



STANDARD NON-RESIDENTIAL SECURITY CODE PROVISIONS [VERSION 5.0]

[Applies to Applications Made on or After 01/01/2020]

This document shall be completed by the design professional of record. The completed document shall be incorporated, in its entirety, along with the **City of Irvine Standard Security Code Plan Requirements and Definitions** into the plans submitted for approval prior to permit issuance. This document is in 12 point font and may not be reduced in size prior to incorporation.

INSTRUCTIONS:

(1) Those provisions preceded by an asterisk (*) shall be completed if applicable and an "A" shall be inserted in the space preceding the provision; if not applicable, an "N/A" shall be inserted.

(2) Those provisions preceded by a [P] shall be depicted in the plans via notes, details, plan, and/or elevation views in a manner that clearly demonstrates compliance to the requirement. Such depictions shall be cross referenced within the brackets { } provided or note shall be completed as otherwise instructed.

STANDARDS

KEYING REQUIREMENTS [Ref. Irvine Municipal Code (IMC) Section 5-9-511]

Upon occupancy by the owner or proprietor, each single unit shall have locks using combinations which are interchange free from locks used in all other proprietorships or similar distinct occupancies.

(*) STANDARDS FOR LOUVERED WINDOWS [Ref. IMC Section 5-9-514]

[P] Louvered windows shall not be utilized if any portion of it is within 8 feet vertically or 6 feet horizontally from any exterior accessible surface or any adjoining roof, balcony, landing, stair tread, platform, or similar structure. {Ref. elevation views, window schedule

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(*) STANDARDS FOR GARAGE DOORS: ROLLING OVERHEAD, SOLID OVERHEAD [Ref. IMC Section 5-9-515]

A. [P] Wood doors shall have panels a minimum of 5/16 inch in thickness with the locking hardware being attached to the support framing. {Ref. plans and/or door schedules or note: Not Applicable-

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B. [P] Aluminum doors shall be a minimum thickness of 0.0215 inches and riveted together a minimum of 18 inches on center along the outside seams. There shall be a full width horizontal beam attached to the main door structure which shall meet the pilot, or pedestrian access, door framing within 3 inches of the strike area of the pilot or pedestrian access door framing within 3 inches of the strike area of the pilot or pedestrian access door. {Ref. plans and/or door schedules or note: Not Applicable-

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C. **[P]** Fiberglass doors shall have panels a minimum density of 6 ounces per square foot from the bottom of the door to a height of 7 feet. Panels above 7 feet shall have a density not less than 5 ounces per square foot. *{Ref. plans and/or door schedules or note: Not Applicable-*

D. Doors utilizing a cylinder lock shall have a minimum 5 pin tumbler operation with the locking bar or bolt extending into the receiving guide a minimum of 1 inch.

E. Doors that exceed 16 feet in width shall have 2 lock receiving points; or, if the door does not exceed 19 feet, a single bolt may be used if placed in the center of the door with the locking point located either at the floor or door frame header; or, torsion spring counterbalance-type hardware may be used.

F. **[P]** Doors secured by electrical operation shall have a keyed-switch to open the door when in a closed position, or by a signal locking device. *{Ref. plans and applicable notes and/or details or note: Not Applicable-*

G. Doors with slide bolt assemblies shall have frames a minimum of 0.120 inches in thickness, with a minimum bolt diameter of 1/2 inch and protrude at least 1 1/2 inches into the receiving guide. A bolt diameter of 3/8 inch may be used in a residential building. The slide bolt shall be attached to the door with non-removable bolts from the outside. Rivets shall not be used to attach slide bolt assemblies.

STANDARDS FOR EXTERIOR DOORS & OPENINGS [Ref. IMC Section 5-9-517]

A. Exterior glass doors, wood, or metal doors with glass panels, solid wood, or metal doors, and all entrance doors to individual office suites shall be constructed or protected as follows:

1. **[P]** Wood doors shall be of solid core construction with a minimum thickness of 1 3/4 inches. Wood panel doors with panels less than 1 inch thick shall be covered on the inside with a minimum 16 U.S. gauge sheet steel or its equivalent, which is to be attached with screws on minimum 6 inch centers. Hollow steel doors shall be of a minimum 16 U.S. gauge and have sufficient reinforcement to maintain the designated thickness of the door when any locking device is installed; such reinforcement being able to restrict collapsing of the door around any locking device. *{Ref. plans and/or door and window schedules-*

2. **[P]** Except when double cylinder deadbolts are utilized, any glazing utilized within 40 inches of any door locking mechanism shall be constructed or protected as follows:

a. Fully tempered glass or rated burglary resistant glazing; or

b. Iron or steel grills of at least 1/8 inch material with a minimum 2 inch mesh secured on the inside of the glazing may be utilized; or

c. The glazing shall be covered with iron bars of at least 1/2 inch round or 1 inch by 1/4 inch flat steel material, spaced not more than 5 inches apart, secured on the inside of the glazing.

d. Items b. and c., above, shall not interfere with the operation of opening windows if such windows are required to be openable by the Uniform Building Code.

3. Doors without mechanical locks may be secured with a magnetic locking device which shall have the minimum holding force of 1600 lbs. and a minimum 12 hour back up battery source.

B. All swinging exterior wood and steel doors shall be equipped as follows:

1. A single or double door shall be equipped with a double or single cylinder deadbolt. The bolt shall have a minimum projection of 1 inch and be constructed so as to repel a cutting tool attack. The deadbolt shall have an embedment of at least 3/4 inch into the strike receiving the projected bolt. The cylinder shall have a cylinder guard, a minimum of 5-pin tumblers, and shall be connected to the inner portion of the lock by connecting screws of at least 1/4 inch in diameter. The provisions of the preceding paragraph do not apply where (1) panic hardware is required, or (2) an equivalent device is approved by the enforcing authority.

2. Double doors shall be equipped as follows:

a. The inactive leaf of double door(s) shall be equipped with metal flush bolts having a minimum embedment of 5/8 inch into the head and threshold of the doorframe.

b. Double doors shall have an astragal constructed of steel a minimum of 1/8 inch thick, which will cover the opening between the doors. The astragal shall be a minimum of 2 inches wide, and extend a minimum of 1 inch beyond the edge of the door to which it is attached. The astragal shall be attached to the outside of the active door by means of welding or with nonremovable bolts spaced apart on not more than 10 inches centers. (The door to which such an astragal is attached must be determined by the fire safety codes adopted by the enforcing authority.)

C. Aluminum frame swinging doors shall be equipped as follows:

1. The jamb on all aluminum frame swinging doors shall be so constructed or protected to withstand 1,600 pounds of pressure in both a vertical distance of 3 inches and a horizontal distance of 1 inch each side of the strike, so as to prevent violation of the strike.

2. A single or double door shall be equipped with a double cylinder deadbolt with a bolt projection exceeding 1 inch or a hook-shaped or expanding deadbolt that engages the strike sufficiently to prevent spreading. The deadbolt lock shall have a minimum of 5-pin tumblers and a cylinder guard.

D. Panic hardware, whenever required by the Building Code shall be installed as follows:

1. Panic hardware shall contain a minimum of 2 locking points on each door; or

2. On single doors, panic hardware may have 1 locking point, which is not to be located at either the top or bottom rails of the doorframe. The door shall have an astragal constructed of steel 1/8 inch thick, which shall be attached with nonremovable bolts to the outside of the door. The astragal shall extend a minimum of 6 inches vertically above and below the latch of the panic hardware. The astragal shall be a minimum of 2 inches wide and extend a minimum of 1 inch beyond the edge of the door to which it is attached.

- 3. Double doors containing panic hardware shall have an astragal attached to the doors at their meeting point, which will close the opening between them, but not interfere with the operation of either door.
- E. Horizontal sliding doors shall be equipped with a metal guide track at top and bottom, and a cylinder lock and/or padlock with a hardened steel shackle which locks at both heel and toe, and a minimum 5-pin tumbler operation with nonremovable key when in an unlocked position. The bottom track shall be so designed that the door cannot be lifted from the track when the door is in a locked position.
- F. In office buildings (multiple occupancy), all entrance doors to individual office suites shall meet the construction and locking requirements for exterior doors.
- G. Glazing shall be deemed accessible, if any portion of it is within 40 inches of any door locking mechanism, and shall be constructed of either two part laminated glazing with a 0.60 .0060 inch inner layer or burglary resistant glazing.
Exception: Glass doors at least 1/2 inch thick and greater than 2880 square inches.

(*) STANDARDS FOR ROOF OPENINGS [Ref. IMC Section 5-9-517]

[P] Roof openings shall be protected as follows if the roof is accessible via an exterior ladder or the roof is less than 20 feet from ground level or if any portion of it is within 12 feet vertically or 6 feet horizontally from any exterior accessible surface or any adjoining roof, balcony, landing, stair tread, or similar structure:

- A. All skylights on the roof of any building used for business purposes shall be provided with:
 - 1. Rated burglary-resistant glazing; or
 - 2. Iron bars of at least 1/2 inch round or 1 by 1/4 inch flat steel material under the skylight and securely fastened; or
 - 3. A steel grill of at least 1/8 inch material with a maximum 2 inch mesh under the skylight and securely fastened.
- B. All hatchway openings on the roof of any building or premises used for business purposes shall be secured as follows:
 - 1. If the hatchway is of wooden material, it shall be covered on the inside with at least 16 U.S. gauge sheet metal, or its equivalent, attached with screws.
 - 2. The hatchway shall be secured from the inside with a slide bar or slide bolts.
 - 3. Outside hinges on all hatchway openings shall be provided with nonremovable pins when using pin-type hinges. *{Ref. plans and details-*

(*) STANDARDS FOR EXTERIOR LADDERS [Ref. IMC Section 5-9-517]

[P] Exterior mounted ladders are prohibited except:

- A. Ladders with a minimum 1/8 inch thick steel plate, securely attached to the ladder edge on each side and extending to within 2 inches of the wall for a height of 10 feet above ground level. A door or cover shall be securely attached to the front of the ladder and be constructed of a minimum 1/8 inch steel, extending from ground level to at least 10 feet high. The ladder door shall have nonremovable hinge pins and be

locked tight against the side wall by a locking mechanism with a minimum 5-pin tumbler operation, and attached with nonremovable bolts from the exterior; or

- B. Ladders beginning a height of 10 feet above ground. *{Ref. plans, elevations, and applicable notes and/or details-*

EXTERIOR PHONE PANELS ARE PROHIBITED [Ref. IMC Section 5-9-517]

STANDARDS FOR LIGHTING [Ref. IMC Section 5-9-517]

Note: Performance standards are contained herein for reference. Compliance shall be demonstrated in photometric study preceding plan check approval.

Buildings, open parking lots, walkways, and accesses thereto shall conform to the following light standards and be arranged in such a way so as to conform to California Green Building Standards Code Section 5.106.5.2 and Zoning Code Section 3-16-1 which require that direct rays be confined to the site and that adjoining properties are protected from glare such that at 15 feet beyond site boundaries illumination is less than 0.01 horizontal footcandles.

- A. **[P]** All types of exterior doors shall be illuminated with an exterior light fixture, during the hours of darkness, with a minimum maintained 1 foot-candle of light, measured within a 5 foot radius on each side of the door at ground level. The light source shall be controlled by a photocell device or a timeclock with an astronomic clock feature and capable of operating during a power outage. *{Ref. plans, elevations, and applicable notes and/or details-*

- B. Recessed areas of buildings or fences, which have a minimum depth of 2 feet, a minimum height of 5 feet, and do not exceed 6 feet in width and are capable of human concealment, shall be illuminated with a minimum maintained 0.25 foot-candles of light at ground level during the hours of darkness. This requirement applies to defined recessed areas which are within 6 feet of the edge of a designated walking surface with an unobstructed pathway to it, not hindered by walls or hedge row landscaping a minimum of 2 feet in height.
- C. Stairways shall be illuminated with a minimum maintained 1 foot-candle of light on all landings and stair treads, during the hours of operation, including 1 hour thereafter.
- D. All interior or exterior corridors, passageways, and walkways in any hotel, motel, or inn shall be illuminated at all times with a minimum maintained 1 foot-candle of light on the walking surface.
- E. All exterior pedestrian walkways, interior common corridors, and open parking lots shall be illuminated with a minimum maintained 1 foot-candle of light on the walking, parking, or driving surface during the hours of operation and 1 hour thereafter.
- F. **[P]** For buildings required to have 2 or more exits, lighting for landings shall be on an emergency power system consisting of storage batteries or an onsite generator capable of providing power for 90 minutes, installed as required by California Building Code Section 1006.3 *{Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable-*

- G. The light source utilized to comply with this section to meet parking and drive surface lighting shall have a rated average bulb life of not less than 12,000 hours.
- H. Light fixtures for open parking lots may utilize motion sensing devices to raise and lower the light levels based upon the presence of vehicles or people. The light level shall not be less than minimum maintained .25 foot-candles of light at ground level when not occupied. The motion sensing device shall only be used after business hours and shall be adjusted to sense and activate light when a vehicle or person is within 24 feet of the fixture. Areas within a 50 foot radius of an elevator lobby/doors and stairways shall not fall below the required minimum maintained 1.0 foot-candles of light.
- I. **[P]** Accessible luminaires utilized to meet the requirements of this section have fully enclosed vandal resistant light fixtures and be not less than 3 feet in height from ground level when used to illuminate walkways and a minimum of 8 feet in height from ground level when illuminating surfaces associated with vehicles. Light fixtures shall be deemed accessible if mounted within 15 feet vertically or 6 feet horizontally from any accessible surface or any adjoining roof, balcony, landing, stair tread, platform, or similar structure. *{Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable-*

- J. **[P]** See plan sheet *{Ref. plans or note: This provision is not applicable-*

showing buildings, parking area, walkways, detailed landscaping with tree legend (if pole lights are used) and shrub legend (if bollards are used), fixture schedule, mounting height, lighting ratio, and a point-by-point photometric calculation of the required light levels. If parking lot is equipped with an occupancy sensor, then a point-by-point photometric calculation is required to show it meets the required minimum level of light. Foot-candles shall be measured at grade on a horizontal plane and conform to a uniformity ratio of 6:1 average/minimum. Landscaping shall not be planted so as to obscure required light levels and with light fixtures exceeding 8 feet in height installed at least 2 feet from a tree's canopy at 70 percent maturity. Private street, alley, and Fire Department required roadways designed for use in emergency only situations shall be illuminated using the same standards as established for public thoroughfares.

STANDARDS FOR ADDRESSING [Ref. IMC Section 5-9-517]

[P] Buildings shall display a street address number conforming to the following specifications:

- A. Numerals shall be mounted on the wall, no higher than 30 feet, and face the street on which the building is addressed. Numerals are to be clearly visible from this same street and not obscured by building landscaping at full maturity. Addressing shall be of a color contrasting to the background to which they are affixed. Method of attachment shall not include the use of two-sided tape or any material not resistant to weather conditions. *{Ref. plans, elevations, and applicable notes and/or details -*

- B. Where distance or intervening obstructions impair visibility from the street, addressing shall be mounted on all buildings so as to be visible from the drive aisles and walkways internal to the site, and each such address, or an encompassing range of addresses, shall be displayed on monument signs visible from each site entrance from all approaching directions. In such cases, directional wayfinding signs shall be designed per item E. below.

{Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable-

C. Numerals shall be no less than 6 inches in height if located less than 100 feet from the center line of the addressed street, or 12 inches in height if placed further than 100 feet from the center line of the addressed street. The numerals shall be in a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible, and illuminated during the hours of darkness with a minimum of 2 foot-candles of light on the numbers, using a light source provided with an uninterruptible A.C. power source or controlled only by a photoelectric device, which may be the common area site lighting. *{Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable-*

D. The rear doors and public entrances of all buildings shall have address numbers not less than 6 inches in height, using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible, and be of a color contrasting to the background to which they are affixed. Method of attachment shall not include the use of two-sided tape or any material not resistant to weather conditions. *{Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable-*

E. For sites having multiple buildings for which addressing mounted on building is not clearly visible from the street, or for which drive aisles diverge from a site entrance in a manner such that the direct route to each building is not obvious, vehicle directional signs shall be provided. Vehicle direction signage from the point of site entry to each building entrance shall display building addresses or unit number range, and be located at all turning points along the route to a building entrance. Bottom of the address numbers on the sign copy shall be no less than two feet from ground level and not obstructed by landscaping at full maturity or parked cars. Numerals shall be at least 4 inches in height using a Sans Serif font with a stroke weight of medium to bold or an approved equivalent font which is clearly legible. *{Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable-*

F. Buildings, except parking structures, with a total square footage of at least 10,000 square feet shall have rooftop numbers placed parallel to the addressed street, screened from public view and only visible from the air. The numerals are to be white, block lettered, constructed of weather resistant material, and placed against a black background. Address numbers are to be a minimum of 4 feet in height and 18 inches wide. When more than one street address is assigned to a building, the beginning and ending address numbers are to be placed on the rooftop, at opposite ends of the building, reflecting the approximate location of these addresses. Exceptions:

1. For buildings having white roofing, black lettering shall be used in lieu of white lettering.
2. Buildings providing addressing for a helipad as specified in the California Building Code.

{Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable-

G. For sites having more than three separately addressed buildings with a common area sidewalk connecting each building, and the primary building entrances are not visible from the street or parking lot, pedestrian directional signage shall be provided. Signs shall be posted at all decision-making points, including walkway entrances and intersections. Bottom of the address numbers on the sign copy shall be no less than two feet from ground level and not obstructed by landscaping at full maturity. Numerals shall be at least three inches in height using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.

H. A Wayfinding Plan shall be developed indicating the following:

- a. Location and wording of directional signage for vehicles and pedestrians;
- b. Location of building address numbers;
- c. Landscaping details for areas near any signage or address numbers, including elevation showing trees near exterior address numbers;
- d. Required lighting level on address numbers.

The plan shall include design drawings or exhibits that clearly illustrate the intent of the Wayfinding Plan. *{Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable-*

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(*) STANDARDS FOR ELEVATOR [Ref. IMC Section 5-9-517]

Elevators shall be designed as follows:

A. Elevator cabs, the interiors of which are not completely visible when the door is open from a point centered on and 36 inches away from the door, shall have shatter resistant mirrors or other equally reflective material so placed as to make visible the entire elevator cab from this point. The elevator cab shall be illuminated at all times with a minimum maintained 2 foot-candles of light at floor level. *{Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable as interior is completely visible per specification above-*

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B. Elevator emergency stop buttons shall be so installed and connected as to activate the elevator alarm when utilized.

(*) EMERGENCY ACCESS [Ref. IMC Section 5-9-519]

Private roads and parking areas or parking facilities when controlled by unmanned automated parking gates shall provide for police emergency access utilizing an approved radio controlled entry system and approved key switch device to be installed and designed as follows:

A. **[P]** The key switch control shall be installed at a height of 42 inches from finished driveway grade and a minimum of 15 feet from the entry/exit gate, and be located on the driver's side of the road or driveway. The key switch is to be accessible in such a manner as to not require a person to exit their vehicle to reach it; nor to require any back-up movements in order to enter/exit the gate. The key switch may be installed within a visitor telephone/intercom call box if meeting the above criteria. The control housing shall consist of heavy gauge metal, and be vandal- and weather-resistant and be mounted on a substantial structure such as a steel post, concrete, or masonry pedestal.

- B. Key switches shall be secured to the control housing, telephone/intercom call box, or parking ticket dispenser utilizing tamper resistant screws.
- C. Except for any open surface parking lot with less than 100 spaces, a radio controlled entry system shall be installed per City specifications.
- D. **[P]** Vehicle gates shall be designed to open in a power failure. *{Ref. plans, elevations, and applicable notes and/or details-*

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