7511.1104 SECTION 1104, MEANS OF EGRESS FOR EXISTING BUILDINGS.

Subpart 1. IFC section 1104.1. IFC section 1104.1 is amended and sections added to read:

1104.1 General. Means of egress in existing buildings shall comply with the minimum egress requirements specified in Sections 1104.1 through 1104.26.7.

1104.1.1 Occupant loads. The number of occupants shall be determined in accordance with Section 1004.

1104.1.2 Egress width. The minimum required egress width shall be determined in accordance with Section 1005.1.

1104.1.3 Ceiling height. The ceiling height in corridors shall be not less than 78 inches (1,981 mm).

1104.1.4 Special exiting provisions for younger students. Rooms in Group E occupancies used by preschool, kindergarten, first- or second-grade pupils, latchkey, child care, early childhood family education, teen parent, or similar programs shall be located as required by the Building Code.

Subp. 2. IFC section 1104.2. IFC section 1104.2 is amended to read:

1104.2 Elevators, escalators, and moving walks. Elevators, escalators, and moving walks can only be used as a component of a required means of egress where previously approved.

Subp. 3. IFC section 1104.3. IFC section 1104.3 is amended and sections added to read:

1104.3 Exit signs - general. Exit signs shall comply with Sections 1104.3.1 through 1104.3.5.

1104.3.1 Where required. Exit signs shall be provided where two or more exits are required from a room, area, or story.

1104.3.2 Locations. Exits and exit access doors shall be marked by an approved exit sign readily visible from any direction of egress travel.

1104.3.3 Main exits. Exit signs need not be provided for main exterior exit doors that are obviously and clearly identifiable as exits.

1104.3.4 Certain occupancies exempt. Exit signs are not required in housing areas of Group I-3 occupancies; in sleeping rooms or dwelling units in Group R-1, R-2, or R-3 occupancies; and in Group U occupancies.

1104.3.5 Exit sign illumination. Exit signs shall be internally illuminated, externally illuminated, or self-luminous. The face of an exit sign illuminated from an external source shall have an intensity of not less than 5 foot-candles (54 lux). Internally illuminated signs shall provide equivalent luminance and be listed for the purpose. Approved self-luminous signs that provide evenly illuminated letters shall have a minimum luminance of 0.06 foot-lamberts (0.21 cd/m²).

Subp. 4. IFC section 1104.5. IFC section 1104.5 is amended and sections added to read:
1104.5 Illumination - general. Normal and emergency illumination of the means of egress shall comply with Sections 1104.5.1 through 1104.5.3.

1104.5.1 Illumination required. The means of egress shall be illuminated at all times that the building space served by the means of egress is occupied. Natural lighting in the interior rooms or spaces can be used to satisfy this requirement during periods of daylight.

1104.5.1.1 Group U occupancies. Illumination is not required in Group U occupancies.

1104.5.1.2 Aisle accessways. Illumination is not required for aisle accessways.

1104.5.1.3 Dwelling units and sleeping rooms. Illumination is not required for dwelling units and sleeping rooms of Group I, R-1, R-2, and R-3 occupancies.

1104.5.2 Illumination level. Floors and other walking surfaces within the means of egress shall be illuminated according to Sections 1104.5.2.1 and 1104.5.2.2:

1104.5.2.1 General. The means of egress illumination level shall not be less than one foot-candle (11 lux) at the floor level.

1104.5.2.2 Assembly performances. In assembly occupancies, the illumination of the floors of exit access shall be at least 0.2 foot-candle (2.2 lux) during periods of performances or projections involving directed light.

1104.5.3 Illumination emergency power. The power supply for means of egress illumination shall normally be provided by the premises' electrical supply. In the event of power supply failure, illumination shall be automatically provided from an emergency system for the following occupancies where such occupancies require two or more means of egress:

1. Group A having 50 or more occupants. Assembly occupancies used exclusively as a place of worship and having an occupant load of less than 300 are not required to have emergency illumination.

2. Group B buildings three or more stories in height, buildings with 100 or more occupants above or below the level of exit discharge, or buildings with 1,000 or more total occupants.

3. Group E in interior stairs, corridors, windowless areas with student occupancy, shops, and laboratories.

4. Group F having more than 100 occupants. Buildings used only during daylight hours that are provided with windows for natural light are not required to have emergency illumination.

5. Group I.

6. Group M buildings greater than 3,000 square feet (2,879 m²) in gross sales area or exceeding one story in height.

7. Group R-1. Where each guest room has direct access to the outside of the building at grade, emergency illumination is not required.
8. Group R-2. Where each living unit has direct access to the outside of the building at grade, emergency illumination is not required.

9. Group R-4. Where each sleeping room has direct access to the outside of the building at ground level, emergency illumination is not required.

The emergency power system shall provide power for not less than 30 minutes and consist of storage batteries, unit equipment, or an on-site generator. The installation of the emergency power system shall be in accordance with Section 1203.

Subp. 5. **IFC section 1104.6.** IFC section 1104.6 and its subsections are deleted entirely and replaced with the following:

**1104.6 Guards.** Guards complying with this section shall be provided at the open sides of means of egress that are more than 30 inches (762 mm) above the floor or grade below.

**Exception:** Approved existing open guards.

**1104.6.1 Height of guards.** Guards shall form a protective barrier not less than 42 inches (1,067 mm) high except for the following existing guards:

1. Existing guards on the open side of stairs, which are permitted to be not less than 30 inches (760 mm) high.

2. Existing guards within dwelling units, which are permitted to be not less than 36 inches (910 mm) high.

3. Existing guards in assembly areas.

4. Existing guards on stairs and balconies of buildings designated as historic structures, which are permitted to be not less than 24 inches (610 mm) high.

**1104.6.2 Opening limitations.** Open guards shall have balusters or ornamental patterns such that a 6-inch (152 mm) diameter sphere cannot pass through any opening up to a height of 34 inches (864 mm) except when one of the following conditions exist:

1. At elevated walking surfaces for access to and use of electrical, mechanical, or plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere with a diameter of 21 inches (533 mm) cannot pass through any opening.

2. In occupancies in Group I-3, F, H, or S, the clear distance between intermediate rails measured at right angles to the rails shall not exceed 21 inches (533 mm).

Subp. 6. **IFC section 1104.7.** IFC section 1104.7 and its subsections are deleted entirely and replaced with the following:

**1104.7 Doors - general.** Except where modified by Section 1010.1.2, doors shall be of the side-hinged swing type. Doors shall swing in the direction of egress travel when serving an occupant load of 50 or more persons. The minimum width of each door opening shall be sufficient for the occupant load thereof. Locks and latches shall comply with Sections 1010.1.9 through 1010.1.11.4.
1104.7.1 Size of doors. Except where modified by this section, each required means of egress door shall comply with the minimum dimensions specified herein. Doors shall provide a clear width of not less than 28 inches (711 mm). Where this section requires a minimum clear width of 28 inches (711 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 28 inches (711 mm). The maximum width of a swinging door leaf shall be 48 inches (1,219 mm) nominal. The height of doors shall not be less than 80 inches (2,032 mm).

1104.7.1.1 Closets. Door openings to storage closets less than 10 square feet (0.93 m²) in area shall not be limited by the minimum width.

1104.7.1.2 Revolving doors. Width of door leaves in revolving doors shall not be limited.

1104.7.1.3 Dwelling units. Door openings within a dwelling unit are permitted to be 78 inches (1,981 mm) in height.

1104.7.1.4 Small rooms. Exit access doors serving a room not larger than 70 square feet (6.5 m²) are permitted to be 24 inches (610 mm) in door width.

1104.7.1.5 Health care facilities. The minimum clear width for doors in the means of egress from hospitals; nursing homes; limited care facilities; psychiatric hospital sleeping rooms; and diagnostic and treatment areas, such as x-ray, surgery, or physical therapy, shall be not less than 32 inches (810 mm) wide. Existing 34-inch (865 mm) doors shall be permitted. Existing 28-inch (710 mm) corridor doors in facilities where the fire plans do not require evacuation by bed, gurney, or wheelchair shall be permitted.

Subp. 7. IFC section 1104.10. IFC section 1104.10 and subsection 1104.10.1 are amended to read:

1104.10 Stair dimensions for existing stairs. Existing stairs in buildings shall be permitted to remain if the rise does not exceed 8.25 inches (210 mm) and the run is not less than 9 inches (229 mm). Existing stairs are permitted to have a minimum width of 36 inches (914 mm) but not less than the width required for the number of occupants served as determined by Section 1005.1. Existing stairs can be rebuilt.

1104.10.1 Stair dimensions for replacement stairs. The replacement of an existing stairway in a structure shall not be required to comply with the new stairway requirements of Section 1011 where the existing space and construction will not allow a reduction in pitch or slope.

Subp. 8. IFC section 1104.12. IFC section 1104.12 is amended to read:

1104.12 Circular stairways. Existing circular stairs shall be allowed to continue in use provided the minimum depth of tread at the outside of the stair is at least 10 inches (254 mm).

Subp. 9. IFC section 1104.16. IFC section 1104.16 and its subsections are deleted in their entirety and replaced with the following:

1104.16 Fire escape stairs. Fire escape stairs shall comply with Sections 1104.16.1 through 1104.16.7.
1104.16.1 **Existing means of egress.** Fire escape stairs shall be permitted in existing buildings but shall not constitute more than 50 percent of the required exit capacity.

1104.16.2 **Protection of openings.** Openings within 10 feet (3,048 mm) of fire escape stairs shall be protected by fire assemblies having a minimum 3/4-hour fire-resistance rating. In buildings equipped throughout with an approved automatic sprinkler system, opening protection is not required.

1104.16.3 **Dimensions.** Fire escape stairs shall meet the minimum width, capacity, riser height, and tread depth as specified in Table 1104.16.

1104.16.4 **Access.** Access to a fire escape from a corridor shall not be through an intervening room. Access to a fire escape stair shall be from a door or window meeting the criteria of Section 1005.3.2. Access to a fire escape stair shall be directly to a balcony, landing, or platform. These shall be no higher than the floor or windowsill level and no lower than 8 inches (203 mm) below the floor level or 18 inches (457 mm) below the windowsill.

1104.16.5 **Materials and strength.** Components of fire escape stairs shall be constructed of noncombustible materials.

Fire escape stairs and balconies shall support the dead load plus a live load of not less than 100 pounds per square foot (4.78 kN/m²). Fire escape stairs and balconies shall be provided with a top and intermediate handrail on each side.

The fire code official is authorized to require testing or other satisfactory evidence that an existing fire escape stair meets the requirements of this section.

1104.16.6 **Termination.** The lowest balcony shall not be more than 18 feet (5,486 mm) from the ground. Fire escape stairs shall extend to the ground or be provided with counterbalanced stairs reaching the ground. For fire escape stairs serving ten or fewer occupants, an approved fire escape ladder is allowed to serve as the termination for fire escape stairs.

1104.16.7 **Maintenance.** Fire escapes shall be kept clear and unobstructed at all times and shall be maintained in good working order.

**TABLE 1104.16**

**DIMENSIONS FOR EXISTING FIRE ESCAPE STAIRS**

<table>
<thead>
<tr>
<th>Feature:</th>
<th>Serving More Than 10 Occupants</th>
<th>Serving 10 or Fewer Occupants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Width</td>
<td>22 inches</td>
<td>18 inches</td>
</tr>
<tr>
<td>Maximum Height of Risers</td>
<td>9 inches</td>
<td>12 inches</td>
</tr>
<tr>
<td>Minimum Tread Depth</td>
<td>9 inches</td>
<td>6 inches</td>
</tr>
</tbody>
</table>

Subp. 10. **IFC section 1104.17.** IFC section 1104.17 and its subsections are deleted entirely and replaced with the following:
1104.17 Corridors. Corridors, common path of travel, and travel distance shall comply with Sections 1104.17.1 through 1104.17.4.1. Corridors complying with Section 1020.1 need not be fire-resistance rated.

1104.17.1 Construction. Corridors shall be fire-resistance rated in accordance with this section and Table 1104.17.1. Existing walls surfaced with wood lath and plaster in good condition or 1/2-inch gypsum wallboard are acceptable for corridor walls and ceilings. Where Table 1104.17.1 allows a sprinkler system in lieu of fire-resistance-rated construction, the building shall be protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

1104.17.1.1 Existing places of religious worship. In Group A occupancies used as places of religious worship, existing corridor walls, ceilings, and opening protection not in compliance with Section 1104.17.1 may be continued when such buildings are protected with an approved automatic fire alarm system. The fire alarm system shall include automatic smoke detection throughout the exit system and approved detection in all boiler rooms, furnace rooms, mechanical rooms, and storage rooms.

1104.17.1.2 Existing Group B occupancies. In office areas of Group B occupancies not exceeding 10,000 square feet (929 m²) in size, existing corridor walls, ceilings, and opening protection not in compliance with Section 1104.17.1 may be continued when such buildings are protected with an approved automatic fire alarm system. The fire alarm system shall include automatic smoke detection throughout the exit system and approved detection in all boiler rooms, furnace rooms, mechanical rooms, and storage rooms.

1104.17.1.3 Existing Group E occupancies. In Group E occupancies, existing corridor walls, ceilings, and opening protection not in compliance with Section 1104.17.1 may be continued when such buildings are protected with an approved automatic fire alarm system that is monitored by a central, proprietary, or remote station service. The fire alarm system shall include automatic smoke detection throughout the exit system and approved detection in all rooms and areas other than classrooms and offices.

### TABLE 1104.17.1

**CORRIDOR FIRE-RESISTANCE RATING**

<table>
<thead>
<tr>
<th>Occupancy</th>
<th>Occupant Load Served by Corridor</th>
<th>Required Fire-Resistance Rating (hours)</th>
<th>Without sprinkler system</th>
<th>With sprinkler system</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B, E, F, H, M, S, U</td>
<td>Greater than 30</td>
<td>1</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Greater than 10</td>
<td>1 (see Section 1104.17.2.3)</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>R</td>
<td>Greater than 10</td>
<td>1</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
1104.17.2 Corridor openings. Openings into corridors shall comply with Sections 1104.17.2.1 through 1104.17.2.3.

1104.17.2.1 Doors. Doors opening into corridors required by Table 1104.17.1 to be fire-resistance rated shall be protected by 20-minute fire assemblies or solid wood doors not less than 1-3/4 inches (45 mm) thick. Where the existing frame will not accommodate the 1-3/4 inches (45 mm) thick door, a 1-3/8 inches (35 mm) thick solid bonded wood core door or equivalent insulated steel door shall be permitted. Doors shall be self-closing or automatic-closing by smoke detection.

1104.17.2.2 Other openings. Openings with fixed wired glass set in steel frames are permitted for corridor walls and ceilings. Transoms, louvers, and openings other than doors from corridors to rooms shall be automatic-closing by smoke detection or shall be covered with a minimum of 3/4-inch (19 mm) gypsum wallboard or equivalent material on the room side.

1104.17.2.3 Existing Group I-2 and I-3 occupancies. Group I-3 corridor doors and patient room doors in Group I-2 corridors need not be fire-resistance rated or self-closing where smoke barriers are provided in accordance with the Building Code or NFPA 101.

1104.17.3 Corridor width. The minimum corridor width shall be in accordance with Sections 1104.17.3.1 through 1104.17.3.2.

1104.17.3.1 Minimum width. The minimum corridor width shall be as determined by the occupant load calculations in Section 1005.3 but not less than 36 inches.

1104.17.3.2 Minimum width in mechanical areas. The minimum corridor width is allowed to be reduced to 24 inches (610 mm) for spaces providing access to electrical, mechanical, or plumbing systems.

1104.17.4 Dead ends. Where more than one exit or exit access doorway is required, the exit access shall be arranged such that dead ends do not exceed the limits specified in Section 1104.17.4.1 and Table 1104.17.4.

1104.17.4.1 Wide corridors and dead-end provisions. A dead-end passageway or corridor shall not be limited in length where the length of the dead-end passageway or corridor is less and 2.5 times the least width of the dead-end passageway or corridor.

### TABLE 1104.17.4

**COMMON PATH, DEAD-END, AND TRAVEL DISTANCE LIMITS (by occupancy)**

<table>
<thead>
<tr>
<th>Occupancy</th>
<th>Common Path Limit</th>
<th>Dead-End Corridor Limit</th>
<th>Travel Distance Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unspr (feet)</td>
<td>Spr (feet)</td>
<td>Unspr (feet)</td>
</tr>
<tr>
<td>Group A</td>
<td>20/75&lt;sup&gt;a&lt;/sup&gt;</td>
<td>20/75&lt;sup&gt;a&lt;/sup&gt;</td>
<td>20&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Group B</td>
<td>75</td>
<td>100</td>
<td>50</td>
</tr>
</tbody>
</table>

---

<sup>a</sup> Group A is limited to 20 feet for building construction.

<sup>b</sup> Group B is limited to 20 feet for building construction.
<table>
<thead>
<tr>
<th>Group</th>
<th>75</th>
<th>75</th>
<th>50</th>
<th>50</th>
<th>200</th>
<th>250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groups F-1, S-1&lt;sup&gt;d&lt;/sup&gt;</td>
<td>75</td>
<td>100</td>
<td>50</td>
<td>50</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Groups F-2, S-2&lt;sup&gt;d&lt;/sup&gt;</td>
<td>75</td>
<td>100</td>
<td>50</td>
<td>50</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>Group H-1</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Group H-2</td>
<td>50</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>Group H-3</td>
<td>50</td>
<td>100</td>
<td>20</td>
<td>20</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td>Group H-4</td>
<td>75</td>
<td>75</td>
<td>20</td>
<td>20</td>
<td>150</td>
<td>175</td>
</tr>
<tr>
<td>Group H-5</td>
<td>75</td>
<td>75</td>
<td>20</td>
<td>50</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>Group I-1</td>
<td>75</td>
<td>75</td>
<td>20</td>
<td>20</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Group I-2 (Health Care)</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>150</td>
<td>200&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Group I-3</td>
<td>100</td>
<td>100</td>
<td>N/R</td>
<td>N/R</td>
<td>150&lt;sup&gt;c&lt;/sup&gt;</td>
<td>200&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Group I-4 (Day Care)</td>
<td>75</td>
<td>100</td>
<td>20</td>
<td>20</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Group M (Covered Mall)</td>
<td>75</td>
<td>100</td>
<td>50</td>
<td>50</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Group M (Mercantile)</td>
<td>75</td>
<td>100</td>
<td>50</td>
<td>50</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Group R-1 (Hotels)</td>
<td>75</td>
<td>75</td>
<td>50</td>
<td>50</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Group R-2 (Apartments)</td>
<td>75</td>
<td>125</td>
<td>50</td>
<td>50</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Groups R-3, R-4</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td>Group U</td>
<td>75</td>
<td>100</td>
<td>20</td>
<td>50</td>
<td>300</td>
<td>400</td>
</tr>
</tbody>
</table>

"Unspr" means unsprinklered and "Spr" means sprinklered.

For SI: 1 foot = 304.8 mm.
a 20 feet for common path serving more than 50 persons; 75 feet for common path serving 50 or fewer persons.

b See Section 1029.9.5 for dead-end aisles in Group A occupancies.

c This dimension is for the total travel distance, assuming incremental portions have fully utilized their allowable maximums. For travel distance within the room, and from the room exit access door to the exit, see the appropriate occupancy chapter.

d See the International Building Code for special requirements on spacing of doors in aircraft hangers.

N/R = No requirements.

Subp. 10a. IFC section 1104.18. IFC section 1104.18 is deleted.

Subp. 11. IFC section 1104.19. IFC section 1104.19 is amended to read:

1104.19 Exit access travel distance. Exits shall be located so that the maximum length of exit access travel, measured from the most remote point to an approved exterior exit, vertical exit enclosure, horizontal exit, or exit passageway along the natural and unobstructed path of egress travel, does not exceed the distances given in Table 1104.17.4.

Subp. 12. IFC section 1104.20. IFC section 1104.20 is amended to read:

1104.20 Common path of egress travel. The common path of egress travel shall not exceed the distances given in Table 1104.17.4.

Subp. 13. IFC section 1104.21. IFC section 1104.21 is amended to read:

1104.21 Stairway discharge identification. A stairway in an exit enclosure that continues below the level of exit discharge shall be arranged and marked to make the direction of egress to a public way readily identifiable. Stairs that continue one-half story beyond the level of exit discharge need not be provided with barriers where the exit discharge is obvious.

Subp. 14. IFC section 1104.22. IFC section 1104.22 is amended to read:

1104.22 Exterior stairway protection. Exterior exit stairs shall be separated from the interior of the building as required in Section 1027.6.

Subp. 15. IFC section 1104.23. IFC section 1104.23 is amended and sections added to read:

1104.23 Minimum aisle width. The minimum clear width of aisles and aisle accessways shall be in accordance with this section and Table 1104.23.

1104.23.1 Aisle and aisle accessway width. Aisles and aisle accessway widths shall be as determined by the occupant load calculations in Section 1005.3, but not less than the widths shown in Table 1104.23.

TABLE 1104.23

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### MINIMUM AISLE AND AISLE ACCESSWAY WIDTHS

<table>
<thead>
<tr>
<th>Condition</th>
<th>Minimum Width (in inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aisle accessways serving seating areas having 50 or fewer seats, tables, or desks</td>
<td>24 inches (610 mm)</td>
</tr>
<tr>
<td>Aisle accessways serving seating areas more than 50 seats, tables, or desks</td>
<td>30 inches (760 mm)</td>
</tr>
<tr>
<td>Aisle accessways serving employee areas only</td>
<td>24 inches (610 mm)</td>
</tr>
<tr>
<td>Level or ramped aisles having seating on each side and serving 50 or fewer seats</td>
<td>36 inches (914 mm)</td>
</tr>
<tr>
<td>Level or ramped aisles having seating on each side and serving more than 50 seats</td>
<td>42 inches (1,067 mm)</td>
</tr>
<tr>
<td>Level or ramped aisles having seating on one side and serving 60 or fewer seats</td>
<td>30 inches (760 mm)</td>
</tr>
<tr>
<td>Level or ramped aisles having seating on one side and serving more than 60 seats</td>
<td>36 inches (914 mm)</td>
</tr>
<tr>
<td>Aisle stairs having seating on each side and serving 50 or fewer seats</td>
<td>36 inches (914 mm)</td>
</tr>
<tr>
<td>Aisle stairs having seating on each side and serving more than 50 seats</td>
<td>42 inches (1,067 mm)</td>
</tr>
<tr>
<td>Aisle stairs having seating on one side and serving 60 or fewer seats</td>
<td>30 inches (760 mm)</td>
</tr>
<tr>
<td>Aisle stairs having seating on one side and serving more than 60 seats</td>
<td>36 inches (914 mm)</td>
</tr>
<tr>
<td>Aisle stair - distance between seating and aisle handrail or guard when the aisle is subdivided</td>
<td>20 inches (508 mm)</td>
</tr>
</tbody>
</table>

Subp. 16. **IFC section 1104.24.** IFC section 1104.24 is amended to read:

**1104.24 Stairway floor number signs.** Existing stairs shall be marked in accordance with Section 1023.9.

Subp. 17. **IFC section 1104.25.** IFC section 1104.25 is amended and sections added to read:

**1104.25 Number of means of egress or exits.** The number of means of egress doors or exits from a room, area, story, or building shall be in accordance with Sections 1104.25.1 through 1104.25.4 and Table 1104.25.
Where two or more means of egress doors or exits are required from a room or area, such doors shall be separated from each other by a distance not less than one-third of the length of the maximum overall diagonal dimension of the area served.

1104.25.1 Number based on capacity. Two means of egress doors or exits are required from rooms, areas, stories, or buildings when the number of occupants exceeds the values shown in Table 1104.25.

1104.25.1.1 Dormitories. Dormitory sleeping rooms having an exit doorway direct to the exterior are not required to have a second exit or exit access doorway provided that:

a. the room has 16 or fewer occupants;

b. the travel distance from any point in the room to the exit doorway does not exceed 30 feet;

c. the room is not located more than two stories above grade;

d. the room is not located on a level below grade; and

e. the room is provided with an emergency escape window in accordance with Sections 1030.2 through 1030.5 and the escape window is separated from the exit doorway in accordance with Section 1007.1.1.

1104.25.2 Three egress doors or exits required. Three means of egress doors or exits are required from rooms, areas, stories, or buildings when the number of occupants exceeds 500 persons.

1104.25.3 Four egress doors or exits required. Four means of egress doors or exits are required from rooms, areas, stories, or buildings when the number of occupants is 1,001 or more persons.

1104.25.4. Group E laboratories. Group E science laboratories containing hazardous materials shall have two exits when exceeding 1,000 square feet (93 m²) in size.

**TABLE 1104.25**

<table>
<thead>
<tr>
<th>Occupancy</th>
<th>Number of Occupants</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B, E, F, M, S, U</td>
<td>&gt; 49 occupants</td>
</tr>
<tr>
<td>H, I, R</td>
<td>&gt; 10 Occupants</td>
</tr>
<tr>
<td>R (dormitories)</td>
<td>&gt; 16 Occupants (see 1104.25.1.1)</td>
</tr>
</tbody>
</table>

* Two egress doors or exits shall be required when the number of occupants exceeds the number listed in the table.

Subp. 18. **IFC section 1104.26.** IFC section 1104 is amended by adding section 1104.26 and subsections to read:
1104.26 Escape windows. In Group R and Group I-1 occupancies, escape windows shall be provided, installed, and maintained in rooms used for sleeping below the fourth story. A readily accessible escape window shall be provided from basement levels occupied as a licensed family or group family child care home. Escape windows shall be in accordance with this section.

1104.26.1 Escape windows not required. Emergency escape windows are not required for the following conditions:

1. If the room has a door that leads directly to the exterior of the building.

2. In dwellings and structures constructed prior to July 1, 1972, provided they are not licensed by Minnesota or used for transient lodging.

3. If the building is protected throughout by an approved, automatic sprinkler system installed in accordance with Section 903.3.

4. From rooms of existing buildings having two separate means of escape, provided that the means of escape are independent of each other and they pass through only one adjacent nonlockable room or area.

5. In Group R hotels or motels constructed prior to April 11, 1983.

1104.26.2 Minimum size and dimensions. Escape window openings shall have a minimum net clear opening area of 4.5 square feet (648 square inches). Opening height and width dimensions shall not be less than 20 inches.

1104.26.3 Maximum height from floor. The maximum height from the floor to the window sill opening shall not exceed 48 inches.

1104.26.4 Emergency escape windows under decks and porches. Emergency escape windows are allowed to be installed under decks and porches provided the location of the deck allows the emergency escape window to be fully opened and provides a path not less than 36 inches in height to a yard or court.

1104.26.5 Window wells. An escape window opening with a finished sill height below the adjacent ground level shall be provided with a window well in accordance with Sections 1104.26.5.1 through 1104.26.5.2.

1104.26.5.1 Minimum size. The minimum horizontal area of the window well shall be 9 square feet, with a minimum dimension of 36 inches. The area of the window well shall allow the emergency escape and rescue opening to be fully opened.

1104.26.5.2 Ladders or steps. Window wells with a vertical depth of more than 44 inches shall be equipped with an approved permanently affixed ladder or steps. Ladders or rungs shall have an inside width of at least 12 inches, shall project at least 3 inches from the wall and shall be spaced not more than 18 inches on center vertically for the full height of the window well. The ladder or steps shall not encroach into the required dimensions of the window well by more than 6 inches. The ladder or steps shall not be obstructed by the
emergency escape and rescue opening. Ladders or steps required by this section are exempt from the stairway requirements of Sections 1011 and 1104.10 through 1104.13.

1104.26.6 Replacement windows for emergency escape and rescue openings. The replacement of windows provided for emergency escape and egress in Group R-2 and R-3 occupancies regulated by the International Building Code or in one- and two-family dwellings and townhouses regulated by the International Residential Code shall be exempt from the minimum opening size and maximum sill height requirements of the International Building Code or International Residential Code, respectively, where all of the following conditions are met:

1. the replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window; and

2. the replacement of the window is not part of a change of occupancy.

1104.26.6.1 Licensed facilities. Required windows in rooms of care facilities licensed or registered by the state of Minnesota shall comply with the provisions of Section 1104.26.6 or Sections 1104.26.2 and 1104.26.3, whichever is more restrictive.

1104.26.7 Operational constraints. Window opening control devices complying with ASTM F 2090 shall be permitted for use on windows required to provide emergency escape and rescue openings.

Statutory Authority:  MS s 326B.02

History:  40 SR 1437; 44 SR 610

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