**BS 7273-4:2015+A1:2020**

# Note for commenters

The proposed amendment to this document is presented here in the form of a list of changes to the relevant sections of the text, drawings etc. We are only inviting comments on these changes. Any comments on the rest of the document are likely to be reserved for the next revision.

Minor changes have not been listed.

## Introduction

*Insert note after paragraph 8 (ending… " the full application of all recommendations in this part of BS 7273 might not be necessary".)*

*NOTE In blocks of flats, it is common for electronic locking to be fitted to the main entrance doors to the blocks. As a result of modern purpose-built blocks of flats having a "stay-put" strategy, there is normally no fire detection and fire alarm system with which electronic locking can be interfaced. To facilitate means of escape from the block, the electronic locking is released either by mechanical means (e.g. a lever handle), or by a manual release control that is used for normal egress (e.g. a mushroom head push-button); in the latter case, a further manual release control conforming to the recommendations of sub-clause **11.2** of this British Standard is provided for emergency use. As, in such cases, there is no fire detection and fire alarm system, the electronic locking is outside the scope of this Part of BS 7273.*

*However, attention is drawn to BS 8220-1, which recommends that, in medium and high-rise blocks of dwellings (i.e. dwellings within a block of flats), where electric strikes or magnets are installed, they need to be fail safe (open) devices in the event of simultaneous failure of the normal, and any standby, power supply. This also enhances the reliability of access to the block by the fire and rescue service, for whom a facility for access (e.g. a "drop key" facility) is normally provided. This is not a requirement of either building regulations (in relation to new buildings) or fire safety legislation relevant to existing buildings (given that the entrance door to the block could, otherwise, be locked with a mechanical lock, operated by an "easy opening device", such as a lever handle, on the inside, and by a key that would not be held by the fire and rescue service on the outside).*

*However, provision of "fail-safe to open" is good practice, in that it capitalizes on the provision of electronic locking by facilitating easy access to the block for the fire and rescue service. Equally, the latter facility might impact on the security of the block because the access facility for the fire and rescue service is commonly operated by a key (e.g. a "drop key") that is readily available to members of the public and, hence, criminals.*

## Scope

*Replace paragraph:*

This British Standard does not apply to electrically controlled systems that form part of a smoke venting system. Fire resisting shutters and active fire curtain barrier assemblies are also outside the scope of this British Standard.

*With new paragraph:*

This British Standard does not apply to electrically controlled systems that form part of a smoke venting system.

*NOTE Recommendations for the interface between these systems and a fire detection and fire alarm system are given in BS 7273-6.*

## 1 Methods of actuation

**7.2**

*Insert new Note 3:*

*NOTE 3 In modern, purpose-built blocks of flats with electronic locking fitted to the entrance door(s) to the block, there is normally no fire detection and fire alarm system. However, the manual control to which **7.2** refers is provided, unless the electronic locking is overcome, on the inside of the door, by a mechanical device (e.g. a level handle).*

## 2 Manual release controls

### 11.2 Manual release controls for electronically secured doors and powered sliding doors

**11.2.2**

Paragraph 1

*Replace text:*

Other than in places of lawful detention (see **7.2**), manual release controls should conform to the requirements specified in BS EN 54-11:2001 for Type A (single action) manual call points, other than **4.7.2.3** (colours) and **4.7.3.2** (symbols and lettering on front face).

*With:*

Other than in the case of the exceptions listed in **11.2.3** (see also **7.2**), manual release controls should conform to the requirements specified in BS EN 54-11:2001 for Type A (single action) manual call points, other than **4.7.2.3** (colours) and **4.7.3.2** (symbols and lettering on front face).

Note 2

*Insert new text at end of current text:*

*Key-operated manual release controls might also be acceptable in certain care homes and supported housing, subject to a risk assessment and adequately reliable arrangements for operation of the manual release controls by staff.*

*Insert new subclause **11.2.3**:*

**11.2.3** The recommendations of **11.2.2** should not be applied in the case of the following premises:

a) places of lawful detention (see **7.2**); and

b) certain mental health units in hospitals, and certain care homes and similar premises (such as supported housing), in which, as a result of mental health issues or cognitive impairment, some or all residents (e.g. those living with dementia) are considered to be at risk if Type A manual release controls are provided; such risk to certain residents can arise if they are able to leave the premises without supervision.

*NOTE In the case of care homes, in most cases, Type A manual release controls are appropriate, but risk to residents, such as those living with dementia, can be addressed by appropriate siting of the manual release controls (see **11.2.6**).*

**11.2.5 (new 11.2.6)**

Paragraph 1

*Replace first sentence:*

Manual release controls should be fixed at a height of 1.2 m above finished floor level, at easily accessible, well-illuminated and conspicuous positions free from potential obstruction.

*With:*

Other than in the case of certain care homes and supported housing (e.g. in which residents are living with dementia), manual release controls should be fixed at a height of 1.2 m above finished floor level, at easily accessible, well-illuminated and conspicuous positions free from potential obstruction.

*Replace Note 1 with:*

*NOTE In the case of residential premises in which care is provided for people living with dementia, manual release controls at final exits and storey exits are often sited at high level, where they are less obvious to residents, if use of the release controls could result in risk to residents because they could then readily leave the premises without the supervision required for their safety.*

**3 Cables, wiring and other interconnections**

**14.5**

*Delete text:*

Any non-metallic trunking used in the system should conform to BS 4678-4.

**21 Maintenance**

**21.1 Routine testing**

*Insert new subclause **21.1.4**:*

**21.1.4** Where manual release controls are provided adjacent to electronically locked doors on means of escape, one manual release control should be tested every week to confirm that the associated electronic lock releases and that the door opens freely. A different manual release should be used at the time of every weekly test, so that all release controls in the building are tested in rotation over a prolonged period. There is no maximum limit for this period (e.g. in a system with 60 manual release controls, the user will test each manual release control every 60 weeks). The result of the weekly test and the identity of the manual call point should be recorded in the system logbook of the fire detection and fire alarm system.

**21.2 Inspection and servicing**

*Insert new Note 3:*

*NOTE 3 Where a maintenance organization identifies that an interface between a fire detection and fire alarm system and a door release mechanism comprises a relay in a sounder circuit (other than that of a*

*compatible input/output unit designed for the purpose), it is important that this is drawn to the attention of the user, as this practice is now deprecated, but might be found in older installations. Clearly, this need not be checked on every routine maintenance visit, but can be subject to one check (e.g. if a new organization is engaged to carry out maintenance of an existing installation). This is particularly important in the case of an interface with electronic locking of doors on means of escape.*

## Annex A
## Applications for mechanisms for unlocking and releasing doors

### A.3

*Amend title from:*

**Security**

*To:*

**Safety and Security**

### A.3 Safety and security

*Insert new text and end of subclause:*

In some care homes and supported housing, such as those in which residents are living with dementia, risk can occur to residents if they pass through a door that is not secured or is secured only by a device such as a panic bar. The risk can arise because, for example, the door leads to a stairway, down which residents might fall, or because the door is a final exit, through which residents might leave the premises without the supervision required for their safety. There is experience of fatalities of those living with dementia in such circumstances.

In these circumstances, use of electronic locking of the doors is normally acceptable. Typically, safety from fire still necessitates an interface between the electronic locking and the fire detection and fire alarm system, but special considerations apply to the siting and type of manual release controls; these are often sited at high level, where they are less obvious to residents, or, if the risk to residents by use of the doors is high, are key-operated subject to suitable management arrangements.

*NOTE Attention is drawn to the Non-Domestic Technical Handbook that supports the Building (Scotland) Regulations 2004 [15]. Annex 2.A of the Technical Handbook notes that some residential care buildings are a home to people who might put themselves at risk, such as residential care homes for the elderly and mentally infirm, where there is concern about residents falling down stairs. The Technical Handbook notes that, in terms of locks, variation in the guidance on means of escape would be entirely appropriate where the risk of death or injury from falls is assessed against the hazards associated with fire.*

## Annex B
## Selection of category of actuation

### Table B.1 - Selection of category of actuation for release of self closing fire doors

Row 7, column 1

*Amend text from:*

Any fire door in a dwelling, other than within the staircase enclosure of an HMO

*To:*

Any fire door in a dwelling (other than within the staircase enclosure of an HMO, or a flat entrance door in a building containing flats (e.g. sheltered and extra care housing)

*Insert new row:*

| | | | |
|---|---|---|---|
| 8. | Flat entrance doors in a building containing flats | Critical (Category A) | In general needs blocks of flats, hold-open devices are commonly regarded as unacceptable. However, hold-open devices (usually of the swing-free type) are sometimes fitted to flat entrance doors of flats in sheltered and extra care housing. |

**Table B.2 - Selection of category of actuation for release of electronically locked doors on means of escape from buildings**

Row 3, column 3 (comments)

*Amend text from:*

Electronically secured doors in some premises might be unacceptable to enforcing authorities/bodies.

For hospitals, guidance documents on fire safety produced by the Department of Health are appropriate.

Acoustically actuated systems are not acceptable.

In some premises, electronic security might be vital for public safety and the safety of the occupants (e.g. in-patient mental health units) and release of locks as a result of various conditions under critical (Category A) actuation (e.g. all fault conditions) is unlikely to be acceptable. Standard (Category B) or Indirect (Category C) actuation might be more appropriate in these situations.

*To:*

Electronically secured doors in some premises might be unacceptable to enforcing authorities/bodies.

For hospitals, guidance documents on fire safety produced by the Department of Health are appropriate.

Acoustically actuated systems are not acceptable.

In some premises, electronic security might be vital for public safety (e.g. in-patient mental health units with violent patients) and release of locks as a result of various conditions under critical (Category A) actuation (e.g. all fault conditions) is unlikely to be acceptable. Standard (Category B) or indirect (Category C) actuation might be necessary in these situations.

Similarly, in some residential care homes and mental health units of hospitals, critical (Category A) actuation can result in significant risk to, for example, those living with dementia or other cognitive problems. In these cases, if there is critical (Category A) actuation, release of electronically locked doors, perhaps as a result of a minor fault in the fire detection and fire alarm system, or, for example, removal of a fire detector from its base (e.g. during maintenance), could allow residents or patients to leave a storey of the building, or leave the building through a final exit, unsupervised, placing themselves at risk. Again, on the basis of a risk assessment involving care or medical staff, standard (Category B) actuation might be necessary in these situations.

## Annex C
## Typical actuation arrangements for release mechanisms

*Insert new Note 3 immediately after Note 2:*

*NOTE 3 An interface between a fire detection and fire alarm system and a door release mechanism by means of a relay in a sounder circuit (other than that of a compatible input/output unit designed for the purpose) is deprecated (see Clause **9**).*

## Annex G
## Model commissioning certificate

*Replace Figure G.1 with:*

**Figure 1 – Model commissioning certificate**

Certificate of commissioning for the electrically powered hold-open device(s)/electric door magnet(s)/electronic locks/powered sliding doors *(delete as appropriate)* at:
Address:
.....
.....
……
……...
I/we being the person(s) responsible (as indicated by my/our signatures below) for the commissioning of the above, particulars of which are set out below, CERTIFY that the equipment and release arrangements I/we have commissioned complies to the best of my/our knowledge and belief with the recommendations of BS 7273-4:2020 for the category of actuation described below, except for the variations, if any, stated in this certificate.

Name (in block letters): ..... Position:
.....
Signature: ..... Date:
.....
For and on behalf of:
.....
Address:
.....
.....
. . . . . .. . . Postcode:
.....
The extent of liability of the signatory is limited to the equipment and arrangements described below.
Category of actuation (see BS 7273-4:2020, Clause **4):**
.....
Variations from the recommendations of BS 7273-4 (see BS 7273-4:2020 Clause **6):**
……
……....
……
……...……
……....
……
……...……
……
Brief description of release mechanisms, method(s) of actuation (see BS 7273-4:2020, Clause **7)** and interface design (see BS 7273-4:2020, Clause **9).**
……
……...……
……....
……
……...……
…….☐ All equipment operates correctly.
☐ Installation work is, as far as can reasonably be ascertained, of an acceptable standard.
☐ I/we have carried out commissioning in accordance with the recommendations of BS 7273-4:2020, Clause **20.**
☐ Suitable documentation has been provided to the user (see BS 7273-4:2020, **20.6)**
The following work should be completed before/after (delete as applicable) release mechanisms become operational:

……
……
……
……
……
……

**Maintenance**

**It is strongly recommended that, after completion, the system is maintained in accordance with BS 7273-4:2020, Clause 21**

**User responsibilities**

**The user should appoint a responsible person to supervise routine testing of release mechanisms in accordance with BS 7273-4:2020, 21.1, and to supervise all matters pertaining to the associated fire detection and fire alarm system in accordance with BS 5839-1:2017, Section 7.**