National Security Inspectorate
Sentinel House, 5 Reform Road, Maidenhead, SL6 8BY
E: nsi@nsi.org.uk | W: nsi.org.uk

Date: 24 February 2021

To: All NSI Fire Gold, Fire Silver, NACOSS Gold and Systems Silver approved companies and applicants

TECHNICAL BULLETIN No: 0057

Publication of BS 7273-4:2015+A1:2021 – Code of practice for the operation of fire protection measures - Part 4: Actuation of release mechanisms for doors

BS 7273-4:2015 amendment 1 was published in January 2021 and is available as an outright individual purchase directly from the BSI or at a discounted rate from the NSI or, alternatively, as a download via the NSI approved company Standards on Subscription service.

Further guidance on the changes within BS 7273-4:2015+A1:2021 can be found in:

Expert commentary BS 7273-4:2015+A1:2021 — Code of practice for the operation of fire protection measures — Part 4: Actuation of release mechanisms for doors

which is available as an outright individual purchase directly from the BSI or at a discounted rate from the NSI.

Implementation timescale for approved and applicant companies

As there are minimal technical changes to the standard both new applicant and existing NSI Fire Gold, Fire Silver, NACOSS Gold and Systems Silver certificated companies will be audited, where applicable, against BS 7273-4:2015+A1:2021 with immediate effect.

Text colour schemes within this document

The following text colour schemes are used within this document.

Where the actual wording of the Standard is quoted, it is reproduced in bold text.

Where wording of the Standard has been added, this is reproduced in Green.

Where wording of the Standard has been changed, this is reproduced in Blue.

Where it is considered relevant, further clarification is included in italics.

Please note this is not a definitive list of all the changes introduced through the publication of the 2021 amendment 1 of BS 7273-4:2015. Only significant changes are detailed within this document.

Introduction

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.

This note is a new addition.

7.2 Note

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).

This note is a new addition.

11.2.2 Recommendation

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).

Reference to new clause 11.2.3 has been added

11.2.2 Note 2

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.

The above text has been added to 11.2.2 – Note 2.

11.2.3 Recommendations and Note

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).

A new clause and note has been added.

Due to the addition of clause 11.2.3 the following clauses have been renumbered:

BS 7273-4:2015	BS 7273-4:2015+A1:2021
11.2.3	11.2.4
11.2.4	11.2.5
11.2.5	11.2.6
11.2.7	11.2.8
11.2.8	11.2.9

11.2.6 Recommendation and Note

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. They should be sited within approximately 2 m of the associated door(s), be mounted against a contrasting background to assist in easy recognition and, ideally, not be located immediately adjacent to a manual fire alarm call point. A lower mounting height is acceptable in circumstances where there is a high likelihood that persons using the control to escape might be wheelchair users. Care should be taken to ensure that the mounting location is such as to enable insertion of any tool used to carry out routine testing of the control.

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.

The opening text of clause 11.2.6 has been amended to exclude certain care homes and supported housing and a new note has been added.

21.1.4 Recommendation

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.

This clause is a new addition.

21.2.1 Note

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.

This is a new note.

Annex A3

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 [3]. 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 A3 has been retitled "Safety and Security" and the above text and note has been added to the annex.

Table B1

Item 7 has been amended to include reference to flat entrance doors in a building containing flats.

Item 8 has been added to include flat entrance doors in a building containing flats.

Item 9 was item 8.

Table B2

Item 3 – comment has been amended.

Annex C

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).

This is a new note

Figure G.1 — Model commissioning certificate

*All references to BS 7273-4:2015 have been changed to **BS 7273-4:2021** throughout Figure G.1.*