2015 International Building Code

Section 1010 Doors, Gates and Turnstiles

1010.1 Doors

Means of egress doors shall meet the requirements of this section. Doors serving a means of egress system shall meet the requirements of this section and Section 1022.2. Doors provided for egress purposes in numbers greater than required by this code shall meet the requirements of this section.

Means of egress doors shall be readily distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as doors. Mirrors or similar reflecting materials shall not be used on means of egress doors. Means of egress doors shall not be concealed by curtains, drapes, decorations or similar materials.

1010.1.1 Size of Doors

The required capacity of each door opening shall be sufficient for the occupant load thereof and shall provide a minimum clear width of 32 inches (813 mm). Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). Where this section requires a minimum clear width of 32 inches (813 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 32 inches (813 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. Means of egress doors in a Group I-2 occupancy used for the movement of beds shall provide a clear width not less than 411/2 inches (1054 mm). The height of door openings shall be not less than 80 inches (2032 mm).

- 1. The minimum and maximum width shall not apply to door openings that are not part of the required means of egress in Group R-2 and R-3 occupancies.
- 2. Door openings to resident sleeping units in Group I-3 occupancies shall have a clear width of not less than 28 inches (711 mm).
- 3. Door openings to storage closets less than 10 square feet (0.93 m2) in area shall not be limited by the minimum width.
- 4. Width of door leaves in revolving doors that comply with Section 1010.1.4.1 shall not be limited.



- 5. Door openings within a dwelling unit or sleeping unit shall be not less than 78 inches (1981 mm) in height.
- 6. Exterior door openings in dwelling units and sleeping units, other than the required exit door, shall be not less than 76 inches (1930 mm) in height.
- 7. In other than Group R-1 occupancies, the minimum widths shall not apply to interior egress doors within a dwelling unit or sleeping unit that is not required to be an Accessible unit, Type A unit or Type B unit.
- 8. Door openings required to be accessible within Type B units shall have a minimum clear width of 31.75 inches (806 mm).
- 9. Doors to walk-in freezers and coolers less than 1,000 square feet (93 m2) in area shall have a maximum width of 60 inches (1524 mm).
- 10. In Group R-1 dwelling units or sleeping units not required to be Accessible units, the minimum width shall not apply to doors for showers or saunas.

1010.1.1.1 Projections Into Clear Width

There shall not be projections into the required clear width lower than 34 inches (864 mm) above the floor or ground. Projections into the clear opening width between 34 inches (864 mm) and 80 inches (2032 mm) above the floor or ground shall not exceed 4 inches (102 mm).

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

1010.1.2 Door Swing

Egress doors shall be of the pivoted or side-hinged swinging type.

- 1. Private garages, office areas, factory and storage areas with an occupant load of 10 or less.
- 2. Group I-3 occupancies used as a place of detention.



- 3. Critical or intensive care patient rooms within suites of health care facilities.
- 4. Doors within or serving a single dwelling unit in Groups R-2 and R-3.
- 5. In other than Group H occupancies, revolving doors complying with Section 1010.1.4.1.
- 6. In other than Group H occupancies, special purpose horizontal sliding, accordion or folding door assemblies complying with Section 1010.1.4.3.
- 7. Power-operated doors in accordance with Section 1010.1.4.2.
- 8. Doors serving a bathroom within an individual sleeping unit in Group R-1.
- 9. In other than Group H occupancies, manually operated horizontal sliding doors are permitted in a means of egress from spaces with an occupant load of 10 or less.

1010.1.2.1 Direction of Swing

Pivot or side-hinged swinging doors shall swing in the direction of egress travel where serving a room or area containing an occupant load of 50 or more persons or a Group H occupancy.

1010.1.3 Door Opening Force

The force for pushing or pulling open interior swinging egress doors, other than fire doors, shall not exceed 5 pounds (22 N). These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position. For other swinging doors, as well as sliding and folding doors, the door latch shall release when subjected to a 15-pound (67 N) force. The door shall be set in motion when subjected to a 30-pound (133 N) force. The door shall swing to a full-open position when subjected to a 15-pound (67 N) force.

1010.1.3.1 Location of Applied Forces

Forces shall be applied to the latch side of the door.

1010.1.4 Special Doors

Special doors and security grilles shall comply with the requirements of Sections 1010.1.4.1 through

1010.1.4.4.

1010.1.4.1 Revolving Doors

Revolving doors shall comply with the following:

- 1. Revolving doors shall comply with BHMA A156.27 and shall be installed in accordance with the manufacturer's instructions.
- 2. Each revolving door shall be capable of breakout in accordance with BHMA A156.27 and shall provide an aggregate width of not less than 36 inches (914 mm).
- 3. A revolving door shall not be located within 10 feet (3048 mm) of the foot or top of stairways or escalators. A dispersal area shall be provided between the stairways or escalators and the revolving doors.
- 4. The revolutions per minute (rpm) for a revolving door shall not exceed the maximum rpm as specified in BHMA A156.27. Manual revolving doors shall comply with Table 1010.1.4.1(1). Automatic or power-operated revolving doors shall comply with Table 1010.1.4.1(2).
- 5. An emergency stop switch shall be provided near each entry point of power or automatic operated revolving doors within 48 inches (1220 mm) of the door and between 24 inches (610 mm) and 48 inches (1220 mm) above the floor. The activation area of the emergency stop switch button shall be not less than 1 inch (25 mm) in diameter and shall be red.
- 6. Each revolving door shall have a side-hinged swinging door that complies with Section 1010.1 in the same wall and within 10 feet (3048 mm) of the revolving door.
- 7. Revolving doors shall not be part of an accessible route required by Section 1009 and Chapter 11.

TABLE 1010.1.4.1(1) MAXIMUM DOOR SPEED MANUAL REVOLVING DOORS

REVOLVING DOOR MAXIMUM NOMINAL DIAMETER (FT-IN)	MAXIMUM ALLOWABLE REVOLVING DOOR SPEED (RPM)
6-0	12
7-0	11
8-0	10



	1
9-0	9
10-0	8

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

TABLE 1010.1.4.1(2) MAXIMUM DOOR SPEED AUTOMATIC OR POWER-OPERATED REVOLVING DOORS

REVOLVING DOOR MAXIMUM NOMINAL DIAMETER (FT-IN)	MAXIMUM ALLOWABLE REVOLVING DOOR SPEED (RPM)
8-0	7.2
9-0	6.4
10-0	5.7
11-0	5.2
12-0	4.8
12-6	4.6
14-0	4.1
16-0	3.6
17-0	3.4
18-0	3.2
20-0	2.9
24-0	2.4

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

1010.1.4.1.1 Egress Component

A revolving door used as a component of a means of egress shall comply with Section 1010.1.4.1 and the following three conditions:

- 1. Revolving doors shall not be given credit for more than 50 percent of the minimum width or required capacity.
- 2. Each revolving door shall be credited with a capacity based on not more than a 50-person occupant load.



3. Each revolving door shall provide for egress in accordance with BHMA A156.27 with a breakout force of not more than 130 pounds (578 N).

1010.1.4.1.2 Other Than Egress Component

A revolving door used as other than a component of a means of egress shall comply with Section

1010.1.4.1. The breakout force of a revolving door not used as a component of a means of egress shall not be more than 180 pounds (801 N).

Exception: A breakout force in excess of 180 pounds (801 N) is permitted if the collapsing force is reduced to not more than 130 pounds (578 N) when not less than one of the following conditions is satisfied:

- 1. There is a power failure or power is removed to the device holding the door wings in position.
- 2. There is an actuation of the automatic sprinkler system where such system is provided.
- 3. There is an actuation of a smoke detection system that is installed in accordance with Section 907 to provide coverage in areas within the building that are within 75 feet (22 860 mm) of the revolving doors.
- 4. There is an actuation of a manual control switch, in an approved location and clearly identified, that reduces the breakout force to not more than 130 pounds (578 N).

1010.1.4.2 Power-Operated Doors

Where means of egress doors are operated or assisted by power, the design shall be such that in the event of power failure, the door is capable of being opened manually to permit means of egress travel or closed where necessary to safeguard means of egress. The forces required to open these doors manually shall not exceed those specified in Section 1010.1.3, except that the force to set the door in motion shall not exceed 50 pounds (220 N). The door shall be capable of swinging open from any position to the full width of the opening in which such door is installed when a force is applied to the door on the side from which egress is made. Power-operated swinging doors, power-operated sliding doors and power-operated folding doors shall comply with BHMA A156.10. Power-assisted swinging doors and lowenergy power-operated swinging doors shall comply with BHMA A156.19.

Exceptions:

- 1. Occupancies in Group I-3.
- 2. Horizontal sliding doors complying with Section 1010.1.4.3.
- 3. For a biparting door in the emergency breakout mode, a door leaf located within a multiple-leaf opening shall be exempt from the minimum 32-inch (813 mm) single-leaf requirement of Section
- 1010.1.1, provided a minimum 32-inch (813 mm) clear opening is provided when the two biparting leaves meeting in the center are broken out.
- 1010.1.4.3 Special Purpose Horizontal Sliding, Accordion or Folding Doors

In other than Group H occupancies, special purpose horizontal sliding, accordion or folding door assemblies permitted to be a component of a means of egress in accordance with Exception 6 to Section 1010.1.2 shall comply with all of the following criteria:

- 1. The doors shall be power operated and shall be capable of being operated manually in the event of power failure.
- 2. The doors shall be openable by a simple method from both sides without special knowledge or effort.
- 3. The force required to operate the door shall not exceed 30 pounds (133 N) to set the door in motion and 15 pounds (67 N) to close the door or open it to the minimum required width.
- 4. The door shall be openable with a force not to exceed 15 pounds (67 N) when a force of 250 pounds (1100 N) is applied perpendicular to the door adjacent to the operating device.
- 5. The door assembly shall comply with the applicable fire protection rating and, where rated, shall be self-closing or automatic closing by smoke detection in accordance with Section 716.5.9.3, shall be installed in accordance with NFPA 80 and shall comply with Section 716.
- 6. The door assembly shall have an integrated standby power supply.
- 7. The door assembly power supply shall be electrically supervised.



8. The door shall open to the minimum required width within 10 seconds after activation of the operating device.

1010.1.4.4 Security Grilles

In Groups B, F, M and S, horizontal sliding or vertical security grilles are permitted at the main exit and shall be openable from the inside without the use of a key or special knowledge or effort during periods that the space is occupied. The grilles shall remain secured in the full-open position during the period of occupancy by the general public. Where two or more means of egress are required, not more than one-half of the exits or exit access doorways shall be equipped with horizontal sliding or vertical security grilles.

1010.1.5 Floor Elevation

There shall be a floor or landing on each side of a door. Such floor or landing shall be at the same elevation on each side of the door. Landings shall be level except for exterior landings, which are permitted to have a slope not to exceed 0.25 unit vertical in 12 units horizontal (2-percent slope).

- 1. Doors serving individual dwelling units in Groups R-2 and R-3 where the following apply:
- 1.1. A door is permitted to open at the top step of an interior flight of stairs, provided the door does not swing over the top step.
- 1.2. Screen doors and storm doors are permitted to swing over stairs or landings.
- 2. Exterior doors as provided for in Section 1003.5, Exception 1, and Section 1022.2, which are not on an accessible route.
- 3. In Group R-3 occupancies not required to be Accessible units, Type A units or Type B units, the landing at an exterior doorway shall be not more than 73/4 inches (197 mm) below the top of the threshold, provided the door, other than an exterior storm or screen door, does not swing over the landing.
- 4. Variations in elevation due to differences in finish materials, but not more than 1/2 inch (12.7 mm).



- 5. Exterior decks, patios or balconies that are part of Type B dwelling units, have impervious surfaces and that are not more than 4 inches (102 mm) below the finished floor level of the adjacent interior space of the dwelling unit.
- 6. Doors serving equipment spaces not required to be accessible in accordance with Section 1103.2.9 and serving an occupant load of five or less shall be permitted to have a landing on one side to be not more than 7 inches (178 mm) above or below the landing on the egress side of the door.

1010.1.6 Landings at Doors

Landings shall have a width not less than the width of the stairway or the door, whichever is greater. Doors in the fully open position shall not reduce a required dimension by more than 7 inches (178 mm). Where a landing serves an occupant load of 50 or more, doors in any position shall not reduce the landing to less than one-half its required width. Landings shall have a length measured in the direction of travel of not less than 44 inches (1118 mm).

Exception: Landing length in the direction of travel in Groups R-3 and U and within individual units of Group R-2 need not exceed 36 inches (914 mm).

1010.1.7 Thresholds

Thresholds at doorways shall not exceed 3/4 inch (19.1 mm) in height above the finished floor or landing for sliding doors serving dwelling units or 1/2 inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than 1/4 inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope).

- 1. In occupancy Group R-2 or R-3, threshold heights for sliding and side-hinged exterior doors shall be permitted to be up to 73/4 inches (197 mm) in height if all of the following apply:
- 1.1. The door is not part of the required means of egress.
- 1.2. The door is not part of an accessible route as required by Chapter 11.
- 1.3. The door is not part of an Accessible unit, Type A unit or Type B unit.



2. In Type B units, where Exception 5 to Section 1010.1.5 permits a 4-inch (102 mm) elevation change at the door, the threshold height on the exterior side of the door shall not exceed 43/4 inches (120 mm) in height above the exterior deck, patio or balcony for sliding doors or 41/2 inches (114 mm) above the exterior deck, patio or balcony for other doors.

1010.1.8 Door Arrangement

Space between two doors in a series shall be 48 inches (1219 mm) minimum plus the width of a door swinging into the space. Doors in a series shall swing either in the same direction or away from the space between the doors.

Exceptions:

- 1. The minimum distance between horizontal sliding power-operated doors in a series shall be 48 inches (1219 mm).
- 2. Storm and screen doors serving individual dwelling units in Groups R-2 and R-3 need not be spaced 48 inches (1219 mm) from the other door.
- 3. Doors within individual dwelling units in Groups R-2 and R-3 other than within Type A dwelling units.

1010.1.9 Door Operations

Except as specifically permitted by this section, egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

1010.1.9.1 Hardware

Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapter 11 shall not require tight grasping, tight pinching or twisting of the wrist to operate.

1010.1.9.2 Hardware Height

Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches (864 mm) minimum and 48 inches (1219 mm) maximum above the finished floor. Locks used only for security purposes and not used for normal operation are permitted at any height.

Exception: Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided the self-latching devices are not also self locking devices operated by means of a key, electronic opener or integral combination lock.

1010.1.9.3 Locks and Latches

Locks and latches shall be permitted to prevent operation of doors where any of the following exist:

- 1. Places of detention or restraint.
- 2. In buildings in occupancy Group A having an occupant load of 300 or less, Groups B, F, M and S, and in places of religious worship, the main door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:
- 2.1. The locking device is readily distinguishable as locked.
- 2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.
- 2.3. The use of the key-operated locking device is revocable by the building official for due cause.
- 3. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts does not have a doorknob or surface-mounted hardware.
- 4. Doors from individual dwelling or sleeping units of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key or tool.
- 5. Fire doors after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.

1010.1.9.4 Bolt Locks

Manually operated flush bolts or surface bolts are not permitted.

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1. On door	s not required	for egress i	n individual	dwelling	units or s	leeping units.
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- 2. Where a pair of doors serves a storage or equipment room, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf.
- 3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf. The inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.
- 4. Where a pair of doors serves a Group B, F or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf provided such inactive leaf is not needed to meet egress capacity requirements and the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. The inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.
- 5. Where a pair of doors serves patient care rooms in Group I-2 occupancies, self-latching edge- or surface-mounted bolts are permitted on the inactive leaf provided that the inactive leaf is not needed to meet egress capacity requirements and the inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.

1010.1.9.5 Unlatching

The unlatching of any door or leaf shall not require more than one operation.

- 1. Places of detention or restraint.
- 2. Where manually operated bolt locks are permitted by Section 1010.1.9.4.
- 3. Doors with automatic flush bolts as permitted by Section 1010.1.9.3, Item 3.

4. Doors from individual dwelling units and sleeping units of Group R occupancies as permitted by Section 1010.1.9.3, Item 4.

1010.1.9.5.1 Closet and Bathroom Doors in Group R-4 Occupancies

In Group R-4 occupancies, closet doors that latch in the closed position shall be openable from inside the closet, and bathroom doors that latch in the closed position shall be capable of being unlocked from the ingress side.

1010.1.9.6 Controlled Egress Doors in Groups I-1 and I-2

Electric locking systems, including electromechanical locking systems and electromagnetic locking systems, shall be permitted to be locked in the means of egress in Group I-1 or I-2 occupancies where the clinical needs of persons receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with all of the following:

- 1. The door locks shall unlock on actuation of the automatic sprinkler system or automatic fire detection system.
- 2. The door locks shall unlock on loss of power controlling the lock or lock mechanism.
- 3. The door locking system shall be installed to have the capability of being unlocked by a switch located at the fire command center, a nursing station or other approved location. The switch shall directly break power to the lock.
- 4. A building occupant shall not be required to pass through more than one door equipped with a controlled egress locking system before entering an exit.
- 5. The procedures for unlocking the doors shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the International Fire Code.
- 6. All clinical staff shall have the keys, codes or other means necessary to operate the locking systems.
- 7. Emergency lighting shall be provided at the door.



8. The door locking system units shall be listed in accordance with UL 294.

Exceptions:

- 1. Items 1 through 4 shall not apply to doors to areas occupied by persons who, because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area.
- 2. Items 1 through 4 shall not apply to doors to areas where a listed egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I-2 hospital.

1010.1.9.7 Delayed Egress

Delayed egress locking systems shall be permitted to be installed on doors serving any occupancy except Group A, E and H in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907. The locking system shall be installed and operated in accordance with all of the following:

- 1. The delay electronics of the delayed egress locking system shall deactivate upon actuation of the automatic sprinkler system or automatic fire detection system, allowing immediate, free egress.
- 2. The delay electronics of the delayed egress locking system shall deactivate upon loss of power controlling the lock or lock mechanism, allowing immediate free egress.
- 3. The delayed egress locking system shall have the capability of being deactivated at the fire command center and other approved locations.
- 4. An attempt to egress shall initiate an irreversible process that shall allow such egress in not more than 15 seconds when a physical effort to exit is applied to the egress side door hardware for not more than 3 seconds. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the delay electronics have been deactivated, rearming the delay electronics shall be by manual means only.

Exception: Where approved, a delay of not more than 30 seconds is permitted on a delayed egress door.

5. The egress path from any point shall not pass through more than one delayed egress locking system.

Exception: In Group I-2 or I-3 occupancies, the egress path from any point in the building shall pass through not more than two delayed egress locking systems provided the combined delay does not exceed 30 seconds.

- 6. A sign shall be provided on the door and shall be located above and within 12 inches (305 mm) of the door exit hardware:
- 6.1. For doors that swing in the direction of egress, the sign shall read: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS.
- 6.2. For doors that swing in the opposite direction of egress, the sign shall read: PULL UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS.
- 6.3. The sign shall comply with the visual character requirements in ICC A117.1.

Exception: Where approved, in Group I occupancies, the installation of a sign is not required where care recipients who because of clinical needs require restraint or containment as part of the function of the treatment area.

- 7. Emergency lighting shall be provided on the egress side of the door.
- 8. The delayed egress locking system units shall be listed in accordance with UL 294.

1010.1.9.8 Sensor Release of Electrically Locked Egress Doors

The electric locks on sensor released doors located in a means of egress in buildings with an occupancy in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 are permitted where installed and operated in accordance with all of the following criteria:

- 1. The sensor shall be installed on the egress side, arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
- 2. Loss of power to the lock or locking system shall automatically unlock the doors.



- 3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of other electronics—and the doors shall remain unlocked for not less than 30 seconds.
- 4. Activation of the building fire alarm system, where provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
- 5. Activation of the building automatic sprinkler system or fire detection system, where provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
- 6. The door locking system units shall be listed in accordance with UL 294.
- 1010.1.9.9 Electromagnetically Locked Egress Doors

Doors in the means of egress in buildings with an occupancy in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 and doors to tenant spaces in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 shall be permitted to be locked with an electromagnetic locking system where equipped with hardware that incorporates a built-in switch and where installed and operated in accordance with all of the following:

- 1. The hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.
- 2. The hardware is capable of being operated with one hand.
- 3. Operation of the hardware directly interrupts the power to the electromagnetic lock and unlocks the door immediately.
- 4. Loss of power to the locking system automatically unlocks the door.
- 5. Where panic or fire exit hardware is required by Section 1010.1.10, operation of the panic or fire exit hardware also releases the electromagnetic lock.
- 6. The locking system units shall be listed in accordance with UL 294.

1010.1.9.10 Locking Arrangements in Correctional Facilities

In occupancies in Groups A-2, A-3, A-4, B, E, F, I-2, I-3, M and S within correctional and detention facilities, doors in means of egress serving rooms or spaces occupied by persons whose movements are controlled for security reasons shall be permitted to be locked where equipped with egress control devices that shall unlock manually and by not less than one of the following means:

controlled for security reasons shall be permitted to be locked where equipped with egress control devices that shall unlock manually and by not less than one of the following means:
1. Activation of an automatic sprinkler system installed in accordance with Section 903.3.1.1.
2. Activation of an approved manual fire alarm box.
3. A signal from a constantly attended location.
1010.1.9.11 Stairway Doors
Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.
Exceptions:
1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.
2. This section shall not apply to doors arranged in accordance with Section 403.5.3.
3. In stairways serving not more than four stories, doors are permitted to be locked from the side opposite the egress side, provided they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon a signal from the fire command center, if present, or a signal by emergency personnel from a single location inside the main entrance to the building.
4. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group B, F, M and S occupancies where the only interior access to the tenant space is from a single exit stairway where permitted in Section 1006.3.2.

5. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the dwelling unit is from a

single exit stairway where permitted in Section 1006.3.2.



1010.1.10 Panic and Fire Exit Hardware

Doors serving a Group H occupancy and doors serving rooms or spaces with an occupant load of 50 or more in a Group A or E occupancy shall not be provided with a latch or lock other than panic hardware or fire exit hardware.

Exceptions:

- 1. A main exit of a Group A occupancy shall be permitted to be locking in accordance with Section 1010.1.9.3, Item 2.
- 2. Doors serving a Group A or E occupancy shall be permitted to be electromagnetically locked in accordance with Section 1010.1.9.9.

Electrical rooms with equipment rated 1,200 amperes or more and over 6 feet (1829 mm) wide, and that contain overcurrent devices, switching devices or control devices with exit or exit access doors, shall be equipped with panic hardware or fire exit hardware. The doors shall swing in the direction of egress travel.

1010.1.10.1 Installation

Where panic or fire exit hardware is installed, it shall comply with the following:

- 1. Panic hardware shall be listed in accordance with UL 305.
- 2. Fire exit hardware shall be listed in accordance with UL 10C and UL 305.
- 3. The actuating portion of the releasing device shall extend not less than one-half of the door leaf width.
- 4. The maximum unlatching force shall not exceed 15 pounds (67 N).

1010.1.10.2 Balanced Doors

If balanced doors are used and panic hardware is required, the panic hardware shall be the pushpad type and the pad shall not extend more than one-half the width of the door measured from the latch side.



1010.2 Gates

Gates serving the means of egress system shall comply with the requirements of this section. Gates used as a component in a means of egress shall conform to the applicable requirements for doors.

Exception: Horizontal sliding or swinging gates exceeding the 4-foot (1219 mm) maximum leaf width limitation are permitted in fences and walls surrounding a stadium.

1010.2.1 Stadiums

Panic hardware is not required on gates surrounding stadiums where such gates are under constant immediate supervision while the public is present, and where safe dispersal areas based on 3 square feet (0.28 m2) per occupant are located between the fence and enclosed space. Such required safe dispersal areas shall not be located less than 50 feet (15 240 mm) from the enclosed space. See Section 1028.5 for means of egress from safe dispersal areas.

1010.3 Turnstiles

Turnstiles or similar devices that restrict travel to one direction shall not be placed so as to obstruct any required means of egress.

Exception: Each turnstile or similar device shall be credited with a capacity based on not more than a 50-person occupant load where all of the following provisions are met:

- 1. Each device shall turn free in the direction of egress travel when primary power is lost and on the manual release by an employee in the area.
- 2. Such devices are not given credit for more than 50 percent of the required egress capacity or width.
- 3. Each device is not more than 39 inches (991 mm) high.
- 4. Each device has not less than 161/2 inches (419 mm) clear width at and below a height of 39 inches (991 mm) and not less than 22 inches (559 mm) clear width at heights above 39 inches (991 mm).



Where located as part of an accessible route, turnstiles shall have not less than 36 inches (914 mm) clear at and below a height of 34 inches (864 mm), not less than 32 inches (813 mm) clear width between 34 inches (864 mm) and 80 inches (2032 mm) and shall consist of a mechanism other than a revolving device.

1010.3.1 High Turnstile

Turnstiles more than 39 inches (991 mm) high shall meet the requirements for revolving doors.

1010.3.2 Additional Door

Where serving an occupant load greater than 300, each turnstile that is not portable shall have a side-hinged swinging door that conforms to Section 1010.1 within 50 feet (15 240 mm).