etc.?
- How will recordings be exported and archived with regards to third party access and replay software?

4. VSS management

- How will the recorded images be stored and archived?
- Who will ensure the regulatory requirements such as the General Data Protection Regulation (GDPR) and the Data Protection Act (DPA) are complied with?
- Who will ensure that the maintenance protocol including lens cleaning, software upgrades and product life-cycles is adhered to?
- Who will organise and ensure that staff are trained and control room appointments are met to facilitate a well organised and properly structured operation?

- 34.8 The Home Office CCTV Operational Requirements Manual is available at: www.gov.uk/government/publications/cctv-guidance

- 34.9 Most Video Surveillance Systems are designed for recording images and for the post event investigation only, in which case nobody is required to monitor the activities live. Police recommend that images are stored for a minimum of 31 days.

- 34.10 Ideally a VSS will record 24/7, to ensure that all incidents are recorded, even those that occur outside trading hours, e.g. burglary, criminal damage or motor vehicle crime.

Legal responsibilities and some other requirements

- 34.11 Before reading the following information regarding the General Data Protection Regulation and the Data Protection Act, it may be useful to remind the reader that this guide has used the term, Video Surveillance System, to define all such equipment that captures moving images or sound, which includes Closed Circuit Television (CCTV), that the Information Commissioner, GDPR and DPA discuss below.
- 34.12 The Information Commissioner's Office (ICO) offers clear guidance for domestic CCTV systems – see www.ico.org.uk The phrase 'domestic CCTV system' refers to the use of any video surveillance equipment mounted or fixed on your home and can include cameras fitted to doorbells.
- 34.13 If you are thinking of installing a domestic CCTV system, it must be done in a way that carefully respects other people's privacy.
- 34.14 If the system is set up so that it only captures images within the boundary of the private domestic property (including the garden), then data protection laws do not apply.
- 34.15 However, if the system captures images of people outside the boundary of a private domestic property – for example, in a neighbour's home or gardens, in a shared space, or on a public footpath or street, then the GDPR and the DPA will apply and the system must comply with all the relevant laws.
- 34.16 If the CCTV system captures images outside the boundary of the private domestic property, the CCTV user needs to register as the Data Controller and ensure that the system complies with the data protection laws and upholds the rights of the people whose images it is capturing.
- 34.17 If the system is capturing images beyond the boundary, the Data Controller must:
- have a clear and justifiable reason for doing so. It is advisable to write the reasons down in case an individual or the ICO asks for an explanation;
 - let people know that CCTV is in operation by putting up signs saying that recording is taking place;
 - ensure that the system does not capture more footage than is needed to achieve the purpose in using the system;
 - ensure the security of the footage is held securely so that it cannot be watched without good reason;
 - regularly delete footage and only keep it for as long as it is needed;
 - ensure the CCTV system is only operated in the way it was intended to be used and cannot be misused for other reasons – this includes making sure that all members of the household understand the importance of not misusing it.
 - respond to subject access rights (SARs) requests which means:
 - individuals have the right to access their personal data;
 - individuals can make a subject access request verbally or in writing;
 - the Data Controller must respond to the request within one month and give them a copy of the data;
 - a fee cannot be charged in most circumstances.
 - delete footage of people within one month, unless it is specifically needed for a genuine legal dispute – in which case they need to be informed of this as they can challenge it in court or complain to the ICO;
 - consider any objections about capturing future images of particular people before installation.
- 34.18 Failure to comply with the data protection laws could result in enforcement action by the ICO. This could include a fine and/or legal action by affected individuals, who could pursue court claims for compensation.
- 34.19 Publicly uploading or streaming footage of identifiable people would need more justification. In most cases it would not be justifiable.
- 34.20 The Data Controller does not need to register with the ICO or pay a fee (this is a change from the previous law). However, records must be maintained of how and why images are being captured and for how long they are being kept. These records must be made available to the ICO on request.
- 34.21 The 'Guidance on the use of domestic CCTV' issued by the Surveillance Camera Commissioner, now specifically incorporates Smart Doorbells (with integral CCTV). The guidance is reasonable and proportionate and designed to ensure that the operator (the home owner/occupier) operates the system in a manner that:

- does not bring operator and neighbours into conflict;
 - is operated in a transparent manner with the appropriate notification to neighbours and signage for passers-by, if the system captures images of people outside the boundary of the private domestic property in which it is installed;
 - ensures images are kept no longer than is necessary and that subject access requests are dealt with quickly and efficiently.
- 34.22 Where the system views shared or public space outside the boundary of the domestic property. This is perhaps compounded if a force has brokered a 'deal' to provide such products for home owners/occupiers at no cost or a much reduced cost and where there is an unhindered view of space outside the boundary of the residential property, especially if the police service has not communicated to the resident that appropriate signage is required in order to comply with the law, and no detailed written advice has been provided regarding the home owners responsibilities as a Data Controller in such circumstances e.g. the need to register as a Data Controller, to answer subject access requests within one month, to erase any personal images of passers-by at their request (both verbal and or written), etc.
- 34.23 Regardless, the Information Commissioner is clear that homeowners that are found to be in breach of either the GDPR or the DPA may be subject to regulatory action, this can involve just 'words of advice' or in extreme circumstances significant monetary penalties. It should also be noted that if the images captured, and the manner in which they are stored, do not comply with the GDPR or DPA then they may not be admissible in court. In short, mass application of such products with police acting as the lead authority offering support or encouragement (no or reduced costs), in areas where it is obvious that the images captured are within shared areas or the public domain, are likely to become problematic if not dealt with in the appropriate manner.
- 34.24 Finally, where police and local authorities wish to utilise Smart Doorbells as a crime prevention tactic, the following applies:
1. they should be certificated to the BSI IoT standard (or equivalent standards when available);
 2. assuming that the Smart Doorbell is IoT certified then clear written guidance regarding the requirements of the GDPR and DPA including the need for signage, Data Controller responsibilities and details of the consequences of the failure to comply with the legislation should be provided.
- 34.25 In some circumstances, public space operators are legally required to have VSS (often referred to as CCTV) training and if so to what level. Public space operators should be licensed by the SIA and to obtain a licence must show they have been appropriately trained. Further information is available at: www.gov.uk/government/organisations/security-industry-authority/about

Confidentiality

- 34.26 CCTV images may contain sensitive scenes and information; therefore, confidentiality must be maintained at all times. It is essential that strict security protocols are maintained and access to images restricted.

Quality of images

- 34.27 The industry standard for images is Full HD 1080p resolution, with a 1080 x 1920 display. This means the screen will have a width of 1,920 pixels with a height of 1,080 pixels with the rule being that more pixels results in a sharper image.
- 34.28 The terms 'frame rate' and 'frames per second (FPS)' determine the number of video frames recorded by the VSS every second. The current industry standard for continuous, smooth video footage is 30 FPS. However, the higher the frame rate, the larger the VSS storage capacity needed which increases the cost of the system. High frame rates may be required in some situations but in most cases, a minimum frame rate of 10 FPS is acceptable. The frame rate will depend on the outcome of a detailed Operational Requirement.

Access to images

- 34.29 For the purposes of apprehending and prosecuting offenders, police will require fast access to recordings and therefore it is recommended, where Video Surveillance Systems are maintained by public bodies or commercial enterprises, trained staff are made available quickly so that copies of film or sound recordings can be exported as soon as requested.
- 34.30 Where VSS is being used on private property, any written advice and guidance in respect of installation and use should include requests to store images/audio records in the cloud, or by other means, for a minimum of 31 days. In the event of serious crime, police officers will visit private premises where VSS has a view of crime scenes or potential suspects in order to harvest evidence.

Management and maintenance

- 34.31 Video Surveillance Systems should have a maintenance programme in place that encompass all VSS components to ensure all aspects of the VSS are working as intended, including:
- Cameras;
 - Wiring;
 - Recording equipment.
- 34.32 A regular maintenance inspection should ensure that:
- Camera lenses are cleaned and any debris removed;
 - All cameras are inspected for damage, wear or degradation;
 - Cameras have not been vandalised or interfered with;
 - The cameras have adequate view of the key areas they are monitoring;
 - If any areas have since been obscured by foliage, for example, that this is assessed and recommendations made to clear the area as soon as possible;
 - Any related motion detection setup is functioning and working as anticipated.
 - If the cameras are controlled remotely, the PTZ (Pan, Tilt & Zoom) function is operating as intended and in real time;
 - All fixings that contain and protect the camera and attach the camera to the tower and/or wall are fastened securely.

Key considerations

- 34.33 Video Surveillance Systems (VSS) are highly technical and specialised installations: those that commission and use the systems are strongly advised to make firm decisions regarding the following four key considerations.
1. Firstly, decide if a Video Surveillance System is going to be appropriate, given all the relevant circumstances.
 2. Decide exactly what tasks a VSS would be expected to accomplish and how this would be done – this is referred to as the 'Operational Requirement' for the system.
 3. Ensure that the specification, installation and use of the VSS is entirely compliant with all relevant regulatory and legal requirements.
 4. With due weight given to the first three key considerations above, an informed choice of an approved VSS installer is to be made which centres on their ability to fulfil the Operational Requirement.

SECTION 35

Security lighting

- 35.1 Good security lighting should be energy efficient, distributing an appropriate amount of uniform light to maximise visibility and colour rendition, whilst minimising light pollution. All external doors and the first 10 metres of footpath from the building's main entrance door, should be well lit to provide facial recognition. Unless special circumstances dictate, lighting should be installed on the building and where possible, at an appropriate height to reduce malicious damage.
- 35.2 Routes to and from garages and car parking areas, within the curtilage of a residential development, should also be lit with lighting mounted on the garage or house.
- 35.3 Secured by Design recommends photo-electric cell lighting (lights that automatically switch on at dusk and off at dawn, typically referred to as 'dusk to dawn lighting') with manual override on the advice of the Institute of Lighting Professionals (ILP) and the police, as repeated activations by passive infra-red (PIR) lighting can increase the fear of crime. They also favour the use of good quality LED lighting and other energy effective light sources and advise against the use of fluorescent lighting which is environmentally unsustainable.
- 35.4 If the residents object to having 'dusk to dawn' lighting only, there are alternatives such as a combined photo-electric cell light which has a PIR override facility to raise the lighting levels if movement is detected or a straightforward PIR light.



SECTION 36

Secured by Design Sanctuary Scheme

- 36.1 The primary aim of the SBD Sanctuary Scheme is to protect victims of domestic abuse in their own homes. A Sanctuary safe room is only installed in a home where the perpetrator no longer resides. A safe room is provided along with a range of other security features aimed at delaying unlawful entry and allowing time for the emergency services to arrive.
- 36.2 Since its creation in 1998, the scheme has successfully helped thousands of victims of domestic abuse remain safely in their homes and maintain their social roots. It has also resulted in huge savings for police forces, healthcare services and local authorities, with less serious assaults to investigate, less families to re-house and less children to re-school.
- 36.3 Mindful of the diverse journeys that residents may have had in their lives prior to taking up residence in the SHAP, Police Crime Prevention Initiatives would recommend that each development has at least one Sanctuary safe room installation in accordance with the detailed specification in the Sanctuary Scheme Installation Manual which is available as a restricted document in accordance with arrangements made between Police CPI and Homes England. For further information about the SBD Sanctuary Scheme contact: specialisthousing.deliveryteam@homesengland.gov.uk

Secured by Design



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