

Highlights of the Southern Building Code Congress International (SBCCI) Standard Building Code 1999

Notes: In this Code Reference Guide, "fire protection system" means an approved sprinkler system, approved fire alarm system, or both. Numbers in brackets () refer to applicable sections of the code publication.

Doors - General (1012.1)

- clear opening width for egress doors used as exit doors - 32" minimum for most occupancies, 36" for Group I Unrestrained, 44" in areas requiring movement of beds in Group I Unrestrained (refer to 1024.1.2.1 for specific information)
- maximum leaf width - 48"
- egress doors in the exit access - 32" clear minimum
- must be side-swinging type, and shall swing in the direction of egress when serving an occupant load of 50 or more, or when serving a high hazard occupancy (all egress doors in Group H per 1023.1), maximum force of 15 lb. to release latch, 30 lb. to set the door in motion, 15 lb to swing door fully open
 - exceptions for specific occupancies, revolving doors, and horizontal sliding doors noted
 - some exceptions for specific occupancy types include: office areas with an occupant load of 10 or less (1020.2), factory areas with an occupant load of 10 or less (1022.2), certain dwelling unit doors (1026.3), automobile parking garages and storage areas with an occupant load of 10 or less (1027.3)
- thresholds - 3/4" high maximum for exterior sliding doors serving dwelling units, 1/2" high maximum for other doors, raised thresholds and changes in level of more than 1/4" require a bevel with a slope of 1:2 maximum (exception - exterior doors not on an accessible route)
- operating hardware must operate with one hand and require no tight grasping, tight pinching, or twisting of the wrist (exceptions - doors serving a single dwelling unit not required to be accessible, doors within Type B dwelling units)
- required exit doors must be openable from the inside without a key, tool, special knowledge, or effort; manual flush or surface bolts are prohibited; all hardware must be direct-acting requiring no more than 1 operation
- double cylinder deadbolts are prohibited on required means of egress doors unless the key cannot be removed when the door is locked from the inside
- operating hardware mounting height - 34" minimum, 48" maximum (exception - locks used for security purposes and not used for normal operation may be mounted at any height)

Power Operated Doors (1012.2)

- must be able to be manually opened in a power failure, with same requirements as manual doors
- sliding doors must have an emergency swing feature (exception for horizontal sliders conforming with 1012.4)
- power operated doors must comply with ANSI/BHMA A156.10

Special Locking Arrangements (1012.6)

- not allowed in Group A (Assembly) occupancies
- building must be protected throughout by a fire protection system
- locking device must be approved and listed, and shall:
 - unlock upon activation of the fire protection system, and/or unlock upon loss of power controlling the lock, and
 - initiate an irreversible process which will unlock the door within 15 seconds when a force of not more than 15 lbs is applied to the door or releasing device, device will not relock until the door has been opened, upon initiation of irreversible process a signal in the vicinity of the door must indicate that the system is functional
 - exception - standby power (1012.6.1, exception 1)
 - independent standby power is acceptable if the fire protection system has precedence over the standby power and unlocks the door,
 - in a power outage, the door may remain locked until the detection systems operate, as long as the power outage does not disable the detection systems
 - if any detection systems are disabled, standby power controlling the locking devices will be interrupted
 - exception - time delay - building official may approve a 30-second delay if reasonable life safety is assured
- signage is required on the door stating "PUSH. THIS DOOR WILL OPEN IN 15 SECONDS. ALARM WILL SOUND." - letters must be at least 1" high
- emergency lighting must be provided at the door

Use Groups (consult code for complete descriptions)

- A - Assembly
- B - Business
- E - Educational
- F - Factory
- H - High Hazard
- I - Institutional
- M - Mercantile
- R - Residential
- S - Storage

Access-Controlled Egress Doors (1012.7)

Entrance doors in a means of egress and entrance doors to tenant spaces in Group B, M, R1 or R2 buildings may be equipped with an approved entrance and egress access control system which complies with the following:

- an approved listed releasing sensor/device, mechanical or electrical, must be provided on the egress side to detect an occupant attempting to exit, doors shall unlock by a signal from or loss of power to releasing device
- loss of power to the locking hardware must automatically unlock the doors
- manual unlocking device required for emergency unlocking purposes only
 - manual unlocking device must be located 40" to 48" vertically above the floor and within 5' of the doors
 - ready access to manual unlocking device must be provided, and signage is required
 - operation of device shall result in direct interruption of power to the lock, independent of the access control system electronics
 - activation of device shall unlock doors for 30 seconds minimum
- activation of the fire protection system (if the building has one) shall unlock the doors, doors to remain unlocked until the fire protection system is reset
- entrance doors in Groups B or M shall not be secured from the egress side when the building is open to the general public
- entrance doors in buildings having a mechanical means of egress in conjunction with an electric strike shall be latched when not energized
- independent standby power may be used on doors which provide immediate egress upon a signal from a listed releasing sensor/device and a signal from the fire protection system (if the building has one), as described in 1012.6.1 exception 1 (Special Locking Arrangements)

Special Egress Requirements by Occupancy (1019 - 1027)

- Key-Operated Locks - for main exterior exit doors on Group A-2 with an occupancy of 300 or less (1019.7.1), main exterior exit doors in Group B (1020.3), Group F (1022.3), Group M (1025.2), and Group S (1027.4):
 - key locking devices may be used on the egress side if:
 - readily visible durable signs on or adjacent to the door states "THIS EXIT TO REMAIN UNLOCKED WHEN THIS BUILDING IS OCCUPIED" - 1" letters on a contrasting background
 - locking device must be readily distinguishable as locked
 - main exit door is a single door or one pair of doors
 - when unlocked, the door or both leaves of the pair must be free-swinging
 - code official may revoke the use of a key locking device for due cause
- Panic Hardware - means of egress doors from an area of a Group A occupancy (1019.7.2) and means of egress doors from an area of a Group E occupancy with an occupant load of 100 or more
 - may have a latch or lock only if it is panic hardware or fire exit hardware, which releases when a force of no more than 15 lb. is applied in the direction of exit travel
 - releasing devices may be bars or panels extending at least half the width of the door, mounted between 30" and 44" above finished floor
 - panic hardware used on a labeled fire door must be labeled as fire exit hardware
 - panic hardware used on balanced doors must be the push pad type and the pad shall not extend more than 1/2 the width of the door measured from the latch side
- Group I Locks (1024.1.3) - patient rooms or tenant space egress doors must not be lockable except in places of restraint or detention
- Group I Restrained - refer to section 1024.2.8 and 1024.2.9 for several exceptions
- Dwelling Unit Locks (1026.4) - night latch, deadbolt, or security device is acceptable on exit doors from dwelling units and hotel guest rooms if devices are openable from the inside without a key, tool, special knowledge or effort, and the device is mounted no more than 48" above finished floor