



ABHM

**Association of Building
Hardware Manufacturers**

Best practice guide

**Panic and emergency
exit devices
to
BS EN 1125 & BS EN 179**

in association with



*Extracts from BS EN 1125:1997 +
A1: 2001 and BS EN 179: 1997 +
A1: 2001 are reproduced with the
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• ABHM BEST PRACTICE GUIDES

This publication is one in a series of guides addressing the major issues that should be considered when specifying, ordering or using the products it describes. It aims to provide the reader with a concise document which includes a summary of relevant sections from the new European product standards. The reader will then be in a position to seek further specialist advice where necessary and recognise **GENUINE** conformity to the new standards.

• BS EN 1125 - Panic exit devices

Experience relating to escape from buildings and general safety have made it desirable that doors at exits in public buildings, places of entertainment, shops etc., should be fitted with panic devices operated by a horizontal bar. The emphasis for products covered by this standard is on safe exit rather than security.

• BS EN 179 - Emergency exit devices

This standard covers devices to be used in emergency situations where people are familiar with the emergency exit and its hardware and therefore a panic situation is most unlikely to develop. Lever handle operated escape mortice locks or push pads may therefore be used.

These standards provide details on product types, classification by use, test cycles, door mass, corrosion resistance, as well as definitions, product performance requirements, test apparatus, test methods and marking of products. In addition, the published standards include annexes illustrating the various points made through diagrams and supplementary text.

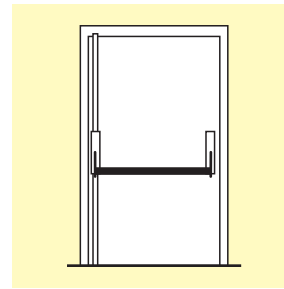
Extracts from BS EN 1906 are reproduced with the permission of the British Standards Institution. BSI publications can be obtained from BSI Customer Services, 389 Chiswick High Road, London W4 4AL Tel +44 (0)20 8996 9001 Email: cservices@bsi-global.com.

BS EN 1125 replaces BS5725 which is withdrawn. BS EN 179 is a new standard.

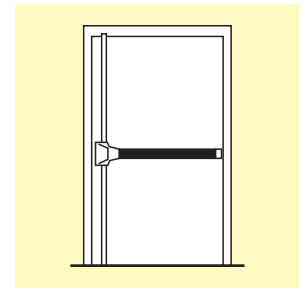
Amendments A1 to BS EN 1125 and BS EN 179 were published in 2001 and these amendments provide for CE marking of conforming products in accordance with the EU Construction Products Directive.

• SCOPE - BS EN 1125

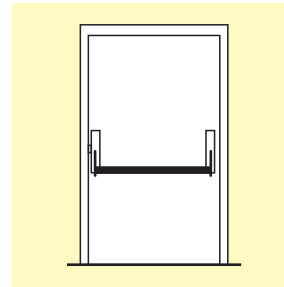
The main purpose of the performance requirements of this standard is to give safe and effective escape through a doorway with minimum effort and **without prior knowledge** of the device, i.e. for locked doors on escape routes where **panic situations can be foreseen**.



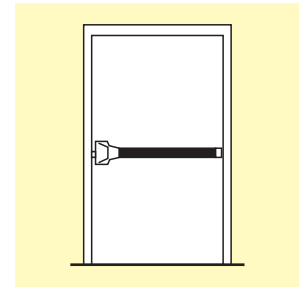
Type A: Panic bolt push bar



Type B: Panic bolt touch bar



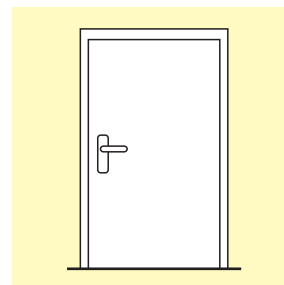
Type A: Panic latch push bar



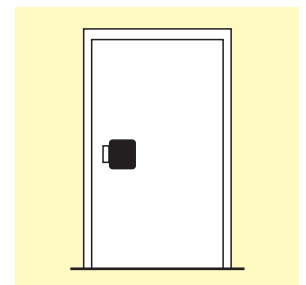
Type B: Panic latch touch bar

• SCOPE - BS EN 179

The main purpose of the performance requirements of this standard is to give safe and effective escape through a doorway with one single operation to release the device although this **can require prior knowledge of its operation**, i.e. for locked doors on escape routes where **panic situations are not foreseen**.



Type A: Emergency device lever handle



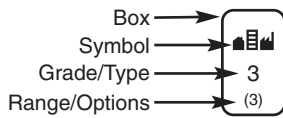
Type B: Emergency device push pad

• CLASSIFICATION

BS EN 1125 and BS EN 179 classify panic and emergency exit devices by using a 9 digit coding system. A similar classification applies to all building hardware product standards so that complementary items of hardware can be specified to, for instance, a common level of corrosion resistance, category of use, etc. Each digit refers to a particular feature of the product measured against the standard's performance requirements.

The ABHM recommends the use of graphic icons to enhance clarity of information and has devised a system to facilitate assimilation of the various product classifications. Each feature within the product

classification is represented by an icon comprising four elements; Symbol, Grade/Type, Range/Options and Box:-



The icon above is for a product which meets Grade 3 in the Category of Use classification, where EN 1125 and EN 179 stipulate only grade 3.

Full details on the ABHM graphic icons system can be found [on this CD](#) or at www.abhm.org.uk

Digit 1 **Category of use**

Only one category is identified, that being
- grade 3: high frequency of use by public and others with little incentive to exercise care.

Digit 2 **Number of test cycles**

Two categories of durability are defined:

- grade 6: 100 000 cycles.
- grade 7: 200 000 cycles.

Digit 3 **Test door mass**

Two categories of test door mass are identified:

- grade 5: up to 100 kg.
- grade 6: up to 200 kg.

Digit 4 **Fire resistance**

Two categories of fire door resistance are identified:

- grade 0: not approved for use on fire/smoke door assemblies.
- grade 1: suitable for use on fire/smoke door assemblies, subject to satisfactory assessment of the contribution of the panic/emergency device to the fire resistance of specified fire/smoke door assemblies. Such assessment is outside the scope of this European standard (see EN 1634-1).

Digit 5 **Safety**

All panic and emergency devices have a critical safety function therefore only the top grade - 1 - is identified

Digit 6 **Corrosion resistance**

Two grades of corrosion resistance are identified according to EN 1670:

- grade 3: high resistance.
- grade 4: very high resistance.

Digit 7 **Security**

Products covered by BS EN 179 have 3 identified categories and generally have the opportunity of greater security against forced opening than devices covered by BS EN 1125.

BS EN 179

- grade 2: 1 000 N.
- grade 3: 2 000 N.
- grade 4: 3 000 N.

BS EN 1125

Only one category of security is identified
- grade 2: 1000N panic devices are primarily for the operation of a door from the inside. Safety considerations will always be given priority over security.

Digit 8 **Projection of device**

Two grades are identified relating to the projection of the device from the door face:

- grade 1: projection up to 150 mm (standard projection).
- grade 2: projection up to 100 mm (low projection).

Digit 9 **Type of device**

Two categories are identified for each standard:

BS EN 179

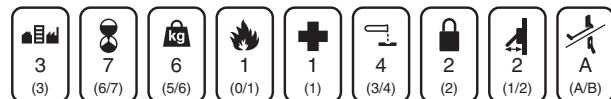
- type A: emergency device with lever handle operation.
- type B: emergency device with push pad operation

BS EN 1125

- type A: panic device with push bar operation
- type B: panic device with touch bar operation

• EXAMPLE:

The following marking denotes a panic exit device tested to 200 000 operations for a door mass up to 200 kg, suitable for fire door use with very high corrosion resistance and low bar projection.



• MARKING

- Manufacturer's name or trademark or other means of positive identification.
- Classification as detailed.
- The number of the European standard.
- The month and year of final assembly by the manufacturer.

Note: This information can be in coded form. Items (b) and (c) should be clearly visible after installation.

• CE MARKING

Panic and emergency exit devices intended for use on escape route doors are covered by a Construction Products Directive mandate issued by the European Commission. Consequently, these standards are regarded as “harmonised” standards and compliance with them, supported by suitable evidence, allows for the application of the CE mark.

As panic and emergency exit devices have a critical safety function, application of the CE mark will require the involvement of a notified certification body to provide verification of the compliance claims. This will involve initial type-testing of the product to either EN 1125 or EN 179, initial inspection of the manufacturer’s factory production control and continuing surveillance and approval of the factory production control. On satisfactory fulfilment of these tasks, the notified body issues an EC Certificate of Conformity which then permits the manufacturer to declare compliance and affix the CE marking to his product.

The standard requires the following additional information to accompany the CE marking:-

- the identification number of the notified certification body
- the name or identifying mark of the manufacturer
- the registered address of the manufacturer
- the last two digits of the year in which the marking was applied
- the number of the EC certificate of conformity
- reference to EN 1125 + A1: 2001, or EN 179 + A1: 2001, as appropriate
- the classification code of the product

Note that, although the notified body has to be involved to verify the manufacturer’s claims, the manufacturer remains responsible for designing and producing the product, for affixing the CE marking, and for ensuring that the product meets the requirements of the Directive.

• SPECIFICATION ISSUES

- The decision as to which products are specified should be made on the basis of the building use and occupancy. Products incorporating a horizontal bar (BS EN 1125) to operate the exit device must be used in public buildings, places of public entertainment, shops and any other location where the building occupants do not have prior knowledge of the escape device and where a panic situation can be foreseen.

- Products incorporating a push pad or lever handle to operate the exit device (BS EN 179) should only be used where building occupants are familiar with the emergency exit and its hardware and where panic situations are not foreseen.

- If there is any doubt about the conditions relating to building occupancy, the ABHM recommends that devices covered by BS EN 1125 should be specified.

- For safety reasons the push bar of a type “A” panic device shall not protrude beyond either of the end supports. This means that for pairs of rebated doors, the traditional British designed “double panic bolt” will **not** be permitted. An acceptable solution is for a single vertical panic bolt to be fitted on the “inactive leaf” and a panic latch on the “active leaf”.

- A grade 2 (low projection) panic device should be used in situations where there is restricted width for escape or where doors are not able to open beyond 90°.

- Panic device push and touch bars should be installed to provide the maximum effective length but never less than 60% of the door leaf width.

Where to place the CE mark

	On product – and visible after installation	On product	With installation instructions	On product packaging	On commercial documents
CE symbol	R	E	E	R	O
Notified Body number	R	E	E	R	O
Name of Producer	O	O	E	O	O
Address of Producer	O	O	E	O	O
Year of marking	O	O	E	O	O
C of C number	O	O	E	O	O
Product std number	R	R	E	R	O
Classification code	R	R	E	R	O

E = Essential
 O = Optional
 R = Recommended

For some products it may be appropriate to specify a combination of locations for the CE marking and the accompanying information. For example, a minimum of information could appear on the product itself, with the complete information appearing on the installation instructions or on the accompanying commercial documents. Where the information is split in this way, the location(s) lower in the hierarchy must always repeat that part of the information already placed higher up in the hierarchy.

Additional important considerations

In addition to ensuring that products satisfy the requirements of this standard, other factors should be taken into consideration when selecting lever handles and knob furniture. These not only include sourcing products from a reputable manufacturer, but also quality assurance, support services and unequivocal conformity to the standard as detailed below:

• QUALITY ASSURANCE

The internationally recognised standard for quality assurance, BS EN ISO 9000 provides confidence that the products are being manufactured to a consistent quality level. All ABHM members operate recognised BS EN ISO 9000 Quality Assurance Schemes.



Companies displaying this symbol are registered under the BSI Registered Firm Scheme.

• SUPPORT SERVICE

The correct specification and installation of panic and emergency exit devices is essential to ensure that they are able to operate efficiently within the performance levels described in this standard. Specialist advice is available from ABHM members in support of their products from specification stages through supply to effective operation on site.

• CONFORMITY

Conformity to the standard must be clearly and unequivocally stated. Such phrases as “tested to ...”, “designed to conform to ...”, “approved to”, are not sufficient. To avoid misleading or confusing claims it is recommended that one of the following phrases is used when stating conformity.

“This product has been successfully type-tested for conformity to all of the requirements of (BS EN 1125 + A1: 2001/BS EN 179 + A1: 2001), including the additional requirement for (fire/smoke door use*). Regular audit testing is undertaken. Test Reports and/or Certificates are available on request.”

* *Add as appropriate.*

It is recommended that an [ARGE Declaration of Compliance](#) is also completed, as this gives a clear and unambiguous method of demonstrating test evidence and compliance.

ABHM PROFILE

Formed in 1897 to represent the interests of brassfounders, the ABHM and its members has been instrumental in the industry's advancement over the last 100 years.

Innovations in material and manufacturing technologies as well as changes in the building industry throughout the world have resulted in the development of a wide range of new products and practices. These advances have, in turn, required new skills and knowledge from the designer and manufacturer of the products themselves through to the specifiers, stockists and installers in the various sectors of the building industry.

The Association and its members have consistently risen to this challenge, creating products which meet the needs of a changing world and developing performance standards alongside national and international organisations, such as BSI

and CEN, which enable the industry to select and compare hardware with confidence.

The advances made throughout the industry are reflected in the Association's structure, the diversity of its membership and the wide range of activities in which it is involved. The ABHM now represents the United Kingdom's leading manufacturers of building hardware, architectural ironmongery and door and window fittings as well as providing the technical expertise essential for the formulation of performance standards at home and abroad.

All members are listed [on this CD](#) and on the [ABHM website \(www.abhm.org.uk\)](#), which includes a guide to the products and services available from each member.

British Hardware Federation

BHF represents some 3,500 ironmongery, hardware and DIY shops in the United Kingdom. In addition, it embraces the Independent Builders Merchants Service, a specialist division of the Federation.

Builders Merchants' Federation

The Builders Merchants' Federation represents the majority of bona fide merchants in the UK. Its members have a combined turnover of £6 billion a year. Members range from large nationals to small independents.

Guild of Architectural Ironmongers

Founded in 1961, the Guild represents 95% of bona fide distributors within the UK and the majority of manufacturers of architectural ironmongery. The Guild serves to further all aspects of architectural ironmongery by promoting the interchange of information to encourage better product design and high professional standards of ironmongery scheduling and specification.

Master Locksmiths Association

The MLA is recognised by the Home Office, Police and The British Standards Institution as being the authoritative body for locksmithing. It was formed to promote the membership to Central and Local Governments, Industry, Commerce and the Public.



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1.0 Introduction

Experience relating to escape from buildings and general safety has shown the importance of fitting doors on escape routes with suitable exit devices to enable the occupants of the building to escape quickly and easily from a building in the case of fire or some other emergency. Different groups of users will have differing requirements to enable them to make an effective escape and this has to be reflected in the type of device chosen. For example, in buildings frequented by the general public it is important that doors can be released easily by people who may have no training in emergency procedures or the use of the exit device and may therefore panic in the rush to escape. Other buildings may be occupied, predominantly by authorised personnel who will have been trained specifically in the procedures for escape and are, therefore, unlikely to panic in the case of an emergency.

At the same time, where escape route doors are part of the final exit from a building, there will be some additional requirements for security of the door against intrusion and burglary. In this case there is a clear conflict between the requirements of building users to be able to escape easily and the requirements of building owners to secure their building and its contents against crime.

Where escape route doors are part of the fire compartmentation of the building there will be additional requirements to ensure that the escape hardware fitted does not compromise the fire resisting performance of the doorset.

For the purpose of this Code of Practice therefore, exit door hardware is divided into the following categories:

- a) Panic exit devices (for use where panic situations may be envisaged);
- b) Emergency exit devices (for use by trained personnel where panic situations are not envisaged);
- c) Exit devices for use on fire resisting doorsets;
- d) Accessories for exit devices.

Note: This list does not imply suitability of any device for fire or escape door use – see Section 3.0 for further information.

2.0 Critical recommendations

2.1 General recommendations (for all exit devices)

2.1.1 The device and its accessories must be chosen taking account of the type of user :-

- (i) devices intended for use by the general public should comply fully with BS EN 1125 – *Panic exit devices operated by a horizontal bar*. Preferably this compliance should be demonstrated by application of the CE marking.
- (ii) devices for use by trained personnel may alternatively comply fully with BS EN 179 – *Emergency exit devices operated by a lever handle or pushpad*. Again, this compliance should be demonstrated by application of the CE marking

If there is any doubt about the conditions relating to building occupancy, it is recommended that devices covered by BS EN 1125 are specified.

2.1.2 devices for use on double doors should have been specifically tested and approved for that purpose. (see section 3.3.3).

2.1.3 low projection exit devices should be used where there is restricted width for escape, or where the exit doors are unable to open beyond 90°.

2.1.4 care should be taken that hinges and any seals are correctly fitted so that the escape doors are able to open freely once the exit device is operated.

2.1.5 a regular programme of maintenance should be undertaken to ensure that the correct operational performance is maintained for the life of the building (see '[Installation and maintenance advice](#)').

2.1.6 **NO** additional security devices should ever be fitted to escape route doors unless specifically approved by fire and building control officers. (see section 3.4).

2.2 Additional recommendations for devices for fire door use

- 2.2.1 The exit device and any accessories should have demonstrated their ability to be suitable for the intended purpose, by inclusion in satisfactory fire tests to BS EN 1634-1, on a type of doorset and configuration in which it is proposed to be used. This evidence should be provided by an approved third party certification or testing body. (see Notified Bodies in the '[Guidance Notes on CE Marking](#)' section of this CD, clause 2.3).
- 2.2.2 devices for use on double doors should have been specifically fire tested on an appropriate double doorset assembly and approved for that purpose. (see section 3.3.3);
- 2.2.3 the exit device should **NOT** include any dogging mechanism unless its use is proven by fire test evidence on self-closing unlatched fire doors. (see section 3.3.1).

3.0 Commentary

3.1 General

The Building Regulations Approved Document B requires that all escape doors be fitted with escape hardware that is simple to operate and does not require specialist knowledge or tools for their operation (for example panic bars).

Panic or emergency exit devices intended for use on escape doors are covered by a Construction Products Directive mandate issued by the European Commission. Consequently, BS EN 1125 and BS EN 179 are regarded as "harmonised" and compliance with them, supported by suitable evidence, allows application of the CE mark. It is strongly recommended that, once these products are available, only panic or emergency exit devices bearing the CE mark should be specified.

European product standards have been developed to provide a benchmark for the performance and safety of escape hardware and as such, they can be considered as describing best practice in this important area.

Under these standards escape hardware is divided into two basic types:-

- (i) Panic exit devices to BS EN 1125: These devices are intended primarily for buildings where the public are likely to be present and a panic situation could arise if the building is required to be evacuated quickly. For this reason the devices are designed to operate by body pressure alone and require no knowledge of their operation to enable safe and effective evacuation of a building. BS EN 1125, therefore, contains specific performance tests to ensure that a panic device will release by body pressure even if people are pushing on the door leaf itself while the device is being operated.
- (ii) Emergency exit devices to BS EN 179: These devices are intended for escape from buildings where the public are unlikely to be present in large numbers, and where the staff in the building have been trained both in emergency procedures **and** in the use of the specific emergency exit devices fitted. For this reason, panic situations are considered unlikely and these devices are therefore permitted to have higher operating forces and do not have to release by body pressure alone.

From the above descriptions it can be appreciated that it is very important that a device according to BS EN 1125 is always specified where there is a possibility that the public are present and that subsequently, a panic situation could arise.

BS EN 179 devices should only be specified where it is intended that the occupants will be trained in emergency escape procedures and are therefore most unlikely to panic. If there is any doubt, then a device to BS EN 1125 should be specified.

3.2 Escape considerations

3.2.1 Panic exit devices

The main purpose of the performance requirements contained in BS EN 1125 is to give safe and effective escape through a doorway with minimum effort and without prior knowledge of the panic exit device. The requirements emphasise the importance of ease of opening by the young, elderly and infirm.

Whilst reasonable external security will be provided by the panic exit devices covered in this standard, the main objective is to enable a door to be opened at all times by hand or body pressure along its inside face on the panic exit device, and not requiring the use of a key or any other object.

It is important that any panic exit device is able to operate safely for a realistic lifetime and tests are included in BS EN 1125 to verify the durability of the product. Two categories of durability are recognised:-

Grade 6:	100 000 test cycles
Grade 7:	200 000 test cycles.

If the escape door to which the panic device is fitted is also used during the day as a normal access door, it is important to ensure that the panic device is proven for at least 200 000 cycles.

Panic devices are classified according to the amount that they project from the door face. When the door is in the open position at around 90°, any projection of the panic device effectively reduces the clear escape width of the opening. It is therefore important that a low projection device (100 mm or less) is chosen where the door may only be able to open to around 90°, in order to maintain a clear opening width.

3.2.2 Emergency exit devices

The main purpose of the performance requirements contained in BS EN 179 are to give safe and effective escape through a doorway with one single operation to release the emergency exit device, although this can require prior knowledge of its operation.

The European Standard deals with emergency exit devices designed to be used in emergency situations, where people are familiar with the emergency exit and its hardware and therefore a panic situation is most unlikely to develop.

Where panic situations are foreseen, reference should be made to BS EN 1125, covering panic exit devices operated by a horizontal bar.

It is important that any emergency exit device is able to operate safely for a realistic lifetime and tests are included in BS EN 179 to verify the durability of the product. Two categories of durability are recognised:-

Grade 6:	100 000 test cycles
Grade 7:	200 000 test cycles.

If the escape door to which the exit device is fitted is also used during the day as a normal access door, it is important to ensure that the exit device is proven for at least 200 000 cycles.

Emergency exit devices are also classified according to the amount that they project from the door face. When the door is in the open position at around 90°, any projection of the exit device effectively reduces the clear escape width of the opening. It is therefore important that a low projection device (100 mm or less) is chosen where the door may only be able to open to around 90°.

As emergency exit devices are intended for use by trained personnel only, they are permitted to have higher operating forces, and this in turn may permit higher security levels to be achieved. BS EN 179 includes static load tests for 1000, 2000 or 3000 N. The grade achieved will be shown by the 7th character of the classification system.

3.3 Exit devices for use on fire resisting doorsets

Where panic or emergency exit devices are used on fire resisting or smoke control doors there are additional performance requirements that have to be met, beyond those required for escape, to ensure that the device does not jeopardise the fire compartmentation properties of the doorset.

- 3.3.1 **Dogging:** Dogging is a method of holding the latchbolt of the exit device in a withdrawn state, for easy passage through the door. Where the doorset relies on the provision of a latchbolt for its fire resistance rating, then devices with a dogging feature should never be used. However, dogging may be permitted where the fire test evidence has been obtained from unlatched fire doorsets, as these tests will have proved that the self-closing device fitted to that particular doorset is capable of maintaining the closed position without any help from the latch. In these circumstances, it is essential that the fire test evidence covers the particular doorset assembly of door leaf, frame, closer, exit device and hinges. A good certification scheme will address all these points.
- 3.3.2 **Automatic relatching:** This feature is currently required by BS EN 1125:1997 and BS EN 179:1998 where devices are for use on fire resisting doorsets, but a future revision will not require automatic relatching where the fire testing evidence has been obtained from an unlatched device. Clearly, if the test evidence has proven the fire compartmentation performance without the need for the engagement of a latchbolt, then automatic relatching is not necessary. Where devices without automatic relatching are being considered, the detailed fire test fire test report should be consulted to ensure that the testing was carried out on an unlatched door.
- 3.3.3 **Double door use:** Both BS EN 1125 and BS EN 179 include specific durability and release tests depending on whether the device is intended for single or double door use. It is important to check that the device is approved for the correct end use, as there is no guarantee that a device approved for single door applications only will perform safely if used on a double door configuration. Some products are tested and approved for both applications and these will often be the best option if the precise end use is not known at the time of specifying.

Where exit devices are intended for use on double doorsets particular care should be taken that any intumescent material contained in the meeting stiles is not damaged during the installation or operation of the exit devices. In the case of rebated doors it is important to ensure that door lippings and any intumescent material is protected from damage by the latchbolt action.

For safety and reliability reasons, the UK traditional double panic bolt consisting of a single bolt and slave arm connected by bevelled plugs, is now not permitted by BS EN 1125. For rebated doors this product is now usually replaced by a panic latch on the first opening leaf and a panic bolt on the second opening leaf, although more sophisticated multiple locking devices are now becoming available. In all cases the manufacturer's installation instructions should be followed closely, particularly where supplementary intumescent protection is required to achieve the correct fire rating.

3.4 Security

Both BS EN 1125 and BS EN 179 are concerned primarily with quick and effective escape from a building, and the question of security of the building and its contents from the outside is considered to be of secondary importance. All panic and emergency exit devices will provide a basic level of security against intrusion, but there is increasingly a need for higher security in buildings such as supermarkets and stores with high insured content, and even in schools and hospitals to protect the occupants against the attentions of intruders.

For these cases there are additional security measures that can be taken to enhance the physical security of the building, without compromising the ability of people to escape during an emergency. Such measures should always be discussed with local building and fire authorities and will generally be determined on a building occupancy and risk assessment basis.

When buildings are occupied, such measures include:-

- a) exit devices equipped with additional locking, such as deadbolts or electromagnetic locks;
- b) exit devices equipped with local or remote audible alarms;
- c) door monitoring devices and closed circuit television;
- d) delayed egress devices.

In all cases it is essential that the escape function of the door is not compromised at any time while the building is occupied. In particular, any additional deadbolt locking used must still enable the exit device to comply with the release requirements of BS EN 1125 or BS EN 179. If delayed egress devices are to be used, they must be designed such that after the delay period approved by the building authority, the door will automatically be released. In the case of genuine emergency, such as a fire alarm or power failure, the door has to be released immediately.

Panic and emergency exit systems incorporating the type of measures outlined above, are covered by two new European product standards, currently in draft form:-

prEN 13633 – *Electrically controlled panic exit systems*;

prEN 13637 – *Electrically controlled emergency exit systems*.

When published, these two standards will give much needed guidance on safe ways of combining physical security with effective means of escape, and they will be used to satisfy the requirements of the Construction Products Directive in this regard. Until they are available, it is strongly recommended that any proposed additional security measures to be applied to escape doors are approved with the local building and fire authorities.

3.5 Accessories for exit devices

- 3.5.1 Outside access devices (OADs): These devices are used to enable authorised access from the opposite side to the escape direction, and can consist of a cylinder, lever/knob or keypad assembly. All are connected to the latchbolt of the exit device in some way, either through a mechanical link or an electrical connection.

From an escape point of view it is essential that the provision of these OADs cannot override or inhibit the escape function from the inside, at any time. The manufacturer's data sheets should specify which OADs have been tested for use with a specific exit device, and this should be proven by checking that the test evidence covers the correct outside access devices. Use of a non-approved OAD could cause a dangerous situation in which the exit device would not release properly when called upon to do in an emergency.

From a fire compartmentation point of view, care must be taken that any OAD chosen will not compromise the fire rating of the complete doorset. It is therefore important to follow the manufacturer's installation instructions and also check that the fire test evidence includes the use of the appropriate OAD with the exit device.

- 3.5.2 Striking plates: Most panic or emergency exit devices are offered with a choice of striking plates to suit different frame materials or configurations. For example, a panic latch may be approved for use on a single non-rebated door, the active leaf of a rebated pair of doors, an aluminium profile door frame, a timber frame or a steel rebated frame. In each case a different striking plate may be needed. The design of a striking plate can have a very significant effect on the release forces and correct operation of an exit device, so care should be taken that the test evidence and approval covers the particular striking plate required.

- 3.5.3 Other components: Break-glass emergency bolts - these devices are unable to comply with the design requirements of BS EN 179, as they require more than one single hand operation to effect an exit. For this reason this Code of Practice cannot recommend the use of such devices.

Many other components could be used in conjunction with panic or emergency exit devices. In all cases these components must not be allowed to inhibit the escape function in any way. If appropriate certification from a third party is not available, then specific test evidence should be sought for all combinations of building hardware intended to be used together.

4.0 Fire issues

Many of the best practice guides in this section refer to classification of the suitability of the associated products for use on fire resistant and/or smoke control doors.

Currently the following test methods and classification documents are relevant:

BS EN 1634-1: 2000 - *Fire resistance tests for door and shutter assemblies: Part 1 – Fire doors and shutters;*

BS EN 1634-3: 2001 - *Fire resistance tests for door & shutter assemblies: Part 3 - Smoke control doors & shutters*

BS EN 13501-2: 2003* - *Fire classification of construction products and building elements: Part 2 – Classification using data from fire resistance tests (excluding products for use in ventilation systems).*

BS 476: Part 22 - *Fire tests on building materials and structures: Part 22 - Methods for determination of the fire resistance of non-loadbearing elements of construction*

* Standard in course of publication

See also the Product /application related questions in the [FAQ section](#) of this CD.