

## 7.0 Means of Escape for Disabled People: new provision for evacuation lifts in tall residential buildings

Improvement on existing guidance with new requirement recommendation to improve the evacuation provisions for disabled people by facilitating level egress during an emergency.

Ref ID	7.01
ADB Volume	1
ADB Paragraph Ref	New paragraph, after paragraph 3.25
Title	New paragraph on inclusive design
Current text – 2029 amendment	
n/a	
Proposed text	
<p><i>3.i Provisions set out here are suitable for persons who are able to independently evacuate; where those undertaking the building work anticipate that residents or occupants may require assistance, additional management procedures will be needed. See paragraphs 0.6 and 0.8.</i></p>	
Reviewer Comment	

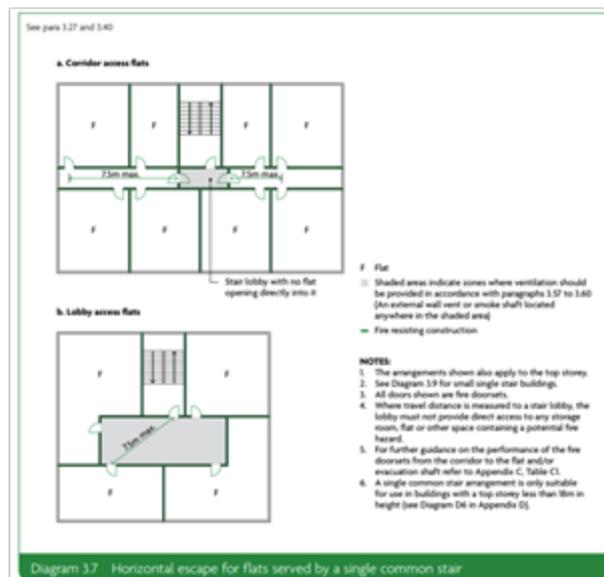
Ref ID	7.02
ADB Volume	1
ADB Paragraph Ref	3.27
Title	Paragraph 3.27
Current text – 2029 amendment	
<p>3.27 From the <b>flat</b> entrance door, a single <b>escape route</b> is acceptable in either of the following cases.</p> <p>a. The <b>flat</b> is on a <b>storey</b> served by a single <b>common stair</b> and both of the following apply.</p> <p>i. Every <b>flat</b> is separated from the <b>common stair</b> by a <b>protected lobby</b> or common <b>protected corridor</b> (see Diagram 3.7).</p> <p>ii. The maximum <b>travel distance</b> in Table 3.1, for escape in one direction only, is not exceeded.</p> <p>b. The <b>flat</b> is on a <b>storey</b> served by two (or more) <b>common stairs</b>, the <b>flat</b> is in a <b>dead end</b> of a <b>common corridor</b> and the maximum <b>travel distance</b> given in Table 3.1, for escape in one direction only, is not exceeded (Diagram 3.8).</p>	
Proposed text	
<p>3.27 From the <b>flat</b> entrance door, a single <b>escape route</b> is acceptable in either of the following cases.</p>	

- a. The flat is on a storey served by a single common stair and both of the following apply.
  - i. Every flat is separated from the evacuation shaft or stair enclosure by a protected lobby or common protected corridor (see Diagram 3.7).
  - ii. The maximum travel distance in Table 3.1, for escape in one direction only, is not exceeded.
- b. The flat is on a storey served by two (or more) common stairs, the flat is in a dead end of a common corridor and the maximum travel distance given in Table 3.1, for escape in one direction only, is not exceeded (Diagram 3.8).

Reviewer Comment

Ref ID	7.03
ADB Volume	1
ADB Paragraph Ref	Diagram 3.7
Title	Diagram 3.7

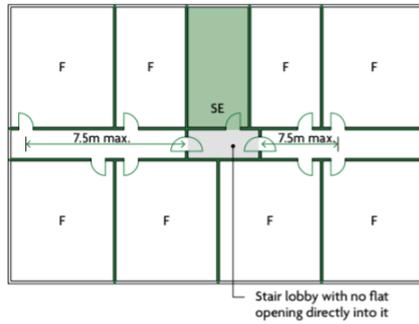
Current text – 2029 amendment



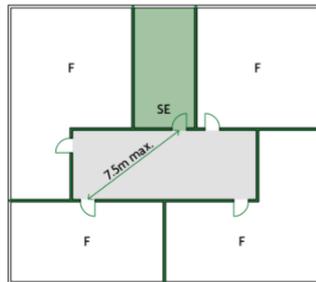
Proposed text

See para X.X and X.X

**a. Corridor access flats**



**b. Lobby access flats**



- F Flat
- SE Storey exit
- Zones where ventilation should be provided in accordance with paragraphs 3.57 to 3.60 (An external wall vent or smoke shaft located anywhere in the shaded area)
- Evacuation shaft or stair enclosure
- Fire resisting construction

- NOTES:**
1. The arrangements shown also apply to the top storey.
  2. See Diagram 3.9 for small single stair buildings.
  3. All doors shown are fire doorsets.
  4. Where travel distance is measured to a stair lobby, the lobby must not provide direct access to any storage room, flat or other space containing a potential fire hazard.
  5. For further guidance on the performance of the fire doorsets from the corridor to the flat and/or evacuation shaft refer to Appendix C, Table C1.
  6. A single common stair arrangement is only suitable for use in buildings with a top storey less than 18m in height (see Diagram D6 in Appendix D).
  7. For components of an evacuation shaft see Diagram 3.xx.

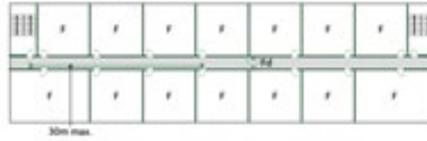
Diagram 3.7 Horizontal escape for flats served by a single common stair

**Reviewer Comment**

Ref ID	7.04
ADB Volume	1
ADB Paragraph Ref	Diagram 3.8
Title	Diagram 3.8
Current text – 2029 amendment	

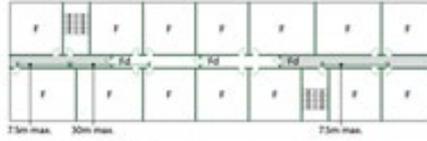
See para 3.27 and 3.40

**a. Corridor access without dead ends**

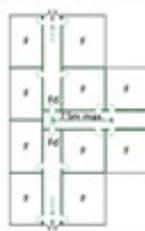


**b. Corridor access with dead ends**

The central door may be omitted if maximum travel distance is not more than 15m.



**c. 'T' junction with main corridor**



- Fd Cross-corridor fire doorset
- F Flat
- Shaded areas indicate zones where ventilation should be provided in accordance with paragraphs 3.57 to 3.60 (An external wall vent or smoke shaft located anywhere in the shaded area)
- Fire resisting construction
- Escape route

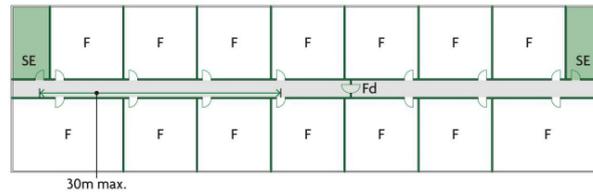
- NOTES:**
1. The arrangements shown also apply to the top storey.
  2. For further guidance on the fire resistance rating of the fire doorsets from the corridor to the flat and/or stairway refer to Appendix C, Table C1.

Diagram 3.8 Horizontal escape for flats served by more than one common stair

**Proposed text**

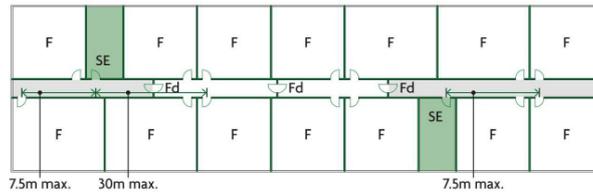
See para 3.27 and 3.40

**a. Corridor access without dead ends**

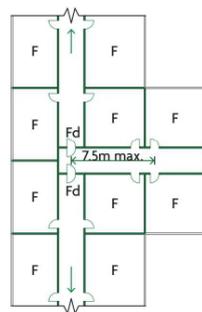


**b. Corridor access with dead ends**

The central door may be omitted if maximum travel distance is not more than 15m.



**c. 'T' junction with main corridor**



- Fd Cross-corridor fire doorset
- F Flat
- SE Storey exit
- Shaded areas indicate zones where ventilation should be provided in accordance with paragraphs 3.57 to 3.60 (An external wall vent or smoke shaft located anywhere in the shaded area)
- Evacuation shaft or stair enclosure
- Fire resisting construction
- Escape route

- NOTES:**
1. The arrangements shown also apply to the top storey.
  2. For further guidance on the fire resistance rating of the fire doorsets from the corridor to the flat and/or stairway refer to Appendix C, Table C1.
  3. For components of an evacuation shaft see Diagram 3.Xi.

Diagram 3.8 Horizontal escape for flats served by more than one common stair

**Reviewer Comment**

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Ref ID	7.05
ADB Volume	1
ADB Paragraph Ref	3.31 (from the 2029 amendment)
Title	Interlocked stairs
Current text – 2029 amendment	
3.31	<b>Interlocked stairs</b> should be considered as a single <b>escape route</b> and do not constitute an alternative <b>means of escape</b> .
Proposed text	
3.31	<i>For the purpose of providing an alternative escape route, interlocked stairs should be counted as a single common stair.</i>
Reviewer Comment	

Ref ID	7.06
ADB Volume	1
ADB Paragraph Ref	New subsection, between the subsection <b>Small single stair buildings</b> and the subsection <b>Flats with balcony or deck access</b> . Note: The text from paragraph 3.29 (from the 2029 amendment) will be removed and incorporated in to this new subsection.
Title	Evacuation Lift Guidance
Current text – 2029 amendment	
3.29	Where <b>evacuation lifts</b> are provided, these should be located within an <b>evacuation shaft</b> containing a <b>protected stairway</b> , <b>evacuation lift</b> and <b>evacuation lift lobby</b> . An <b>evacuation lift lobby</b> should provide a refuge area for those waiting for the <b>evacuation lift</b> , have direct access to a <b>protected stairway</b> and not be directly accessible from any flat, maisonette, storage room or electrical equipment room.
Proposed text	
<b><i>Evacuation lifts and evacuation shafts</i></b>	
3.ii	<i>Flats should be served by evacuation lifts where the building has a top storey of 18m or more in height (see Diagram D6 in Appendix D).</i>
3.iii	<i>In all buildings that adopt evacuation lifts, a minimum of one evacuation lift should be provided with every protected stairway as part of an evacuation shaft.</i>
	<i>NOTE: Where it is reasonably foreseeable that a high number of people will make use of the lift in an evacuation (for example in very tall buildings or where large amenity spaces are present), it may be necessary to provide more than one evacuation lift per evacuation shaft.</i>

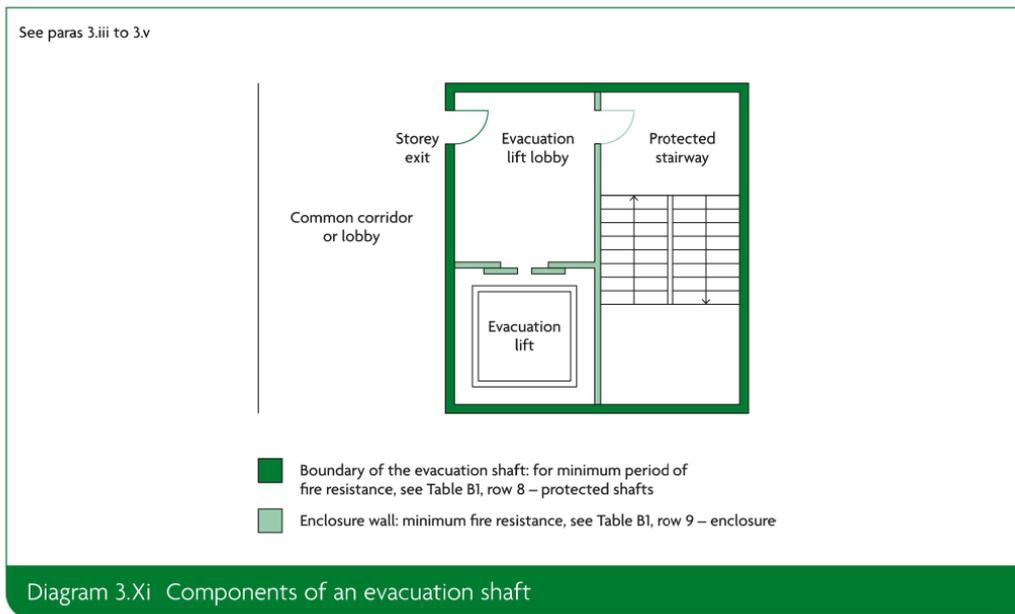
3.iv Each evacuation shaft should contain a protected stairway, at least one evacuation lift and an evacuation lift lobby at each storey served by the lift. See Diagram 3.Xi.

3.v An evacuation lift lobby should provide a protected area for those waiting for the evacuation lift, have direct access to a protected stairway and not be directly accessible from any flat, maisonette, storage room or electrical equipment room. An evacuation lift lobby may serve multiple lifts within the same evacuation shaft.

NOTE: Further guidance on the design of evacuation lift lobbies is given in paragraphs 3.xi and 3.xiv. Guidance on ventilation of evacuation lift lobbies is given in paragraph 3.viii.

Reviewer Comment

Ref ID	7.07
ADB Volume	1
ADB Paragraph Ref	New diagram, in new subsection <b>Evacuation lifts and evacuation shafts</b> after new paragraph 3.v
Title	Diagram 3.Xi Evacuation Shaft Diagram
Current text – 2029 amendment	n/a
Proposed text	

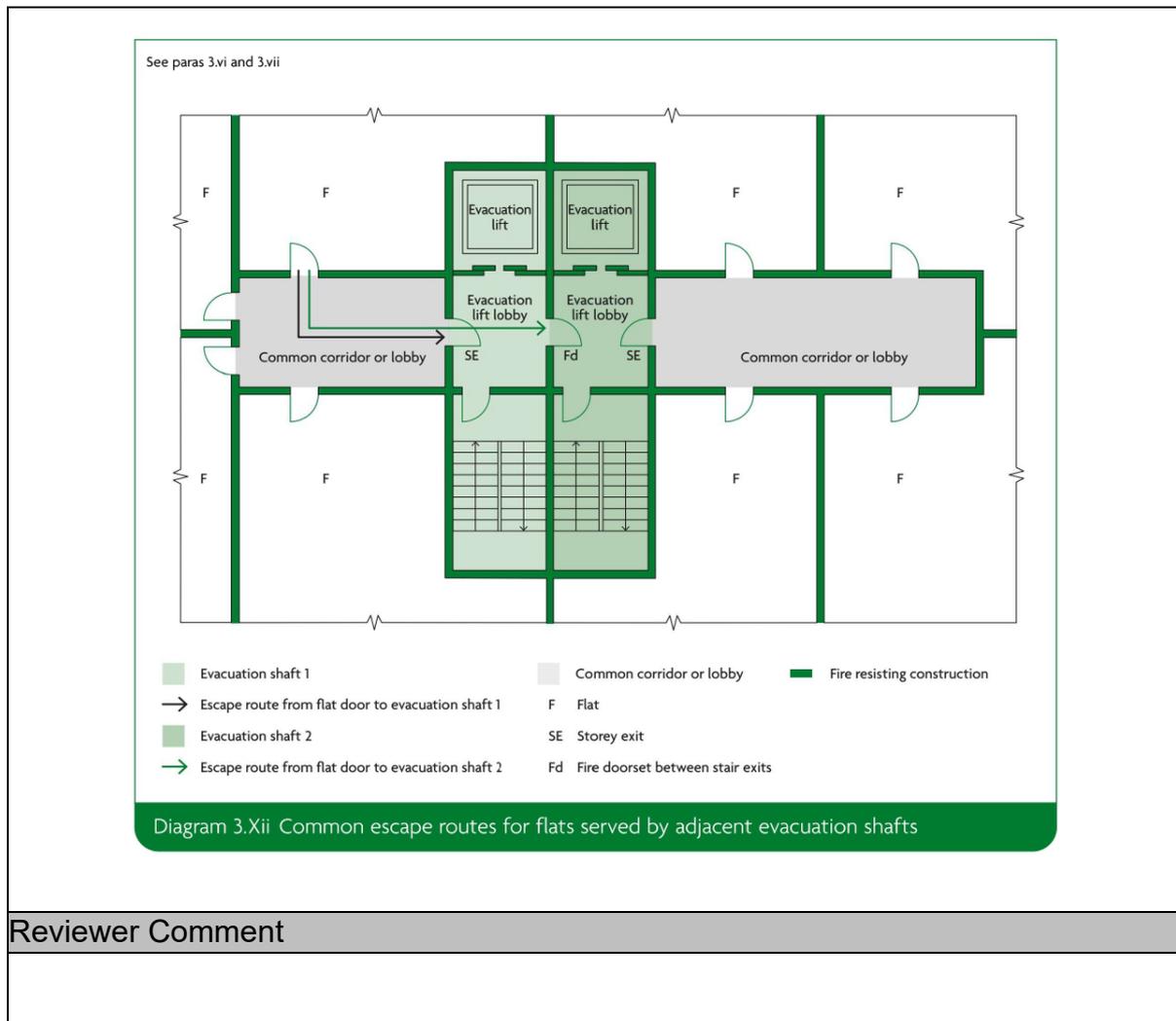


Reviewer Comment

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Ref ID	7.08
ADB Volume	1
ADB Paragraph Ref	3.37
Title	Common escape routes
Current text – 2029 amendment	
<p>3.37 An <b>escape route</b> should not pass through one stair enclosure to reach an <b>alternative exit</b>. It may pass through a <b>protected lobby</b> (minimum REI 30) of one stair to reach an <b>alternative exit</b>. A <b>protected lobby</b> should not provide direct access to more than one stair.</p>	
Proposed text	
<p>3.37 An <b>escape route</b> should not pass through a stair enclosure to reach an alternative <i>stair or evacuation lift</i>.</p> <p><i>3.vi An escape route should not pass through an evacuation shaft to reach another evacuation shaft, unless the building is served by two adjacent evacuation shafts and the alternative escape route passes directly from one evacuation lift lobby into an adjoining evacuation lift lobby without entering another room or circulation space (see Diagram 3.Xi).</i></p> <p><i>3.vii An escape route may pass through a stair lobby (minimum REI 30) to reach an alternative exit. A stair lobby should not provide direct access to more than one storey exit.</i></p>	
Reviewer Comment	

Ref ID	7.09
ADB Volume	1
ADB Paragraph Ref	New diagram in subsection <b>Common escape routes</b> after new paragraph 3.vii
Title	Dual evacuation shaft diagram
Current text – 2029 amendment	
n/a	
Proposed text	



## Reviewer Comment

Ref ID	7.10
ADB Volume	1
ADB Paragraph Ref	3.53 (from the 2029 amendment)
Title	Smoke control in common escape routes
Current text – 2029 amendment	
3.53	<p>Despite the provisions described, it is probable that some smoke will get into the common corridor or lobby from a fire in a <b>flat</b>.</p> <p>There should therefore be some means of ventilating the common corridors/lobbies to control smoke and so protect the <b>common stairs</b>. This means of ventilation offers additional protection to that provided by the fire doors to the stair, as well as some protection to the corridors/lobbies. Where <b>evacuation lifts</b> are provided, <b>evacuation shafts</b> should be afforded the same level of minimum protection as the stairway. Any smoke control system designed to protect the staircase should extend the same level of protection to the <b>evacuation lift</b> and <b>evacuation lift lobby</b>.</p> <p>Ventilation can be natural (paragraphs 3.54 to 3.57) or mechanical (paragraph 3.58).</p>
Proposed text	

<p>3.53 <i>To support both evacuation and firefighting operations, a smoke control system should be provided within the building. This system should ensure that protected stairways remain safe and usable. The smoke control system should limit smoke ingress into the stairwell to a short duration and minimal level and ensure that any smoke entering the area is removed rapidly.</i></p> <p>3.viii <i>In the event of a fire in a flat, it is likely that some smoke will get into the common corridor or stair lobby.</i></p> <p><i>To protect the common stairs and evacuation shafts from smoke ingress, there should be some means of ventilating common corridors and lobbies. This approach is to provide protection to the stair enclosure and evacuation shaft additional to that afforded by the fire doorsets, as well as some protection to the common corridors and lobbies. Smoke control systems should be designed such that smoke from a fire in a flat is drawn away from the evacuation shafts and stair enclosures.</i></p> <p><i>Evacuation lift lobbies provide safe areas where occupants can wait for an evacuation lift. As such, evacuation lift lobbies should be afforded the same minimum level of protection as protected stairs to ensure they remain usable throughout an evacuation. Ventilation in evacuation lift lobbies should be designed to permit any smoke and heat that may enter to be ventilated, while also allowing for adequate air inlet into the building.</i></p> <p>Ventilation can be natural (paragraphs 3.54 to 3.57) or mechanical (paragraph 3.58).</p>
Reviewer Comment

Ref ID	7.11
ADB Volume	1
ADB Paragraph Ref	Four new subsections between the subsection <b>Fire protection of lift installations</b> and the section <b>Final exits</b> .
Title	Evacuation lift guidance
Current text – 2029 amendment	
n/a	
Proposed text	
<i><b>Design and construction of evacuation lifts</b></i>	
3.xi	<i>Evacuation lift cars should be capable of accommodating at least one wheelchair user and an accompanying person. They should be no smaller than other passenger lifts serving the building. Lift cars should have a minimum internal width of 1100mm, a minimum internal depth of 1400mm, and the lift doors should provide a minimum clear opening of 900mm.</i>
3.xii	<i>Evacuation lift lobbies should be appropriately sized to accommodate all persons waiting for the lift service and should allow other residents to access the stairway directly, with minimum dimensions of 2100mm by 1500mm.</i>

3.xiii *Evacuation lifts should be designed with sufficient resilience and reliability to remain operational throughout the evacuation process. They should be served by both a primary and a secondary power supply. The secondary supply should be capable of automatically taking over in the event of a failure of the primary supply.*

*For buildings with a top storey less than 18m in height (see Diagram D6 in Appendix D), the secondary power supply can be either of the following.*

- a. *A separately fused circuit fed directly from the main incoming electrical supply to the building, located within a fire-protected enclosure.*
- b. *An independent power supply, such as a generator or supply from a separate utility, meeting the recommendations for a secondary supply in BS 8519.*

*For buildings with a top storey 18m or more in height (see Diagram D6 in Appendix D), the secondary power supply should be an independent power supply.*

3.xiv *Lift wells, machinery and control equipment should be adequately protected against water ingress to ensure continued operation during an evacuation. Lift shafts should be designed to prevent water runoff from entering, and control equipment must be suitably enclosed or located to prevent water damage. Guidance on methods to prevent water ingress into lift wells is available in BS EN 81-72, Annex C.7.*

3.xv *Evacuation lift shafts should be equipped with an appropriate communication system to support the safe and effective evacuation of residents. Evacuation lift lobbies, where a person can wait for a lift service, should be provided with an emergency voice communication system compliant with BS 5839-9. The emergency voice communication system master station should be located inside the building, in close proximity to the nominal fire and rescue service entry point.*

*NOTE: The emergency voice communication system is separate from the emergency alarm device and intercom system and evacuation operation communication system as described in BS EN 81-20 and BS EN 81-76 respectively.*

3.xvi *Evacuation lifts should be integrated with building systems including the fire detection and alarm systems, smoke control systems and the building management system to ensure they operate in accordance with the overall building safety strategy.*

### **Exit from evacuation lifts**

3.xvii *Every evacuation shaft should discharge to a final exit, either directly or via a protected exit passageway (as described in paragraph 3.81). Where two evacuation shafts adjoin, they should discharge to separate exits. Evacuation lift lobbies at ground floor level may be separated by a fire doorset (minimum E30 S<sub>a</sub>).*

### **Operation of evacuation lifts**

3.xviii *Evacuation lifts should be designed to operate independently, whereby the lift autonomously responds to landing calls without the need for a driver or*

*remote operator. They should be designed to operate in accordance with the automatic evacuation operation mode, as described in Annex B of BS EN 81-76.*

### ***Firefighting lifts used for evacuation***

*3.xvix For buildings designed with a stay-put strategy, lifts may serve a dual purpose as both firefighting lifts and evacuation lifts, provided they meet the minimum design and installation provisions for both functions.*

#### **Reviewer Comment**

Ref ID	7.12
ADB Volume	1
ADB Paragraph Ref	Appendix F
Title	New reference to BS EN 81-76
<b>Current text – 2029 amendment</b>	
BS EN 81 Safety rules for the construction and installation of lifts	
BS EN 81-20 Lifts for the transport of persons and goods. Passenger and goods passenger lifts [2014]	
BS EN 81-58 Examination and tests. Landing doors fire resistance test [2018]	
BS EN 81-72 Particular applications for passenger and goods passenger lifts. Firefighters lifts [2015]	
<b>Proposed text</b>	
BS EN 81 Safety rules for the construction and installation of lifts	
BS EN 81-20 Lifts for the transport of persons and goods. Passenger and goods passenger lifts [2014]	
BS EN 81-58 Examination and tests. Landing doors fire resistance test [2018]	
BS EN 81-72 Particular applications for passenger and goods passenger lifts. Firefighters lifts [2015]	
<i>BS EN 81-76 Particular applications for passenger and goods passenger lifts. Evacuation of persons with disabilities using lifts [2025]</i>	
<b>Reviewer Comment</b>	

