

Secured by Design



Official Police Security Initiative



Secured by Design HOMES 2016

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Door limitation and caller identification

- 21.17 A door chain or opening limiter meeting the requirements of the Door and Hardware Federation Technical Specification 003 (TS 003) must be installed on the doorset to which a caller can be expected, normally the front door (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.
- 21.18 A door viewer meeting the requirements with the Door & Hardware Federation Technical Specification 002 (TS 002) standard must be fitted between 1200mm and 1500mm 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 1.4).

Doorset Installation

- 21.19 Door frames must be securely fixed to the building fabric in accordance with the manufacturer's specifications.
- 21.20 Doorsets that are hidden from public view, typically side or back doors, should not be recessed more than 600mm. This requirement is not applicable to doorsets located in wide recesses that are located within public view (typically a front door) (*Note 21.20*).

Note 21.20: For the purposes of this guidance document a doorset is considered to be within 'public view' when it can be seen from the street.

Secure Mail Delivery to houses, bungalows and flats, apartments or maisonettes accessed via a private dedicated entrance doorset

- 21.21 There are 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.). In order to address such problems SBD strongly recommends, where possible, mail delivery via a secure external letter box 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.

Letter plate apertures in doors

- 21.22 Where a letter plate aperture required to be installed within a doorset it must form part of the certificated doorset range.
- 21.23 **Specifiers and doorset manufacturers are advised that if a letterplate was not present in the doorset when it was tested to any of the standards in paragraph 23, or has not been independently assessed by a certification authority and included within the Scope of Certification of the doorset, then the subsequent installation of a letter plate will invalidate the certificated doorset.**
- 21.24 A letter plate tested to the requirements of the Door Hardware Federation's Technical Standard 008 (TS 008) will provide reassurance that the likelihood of the letterplate aperture being used to gain access to the home will be substantially reduced. Specifiers attention is drawn to the fact that TS 008 is referenced within Approved Document Q as a proven method of protecting the dwelling from attacks known to be committed via the letterplate.

Alternative compliance can be demonstrated by utilising Letterplates meeting the following requirements (*Note 21.24a*):

- Maximum aperture size of 260mm x 40mm

- The fixing shall not be removable from the exterior side of the doorset
- Letter plates must achieve the requirements of the removal test from BS EN 13724:2002 (conducted during the PAS 24 or STS 201 test)
- Doorsets installed with non-key lockable internal hardware (*Note 21.24b*) shall either be installed with a suitable internal security deflector plate to restrict access to the hardware or the letter plate must be installed no less than 400mm from the internal locking point (measured in plane from the centre point of thumb turn to the nearest edge or corner of the letter plate aperture)

Note 21.24a: Specifiers should be aware that the National House-Building Council (NHBC) currently requires a thumb turn release mechanism to be installed on the doorset designated as the primary fire exit route.

Note 21.24b: This specification is the minimum requirement within PAS 24:2012, PAS 24:2016 and STS 201.

- 21.25 The above requirements are also required for doorset products certificated to LPS 2081, LPS 1175 and STS 202, alternatively a letterplate tested to the requirements of TS 008 (see paragraph 23.29) will be acceptable when included within the Scope of Certification for the doorset.
- 21.26 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.

- 21.27 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).

External surface mounted letter boxes

- 21.28 Where a single surface mounted letter box is to be used for each dwelling it must be robust in construction. TS 009 letter boxes offer reassurance that all of the above attributes have been met. In high crime areas TS 009 provides the safest means by which mail can be delivered whilst eliminating the risks associated with letter plate apertures. The letter box must be securely fixed to the face of the building in accordance with the manufacturers specifications and be located in a position that benefits from natural surveillance.

Through-the-wall delivery

- 21.29 Where there are design constraints that prevent a letter plate with a security cowl being installed within a door e.g. narrow hallway, or where it is undesirable to install a surface mounted secure mail box e.g. in a corridor, it may be preferable to provide 'through-the-wall' mail delivery into a secure internal letter box. Such a box must incorporate the same design features as described above for a surface mounted box. Anti-arson design features may also be advised if such crime risks are present.
- 21.30 Products meeting the requirements of the Door & Hardware Federation Technical Specification 008 (TS 008) provide reassurance that 'through the wall' letter boxes offer similar security attributes as secure letter plates and many of the attributes that an external letter box conforming with TS 009 would provide.

performance criteria rather than a glazing thickness specification, so glazing thicknesses may vary between manufacturers/suppliers.

29 Mail delivery in buildings containing multiple dwellings or bedrooms

29.1 There are increasing crime problems associated with the delivery of post to buildings containing multiple dwellings or bedrooms.

Communal mail delivery

29.2 Communal mail delivery facilities within building entrances serving multiple flats or rooms (such as student accommodation) should be designed to incorporate the following:

- Located at the primary entrance/ exit point of the building within view, within an internal area covered by CCTV or located within an 'airlock' access controlled entrance hall, or externally at the front of the building within view of those using the building:
- Be of robust construction
- The individual letter boxes shall have a maximum aperture size of 260mm x 40mm
- Have anti-fishing properties
- Have fire retardation where considered necessary
- Installed in accordance with the manufacturers specifications

29.3 Letter boxes certificated to Door & Hardware Federation Technical Specification 009 (TS 009) offer reassurance that all of the above attributes have been met. In high crime areas TS 009 provides the safest means by which mail can be delivered whilst eliminating the risks associated with letter mail delivery i.e. arson, 'fishing' for personal mail.

Individual mail delivery to flats

29.4 It is not recommended that post is delivered to individual flat entrance doorsets within larger developments. However where letter plates/ boxes are installed in communal developments serving each individual flat shall meet the requirements of paragraphs 21.21 to 21.27 (inclusive) (*Note 29.4*).

Note 29.4: Letter aperture hardware installed within flat entrance doorsets must be assessed by the relevant certification authority and form part of a certificated fire and security range of products.

Windows, roof windows and roof lights in buildings containing multiple dwellings or bedrooms

29.5 All easily accessible windows, roof windows and roof lights in building containing multiple dwellings or bedrooms shall meet the requirements of clauses 23.34 to 23.42 (inclusive).

30 Lighting for buildings containing multiple dwellings

External lighting

30.1 Lighting is required to each elevation that contains a doorset where the public, visitors or occupants of the building are expected to use (*Note 30.1*).

Note 30.1: Secured by Design has not specified PIR activated security lighting for a number of years following advice from the ILP and police concern regarding the increase in the fear of crime (particularly amongst the elderly) due to repeated PIR lamp activations. Research has proven that a constant level of illumination is more effective at controlling the night environment.

applicable to doorsets that are located within public view (typically a front door) (Note 33.27).

Note 33.27: For the purposes of this guidance document a doorset is considered to be within 'public view' when it can be seen from the street.

34 Security of existing (refurbished) doorsets

34.1 It is difficult to provide a definitive requirement for each doorset type and material, therefore if the existing doorset are to be retained during a refurbishment scheme the CPDA should be consulted before embarking on any improvements. However some areas for improvement may include:

- The existing doorset should be thoroughly inspected to ensure that it is sound, free from rot (timber products) and any repairs. The material and dimensional requirements within paragraph 33 (inclusive) should be observed as a guide to the suitability of the existing doorset.
- Locking systems can be replaced with those referenced within paragraph's 33.18 to 33.23.
- Europrofile cylinders should be replaced with products certificated to Door Hardware Federation (DHF) Technical Standard 007 (TS 007) - 3-Star rating, or a TS 007 1-star cylinder may be utilised if accompanied by TS 007 2-star external hardware (handle set or secure escutcheon) or cylinder protection, or Sold Secure SS312 (Diamond) standard cylinders.
- Sliding patio doorsets should be installed with anti-lift hardware designed to prevent the doorset from being lifted off its track.
- The 'slave' door leaf of French or double doorsets should be securely fixed during the normal operation of the primary opening leaf, this can be

achieved through the use of surface mounted or mortised bolts with a minimum engagement of 20mm into the head and sill of the door frame.

- Timber doorsets can be enhanced if necessary by the installation of a deadlock guard, sometimes referred to as an anti-thrust plate, to the door leaf and the installation of a London or Birmingham bar to provide additional strength to the frame.
- Doorsets should be installed with hinge bolts or specialist interlocking hinges. Hinges accessible from outside the building should not have removable pins.
- Doorsets incorporating 'panels' typically timber or PVC-U should be reinforced. Any panel installed within a timber doorset should be at least 15mm thick, securely held in place with beading that is mechanically fixed and glued into position. PVC-U panels can be replaced with new panels that have been shown by test to meet the security requirements of PAS 24:2012 or PAS 24:2016 (as a component part of a full test).
- Glazing in existing doorsets should be upgraded to meet the requirements in paragraph 21.13. Glazing in aluminium and PVC-U doorsets can be secured through the use of glazing security clips or glazing security tape to reduce the likelihood of glazing beads being removed to gain entry.

35 Secure Mail Delivery to bespoke houses, bungalows and flats, apartments or maisonettes accessed via a private dedicated entrance doorset

35.1 A letterplate tested to the requirements of the Door Hardware Federation's Technical Standard 008 (TS 008) will provide reassurance



that the likelihood of the letterplate aperture being used to gain access to the home will be substantially reduced. Specifiers attention is drawn to the fact that TS 008 is referenced within Approved Document Q as a proven method of protecting the dwelling from attacks known to be committed via the letterplate.

35.2 Alternative compliance can be demonstrated by utilising letterplates meeting the following requirements (*Note 35.2a*):

- Maximum aperture size of 260mm x 40mm
- The fixing shall not be removable from the exterior side of the doorset
- Letter plates must achieve the requirements of the removal test from BS EN 13724:2002 (conducted during the PAS 24 or STS 201 test)
- Doorsets installed with non-key lockable internal hardware (*Note 35.2b*) shall either be installed with a suitable internal security deflector plate to restrict access to the hardware or the letter plate must be installed no less than 400mm from the internal locking point (measured in plane from the centre point of thumb turn to the nearest edge or corner of the letter plate aperture)

Note 35.2a: This specification is the minimum requirement within PAS 24:2012, PAS 24:2016 and STS 201.

Note 35.2b: Specifiers should be aware that the National House-Building Council (NHBC) currently requires a thumb turn release mechanism to be installed on the doorset designated as the primary fire exit route.

External surface mounted letter boxes

35.3 There are 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). In order to address such problems SBD strongly recommends, where possible, mail delivery via a secure external letter box 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. TS 009 letter boxes offer reassurance that all of the above attributes have been met. In high crime areas TS 009 provides the safest means by which mail can be delivered whilst eliminating the risks associated with letter plate apertures. The letter box must be securely fixed to the face of the building in accordance with the

manufacturers specifications and be located in a position that benefits from natural surveillance.

Through-the-wall delivery

- 35.4 Where there are design constraints that prevent a letter plate with a security cowl being installed within a door e.g. narrow hallway, or where it is undesirable to install a surface mounted secure mail box e.g. in a corridor, it may be preferable to provide 'through-the-wall' mail delivery into a secure internal letter box. Such a box must incorporate the same design features as described above for a surface mounted box. Anti-arson design features may also be advised if such crime risks are present.
- 35.5 Products meeting the requirements of the Door & Hardware Federation Technical Specification 008 (TS 008) provide reassurance that 'through the wall' letter boxes offer similar security attributes as secure letter plates and many of the attributes that an external letter box conforming with TS 009 would provide.

36 New 'bespoke' windows, roof windows and roof lights

- 36.1 All new bespoke windows should comply with the applicable material and dimensions requirements within paragraph at 33.3 to 33.17 above.
- ### Window hardware
- 36.2 Windows should be installed with multipoint espagnolette locking systems that have been shown by test to meet the security requirements of PAS 24:2012 or PAS 24:2016 as a component part of a window of the same material. There should be locking points within 100mm from the corner of the casement.
- 36.3 Where a multipoint espagnolette locking system is not compatible

or desirable e.g. listed building application, then there should be a minimum of two locking points per opening light.

- 36.4 All hinges and pivots installed within bespoke windows should incorporate an interlocking detail and be shown by test to meet the security requirements of PAS 24:2012 or PAS 24:2016 as a component part of a window of the same material.
- 36.5 Heritage hinges (untested as a component part of PAS 24) should be supplemented with hinge bolts.
- 36.6 Tilting window pivots and top retaining bolts should be enhanced to resist increased loads.
- 36.7 Sash fasteners (fitch catches) should also be enhanced to resist increased loads.

Glazing in windows

- 36.8 All glazing in bespoke windows installed within 400mm of an adjacent doorset shall incorporate one pane of laminated glass meeting, or exceeding, the requirements of BS EN 356:2000 class P1A (*Note 36.8*). NB This is a specific requirement within PAS 24:2012, which is referenced within both the Building Regulations (England) and the Scottish Building Standards.

Note 36.8: 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.

Lighting in communal areas within flats/apartments

- 39.2 24 hour lighting (switched using a photoelectric cell) to communal parts of blocks of flats will be required. This will normally include the communal entrance hall, lobbies, landings, corridors and stairwells and underground garaging facilities and all entrance/exit points. Other areas requiring lighting will be indicated by the CPDA in writing. To reduce energy consumption this may be provided by a dimming system which leaves luminaires on at a lower level during quieter period

40 Utility meters

- 40.1 There is no requirement for the location of the utility meters if 'smart meters' are utilised (remote signalling). Otherwise utility meters should, wherever possible noting the possible planning constraints on listed buildings and dwellings in conservation areas, be located outside the dwelling at the front or as close to the front of the building line as possible (to ensure they are visible). If located to the side of the dwelling they must be as near to the front of the building line as possible and to the front on any fencing or gates (care should be taken not to provide a climbing aid).

41 Additional or alternative requirements for new bespoke buildings containing multiple dwellings or bedrooms

- 41.1 A building containing multiple dwellings for the purposes of this document may include flats, bedsits or individual bedrooms accessed from a semi-private area and served by a shared or communal entrance doorset (including HMO's and student accommodation).

Communal and shared doorset standards

- 41.2 Please refer to Section 2a, paragraph 27.2 for the SBD definition of a communal and shared doorset.
- 41.3 Specifiers should, where possible, specify a shared or communal doorset that has been tested and certificated to a recognised security standard (see paragraph 21) and has also been tested and certificated to BS 6375 to ensure that it is fit for purpose (see paragraph 27.4).
- 41.4 New bespoke shared or communal entrance doorsets that are constructed for a development of specific architectural value, constrained by listed building or other conservation status should be designed to be a secure. In such cases the CPDA should be contacted at the earliest possible opportunity to discuss the technical specification of the doorset, however general security features may include:
- Glazing within bespoke shared or communal doorsets, including glazed panels/side lights adjacent to doors installed within an integral door frame and windows adjacent to doorsets (within 400mm), must incorporate one pane of laminated glass meeting, or exceeding, the requirements of BS EN 356:2000 class P1A (*Note 41.4*). Specifiers are reminded that this is also a requirement within ADQ, Annex B, paragraph B.11.

Note 41.4: 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.

- Mechanical locking systems used should meet the physical security requirements within paragraphs 33.18 or 33.19. Magnetic doorset locking systems should be shown by test to meet the security requirements of PAS 24:2012, PAS 24:2016 or equivalent standard, as a component part of a doorset of the same material.
- All bespoke doorsets shall be installed with hinge bolts or specialist interlocking hinges. Hinges accessible from outside the building should not have removable pins. Specifiers are reminded that hinges should also be correctly rated to support the weight of the doorset.
- Timber shared or communal entrance doorsets can be enhanced if necessary by the installation of a deadlock guard, sometimes referred to as an anti-thrust plate, to the door leaf and the installation of a London or Birmingham bar to provide additional strength to the frame
- Door entry and access control systems should comply with the same standards within Section 2a, Paragraph 27.5 – 27.11.

42 Mail delivery in bespoke buildings containing multiple dwellings or bedrooms

- 42.1 There are increasing crime problems associated with the delivery of post to buildings containing multiple dwellings or bedrooms. Communal mail delivery should therefore adhere to the requirements within Section 2a, paragraph 29.

43 Bespoke Doorsets providing alternative access to communal areas other than the primary shared or communal access doorset (including emergency egress doorsets)

- 43.1 Alternative access doorsets, emergency egress and fire doorsets that may be used by residents to access communal parts of the building are also required to be 'secure doorsets', see Building Regulations (England) Section 1, paragraph 1.1. Bespoke doorsets shall meet the requirements within paragraphs 33 and 34.

44 New windows, roof windows and roof lights in bespoke buildings containing multiple dwellings or bedrooms

- 44.1 All easily accessible bespoke windows, roof windows and roof lights in building containing multiple dwellings or bedrooms shall, where possible, meet the material and dimensional requirements within paragraphs, window hardware requirements within paragraphs 33, 36 and 37.

45 Lightweight framed walls in bespoke dwellings

- 45.1 The security of a development can be severely compromised if lightweight framed walls do not offer sufficient resilience to withstand a criminal attack; this is recognised within Approved Document Q (England) (*Note 45.1*). The SBD requirements are primarily based upon products that have been tested and proven to provide additional security and are outlined in Paragraph 24 of this document.

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