



**SCDF**  
The Life Saving Force  
*... for a safer Singapore*

**SINGAPORE CIVIL DEFENCE FORCE**



**Your Ref** :

**Our Ref:** CD/04/05/01/01

**Date** : 25 Aug 2023

Registrar, Board of Architects  
Registrar, Professional Engineers Board  
President, Singapore Institute of Architects  
President, Institution of Engineers, Singapore  
President, Association of Consulting Engineers, Singapore

Dear Sir/ Mdm,

## **PUBLICATION OF THE CODE OF PRACTICE FOR FIRE PRECAUTIONS IN BUILDINGS 2023 EDITION**

SCDF is pleased to announce the release of the Code of Practice for Fire Precautions in Buildings 2023, commonly known as Fire Code, on 25 Aug 2023. The Code serves as an authoritative source on fire safety standards for local buildings and is used by the industry in designing fire safety works in buildings. The amendments which were deliberated and accepted by the Fire Code Review Committee are attached as Annex A, B, C, D and E of this circular.

2. The review of the Code was conducted by the Fire Code Review Committee, which is led by SCDF and comprises representatives from the building industry, government agencies and academic institutions. Amendments stipulated in this Annexes shall take effect from the dates specified therein. For those amendments that are to take effect at future dates as specified in Annex A, C, D and E, Qualified Persons are encouraged to comply with the requirements before the effective dates. Any proposed plans of fire safety works for new buildings or existing buildings that are submitted to SCDF for approval on or after the effective dates shall be



**SCDF – A member of the Home Team**

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subjected to the amendments made to the Fire Code. The requirements stated in Annex C shall also apply to Rapid Transit System (RTS).

3. The implementation of this new Code takes effect on 1st Mar 2024. The grace period is to give the building industry sufficient lead time to plan ahead for any new building projects. Any proposed plans of fire safety works for new buildings or alteration/ alteration works to existing buildings that are submitted to SCDF for approval on or after the effective date will be subjected to the new Code. Notwithstanding the above, SCDF has no objection to the adoption of the new Code with immediate effect by the industry. Its electronic version is made available at SCDF's website, [www.scdf.gov.sg](http://www.scdf.gov.sg).

4. Please convey the contents of this circular to members of your Board/ Institution/ Association. This circular is also available in CORENET's e-Info: <http://www.corenet.gov.sg/einfo>.

5. For general queries related to Annex A, you may contact Mr Randy Tan at DID: 68481461 or Mr Tan Yi Yang at DID: 68481734. For specific queries related to edits for:

- a. Occupant load factor stated in Annex B, please contact LTC Chong Kim Yuan at 68481476.
- b. PV requirements stated in Annex C, please contact CPT Daven Tan at 68481408 or CPT Foo Ce Yi at 68481417;
- c. Sea-based buildings stated in Annex D, please contact LTC Lim Wee Siang at 68481882; and
- d. Digital lock requirements stated in Annex E, please contact MAJ Ranneth Tan at 68481993 or CPT Foo Ce Yi at 68481417.

Yours faithfully

(transmitted via email)

LTC Tan Chung Yee  
for Commissioner  
Singapore Civil Defence Force

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SCDF Fire Safety Standing Committee  
Fire Code Review Committee

S/N	Amendment Date	Effective Date	Clause Status	Clause Before Amendment	Clause After Amendment
1	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p><b>1.1 SCOPE</b></p> <p>The Code of Practice for Fire Precautions in Buildings, hereinafter called “the Code” or “this Code”, serves to establish the minimum requirements for fire safety provisions in all buildings. It takes into account the function, design, management, operation, and maintenance of buildings to secure the life safety of occupants and property safety in the event of a fire.</p>	<p><b>1.1 SCOPE</b></p> <p><del>The Code of Practice for Fire Precautions in Buildings, hereinafter called “the Code” or “this Code”, serves to establish the minimum requirements for fire safety provisions in all buildings.</del> <b>The Code of Practice for Fire Precautions in Buildings, hereinafter called “the/this Code” or “Fire Code”, serves to establish the minimum requirements for fire safety provisions in all buildings.</b> It takes into account the function, design, management, operation, and maintenance of buildings to secure the life safety of occupants and property safety in the event of a fire.</p>
2	25 Aug 2023	1 Mar 2024	Revised/ Clarification	<p><b>1.1.1 Rapid Transit System (RTS)</b></p> <p>Fire safety requirements for underground, surface, and elevated RTS including trainways, transit stations, train maintenance depots, on-line electric substations, and RTS facility buildings, shall comply with “Code of Practice for Fire Precautions in Rapid Transit Systems”.</p>	<p><b>1.1.1 Rapid Transit System (RTS)</b></p> <p><del>Fire safety requirements for underground, surface, and elevated RTS including trainways, transit stations, train maintenance depots, on-line electric substations, and RTS facility buildings, shall comply with “Code of Practice for Fire Precautions in Rapid Transit Systems”.</del> <b>RTS comprises underground, surface, and elevated facilities, including transit stations, trainways, train maintenance depots, on-line electrical substations, OCCs, relay buildings, ventilation buildings and RTS facility buildings.</b></p> <p><b>a. Transit stations and trainways shall comply with the Code of Practice for Fire</b></p>

					<p>Precautions in Rapid Transit Systems (CPFPRTS).</p> <p>b. Train maintenance depots, on-line electric substations, OCCs, relay buildings, ventilation buildings, and RTS facility buildings shall comply with the Fire Code, except as modified in the CPFPRTS.</p> <p>c. New fire safety requirements implemented in the Fire Code on or after 1 Mar 2024 shall be complied with for the design of transit station and trainways, unless modified or stated otherwise in the CPFPRTS. The above new requirements shall exclude any amendments, revisions, or reinstatement of clauses from preceding versions of this Code.</p>
3	25 Aug 2023	25 Aug 2023	<p>Revised/ Clarification</p>	<p>1.2.3 Maintenance of fire protection systems</p> <p>All fire protection systems when installed/ provided in a building, shall be maintained in accordance with applicable codes or standards specified in <i>Table 1.2A</i>. The QP shall list down the maintenance details in the Fire Safety Instruction Manual and handover to the building owner for compliance at the completion of the building project.</p> <p>For the purpose of this Code, “fire protection system” has the same meaning as in the Fire Safety Act (Cap. 109A).</p>	<p>1.2.3 Maintenance of fire protection systems</p> <p>All fire protection systems when installed/ provided in a building, shall be maintained in accordance with applicable codes or standards specified in <i>Table 1.2A</i>. The QP shall <del>list down</del> <b>document</b> the maintenance details in the Fire Safety Instruction Manual and handover to the building owner for compliance at the completion of the building project.</p> <p>For the purpose of this Code, “fire protection system” has the same meaning as in the Fire Safety Act <del>1993</del> (Cap. <del>109A</del>).</p>

4	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>1.4.54 Fire lift lobby</p> <p>“Fire lift lobby” refers to a protected and ventilated or pressurised lobby into which a fire lift opens, and from which direct access to a protected staircase can be made for the purpose of firefighting.</p>	<p>1.4.54 Fire lift lobby</p> <p>“Fire lift lobby” refers to a protected and ventilated <del>or pressurised</del>-lobby into which a fire lift opens, and from which direct access to <b>an exit</b> <del>a protected</del> staircase can be made for the purpose of firefighting.</p>
5	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>1.4.75 Occupant load</p> <p>“Occupant load” of a building, or part thereof, refers to the total number of persons that can occupy such a building, or part thereof, at any one time. The “occupant load” shall be determined via</p> <p>a. the floor area(s) available for occupation based on the appropriate areas per person as stated in <i>Table 1.4B</i> or</p> <p>b. by the number of fixed seatings, if applicable, for assembly occupancies.</p>	<p>1.4.77 Occupant load</p> <p>“Occupant load” of a building, or part thereof, refers to the total number of persons that can occupy such a building, or part thereof, at any one time. The “occupant load” shall be determined <del>via</del> <b>by:</b></p> <p>a. <b>multiplying</b> the floor area(s) available for occupation <del>with based on</del> the appropriate areas per person as stated in <i>Table 1.4B</i>, <b>unless prior approval is obtained from SCDF for any other occupancy load factors not stated in this table,</b> or</p> <p>b. <del>by</del> the number of fixed seatings, if applicable, for assembly occupancies.</p>
6	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>1.4.104 Workers’ dormitories</p> <p>“Workers’ dormitories” refers to buildings or spaces in buildings where group sleeping accommodation is provided for workers under joint occupancy and single management, without cooking equipment in any room or unit of a dormitory.</p>	<p>1.4.114 Workers’ dormitories</p> <p>“Workers’ dormitories” refers to buildings or spaces in buildings where group sleeping accommodation is provided for workers <del>under joint occupancy and single management, without</del> <b>e</b>ooking equipment in any room or unit of a <b>d</b>ormitory.</p>

<p>7</p>	<p>25 Aug 2023</p>	<p>25 Aug 2023</p>	<p>Revised/ Clarification</p>	<p>2.2.4 Non-simultaneous occupancy</p> <p>The floor areas of toilets, locker rooms, storage rooms, lobbies, corridors and similar rooms and spaces that serve other rooms and spaces on the same storey but are not occupied at the same time as such other rooms or spaces, can be omitted from the occupant load calculations of that storey of the building on which they are located.</p>	<p>2.2.4 Non-simultaneous occupancy</p> <p>The floor areas of toilets, locker rooms, <del>storage rooms</del>, lobbies, <del>and</del> corridors <del>and similar rooms and spaces that serve other rooms and spaces on the same storey but</del> are not occupied at the same time as <del>such</del> other rooms or spaces <b>by building occupants</b>, can be omitted from the occupant load calculations of that storey of the building <del>on which they are</del> <b>in which the storey is</b> located.</p>
<p>8</p>	<p>25 Aug 2023</p>	<p>25 Aug 2023</p>	<p>Revised/ Clarification</p>	<p>2.2.11 Number of exit staircases or exits per storey</p> <p>There shall be at least two independent exit staircases or other exits from every storey of a building, unless otherwise permitted under other subsequent provisions of the Code. For non-habitable roof, at least one exit staircase shall be provided. Where the area of non-habitable roof is large and one-way travel distance to the exit cannot be met, an additional cat/ship ladder adequately separated in accordance with <i>Cl.2.3.12</i> and leading to the circulation area of the floor below shall be provided. All access hatches, if provided, shall be readily accessible from the roof. Access hatch opening shall have a minimum clear width of 1m in diameter. The travel distances can be based on that for a sprinkler protected building for roof areas which are open-to-sky.</p> <p>For protruding structures above the non-habitable roof, namely exit staircase shaft and lift motor room is exempted from this clause.</p>	<p>2.2.11 Number of exit staircases or exits per storey</p> <p>There shall be at least two independent exit staircases or other exits from every storey of a building, unless otherwise permitted under other subsequent provisions of the Code. <del>For non-habitable roof, at least one exit staircase shall be provided. Where the area of non-habitable roof is large and one-way travel distance to the exit cannot be met, an additional cat/ship ladder adequately separated in accordance with Cl.2.3.12 and leading to the circulation area of the floor below shall be provided. All access hatches, if provided, shall be readily accessible from the roof. Access hatch opening shall have a minimum clear width of 1m in diameter. The travel distances can be based on that for a sprinkler protected building for roof areas which are open to sky.</del></p> <p><del>For protruding structures above the non-habitable roof, namely exit staircase shaft and lift motor room is exempted from this clause.</del></p>

					<p>Exception:</p> <ul style="list-style-type: none"> <li>a. For non-habitable roof that is able to comply with one-way travel distance, at least one exit staircase shall be provided. The travel distances for roof areas which are open-to-sky shall be based on the requirements for sprinkler-protected buildings.</li> <li>b. For non-habitable roof that is unable to comply with one-way travel distance to the exit staircase, an additional cat/ ship ladder adequately separated in accordance with Cl.2.3.12 and leading to the circulation area of the floor below shall be provided. All access hatches, if provided, shall be readily accessible from the roof. Access hatch opening shall have a minimum clear width of 1m in diameter. The travel distances for roof areas which are open-to-sky shall be based on the requirements for sprinkler-protected buildings.</li> <li>c. Roof of the protruding structures above the non-habitable roof, namely exit staircase shafts and lift motor rooms.</li> </ul>
8	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>2.2.13 Smoke-free approach to exit staircase</p> <p>Entry at every storey level (including 1st storey) to an exit staircase serving more than four storeys above ground level shall be through any one of the following:</p>	<p>2.2.13 Smoke-free approach to exit staircase</p> <p>Entry at every storey level (including 1st storey) to an exit staircase serving more than four storeys above ground level shall be through any one of the following:</p>

				<p>a. An external exit passageway or external corridor</p> <p>The openings for natural lighting and ventilation to the corridor shall be located such that they face and are open to any of the following:</p>	<p>a. An external exit passageway or external corridor</p> <p>The openings for natural <del>lighting and</del> ventilation to the corridor shall be located such that they face and are open to any of the following:</p>
9	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>2.2.13c. Exception</p> <p>(1) The .....</p> <p>(a) .....</p> <p>(b) .....</p> <p>(c) In an open -sided car park floor where cross-ventilation is provided. In this situation, the fire door to the exit staircase can be ½-hr fire-rated.</p>	<p>2.2.13c. Exception</p> <p>(1) The .....</p> <p>(a) .....</p> <p>(b) .....</p> <p>(c) In an open-sided car park floor where cross-ventilation is provided <b>in accordance with Cl.3.2.8 a. &amp; b.</b>, <del>In this situation</del>, the fire door to the exit staircase can be ½-hr fire-rated.</p>
10	28 Aug 2023	1 Mar 2024	Revised/ Clarification	<p>2.2.14 Smoke-free approach to exit staircase in basement</p> <p>a. In a building comprising more than four basement storeys, the entry to exit staircases serving the basement storeys at every basement storey level shall be through smoke-free lobbies, one of which shall be designated as a fire lift lobby. The exit staircase connecting to the fire lift lobby shall be pressurised to comply with the requirements in <i>Chapter 7</i>.</p>	<p>2.2.14 Smoke-free approach to exit staircase in basement</p> <p>a. <b>In a building comprising single basement storey, the entry to exit staircases need not be through smoke-free lobbies.</b></p> <p>b. In a building comprising two, three, or four basement storeys, entry at every basement storey level to at least one of the exit staircases serving the basement storeys shall be through a <del>smoke free</del> <b>fire lift</b> lobby. <del>Where only one smoke free lobby is provided, it shall be</del></p>

				<p>b. In a building comprising two, three, or four basement storeys, entry at every basement storey level to at least one of the exit staircases serving the basement storeys shall be through a smoke-free lobby. Where only one smoke-free lobby is provided, it shall be required to serve as a fire lift lobby.</p> <p>c. Smoke-free lobbies in basement occupancies shall be required to comply with the relevant provisions under <i>Cl.2.2.13b.</i> and shall be mechanically ventilated to comply with the requirements in <i>Chapter 7.</i></p>	<p><del>required to serve as a fire lift lobby even though the exit staircase is not required to be served by a fire lift. However, where the depth of the basement exceeds 9m below the average grade level and fire lifts are required in accordance with <i>Cl.6.6.4b.(3)</i>, the entries to the exit staircases with provision of fire lifts at every basement storey level shall be through fire lift lobbies.</del></p> <p>c. In a building comprising more than four basement storeys, the entry to exit staircases serving the basement storeys at every basement storey level shall be through smoke-free lobbies <b>or designated fire lift lobbies in accordance with <i>Cl.6.6.4b.(3)</i></b>, <del>one of which shall be designated as a fire lift lobby. The exit staircase connecting to the fire lift lobby shall be pressurised to comply with the requirements in <i>Chapter 7.</i></del></p> <p>d. Smoke-free <b>and fire lift</b> lobbies in basement occupancies shall be required to comply with the relevant provisions under <i>Cl.2.2.13b.</i> and shall be mechanically ventilated to comply with the requirements in <i>Chapter 7.</i></p>
11	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>2.3.2c. External exit passageway</p> <p>(4) it can be enclosed on the open side by only a parapet wall of not less than 1m and not more than 1.1m in height and the vertical height of the unobstructed ventilation opening measured from the parapet wall up</p>	<p>2.3.2c. External exit passageway</p> <p>(4) it can be enclosed on the open side by only a parapet wall of not less than 1m and not more than 1.1m in height and the vertical height of the unobstructed <b>and uninterrupted</b> ventilation opening measured from the parapet wall up to the top edge of</p>

				to the top edge of the opening or eaves of overhang shall be not less than 1.2m; and  (5) .....	the opening or eaves of overhang shall be not less than 1.2m; and  (5) .....
12	25 Aug 2023	25 Aug 2023	Revised/ Clarification	2.3.3a.(4)(a) Single storey basement car park  Exit staircases, including exit ramps in compliance with <i>Cl.2.3.8a.</i> & <i>Cl.2.3.8b.</i> , serving the single storey basement of PG II to VII buildings are not required to be protected with fire-rated enclosures, provided the travel distances in the car park measured to the exit doors at ground level comply with <i>Table 2.2A.</i>	2.3.3a.(4)(a) Single storey basement car park  Exit staircases, <del>including exit ramps in compliance with <i>Cl.2.3.8a.</i> &amp; <i>Cl.2.3.8b.</i>,</del> serving <del>the a</del> single storey basement of PG II to VII buildings are not required to be protected with fire-rated enclosures, provided the travel distances in the car park measured to the exit doors at ground level comply with <i>Table 2.2A.</i>
13	25 Aug 2023	25 Aug 2023	Revised/ Clarification	2.3.8g. Enclosure exemption  Exit ramps serving as means of escape to only one basement storey need not be protected by enclosure walls.	2.3.8g. Enclosure exemption  <del>Exit ramps serving as means of escape to only one basement storey need not be protected by enclosure walls.</del> Exit ramps serving a single storey basement of PG II to VII buildings are not required to be protected with fire-rated enclosures, provided the travel distances measured to the exit doors at ground level comply with <i>Table 2.2A.</i>
14	25 Aug 2023	25 Aug 2023	Revised/ Clarification	2.3.9 Exit doors and exit access doors  Exit doors and exit access doors shall comply with all the following:  a. Door operation  Exit doors shall be capable of being opened manually, without the use of a key, tool, or special knowledge or effort for operation	2.3.9 Exit doors and exit access doors  Exit doors and exit access doors shall comply with all <b>of</b> the following:  a. Door operation  Exit/ <b>exit access</b> doors shall be capable of being opened manually, without the use of a key, tool, or special knowledge or effort for

				<p>from the inside of the building. (Not applicable to buildings under PG I &amp; II)</p> <p>b. Fire resistance</p> <p>Exit doors which are required to have fire resistance rating shall comply with the relevant provisions for fire resisting doors under <i>Cl.3.9.2</i>.</p> <p>c. ....</p> <p>d. Exit door opening</p> <p>(1) .....</p> <p>(2) .....</p> <p>e. ....</p> <p>f. Revolving doors</p> <p>Revolving doors shall not be used as exit doors for required exits.</p>	<p>operation from the inside of the building. (Not applicable to buildings under PG I &amp; II <b>within residential units under PG I and II</b>)</p> <p>b. Fire resistance</p> <p>Exit/ <b>exit access</b> doors which are required to have fire resistance rating shall comply with the relevant provisions for fire resisting doors under <i>Cl.3.9.2</i>.</p> <p>c. ....</p> <p>d. <b>Exit/ exit access</b> door openings</p> <p>(1) .....</p> <p>(2) .....</p> <p>e. ....</p> <p>f. Revolving doors</p> <p>Revolving doors shall not be used as <b>exit/ exit access doors</b> for required exits.</p>
15	25 Aug 2023	25 Aug 2023	<b>Revised/ Clarification</b>	<p>2.3.9g. Exit door of residential unit</p> <p>Exit door of each residential unit shall be located at not more than 500mm from the strata-title line to prevent the creation of a large entrance alcove/ corridor. However, in situations where the entrance alcove/ corridor leads into an open-sided common corridor which meets the requirements for smoke-free approach under <i>Cl.9.2.1a.(4)(e)</i> &amp;</p>	<p>2.3.9g. <b>Exit/ exit access</b> door of residential unit</p> <p><b>Exit/ exit access</b> door of each residential unit shall be located at not more than 500mm from the strata-title line to prevent the creation of a large entrance alcove/ corridor. However, in situations where the entrance alcove/ corridor leads into an open-sided common corridor which meets the requirements for smoke-free approach under</p>

				(f), the separation distance between the entrance alcove/ corridor and the nearest exit staircase shall not be less than 3m.	Cl.9.2.1a.(4)(e) & (f), the separation distance between the entrance alcove/ corridor and the nearest exit staircase shall not be less than 3m.
16	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>2.3.9h. Door located in a path of travel</p> <p>(1) Any door .....</p> <p>Exception</p> <p>(a) .....</p> <p>(b) Locking device</p> <p>With prior consent from the SCDF, locking of exit doors is permissible at certain rooms or spaces of healthcare occupancies and detention and correctional occupancies.</p> <p>(c) .....</p>	<p>2.3.9h. Door located in a path of travel</p> <p>(1) Any door .....</p> <p>Exception</p> <p>(a) .....</p> <p>(b) Locking device</p> <p>With prior consent from the SCDF, locking of exit/ <b>exit access</b> doors <b>is are</b> permissible at certain rooms or spaces of healthcare occupancies and detention and correctional occupancies.</p> <p>(c) .....</p>
17	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>2.3.9k. Access control using electromagnetic/ electromechanical locking device</p> <p>(1) Where access control using electromagnetic/ electromechanical locking device is installed on any exit access door and/ or exit door, excluding revolving doors and doors to residential units, such doors shall comply with the requirements stipulated in <u>Table 2.3.9k.(1) - 1</u> &amp; <u>Table 2.3.9k.(1) - 2</u>.</p> <p>(2) .....</p>	<p>2.3.9k. Access control using electromagnetic/ electromechanical locking device</p> <p>(1) Where access control using electromagnetic/ electromechanical locking device is installed on any exit access door and/ or exit door, excluding revolving doors and doors to residential units, such doors shall comply with the requirements stipulated in <u>Table 2.3.9k.(1) - 1</u> &amp; <u>Table 2.3.9k.(1) - 2</u>. <b>The access control locking devices installed on exit access door and/ or exit door in the escape path shall be</b></p>

					<p>connected directly to the building automatic fire alarm system to de-activate the locking devices. Linking of the locking devices or its control panels through other systems such as access control, building management system, etc., that will cause delay to the de-energising of locking devices is not permitted.</p> <p>(2) .....</p>
18	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>2.4.6 Exit staircase</p> <p>a. Handrails</p> <p>The handrails within a protected exit staircase shall be continuous.</p> <p>b. Wheelchair stairlifts</p> <p>A wheelchair stairlift, where installed, shall be sited inside a protected staircase. Such a stairlift, when in operating position, shall not encroach into the escape path of building occupants.</p>	<p>2.4.6 Exit staircase</p> <p>a. Handrails</p> <p>The handrails within an <del>protected exit</del> staircase shall be continuous.</p> <p>b. Wheelchair stairlifts</p> <p>A wheelchair stairlift, where installed, shall be sited inside an <del>protected exit</del> staircase. Such a stairlift, when in operating position, shall not encroach into the escape path of building occupants.</p>
19	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>3.2.5c. Floor over a basement</p> <p>Any floor immediately over a basement storey if such storey:</p> <p>(1) forms part of a building or compartment of PG II to VIII, or</p>	<p>3.2.5c. Floor over a basement</p> <p>Any floor immediately over a basement <del>storey if such storey:</del> <b>for PG II to VIII buildings shall be a compartment floor except for:</b></p> <p>(1) <del>forms part of a building or compartment of PG II to VIII, or</del></p>

				<p>(2) has an area exceeding 100m<sup>2</sup> except that in the case of a building or compartment of PG IV, V and VII, the SCDF can consent to exemption from the above requirements provided:</p> <p>(a) the building is fitted throughout with an automatic sprinkler system in compliance with the requirements in Chapter 6; and</p> <p>(b) if the building comprises more than one basement storey, the floor at first basement storey level is constructed as a compartment floor.</p>	<p>(1) <del>has an area</del> <b>a basement with floor area not exceeding 100m<sup>2</sup>, or</b></p> <p>(2) <del>except that in the case of a building or compartment of PG IV, V and VII buildings with basement floor area exceeding 100m<sup>2</sup>, the SCDF can consent to exemption from the above requirements provided:</del> <b>provided the following conditions are complied with:</b></p> <p>(a) the building is fitted throughout with an automatic sprinkler system in compliance with the requirements in Chapter 6; and</p> <p>(b) <del>if the building comprises more than one basement storey, the floor at first basement storey level shall be</del> <b>compartmented from other basement storeys is constructed as a compartment floor.</b></p> <p><b>Note: For PG I buildings, refer to Cl.9.1.1b.(2) for compartmentation of floor over basement requirements.</b></p>
20	25 Aug 2023	25 Aug 2023	<p><b>Revised/ Clarification</b></p>	<p>3.2.5f. Kitchen</p> <p>In an eating establishment where a kitchen is required for the preparation of food and where open-flame cooking appliances are used, the following requirements shall be complied with:</p> <p>(1) .....</p>	<p>3.2.5f. Kitchen</p> <p><del>In an eating establishment where a kitchen is required for the preparation of food and where open flame cooking appliances are used,</del> <b>In room/ space where open-flame cooking activities are carried out, except for residential units in PG I and II buildings,</b> the following requirements shall be complied with:</p>

					(1) .....
21	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>3.2.6 Provision for atrium spaces</p> <p>The SCDF can consent to modify the requirements under <i>Cl.3.2.1</i> and <i>Cl.3.2.4a.</i> of this Code for the design of atrium spaces in a building provided all the following conditions are complied with:</p> <p>a. ....</p>	<p>3.2.6 Provision for atrium spaces</p> <p><del>The SCDF can consent to modify the requirements under <i>Cl.3.2.1</i> and <i>Cl.3.2.4a.</i> of this Code for the design of atrium spaces in a building provided all the following conditions are complied with:</del></p> <p>The requirements of <i>Cl.3.2.1</i>, <i>Cl.3.2.4a.</i> and <i>Cl.3.2.4b.</i> of this Code are not applicable for atrium spaces provided the following conditions are complied with:</p> <p>a. ....</p>
22	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>3.2.6b. Occupancy within the floor space of the atrium meets with the specification for low or ordinary hazard content.</p>	<p><del>3.2.6b. Occupancy within the floor space of the atrium meets with the specification for low or ordinary hazard content.</del> The atrium space is not of high hazard occupancy as stated in <i>Cl.1.4.68.</i></p>
23	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>3.3.3 Exemption for non-load-bearing external walls</p> <p>The requirement on fire resistance in <i>Cl.3.3.2</i> shall not apply to:</p> <p>a. ....</p>	<p>3.3.3 Exemption for non-load-bearing external walls</p> <p>The requirement on fire resistance in <i>Cl.3.3.2</i> for non-load-bearing external walls shall not apply to:</p> <p>a. ....</p>
24	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>3.5.9 Separation of residential floor façade</p> <p>(Relocated to <i>Cl.9.2.1b.(3)</i>)</p>	<p>3.5.9 Separation of residential floor façade</p> <p><del>(Relocated to <i>Cl.9.2.1b.(3)</i>)</del> Separation of PG II residential floor façade shall be in accordance with <i>Cl.9.2.1b.(3)</i>.</p>

25	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>3.7.7d. Mode of activation</p> <p>The mode of activation for fire shutters at different locations shall be as follows:</p> <p>(1) Fire shutters as separating wall between two buildings</p> <p>(a) .....</p>	<p>3.7.7d. Mode of activation</p> <p>The mode of activation for fire shutters at different locations shall be as follows:</p> <p>(1) Fire shutters as separating wall between two buildings (if allowed in accordance with Cl.3.6.2)</p> <p>(a) .....</p>
26	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>3.8.6b. Exception</p> <p>(1) .....</p> <p>(2) Any door fitted to an opening in protecting structure of a rubbish chute is not required to have the fire resistance rating if:</p> <p>(a) the thickness of the metal hopper rubbish chute door is at least 1.5mm;</p> <p>(b) the hopper rubbish chute door is sealed with rubber gasket; and</p> <p>(c) the hopper rubbish chute door shall be self-closing type.</p>	<p>3.8.6b. Exception</p> <p>(1) .....</p> <p>(2) Any metal door fitted to an opening in protecting structure of a rubbish/ bin chute is not required to have the fire resistance rating if:</p> <p>(a) the thickness of the metal hopper rubbish/ bin chute door is at least 1.5mm;</p> <p>(b) the hopper-rubbish/ bin chute door is sealed with rubber gasket; and</p> <p>(c) the hopper-rubbish/ bin chute door shall be self-closing type.</p>
27	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>3.8.8f. Fire resistance</p> <p>(1) A transom panel above the lift entrance shall be considered as part of the protecting structure and shall therefore conform to the</p>	<p>3.8.8f. Fire resistance</p> <p>(1) A transom panel above the lift entrance shall be considered as part of the protecting structure and shall therefore conform to the</p>

				<p>fire resistance requirements of the structure.</p> <p>(2) In the case of motor-room-less lifts, the lift control panel enclosure located at the lift lobby shall be compartmented with a fire-rated door of same rating as the lift shaft.</p>	<p>fire resistance requirements of the <b>protecting</b> structure.</p> <p>(2) In the case of motor-room-less lifts, the lift control panel enclosure located at the lift lobby <b>shall not affect the fire resistance requirements of the protecting structure.</b> <del>shall be compartmented with a fire-rated door of same rating as the lift shaft.</del></p>
28	25 Aug 2023	25 Aug 2023	<p><b>Revised/ Clarification</b></p>	<p>3.9.2 Fire doors</p> <p>Fire doors for protection of openings shall comply with all the following:</p> <p>a. Fire doors shall have the appropriate fire resistance as required by relevant parts of the Code. A two-leaf door can be used if the door achieves the required level of fire resistance.</p> <p>b. ....</p>	<p>3.9.2 Fire doors</p> <p>Fire doors for protection of openings shall comply with all the following:</p> <p>a. Fire doors shall have the appropriate fire resistance as required by relevant parts of the Code. <del>A two-leaf door can be used if the door achieves the required level of fire resistance.</del></p> <p>b. ....</p>
29	25 Aug 2023	25 Aug 2023	<p><b>Revised/ Clarification</b></p>	<p>3.9.7 Services running inside and/ or passing through fire lift lobby and smoke-free lobby</p> <p>Air ducts, sanitary pipes, gas pipes, electrical conduits/ cable trays, and other services e.g. fan coil units, ventilation fans (essential or non-essential) excluding lifts shall not be permitted to locate, run inside and/ or pass through:</p> <p>a. fire lift lobbies, or</p> <p>b. smoke-free lobbies.</p>	<p>3.9.7 Services running inside and/ or passing through fire lift lobby and smoke-free lobby</p> <p>a. Air ducts, sanitary pipes, gas pipes, electrical conduits/ cable trays, and other services, e.g., fan coil units, ventilation fans (essential or non-essential) <b>are</b> permitted to locate, run inside and/ or pass through <b>a</b> fire lift or smoke-free <b>lobby provided</b> all these services are protected with a 1-hr fire resistance rating enclosure, or separated with a 1-hr fire resistance ceiling from the said lobby.</p>

				<p>Unless all these services are protected with a 1-hr fire resistance rating enclosure, or separated with a 1-hr fire resistance ceiling from the said lobby. For cablings/ pipings of firefighting or fire protection systems serving or running through the above lobbies, and for other services that are required for operation of the above lobbies during fire emergency, e.g. lighting, mechanical ventilation system, they need not be separately protected. However, this requirement need not complied with if the smoke-free approach is through an external corridor.</p>	<p>b. For cablings/ pipings of firefighting or fire protection systems serving or running through the above lobbies, and for other services that are required for operation of the above lobbies during fire emergency, e.g., lighting, mechanical ventilation systems, they<del>se</del> need not be separately protected.</p> <p>c. <b>Exception</b></p> <p><del>However, this</del> <b>The</b> above requirements <del>need not complied</del> <b>are not applicable for services running inside and/ or passing with if the smoke free approach</b> is through an external corridor.</p>
30	25 Aug 2023	25 Aug 2023	<b>Revised/ Clarification</b>	<p>3.15.18 Timber floors</p> <p>The use of timber floors is allowed under the following situations, provided it is protected to achieve the fire resistance rating required of the element of structure or compartment:</p> <p>a. for an attic in buildings under PG I and II, or</p> <p>b. ....</p>	<p>3.15.18 Timber floors</p> <p>The use of timber floors is allowed under the following situations, provided it is protected to achieve the fire resistance rating required of the element of structure or compartment:</p> <p>a. for an attic <del>in buildings</del> <b>within residential units</b> under PG I and II, or</p> <p>b. ....</p>
31	25 Aug 2023	25 Aug 2023	<b>Revised/ Clarification</b>	<p>4.2.3b. Location</p> <p>The fire access opening shall be placed against an occupied space. It shall not be placed at plant/ store room, exit staircase, smoke -free approach to</p>	<p>4.2.3b. Location</p> <p>The fire access opening shall be placed against an occupied space. It shall not be placed at <b>a</b> plant/ store room, <b>common corridor</b>, exit staircase,</p>

				exit staircase or space that leads only to a dead end.	smoke-free approach to exit staircase or space that leads only to a dead end.
32	25 Aug 2023	1 Mar 2024	Relaxation	<p>4.2.3e.(4) Additional openings for ventilation</p> <p>For buildings under PG III to VIII where an area or space has a ceiling height greater than 10m, additional high level ventilation openings for smoke venting and firefighting purposes shall be provided and located in the external walls opening into the area or space. The ventilation opening shall meet the following criteria:</p> <p>(a) .....</p>	<p>4.2.3e.(4) Additional openings for ventilation</p> <p>For buildings under PG III to VIII where an area or space has a ceiling height greater than 10m, additional high level ventilation openings for smoke venting and firefighting purposes shall be provided and located in the external walls opening into the area or space, <b>except for an area or space that is provided with engineered smoke control system and/ or smoke purging system.</b> The ventilation opening shall meet the following criteria:</p> <p>(a) .....</p>
33	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>4.2.3f. Exemption</p> <p>The provision of fire access openings shall not be applicable to buildings under PG I and II, including building of non-residential ancillary usage (such as gyms, club rooms, etc.) in a residential building.</p>	<p>4.2.3f. Exemption</p> <p>The provision of fire access openings shall not be applicable: <del>to buildings under PG I and II, including building of non-residential ancillary usage (such as gyms, club rooms, etc.) in a residential building.</del></p> <p>(1) <b>buildings under PG I and II, including buildings of non-residential ancillary usage (such as a gym, club rooms-open-to-sky roof garden, intermediate floor sky terrace, etc.) within the residential occupancy.</b></p> <p>(2) <b>aboveground multi-storey car park where parapet walls are provided to comply with</b></p>

					<i>ventilation requirements stipulated in Cl.3.2.8.</i>
34	25 Aug 2023	25 Aug 2023	<b>Revised/ Clarification</b>	<p>4.4.3b. No services other than sprinkler pipe shall be located above or crossing over the fire hydrant mains except under the situations where all of the following conditions are complied with:</p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) .....</p> <p>(4) .....</p>	<p>4.4.3b. No services other than sprinkler pipe(s) shall be located above or crossing over the fire hydrant mains. <del>except under the situations where all of the following conditions are complied with:</del>  <b>Where services need to cross-over the hydrant mains, the following conditions shall be complied with:</b></p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) .....</p> <p>(4) .....</p>
35	25 Aug 2023	25 Aug 2023	<b>Revised/ Clarification</b>	<p>6.3.1c.(2) For dormitories exceeding more than one storey, both automatic and manual fire alarm systems shall be provided to comply with <i>SS 645</i>.</p>	<p>6.3.1c.(2) For dormitories exceeding <del>more than</del> one storey, both automatic and manual fire alarm systems shall be provided to comply with <i>SS 645</i>.</p>
36	25 Aug 2023	25 Aug 2023	<b>Revised/ Clarification</b>	<p>6.3.5c. Visual alarms</p> <p>(1) Visual alarms shall not be used in place of audible alarms and shall be provided:</p> <p>(a) for buildings protected by fire alarm systems</p> <p>(b) in places, such as full-height enclosed washroom spaces, car park floors, lift lobbies, etc. where persons with hearing impairment can be isolated, especially when they are not in their identified locations; and</p>	<p>6.3.5c. Visual alarms</p> <p><del>(1) Visual alarms shall not be used in place of audible alarms and shall be provided:</del></p> <p><del>(a) for buildings protected by fire alarm systems</del></p> <p><del>(b) in places, such as full height enclosed washroom spaces, car park floors, lift lobbies, etc. where persons with hearing impairment can be isolated, especially when they are not in their identified locations; and</del></p>

				<p>(c) in places of entertainment e.g. dance halls, gaming outlets, internet games cafes, arcades where users use headgear that affect hearing or areas where sound and/ or special effects lighting systems are installed.</p> <p>(2) Siting of visual alarms</p> <p>Visual alarms shall be located .....</p>	<p><del>(c) in places of entertainment e.g. dance halls, gaming outlets, internet games cafes, arcades where users use headgear that affect hearing or areas where sound and/ or special effects lighting systems are installed.</del></p> <p>(1) Visual alarms shall be provided in addition to the audible alarms for buildings protected by fire alarm systems and separate visual alarm(s) shall be provided in the following:</p> <p>(a) Where persons with hearing impairment can be isolated, especially when they are not in their identified locations, visual alarm(s) shall also be provided:</p> <p>(i) in toilets and inside full-height partitioned cubicles;</p> <p>(ii) car park floors;</p> <p>(iii) lift lobbies; and</p> <p>(iv) in places of entertainment, e.g., dance halls, gaming outlets, internet games cafes, arcades where users use headgear that affect hearing or areas where sound and/ or special effects lighting systems are installed.</p>
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					<p>(2) Visual alarms shall not be used in place of audible alarms.</p> <p>(3) Siting of visual alarms</p> <p>Visual alarms shall be located .....</p>
37	25 Aug 2023	1 Mar 2024	Revised/ Clarification	<p>6.6.4c. Accessibility and coverage</p> <p>(1) A fire lift shall be located such that the travel distance between the nearest edges of the lift landing door and exit staircase door is not more than 5m. In addition, the exit staircase shall be approached through a fire lift lobby at each storey.</p> <p>Exception :</p> <p>(a) .....</p>	<p>6.6.4c. Accessibility and coverage</p> <p>(1) A fire lift shall be located such that the travel distance between the nearest edges of the lift landing door and exit staircase door is not more than 5m. In addition, the exit staircase shall be approached through a fire lift lobby <b>or a corridor connected directly to a fire lift lobby</b> at each storey. <b>This corridor shall comply with fire lift lobby requirements except that the width can be at least 1.2m.</b></p> <p>Exception :</p> <p>(a) .....</p> <p><b>(b) In cases when two fire lifts are located adjacent to each other, only one of the two fire lifts need to comply with the 5m requirement.</b></p>
38	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>6.6.5c.(5) The means of communication shall:</p> <p>(a) be .....</p> <p>(b) be .....</p>	<p>6.6.5c.(5) The means of communication shall <b>be:</b></p> <p>(a) <b>be</b> .....</p> <p>(b) <b>be</b>.....;</p>

				(c) be .....; and (d) when .....	(c) <del>be</del> .....; and (d) when .....
39	25 Aug 2023	25 Aug 2023	Revised/ Clarification	7.1.9 Ventilation system for exits  b. Exit staircase and internal exit passageway  A mechanical ventilation system for each exit staircase and internal exit passageway, if provided, shall be an independent system of supply mode only exclusive to the particular staircase, and it shall comply with all of the following requirements:	7.1.9 Ventilation system for exits  b. Exit staircase and internal exit passageway  A mechanical ventilation system for each exit staircase and internal exit passageway, if provided, shall be an independent system of supply mode only exclusive to the particular staircase <b>and internal exit passageway</b> , and it shall comply with all of the following requirements:
40	25 Aug 2023	25 Aug 2023	Revised/ Clarification	7.4.4f. Provision of supply air  (1) Supply air to the car park can be provided via mechanised supply air fans or by permanent openings of at least 2.5% of the floor area. Whichever is used, the maximum inlet air speed should be 2m/s to prevent recirculation of smoke.	7.4.4f. Provision of supply air  (1) Supply air to the car park can be provided via mechanised supply air fans or by permanent openings of at least 2.5% of the floor area. Whichever is used, the maximum inlet air speed <del>should</del> <b>shall</b> be 2m/s to prevent recirculation of smoke.
41	25 Aug 2023	25 Aug 2023	Revised/ Clarification	7.4.4g.(3) Each smoke control zone of the car park shall have its own exhaust fan system. The exhaust fan system in each zone should be designed to run in at least two parts, such that the total exhaust capacity does not fall below 50% of the required rate of extract in the event of failure of any one part, and that a fault or failure of the exhaust fan system in one zone will not affect the operation of the exhaust fan system in the other	7.4.4g.(3) Each smoke control zone of the car park shall have its own exhaust fan system. The exhaust fan system in each zone <del>should</del> <b>shall</b> be designed to run in at least two parts, such that the total exhaust capacity does not fall below 50% of the required rate of extract in the event of failure of any one part, and that a fault or failure of the exhaust fan system in one zone will not affect the operation of the exhaust fan system in the other

				zones. The above requirement is also applicable for mechanised supply fan systems, where used.	zones. The above requirement is also applicable for mechanised supply fan systems, where used.
42	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>7.4.4h. Fire resistance of jet fan system</p> <p>The jet fan system, such as the mechanised air supply fans, smoke exhaust fans, jet fans, duct works and wiring shall be capable of operating effectively at 250°C for 2 hours. The fans, ducts and wiring shall be tested in accordance with BS 7346: Pt 2, BS 476: Pt 24 and SS 299 respectively.</p>	<p>7.4.4h. Fire resistance of jet fan system</p> <p>The jet fan system, such as the mechanised air supply fans, smoke exhaust fans, jet fans, duct works and wiring shall be capable of operating effectively at 250°C for 2 hours. The fans, ducts and wiring shall be tested in accordance with <del>BS 7346: Pt 2</del> <b>EN 12101-3</b>, BS 476: Pt 24 and SS 299 respectively.</p>
43	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>7.4.5q. Fail-safe system</p> <p>For natural smoke ventilation system, the natural ventilators shall be-</p> <ul style="list-style-type: none"> <li>(1) in the “open” position in the event of power/ system failure; and</li> <li>(2) positioned such that they will not be adversely affected by positive wind pressure.</li> </ul>	<p><del>7.4.5q. Fail-safe system</del></p> <p><del>For natural smoke ventilation system, the natural ventilators shall be-</del></p> <ul style="list-style-type: none"> <li><del>(1) in the “open” position in the event of power/ system failure; and</del></li> <li><del>(2) positioned such that they will not be adversely affected by positive wind pressure.</del></li> </ul> <p><b>7.4.6</b> Fail-safe system</p> <p>For natural smoke ventilation system, the natural ventilators shall be:</p> <ul style="list-style-type: none"> <li>(1) in the “open” position in the event of power/ system failure; and</li> </ul>

					<p>(2) positioned such that they will not be adversely affected by positive wind pressure.</p> <p>Note: Natural ventilators refer to any device e.g., entrance sliding doors or any other mechanised openings for fresh air replacement or smoke venting to external space.</p>
44	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>9.1.1a.(3) Access staircases</p> <p>Means of escape for a building or a separate part of a building of single occupancy of PG I can be provided via access staircases and exit staircase under the provision of Cl.2.3 is not required.</p>	<p>9.1.1a.(3) Access staircases</p> <p>Means of escape for a building or a separate part of a building of single occupancy of PG I can be provided via access staircase(s) and <del>exit staircase</del> under the provision of Cl.2.3 is not required.</p>
45	25 Aug 2023	1 Mar 2024	Revised/ Clarification	<p>9.2.1a.(5) Exits from residential unit</p> <p>(a) In each residential apartment or maisonette unit, the exit access door or doors shall be provided such that the travel distance measured from any point within the unit to the entrance door(s) of the unit shall not exceed 20m. See <i>Diagram 9.2.1a.(5)(a)</i>.</p> <p>(b) In the case of a maisonette unit comprising not more than two storeys, where a single entrance door is provided:</p> <p>(i) the door shall not be located on the upper storey of the unit; and</p>	<p>9.2.1a.(5) Exits from residential unit</p> <p>(a) In each residential apartment or maisonette unit, the exit access door or doors shall be provided such that the travel distance measured from any point within the unit to the entrance door(s) of the unit shall not exceed 20m. See <i>Diagram 9.2.1a.(5)(a)</i>.</p> <p>(b) In the case of a maisonette unit comprising not more than two storeys, where a single entrance door is provided:</p> <p>(i) the door shall not be located on the upper storey of the unit; and</p>

				<p>(ii) the floor area of the upper storey shall not exceed 60m<sup>2</sup> unless a separate exit is provided on this upper storey.</p> <p>(c) All exits from residential, or maisonette units shall have direct access to an exit staircase, exit passageway, or external space.</p>	<p>(ii) the floor area of the upper storey shall not exceed 60m<sup>2</sup> unless a separate exit is provided on this upper storey.</p> <p>(c) <b>The escape route within the unit to the unit entrance/ rear door(s) shall be kept readily accessible and unobstructed at all times, any room denied of access shall not serve as part of the escape route.</b></p> <p>(d) All exits from residential, or maisonette units shall have direct access to an exit staircase, exit passageway, or external space.</p>
46	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>9.2.1a.(6) Measurement of travel distance</p> <p>Travel distance of a residential unit shall be measured from its entrance door(s) to the exit staircase. Where a residential unit requires two entrance doors at the same storey level, and if only one exit staircase is provided, the travel distance shall be measured from the most remote door. If two or more exit staircases are provided, the travel distance shall be measured from the entrance door of each unit.</p>	<p>9.2.1a.(6) Measurement of travel distance</p> <p>Travel distance of a residential unit shall be measured from its entrance door(s) to the exit staircase. Where a residential unit requires two entrance doors at the same storey level, and if only one exit staircase is <del>provided</del> <b>required</b>, the travel distance shall be measured from the most remote door. If two or more exit staircases are <del>provided</del> <b>required</b>, the travel distance shall be measured from the entrance door of each unit.</p>
47	25 Aug 2023	1 Mar 2024	Relaxation	<p>9.2.1a.(10)(b) Common internal corridor</p> <p>(i) .....</p> <p>(ii) If the common internal corridor is cross-ventilated, all the following requirements shall be complied with:</p>	<p>9.2.1a.(10)(b) Common internal corridor</p> <p>(i) .....</p> <p>(ii) <del>If</del> <b>Where</b> the common internal corridor is cross ventilated, <del>all the following</del></p>

Annex A

				<ul style="list-style-type: none"> <li>The ventilation openings shall be located at high level and positioned directly opposite to each other.</li> <li>Each ventilation opening shall be at least 50% of the superficial area of the opposing external walls.</li> <li>No part of the floor area of the corridor shall be at a distance of more than 12m from any ventilation openings, or from the outer plane of recess void space, if ventilation opening is in recess position.</li> </ul>	<p>requirements shall be complied with: <b>it shall be in accordance with Cl.2.2.13b.(7)(c).</b></p> <ul style="list-style-type: none"> <li><del>The ventilation openings shall be located at high level and positioned directly opposite to each other.</del></li> <li><del>Each ventilation opening shall be at least 50% of the superficial area of the opposing external walls.</del></li> <li><del>No part of the floor area of the corridor shall be at a distance of more than 12m from any ventilation openings, or from the outer plane of recess void space, if ventilation opening is in recess position.</del></li> </ul>
48	25 Aug 2023	25 Aug 2023	Revised/ Clarification	9.3.2b.(5)(b) For single storey premises not protected by sprinkler, each patient accommodation ward shall be constructed as a compartment having at least 1-hr fire resistance rating and at least ½-hr fire resistance rating door for protection of door openings. It shall be provided with both an automatic fire alarm system.	9.3.2b.(5)(b) For single storey premises not protected by sprinkler, each patient accommodation ward shall be constructed as a compartment having at least 1-hr fire resistance rating and at least ½-hr fire resistance rating door for protection of door openings. It shall be provided with <del>both</del> an automatic fire alarm system.
49	25 Aug 2023	1 Mar 2024	Relaxation	9.3.2b.(7) Internal access to wards  A patient.....  (a) .....  (b) .....  (c) .....	9.3.2b.(7) Internal access to wards  A patient.....  (a) .....  (b) .....  (c) .....

				<p>(d) an internal corridor shall be naturally ventilated with fixed openings in an external wall, such ventilation openings being not less than 15% of the floor area of the internal corridor;</p> <p>(e) the ventilation opening in the external walls shall not be less than 3.5m<sup>2</sup>, with at least 1.75m<sup>2</sup> on each side shall be unobstructed by parapet walls or balustrade levels upwards and be positioned on opposite sides of the internal corridor such that they provide effective cross ventilation throughout the entire space of the corridor;</p> <p>(f) the ventilation openings in the external walls shall not be more than 12m from any part of the internal corridor;</p> <p>(g) an internal corridor can be provided with mechanical ventilation and pressurisation in lieu of natural ventilation; and</p> <p>(h) other non-patient accommodation areas or spaces which open into or form part of the internal corridor, and which can jeopardise the means of escape provision, shall be compartmentalised by 1-hr fire-rated enclosures and ½-hr fire-rated doors unless otherwise allowed under <i>Cl.9.3.2b.(4)(b)</i> and <i>Cl.9.3.2b.(6)(c)</i>.</p>	<p>(d) an internal corridor shall be naturally <b>cross</b> ventilated <del>with fixed openings in an external wall, such ventilation openings being not less than 15% of the floor area of the internal corridor;</del> <b>in accordance with <i>Cl.2.2.13b.(7)(c)</i>;</b></p> <p>(e) <del>the ventilation opening in the external walls shall not be less than 3.5m<sup>2</sup>, with at least 1.75m<sup>2</sup> on each side shall be unobstructed by parapet walls or balustrade levels upwards and be positioned on opposite sides of the internal corridor such that they provide effective cross ventilation throughout the entire space of the corridor;</del></p> <p>(f) <del>the ventilation openings in the external walls shall not be more than 12m from any part of the internal corridor;</del></p> <p>(e) an internal corridor can be provided with mechanical ventilation and pressurisation in lieu of natural ventilation; and</p> <p>(f) other non-patient accommodation areas or spaces which open into or form part of the internal corridor, and which can jeopardise the means of escape provision, shall be compartmentalised by 1-hr fire-rated enclosures and ½-hr fire-rated doors unless otherwise allowed under <i>Cl.9.3.2b.(4)(b)</i> and <i>Cl.9.3.2b.(6)(c)</i>.</p>
50	25 Aug 2023	1 Mar 2024	Relaxation	9.3.3e. Internal corridor to dormitory bedrooms	9.3.3e. Internal corridor to dormitory bedrooms

			<p>Dormitory bedrooms with access through an internal corridor shall comply with the following requirements:</p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) internal corridor shall be naturally ventilated with fixed openings on the external walls, with such ventilation openings having an aggregate free area of:</p> <p>(a) at least 15% of the total floor area of the internal corridor, or</p> <p>(b) at least 3.5m<sup>2</sup>m whichever is greater.</p> <p>(4) each ventilation opening in the external walls shall have at least 1.75m<sup>2</sup> free area, unobstructed by parapet walls or balustrade levels upwards such that they provide effective cross ventilation throughout the entire space of the corridor;</p> <p>(5) the ventilation openings in the external walls shall be at most 12m from any part of the corridor;</p> <p>(6) pressurisation of internal corridors in lieu of natural ventilation is not permitted; and</p> <p>(7) other rooms or spaces .....</p>	<p>Dormitory bedrooms with access through an internal corridor shall comply with the following requirements:</p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) <del>internal corridor shall be naturally ventilated with fixed openings on the external walls, with such ventilation openings having an aggregate free area of:</del> <b>an internal corridor shall be naturally cross ventilated in accordance with Cl.2.2.13b.(7)(c);</b></p> <p>(a) <del>at least 15% of the total floor area of the internal corridor, or</del></p> <p>(b) <del>at least 3.5m<sup>2</sup>m whichever is greater.</del></p> <p>(4) <del>each ventilation opening in the external walls shall have at least 1.75m<sup>2</sup> free area, unobstructed by parapet walls or balustrade levels upwards such that they provide effective cross ventilation throughout the entire space of the corridor;</del></p> <p>(5) <del>the ventilation openings in the external walls shall be at most 12m from any part of the corridor;</del></p> <p>(4) pressurisation of internal corridors in lieu of natural ventilation is not permitted; and</p> <p>(5) other rooms or spaces .....</p>
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51	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>9.3.3h. Bedroom compartmentation</p> <ul style="list-style-type: none"> <li>(1) Each dormitory bedroom shall be compartmented from adjoining rooms and other parts of the same building by construction having at least 1-hr fire resistance rating, unless otherwise permitted under <i>Cl.9.3.3f.</i> for the provision of window openings between the bedroom and external corridor;</li> <li>(2) Dormitory bedrooms and other rooms or spaces which open into or form part of the dormitory bedroom corridor shall be separated from the corridor to comply with <i>Cl.9.3.3e.</i> and <i>Cl.9.3.3f.</i>; and</li> <li>(3) Kitchen shall be enclosed with at least 1-hr fire-rated compartment wall, including at least ½-hr fire-rated door. Kitchen can be located within each floor but shall not be within the dormitory bedroom.</li> </ul>	<p>9.3.3h. Bedroom compartmentation</p> <ul style="list-style-type: none"> <li>(1) Each dormitory bedroom shall be compartmented from adjoining rooms and other parts of the same building by construction having at least 1-hr fire resistance rating, unless otherwise permitted under <i>Cl.9.3.3f.</i> for the provision of window openings between the bedroom and external corridor; <b>and</b></li> <li>(2) Dormitory bedrooms and other rooms or spaces which open into or form part of the dormitory bedroom corridor shall be separated from the corridor to comply with <i>Cl.9.3.3e.</i> and <i>Cl.9.3.3f.</i>; <del>and</del></li> <li><del>(3) Kitchen shall be enclosed with at least 1-hr fire-rated compartment wall, including at least ½-hr fire-rated door. Kitchen can be located within each floor but shall not be within the dormitory bedroom.</del></li> </ul> <p><b>9.3.3i. Kitchen compartmentation</b></p> <p><b>A kitchen with open-flame cooking activity shall be enclosed with at least 1-hr fire-rated compartment wall and ½-hr fire-rated door. The kitchen shall not be located within the dormitory unit.</b></p>
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52	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>9.3.4c. Compartmentation</p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) .....</p> <p>(4) .....</p> <p>(5) The worker bedrooms shall be separated from the internal corridor by a wall having fire resistance rating of at least 1-hr. Doors opening into the internal corridor shall have fire resistance rating of at least half an hour.</p> <p>(6) .....</p>	<p>9.3.4c. Compartmentation</p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) .....</p> <p>(4) .....</p> <p>(5) <b>Notwithstanding subclause (4)</b>, the worker bedrooms shall be separated from <del>the</del> <b>any</b> internal corridor by a wall having fire resistance rating of at least 1-hr. Doors opening into the internal corridor shall have fire resistance rating of at least half an hour.</p> <p>(6) .....</p>
53	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>9.6.3g. Label and sign</p> <p>(1) .....</p> <p>(2) A sign shall be displayed at all entrances to the high containment facility, with the following wording: “In the event of fire or any water discharge, please notify PUB at 1800-2846600 for control of contaminated water runoff.</p>	<p>9.6.3g. Label and sign</p> <p>(1) .....</p> <p>(2) A sign shall be displayed at all entrances to the high containment facility, with the following wording: “In the event of fire or any water discharge, please notify <b>the authority having jurisdiction</b> <del>PUB at 1800-2846600</del> for control of contaminated water runoff.</p>
54	25 Aug 2023	1 Mar 2024	Revised/ Clarification	<p>9.6.7b. General requirements</p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) The underground structure housing the transformer shall not be sited within 15m of an exit staircase shaft.</p>	<p>9.6.7b. General requirements</p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) The underground structure housing the transformer shall not be sited within 15m <b>travel distance measured between the nearest</b></p>

					edges of the transformer door and exit staircase shaft of an exit staircase shaft.
55	25 Aug 2023	1 Mar 2024	Relaxation	<p>9.7.2a. Access through an internal corridor</p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) The common internal corridor shall have ventilation openings of not less than 15% of the floor area and located not more than 9m from any part of the common internal corridor. Internal corridors which cannot be naturally ventilated shall be pressurised to comply with the requirements in <i>Chapter 7</i>.</p>	<p>9.7.2a. Access through an internal corridor</p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) The common internal corridor can be naturally or cross ventilated. A naturally ventilated corridor shall have ventilation openings of not less than 15% of the floor area and located not more than 9m from any part of the common internal corridor. Where a corridor is cross ventilated, it shall comply with <i>Cl.2.2.13b.(7)(c)</i>. Internal corridors which cannot be naturally or cross ventilated shall be pressurised to comply with the requirements in <i>Chapter 7</i>.</p>
56	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>9.8.1b. Structural fire precautions</p> <p>(1) Vehicle parking area</p> <p>Fire compartmentation shall be provided between a vehicle parking area (PG VIII) and other areas, except for ancillary washrooms, the fire compartment walls and floors shall have at least 1-hr fire resistance rating.</p> <p>Exceptions:</p> <p>(a) .....</p>	<p>9.8.1b. Structural fire precautions</p> <p>(1) Vehicle parking area</p> <p>Fire compartmentation shall be provided between a vehicle parking area (PG VIII) and other areas, except for ancillary washrooms, and other rooms stated in footnote (4) of <i>Table 6.4A</i>, the fire compartment walls and floors shall have at least 1-hr fire resistance rating.</p> <p>Exceptions:</p>

				(b) .....	(a) .....  (b) .....
57	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>9.9.1 Buildings designated for conservation and buildings built before 1969</p> <p>a. General</p> <p><i>Cl.9.9.1</i> can be applicable to buildings designated for conservation by the authority having jurisdiction or buildings with timber floors/staircases and built before 1969. Change of use of these buildings to public accommodation purpose is not permitted. Upgrading of fire safety works shall be applicable to the whole building; partial upgrading of building is not allowed.</p> <p>b. ....</p>	<p>9.9.1 Buildings designated for conservation and buildings built before 1969</p> <p>a. General</p> <p><i>Cl.9.9.1</i> <del>can be</del> <b>is</b> applicable to buildings <b>with timber floor/ staircase</b> designated for conservation by the authority having jurisdiction or buildings <del>with timber floors/staircases</del> and built before 1969. Change of use of these buildings to public accommodation purpose is not permitted. Upgrading of fire safety works shall be applicable to the whole building; partial upgrading of building is not allowed.</p> <p>b. ....</p>
58	25 Aug 2023	25 Aug 2023	Revised/ Clarification	<p>9.9.1f. Amalgamation of shophouse units</p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) .....</p> <p>(4) .....</p> <p>(5) If the units are to be used for public resort, such as restaurant, association, etc., there shall be a minimum of two protected exit staircases per floor.</p>	<p>9.9.1f. Amalgamation of shophouse units</p> <p>(1) .....</p> <p>(2) .....</p> <p>(3) .....</p> <p>(4) .....</p> <p>(5) <del>If the units are to be used for public resort, such as restaurant, association, etc., there shall be a minimum of two protected exit staircases per floor.</del> <b>There shall be at least two independent exit staircases or other exits from every storey of a building, unless otherwise permitted under <i>Cl.9.4.1</i> and <i>Cl.9.5.1</i>.</b></p>

59	25 Aug 2023	1 Mar 2024	Revised/ Clarification	<p><u>Appendix 1</u></p> <p>1.0 General</p> <p>a. Fire Safety Report is to document the provision of fire protection, life safety features and fire safety management in the building and/ or plants/ installations. This report serves as a useful reference to Fire Safety Managers (FSMs), building owners, Registered Inspectors (RIs), the SCDF and Qualified Persons (QPs) appointed to carry out any subsequent additions and alteration works. Where the nature of the additions and alteration works would require the updating of the Fire Safety Report, the QP shall be responsible to submit revised and updated report to the building owner(s) and the SCDF.</p> <p>b. The project .....</p>	<p><u>Appendix 1</u></p> <p>1.0 General</p> <p>a. Fire Safety Report is to document the provision of fire protection, life safety features and fire safety management in the building and/ or plants/ installations. This report serves as a useful reference to Fire Safety Managers (FSMs), building owners, Registered Inspectors (RIs), the SCDF and Qualified Persons (QPs) appointed to carry out any subsequent additions and alteration works. <b>The building owners and/ or building management shall be responsible for the custody and upkeep of the Fire Safety Report, including making the report available for SCDF.</b> Where the nature of the additions and alteration works would require the updating of the Fire Safety Report, the QP shall be responsible to submit revised and updated report to the building owner(s) and the SCDF.</p> <p>b. The project .....</p>
60	25 Aug 2023	1 Mar 2024	Revised/ Clarification	Existing <u>Table 1.4B</u>	See <u>Annex B</u> (affected portions of <u>Table 1.4B</u> )

TABLE 1.4B : OCCUPANCY LOAD FACTORS

FUNCTIONAL SPACE	FACTOR (m <sup>2</sup> /person)	REMARKS
Pedestrian linkways (aboveground or underground)  <i>with commercial activities</i>  <i>building to Rapid Transit Stations (e.g., Mass Rapid Transit (MRT) without commercial activities</i>  <i>building to building without commercial activities</i>  <i>standalone type without commercial activities</i>	2  3.5  5  --	<del>aboveground or underground</del>      non-simultaneous

S/N	Amendment Date	Effective Date	Clause Status	Clause Before Amendment	Clause After Amendment
1	25 Aug 2023	1 Mar 2024	Revised/ Clarification	<p>10.2.1d. Design and installation criteria</p> <p>(1) ...</p> <p>(2) ...</p> <p>(3) ...</p> <p>(4) Storages or services located below PV arrays excluding those stated under <i>Cl.10.2.1b.(1)(b)</i>, shall be separated from the PV panels as follows:</p> <p>(a) for sprinkler-protected space below arrays, by providing a non-combustible separation, or</p> <p>(b) for non-sprinkler-protected space below arrays, by providing a 1-hr fire-rated separation.</p>	<p>10.2.1d. Design and Installation criteria</p> <p>(1) ...</p> <p>(2) ...</p> <p>(3) ...</p> <p>(4) Storages or services located below PV arrays, excluding those stated under <i>Cl.10.2.1b.(1)(b)</i>, shall be separated from the PV panels <b>arrays</b> as follows:</p> <p>(a) <b>For</b> sprinkler-protected space below arrays, <del>by providing a</del> non-combustible separation <b>shall be provided.</b></p> <p>(b) <b>For</b> sprinkler-protected space below arrays, if the PV modules comply with <i>Cl.10.2.2b.</i>, no separation is required.</p> <p>(c) For non-sprinkler-protected space below arrays, <del>by providing</del> a 1-hr fire-rated separation <b>shall be provided.</b></p> <p>(d) <b>For</b> non-sprinkler-protected space below arrays, if the PV modules comply with</p>

					<i>Cl.10.2.2b.</i> , a non-combustible separation shall be provided.
2	25 Aug 2023	1 Mar 2024	New	Nil	<p>10.2.3 Wall-integrated PV installations</p> <p>a. General</p> <p>This set of fire safety requirements shall be applicable to wall-integrated PV installations, where PV is integrated into the building such as windows or curtain walls.</p> <p>b. Fire performance of PV modules</p> <p>PV modules shall be in accordance with <i>Cl.10.2.2b.</i>.</p> <p>c. Design and installation criteria</p> <p>PV installation shall comply with the following:</p> <p>(1) All spaces abutting/ facing PV installations shall be fully protected by an automatic sprinkler system or automatic fire extinguishing system, unless they comply with all of the following conditions:</p> <p>(a) the building does not exceed 12m in habitable height;</p> <p>(b) the building is protected by an automatic fire alarm</p>

					<p>system compliant with SS 645; and</p> <p>(c) the building does not contain healthcare occupancy (inpatient).</p> <p>(2) PV installation located adjacent to exit staircases shall comply with the <i>Cl.2.3.3a.(3)</i> or <i>Cl.2.3.3b.(2)(b)</i>.</p> <p>(3) All cables and related components shall be housed in a non-combustible conduit. The positive and negative DC cables shall be installed in separate containments.</p> <p>(4) The opening occurring at the junction between the edge of a structural floor and the wall-integrated PV shall be sealed to prevent the spread of smoke and flame from the lower floor to the upper floor via the opening. Fire stopping materials for sealing the openings shall have the same fire resistance rating as the elements of structure.</p> <p>d. Emergency disconnection</p> <p>Emergency disconnection of the PV modules, it shall be in accordance with <i>Cl.10.2.2d.</i></p>
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**Annex C**

3	25 Aug 2023	1 Mar 2024	Revised/ Clarification	Existing <u>Table 11A</u>	See affected portions of <u>Table 11A</u> .
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**TABLE 11A : LIST OF REGULATED FIRE SAFETY PRODUCTS & MATERIALS**

S/N	Products / Materials	Acceptable Standards	Certification Scheme	Surveillance Regime	
				Testing	Factory/Site Inspection
39.	Building-mounted or Building-integrated Solar Photo-voltaic (PV)	39.1 Roof-mounted module:  IEC 61730-2 (MST 23 – spread of flame and burning brand under Annex B) with a <b>min.</b> fire performance rating of Class C)	Scheme 2	Biennial surveillance fire test in accordance to IEC 61730-2 (MST 23 – spread of flame and burning brand under Annex B) as adopted at the point of CoC listing	Not applicable
		39.2 Wall-mounted or Wall-integrated or Roof-mounted <sup>(12)</sup> module:  (a) IEC 61730-2 (MST 22, 23, 25 and 26). For MST 23, spread of flame and burning brand under Annex B with fire performance rating of Class A  and  (b) EN 13501-1 (min. Class B with FIGRA ≤ 70 W/s)  and  (c) Junction Box IEC 61730-1 (for glow wire test and flammability classification)  and  (d) Solar cables IEC 61730-1 (for Vertical Flame Propagation)	Scheme 5 (DoCs issued)	Scheme 5 – Annual surveillance test for EN 13501-1 or IEC 61730-2 (MST 23 – spread of flame and burning brand under Annex B) as adopted at the point of CoC listing	Factory inspection to be conducted at least once annually and Site inspection to be conducted for every project
			Scheme 1b (DoCs issued)	Scheme 1b – Batch testing in accordance with EN 13501-1 or IEC 61730-2 (MST 23 – spread of flame and burning brand under Annex B) as adopted at the point of CoC listing	Site inspection to be conducted for every project
<b>Note:</b> 1. ASTM E119 are not acceptable for load-bearing elements. ... 12. For roof-mounted PV modules complying with <i>Cl.10.2.2b</i> .					

S/N	Clause No.	Amendment Date	Effective Date	Clause Status	Clause Before Amendment	Clause After Amendment
1	9.6.8	25 Aug 2023	1 Mar 2024	New	Nil	<p>9.6.8 Sea-based buildings</p> <p>a. General</p> <p>This set of fire safety requirements shall be applicable to sea-based buildings that meet the following criteria:</p> <p>(1) the building is more than one storey (including attic and mezzanine); or</p> <p>(2) any usage or part thereof used for Purpose Group V or VII.</p> <p>b. Fire safety requirements</p> <p>(1) Evacuee holding area</p> <p>Evacuee holding area(s) on the basis of 0.3m<sup>2</sup>/person shall be provided. The designated evacuee holding area shall be open-to-sky and located not less than 3m from any unprotected openings. In lieu of the separation distance, a 1-hr fire-rated wall of at least 1.8m high shall be provided to separate between the unprotected openings and the evacuee holding area. The evacuee holding area shall be located at first storey.</p> <p>(2) Means of escape</p> <p>One-way and two-way travel distance shall not exceed 15m or 30m, respectively as per <i>Table 2.2A</i>.</p> <p>(a) Single storey structure</p>

						<p>The travel distance shall be measured from the most remote point in any room or space to an open-to-sky space.</p> <p>(b) Multi-storey structure</p> <p>The travel distance shall be measured from the most remote point in any room or space to an exit staircase. An internal and/ or external exit staircase which serves as the required exit shall comply with the requirements stipulated in <i>Cl.2.3.3</i>;</p> <p>(i) For mezzanine floors (excluding stay-in facility), one open staircase is permitted in accordance with <i>Cl.9.6.1a.(2)</i>; and</p> <p>(ii) Where there are stay-in facilities provided at the upper floor(s), at least two exit staircases shall be provided.</p> <p>(3) Structural fire precaution</p> <p>(a) Single storey structure</p> <p>The element of structure (excluding the floor) shall be constructed of non-combustible material.</p> <p>(b) Multi-storey structure</p> <p>(i) The flooring immediately above the sea level need not be constructed of fire-rated or non-combustible material. For other parts of the building, element of structure shall be constructed of fire-rated and non-combustible</p>
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materials, in accordance with *Cl.3.3* and *Table 3.3A*, respectively.

(ii) Where wooden stilts are used for construction of sea-based building (e.g. Kelong), the part that is above the sea level shall be constructed of fire-rated and non-combustible material.

(4) Marine fire vessel accessibility

- (a) To facilitate SCDF's marine firefighting and rescue operations, there shall be unobstructed access to the evacuee holding area.
- (b) A minimal 3m depth is required for berthing of SCDF's marine firefighting vessels all-around the building.

(5) Fire protection systems

- (a) Hydraulic hose reel(s) conforming to the requirements in *SS 575* shall be provided to every storey of the building.
- (b) Fire extinguishers complying with *Cl.6.1* shall be provided to every storey of the building.
- (c) Every part of the sea-based building shall be installed with a fire alarm system in accordance with *Table 6.3A*.

(6) Exit signs and emergency lightings

- (a) Exit and exit directional signs shall be provided in accordance with *Cl.8.1.7*; and

						<p>(b) Emergency lightings shall be provided in accordance with <i>Cl.8.1.3</i> and <i>Cl.8.1.4</i>, respectively.</p> <p>(7) Solar Photo-Voltaic (PV) installation</p> <p>Roof-mounted modules shall comply with <i>Cl.10.2</i> in terms of:</p> <p>(a) means of access;</p> <p>(b) fire performance of PV modules;</p> <p>(c) design and installation criteria; and</p> <p>(d) emergency disconnection.</p> <p>(8) Storage of flammable liquids</p> <p>Storage of flammable liquids shall be located at the first storey. For the maximum capacity of flammable liquids, it shall be in accordance with <i>SS 532 Table 1</i> - Minor Storage.</p>
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S/N	Amendment Date	Effective Date	Clause Status	Clause Before Amendment	Clause After Amendment
1	25 Aug 2023	1 Mar 2024	New	Nil.	<p>2.3.9 Exit doors and exit access doors</p> <p>Exit doors and exit access doors shall comply with all of the following:</p> <p>a. ....</p> <p>n. Access control using digital locksets</p> <p>Where a digital lockset is installed on an exit door or exit access door, these digital locksets shall come with mechanical fail-safe features on the non-secure side (i.e., shall not rely on electrical energy) to ensure occupant escape.</p>
2	25 Aug 2023	1 Mar 2024	Revised/ Clarification	<p>11.8.2 Fire-rated doors</p> <p>a. Requirements for CoC</p> <p>(1) The brand, model and test report number of hardware shall be displayed on the CoC, including, but not limited to:</p> <p>(a) Door closer;</p> <p>(b) Locks and latches (electromechanically operated);</p> <p>(c) Door coordinator devices;</p> <p>(d) Door bolts;</p> <p>(e) Lever handles and knots;</p> <p>(f) Mechanical locks and latches;</p> <p>(g) Emergency exit devices;</p>	<p>11.8.2 Fire-rated doors</p> <p>a. Requirements for CoC</p> <p>(1) The brand, model and test report number of hardware shall be displayed on the CoC, including, but not limited to:</p> <p>(a) Door closer (excluding surface-mounted door closers and floor springs);</p> <p>(b) Locks and latches (electromechanically operated);</p> <p>(c) Door coordinator devices;</p> <p>(d) Door bolts;</p> <p>(e) Lever handles and knots;</p> <p>(f) Mechanical locks and latches;</p>

Annex E

				(h) Panic exit devices; (i) Single axis hinges; (j) Electrically powered door hold-open devices; (k) Cylinders for locks; and (l) Mechatronic cylinders.	(g) Emergency exit devices; (h) Panic exit devices; (i) Single axis hinges; <del>(j) Electrically powered door hold-open devices;</del> <del>(k)</del> Cylinders for locks; and <del>(l)</del> Mechatronic cylinders.
3	25 Aug 2023	1 Mar 2024	Revised/ Clarification	11.8.2b. Requirements for door closers  (1) All door closers (regardless if concealed, surface-mounted or floor-mounted) shall have their own CoCs.  (2) The door closer specifications and CoC number/CoC holder company name shall be included in the appendix for that related fire door.  (3) The 6-digit coding system indicating the performance of the door closer, as stipulated in <i>EN 1154</i> , shall be imprinted on the door closer.  (4) The following statement shall be included in the appendix of the CoC:  ...	11.8.2b. Requirements for door closers  (1) <del>All</del> Door closers (regardless if concealed, surface-mounted or floor-mounted) shall have their own CoCs.  <del>(2) The door closer specifications and CoC number/CoC holder company name shall be included in the appendix for that related fire door.</del>  (2) The 6-digit coding system indicating the performance of the door closer, as stipulated in <i>EN 1154</i> , shall be imprinted on the door closer.  (3) The following statement shall be included in the appendix of the CoC:  ...
4	25 Aug 2023	1 Mar 2024	New	Nil.	11.8.2c. Requirements for digital locksets  (1) Digital locksets shall have their own CoCs.

**Annex E**

					<p>(2) Digital locksets tested on uninsulated fire-rated doors can be used on insulated or uninsulated fire-rated doors.</p> <p>(3) Digital locksets tested on insulated fire-rated doors shall only be used on insulated fire-rated doors, unless otherwise assessed by a test laboratory recognised as stated in <i>Cl.11.3.4b.</i>.</p> <p>(4) Notwithstanding (2) and (3), the fire resistance rating of the digital locksets shall be higher than or equivalent to the fire-rated door.</p> <p>d. Clustering of surveillance test</p> <p>The surveillance .....</p>
5	25 Aug 2023	1 Mar 2024	Revised/ Clarification	Existing <u>Table 11A</u>	See affected portions of <u>Table 11A</u>

**TABLE 11A: LIST OF REGULATED FIRE SAFETY PRODUCTS & MATERIALS**

S/N	Products/ Materials	Acceptable Standards	Certification Scheme	Surveillance Regime	
				Testing	Factory/Site Inspection
20.	Fire-rated door ( <del>including door</del> <del>closer and</del> <del>hardware</del> )	20.1 Fire-rated door (a) SS 332 Clause 5 or EN 1634-1 and (b) Mechanical test for relevant hardware as stipulated in SS332 (wherever applicable if installed on the fire door) EN 179, EN 1125, <del>EN</del> <del>4455</del> , EN 1158, EN 1303, EN 1906, EN 1935, EN 12051, EN 12209, EN 14846, EN 15684 If product includes glass (excl. vision panel), to also conduct impact test: (c) BS 6206 or AS 2208 or EN 12600 and (d) Door closer (refer to S/N 20.2)	Scheme 5 (Labels issued)	Fire test: Timber/ composite door – at least once annually Steel/ glass door – once every 3 years Impact test for fire-rated glass door – once every 3 years	Scheme 5 – Factory inspection to be conducted at least once annually and Site inspection(s) triggered by certification body <sup>(10)</sup>
			Scheme 1b (Labels issued)		Scheme 1b – Batch inspection <sup>(11)</sup> and Site inspection triggered by certification body for each batch <sup>(10)</sup>

**Annex E**

		<p>20.2 Door closer (a) EN 1154 or SS 332 Clause 6 Annex C</p>	<p>Scheme 5 (Labels issued)</p>	<p>Mechanical Test at least once annually based on EN 1154 or SS 332 Clause 6 Annex C</p>	<p>Factory inspection to be conducted at least once annually and Site inspection(s) triggered by certification body <sup>(10)</sup></p>
		<p>20.3 Digital lockset (consisting of lever handle on plate, electromechanically operated lockcase and cylinder (if any))  (a) Fire test with batteries loaded, under SS 332, or EN 1634-1</p>	<p>Scheme 2</p>	<p>Fire Test at least once every 3 years based on the same test standard adopted at the point of CoC listing  Dimension check at least once every 3 years on lever handle plate (entrance face, exit face, rubber pad/gasket); lever handle; mortise lockcase (body, fore-end, latch bolt); spindle; and cylinder</p>	<p>Not applicable</p>