# City of Irvine Uniform Security Code

### CHAPTER 5. UNIFORM SECURITY CODE

# Sec. 5-9-501. Purpose.

The purpose of this code is to provide minimum standards to safeguard property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of buildings and structures subject to the provisions of this code within the City of Irvine, as specified in Section 14051 of the California Penal Code relating to building safety.

(Code 1976, § V.I-502; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

# Sec. 5-9-502. Scope.

- A. The provisions of this code shall apply only to new constructions and to buildings or structures to which additions, alterations, or repairs are made, except as specifically provided by this code. When additions, alterations, or repairs made within any 12-month period exceed 50 percent of the value of the existing building or structure, such building or structure shall be made to conform to the requirements for new buildings and structures. When additions, alterations, and repairs do not exceed 75 percent or less of the value of an existing building, then only the new construction would have to meet the standards set forth by this code.
- B. Existing multiple dwelling units that are converted to privately owned family units (condominiums) shall comply with the provisions of section 5-9-516 of this code.
- C. Any existing structure which converts from its original occupancy group as designated in the Uniform Building Code, shall comply with the provisions of this code.
- D. Any building, as defined in the Uniform Building Code and Title 24, California Code of Regulations, requiring special type releasing, latching, or locking devices, other than described herein, shall be exempt from the provisions hereof relating to locking devices of interior and exterior doors.

(Code 1976, § V.I-503; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

# Sec. 5-9-503. Glossary.

For the purpose of this code, certain terms are defined as follows:

Alley is any roadway not exceeding 25 feet in width which is primarily used for access to the rear or side entrances of abutting property.

Approved means certified as meeting the requirements of this code by the enforcing authority or its authorized agents, or by other officials designated by law to give approval on a particular matter dealt with by the provisions of this code with regard to a given material, mode of construction, piece of equipment or device.

Astragal is a device, either fixed or movable, which eliminates the vertical opening between a pair of doors when in the closed position.

*Bolt* is a metal bar which, when actuated, is projected (or thrown) either horizontally or vertically into a retaining member, such as a strike plate, to prevent a door or window from moving or opening.

*Bolt projection* or *bolt thrown* is the distance from the edge of the door, at the bolt center line, to the farthest point on the bolt in the projected position.

Burglary resistant glazing means those materials as defined in Underwriters' Laboratories Bulletin 972.

Common area is an area of space, a building or portion of a building, which is legally accessible to the owners or users of a multi-tenant property.

*Cylinder* means the subassembly of a lock containing the cylinder core, tumbler mechanism and the keyway. A double cylinder lock is one, which has a key-actuated cylinder on both the exterior and interior of the door.

*Cylinder guard* means a tapered or flush metal ring or plate surrounding the otherwise exposed portion of a cylinder lock to resist cutting, drilling, prying, pulling or wrenching with common tools.

*Deadbolt* is a lock bolt which does not have a spring action. The bolt must be actuated by a key and a knob or thumb-turn, and when projected becomes locked against return by end pressure.

Dead latch or deadlocking latch bolt means a spring-actuated latch bolt having a beveled end and incorporating a plunger which, when depressed, automatically locks the projected latch bolt against return by end pressure.

Double cylinder deadbolt means a deadbolt lock which can be activated only by a key on both the interior and exterior.

Dwelling means a building or portion thereof designed exclusively for residential occupancy, including single-family and multiple-family dwellings.

*Enforcing authority* is the agency or person having the responsibility for enforcing the provisions of this code.

*Flushbolt* is a manual, key or turn-operated metal bolt normally used on inactive door(s), and is attached to the top and bottom of the door and engages in the head and threshold of the frame.

*Fully tempered glass* means those materials meeting or exceeding UCB Standard 24-2 for Safety Glazing.

*Glazing* is all glass, plastics, and fiberglass utilized as an exterior window, vision panel, light, or pane within any type of door.

*Hours of operation* shall mean the time period when any activity requires the presence of employees or workers within or about the affected business.

Hours of darkness shall mean any time from one-half hour before sunset and one-half hour after sunrise and any other time when the illumination level is less than the required lighting for uses as designated in this chapter.

Jamb means the vertical members of a door frame to which the door is secured.

*Jamb/wall* is that component of a door assembly to which a door is attached and secured; the wall and jamb used together are considered a unit.

Latch or latch bolt is a beveled, spring-actuated bolt, which may or may not have a deadlocking device.

*Lock (or lockset)* is a keyed device (complete with cylinder, latch or deadbolt mechanism, and trim such as knobs, levers, thumb turns, escutcheons, etc) for securing a door in a closed position against forced entry. For the purposes of this code, a lock does not include the strike plate.

Locking device is a part of a window assembly, which is intended to prevent movement of the moveable sash, which may be the sash lock or sash operator.

*Luminaire* is a complete lighting device consisting of a light source together with its direct appurtenances, such as globe, reflector refractor, housing and such support as is integral with the housing. The pole, post or bracket is not considered a part of the luminaire.

Minimum maintained foot-candles of light is the amount of light falling on that point of a surface with the least illumination, calculated through application of a maintenance factor, which is a multiplier applied to account for aging of the lamp and for dirt build-up on the luminaire during the period for which a lamp is in place.

*Multiple-family dwelling* means a building or portion thereof designed for occupancy by two or more families living independently of each other, including hotels, motels, apartments, duplexes and townhouses.

*Nonresidential* means any building, parking lot and associated areas used for any purpose other than a dwelling.

Panic hardware means a latching device on a door assembly for use when emergency egress is required due to fire or other threat to life safety. Devices designed so that they will facilitate the safe egress of people in case of an emergency when a pressure not to exceed 15 pounds is applied to the releasing device in the direction of exit travel. Such releasing devices are bars or panels extending not less than one-half of the width of the door and placed at heights suitable for the service require, not less than 30 nor more than 44 inches above the floor.

*Primary locking device* means the single locking system on a door or window unit whose primary function is to prevent unauthorized intrusion.

*Private or single-family dwelling* means a building designed exclusively for occupancy by one family.

*Rail* means the horizontal member of a window or door. A meeting rail is one which mates with a rail of another sash or a framing member of the door or window frame when the sash is in the closed position.

*Recreational space* means any public or private park, community common open space or paseo, bike trail, community swimming pools and associated sidewalks and parking lots.

*Sash* is an assembly of stiles, rails, and sometimes, mullions assembled into a single frame, which supports the glazing material. A fixed sash is one which is not intended to be opened. A moveable sash is intended to be opened.

Sill is the lowest horizontal member of a window frame.

*Single cylinder deadbolt* means a deadbolt lock, which is activated from the outside by a key and from the inside by a knob, thumb-turn, lever, or similar mechanism.

*Solid core door* means a door composed of solid wood or composed of compressed wood equal in strength to solid wood construction.

Stile is a vertical framing member of a window or door.

*Strike* is a metal plate attached to or mortised into a door or door jamb to receive and to hold a projected latch bolt and deadbolt in order to secure the door to the jamb.

Swinging door means a door hinged at the stile or at the head and threshold.

*Underwriters' Laboratories listed* means tested and listed by Underwriters' Laboratory, Inc.

Vandal resistant light fixture has a lens constructed of materials meeting or exceeding U.L. Bulletin 972 (Burglary Resistant Glazing) and a housing meeting or exceeding U.L. Bulletin 1572 (Wet Locations.)

Window assembly is a unit, which includes a window and the anchorage between the window and the wall.

Window frame is the part of a window, which surrounds and supports the sashes and is attached to the surrounding wall. The members include side jambs (vertical), head jamb (upper, horizontal), sill and mullions.

(Code 1976, § V.I-504; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

# Sec. 5-9-504. Enforcement provisions.

Enforcement of this code shall be the responsibility of the City Building Safety Division and the Irvine Police Department. All building officials and administrative authority determinations required by this code shall be made jointly by the responsible representatives of each function charged with administration of this code or individually as charged.

(Code 1976, § V.I-505; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

# Sec. 5-9-505. Right of entry.

A. Whenever necessary to make an inspection to enforce any of the provisions of this code, or whenever the Chief Building Official or his authorized representative has reasonable cause to believe that there exists in any building or upon any premises any condition or code violation which makes such building or premises unsafe, dangerous or hazardous, the Chief Building Official or his authorized representative may enter such building or premises at all reasonable times to inspect the same or to perform any duty imposed upon the Chief Building Official by this code, provided that if such building or

premises be occupied, he shall first present proper credentials and request entry; and if such building or premises be unoccupied, he shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry. If such entry is refused, the building official or his authorized representative shall have recourse to every remedy provided by law to secure entry.

B. When the Chief Building Official or his authorized representative shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care of control of any building or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the Chief Building Official or his authorized representative for the purpose of inspection and examination pursuant to this code.

(Code 1976, § V.I-506; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

Sec. 5-9-506. Reserved

Sec. 5-9-507. Violations and penalties.

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, move, improve, convert, or demolish, equip, use, occupy or maintain any building or structure in the City of Irvine or cause same to be done, contrary to or in violation of any of the provisions of this code.

(Code 1976, § V.I-507; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

# Sec. 5-9-508. Administrative relief.

A. In order to prevent or lessen the unnecessary hardship or practical difficulties in exceptional cases where it is difficult or impossible to comply with the strict letter of this code, the owner or his designated agent shall have the option to apply for an exemption from any provision of this code to the designated representative of the Public Safety Department and the City Chief Building Official. The reviewing authority shall exercise its powers on these matters in such a way that the public welfare is secured, and substantial justice done most nearly in accord with the intent and purpose of this code.

(Code 1976, § V.I-508; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 95-24, § 5, 11-28-95; Ord. No. 98-21, § 1, 12-8-98)

## Sec. 5-9-509. Life safety factors.

No portion of this code shall supersede any local, state, or federal law, regulation, or codes dealing with life safety factors.

(Code 1976, § V.I-509; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

# Sec. 5-9-510. Alternate materials and methods of construction.

- A. The provisions of this code are not intended to prevent the use of any material or method of construction not specifically prescribed by this code, provided any such alternate has been approved by the enforcing authority, nor is it the intention of this code to exclude any sound method of structural design or analysis not specifically provided for in this code. Materials, methods of construction, or structural design limitations provided for in this code are to be unless an exception is granted by the enforcing authority.
- B. The enforcing authority may approve any such alternate provided they find the proposed design to be satisfactory and the material and method of work is for the purpose intended, at least equivalent to that prescribed in this code in quality, strength, effectiveness, burglary resistance, durability and safety.

(Code 1976, § V.I-510; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

# Sec. 5-9-511. Keying requirements.

Upon occupancy by the owner or proprietor, each single unit in a tract or commercial development, constructed under the same general plan, shall have locks using combinations which are interchange free from locks used in all other separate dwellings, proprietorships or similar distinct occupancies.

(Code 1976, § V.I-511; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

Sec. 5-9-512. Reserved.

## Sec. 5-9-513. Frames; jambs; strikes; hinges.

Installation and construction of frames, jambs, strikes and hinges for exterior swinging doors and door leading from garage into dwelling unit shall be as follows:

A. Door jambs shall be installed with solid backing in such a manner that no voids exist between the strike side of the jamb and the frame opening for a vertical distance of six inches each side of the strike.

- B. In wood framing, horizontal blocking shall be placed between study at door lock height for three stud spaces each side of the door openings. Trimmers shall be full length from the header to the floor with solid backing against sole plates.
- C. Door stops on wooden jambs for in-swinging doors shall be of one-piece construction with the jamb. Jambs for all doors shall be constructed or protected so as to prevent violation of the strike.
- D. The strike plate for deadbolts on all wood framed doors shall be constructed of minimum 16 U.S. gauge steel, bronze, or brass, and secured to the jamb by a minimum of two screws, which must penetrate at least two inches into solid backing beyond the surface to which the strike is attached.
- E. Hinges for out-swinging doors shall be equipped with nonremovable hinge pins or a mechanical interlock to preclude removal of the door from the exterior by removing the hinge pins.
- F. When pairs of doors are utilized in residential structures, a one-piece assembly attached to the full-length edge of the inactive door leaf, incorporating an astragal and flush-bolts for the header and threshold, will be accepted as a strike plate, provided the assembly is constructed of aluminum or steel a minimum of one-eighth inch in thickness.
- G. All exterior doors equipped with lever-handled locking devices which operate the deadbolt shall have thresholds designed and installed so as to prevent the passing of rigid materials between the door and threshold to the interior.

(Code 1976, § V.I-512; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

Sec. 5-9-514. Windows; sliding glass doors.

The following requirements must be met for windows and sliding glass doors:

- A. Except as otherwise specified in this code, all openable exterior windows and sliding glass doors shall comply with the tests as set forth in section 5-9-528, "Tests."
- B. Louvered windows shall not be utilized if any portion of it is within eight feet vertically or six feet horizontally from any exterior accessible surface or any adjoining roof, balcony, landing, stair tread, platform or similar structure.

(Code 1976, § V.I-513; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

Sec. 5-9-515. Garage-type doors; rolling overhead, solid overhead, swing, sliding or accordion.

The above described doors shall conform to the following standards:

- A. Wood doors shall have panels a minimum of 5/16 inch in thickness with the locking hardware being attached to the support framing.
- B. 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 three inches of the strike area of the pilot or pedestrian access door.
- C. Fiberglass doors shall have panels a minimum density of six ounces per square foot from the bottom of the door to a height of seven feet. Panels above seven feet and panels in residential structures shall have a density not less than five ounces per square foot.
- D. Doors utilizing a cylinder lock shall have a minimum five-pin tumbler operation with the locking bar or bolt extending into the receiving guide a minimum of one inch.
- E. Doors that exceed 16 feet in width shall have two 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. Except in a residential building, 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.
- 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 one and one-half 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.

(Code 1976, § V.I-514; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

Sec. 5-9-516. Special residential building provisions.

The provisions of this section shall apply only to single- and multiple-family dwelling units.

A. Except for vehicular access doors, all exterior swinging doors of any residential building and garages, including the door leading from the garage area into the dwelling unit shall be equipped as follows:

- 1. All wood doors shall be of solid core construction with a minimum thickness of 1 3/4 inches, or with panels not less than 9/16 inch thick.
- 2. A single or double door shall be equipped with a single cylinder deadbolt lock. The bolt shall have a minimum projection of one inch and be constructed so as to repel 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 five-pin tumblers, and shall be connected to the inner portion of the lock by connecting screws of at least one-fourth inch in diameter.
- 3. 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 door frame.
- 4. Glazing in exterior doors, or within 40 inches of any locking mechanism, shall be of fully tempered glass or rated burglary resistant glazing.
- 5. Except where clear vision panels are installed, all front exterior doors shall be equipped with a wide-angle (180 degrees) door viewer.
- B. Single-family residential buildings shall display a street address number conforming to the following specifications:
- 1. Numerals shall be located where they are clearly visible from the street on which they are addressed. They 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.
- 2. Numerals shall be no less than four inches in height and illuminated during the hours of darkness. The numerals and light source shall be contained within a single, weather-resistant fixture. The light source shall be provided with an uninterruptible A.C. power source or controlled only by a photoelectric device. Nothing in this section shall preclude the requirement for circuit protection devices where applicable.
- 3. Address numbers on buildings farther than 100 feet from the center line of the addressed street shall, in addition to the illuminated address fixture, provide highly reflective four-inch high numerals, placed at the driveway entrance, at a height between 24 and 42 inches.
- 4. Any building which affords vehicular access to the rear through a public or private alley shall display, in a clearly visible location, a highly reflective address number a minimum of four inches in height.

- 5. Second dwelling units on the same single-family parcel, which are further than 100 feet from the center line of the addressed street or are not visible from the addressed street, in addition to the illuminated address fixture, shall have an illuminated address fixture containing a directional arrow or wording indicating the second dwelling unit location, and mounted on the primary dwelling unit that is visible from the addressed street.
- 6. There shall be positioned, at each entrance of a tract of 20 or more residences constructed on private streets, but using a single public street name and address, an illuminated diagrammatic representation of the complex which depicts the location of the viewer and the unit designations within the complex. It shall be lighted during the hours of darkness utilizing a light source which is constructed of weather and vandal resistant materials and provided with an uninterrupted power source or controlled by a photoelectric device. Nothing in this section shall preclude the requirement for circuit protection devices where applicable.
- C. Multiple family buildings shall display a street address number conforming to the following specifications:
- 1. Each individual unit within the complex shall display a prominent identification number not less than four inches in height, contrasting in color to the background to which it is affixed and clearly visible to approaching vehicles and/or pedestrians. It shall be located near, but not on, the dwelling unit entry door.
- 2. Numerals shall be no less than four inches in height and illuminated during the hours of darkness. The numerals and light source shall be contained with a single, weather-resistant fixture. The light source shall be provided with an uninterruptible A.C. power source or controlled only by a photoelectric device. Nothing in this section shall preclude the requirement for circuit protection devices where applicable. An illuminated fixture is not required when the address number can be lighted by an area lighting as required in section 5-9-516E regarding walkways and doors.
- 3. Complexes with two or more buildings with the same address or buildings containing a minimum of six separate street addresses, shall display minimum six-inch high identification numbers noting the address number and range of unit and/or building numbers within the building. They shall be placed on the building between eight and ten feet from ground level, and visible to approaching vehicles and/or pedestrians from all building sides. Identification numbers shall be of a color contrasting to the background to which they are attached and be illuminated during the hours of darkness. The light source shall be provided with an uninterruptible A.C. power source or controlled only by a photoelectric device.

- 4. Driveways servicing more than 20 individual dwelling units shall have minimum four-inch high identification numbers, noting the range of unit numbers, placed at the entrance to each driveway at a height between 36 and 42 inches above grade. The light source shall be provided with an uninterruptible A.C. power source or controlled only by a photoelectric device.
- 5. There shall be positioned, at each entrance of a multiple family dwelling complex with more than four buildings, an illuminated diagrammatic representation of the complex, which depicts the location of the viewer and the unit designations within the complex. It shall be lighted during the hours of darkness utilizing a light source, which is constructed of weather and vandal resistant materials and provided with an uninterruptible A.C. power source or controlled by a photoelectric device. Nothing in this section shall preclude the requirement for circuit protection devices where applicable.
- 6. In multiple family complexes, garages or carports not directly attached to the dwelling unit or placed next to the dwelling unit and discernible as being associated with one addressed dwelling unit shall not use corresponding dwelling unit addresses to identify the garage or carport.
- 7. Address identification numbers and/or letters shall not be affixed to a surface using two-sided tape or any material not resistant to weather conditions.
- 8. An eight and one-half-inch by eleven-inch site plan(s) of the complex shall be provided to the Police and Fire Authority. It shall contain all streets, sidewalks, buildings, including identification numbers and/or description, roof access locations, emergency services access key vaults or key override switches, fire hydrants, and fire extinguishers.
- D. Single-family dwelling units, garages, and tracts of homes shall conform to the following lighting standards:
- 1. All garage doors shall have a light fixture that is capable of illuminating the door. Garage doors accessed from alleys are to have vandal resistant light fixtures.
- 2. Private streets, alleys, and fire department required roadways designed for use only in emergency situations shall be illuminated using the same standards as established for public thoroughfares.
- E. Multiple-family buildings, carports, parking areas, driveways, and walking surfaces shall conform to the following lighting standards:
- 1. All vehicular drive surfaces, open parking areas and carports shall be illuminated with a minimum maintained one foot-candle of light at ground level during the hours of darkness.

- 2. All exterior common area pedestrian walkways and recreation areas shall be illuminated with a minimum maintained 0.25 foot-candle of light at ground level during the hours of darkness.
- 3. Open stairways and enclosed common area corridors shall be illuminated with a minimum maintained 0.5 foot-candle of light on all landings and stair treads during the hours of darkness. Enclosed stairways shall be illuminated at all times with a minimum maintained one foot-candle of light on all landings and stair treads.
- 4. Cluster mailboxes, trash enclosures/areas, vending machines, and public phones located on the exterior shall be illuminated with a minimum maintained one footcandle of light, measured within a five-foot radius at ground level, during the hours of darkness.
- 5. Recessed areas of building or fences, which have a minimum depth of two feet, a minimum height of five feet, and do not exceed six 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 six feet of the edge of designated walking surface with an unobstructed pathway to it, not hindered by walls or hedge row landscaping a minimum of two feet in height.
- 6. Accessible luminaires utilized to meet the requirements of this section shall have vandal resistant light fixtures and be not less than three feet in height from the walking surface when used to illuminate walkways and a minimum of 78 inches in height above the driving surface when illuminating surfaces associated with vehicles. Light fixtures shall be deemed accessible if mounted within 15 feet vertically or six feet horizontally from any accessible surface or any adjoining roof, balcony, landing, stair tread, platform or similar structure.
- 7. 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 10,000 hours.
- 8. A site plan shall be provided showing buildings, parking area, walkways, detailed landscaping and a point-by-point photometric calculation of the required light levels. Landscaping shall not be planted so as to obscure required light levels. Footcandles shall be measured on a horizontal plane and conform to a uniformity ratio of four to one (4:1 maximum/minimum).
- 9. The light source shall be controlled by a photocell device or a time-clock with an astronomic feature.

- F. Common-area laundry rooms in multiple-family complexes shall be designed and protected as follows:
  - 1. Entry doors shall have:
    - a. A minimum 600 square-inch clear vision panel, in the upper half of the door.
    - b. Automatic, hydraulic door closures.
    - c. Self-locking door locks equipped with a dead-locking latch, allowing exiting by a single motion and openable from the inside without the use of a key or any special knowledge or effort.
    - d. Nonremovable hinge pins for out-swinging doors to preclude removal of the door from the exterior by removing the hinge pins.
    - e. A latch protector consisting of minimum 0.125-inch-thick steel attached to the door's exterior with non-removable bolts from the exterior. It shall be two inches wide and extend a minimum of five inches above and below the strike opening and extend a minimum of one inch beyond the edge of the door. It shall have a metal anti-spread pin a minimum of 1/2 inch in length.
- 2. The laundry room shall be illuminated at all times with a minimum maintained five foot-candles of light at floor level, using a non-interruptible power source. There shall be no light switches inside the room that control light fixtures used to meet the lighting requirement.
- 3. Any portion of an openable window which is within eight feet vertically or six feet horizontally from any accessible surface or any adjoining roof, balcony, landing, stair tread, platform, or similar surface, or any climbable pole or tree, or any surface providing a foothold, shall be secured as follows:
  - a. Windows shall not provide an opening greater than 96 square inches: or
  - b. Transom windows opening at the top and hinged at the bottom may be utilized provided the bottom portion is not less than six feet from an exterior accessible surface.
- 4. The entire laundry room shall be visible from the exterior along common area walking or driving surfaces. Perimeter windows and interior mirrors may be utilized to meet this requirement.

- 5. Laundry rooms are to be located in high activity areas with natural surveillance opportunities, and not in remote or isolated locations.
- G. Mail boxes in multi-family complexes are to be located in highly visible areas adjacent to common area activity amenities.

(Code 1976, § V.I-515; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

# Sec. 5-9-517. Special nonresidential building provisions.

The provisions of this section shall apply to nonresidential units and structures.

- A. Swinging exterior glass doors, wood or metal doors with glass panels, solid wood or metal doors shall be constructed or protected as follows:
- 1. Wood doors shall be of solid core construction with a minimum thickness of 1 3/4 inches. Wood panel doors with panels less than one 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 six-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.
- 2. 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 two-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 one-inch by 1/4-inch flat steel material, spaced not more than five 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.

- 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 one 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 five-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 0.125 inch thick, which will cover the opening between the doors. The astragal shall be a minimum of two inches wide, and extend a minimum of one 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 ten 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 three inches and a horizontal distance of one 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 one inch or a hook-shaped or expanding deadbolt that engages the strike sufficiently to prevent spreading. The deadbolt lock shall have a minimum of five-pin tumblers and a cylinder guard.
- D. Panic hardware, whenever required by the Uniform Building Code or Title 24, California Code of Regulations, shall be installed as follows:
  - 1. Panic hardware shall contain a minimum of two locking points on each door; or

- 2. On single doors, panic hardware may have one 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 0.125 inch thick, which shall be attached with nonremovable bolts to the outside of the door. The astragal shall extend a minimum of six inches vertically above and below the latch of the panic hardware. The astragal shall be a minimum of two inches wide and extend a minimum of one 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 five-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 inch inner layer or burglary resistant glazing.
- H. 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 six feet horizontally from any exterior accessible surface or any adjoining roof, balcony, landing, stair tread or similar structure:
- 1. All skylights on the roof of any building used for business purposes shall be provided with:
  - a. Rated burglary-resistant glazing; or
  - b. Iron bars of at least one-half inch round or one by 1/4 inch flat steel material under the skylight and securely fastened; or
  - c. A steel grill of at least 1/8 inch material with a maximum two-inch mesh under the skylight and securely fastened.

- 2. All hatchway openings on the roof of any building or premises used for business purposes shall be secured as follows:
  - a. 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.
  - b. The hatchway shall be secured from the inside with a slide bar or slide bolts.
  - c. Outside hinges on all hatchway openings shall be provided with nonremovable pins when using pin-type hinges.

# I. Exterior mounted ladders are prohibited except:

- 1. Ladders with a minimum 1/8 inch thick steel plate, securely attached to the ladder edge on each side and extending to within two inches of the wall for a height of ten 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 ten 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 five pin tumbler operation, and attached with nonremovable bolts from the exterior; or
  - 2. Ladders beginning a height of ten feet above ground.
- J. There shall be no exterior phone panels.
- K. Buildings, open parking lots, walkways, and accesses thereto shall conform to the following light standards:
- 1. All types of exterior doors shall be illuminated during the hours of darkness, with a minimum maintained one foot-candle of light, measured within a five-foot radius on each side of the door at ground level. The light source shall be controlled by a photocell device or a time-clock with an astronomic clock feature and capable of operating during a power outage.
- 2. Recessed areas of buildings or fences, which have a minimum depth of two feet, a minimum height of five feet, and do not exceed six 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 six 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 two feet in height.

- 3. Stairways shall be illuminated with a minimum maintained one foot-candle of light on all landings and stair treads, during the hours of operation, including one hour thereafter.
- 4. All interior or exterior corridors, passageways and walkways in any hotel, motel or inn shall be illuminated at all times with a minimum maintained one foot-candle of light on the walking surface.
- 5. All exterior pedestrian walkways, interior common corridors, and open parking lots shall be illuminated with a minimum maintained one foot-candle of light on the walking or driving surface during the hours of operation and one hour thereafter.
- 6. 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 10,000 hours.
- 7. Accessible luminaires utilized to meet the requirements of this section have vandal resistant light fixtures and be not less than three feet in height from ground level when used to illuminate walkways and a minimum of eight feet in height from ground level when illuminating surfaces associated with vehicles. Light fixtures shall be deemed accessible if mounted within fifteen feet vertically or six feet horizontally from any accessible surface or any adjoining roof, balcony, landing, stair tread, platform or similar structure.
- 8. A site plan shall be provided showing buildings, parking area, walkways, detailed landscaping and a point-by-point photometric calculation of the required light levels. Foot-candles shall be measured on a horizontal plane and conform to a uniformity ratio of 4:1 average/minimum. Landscaping shall not be planted so as to obscure required light levels.
- L. Nonresidential buildings shall display a street address number conforming to the following specifications:
- 1. Numerals shall be located where they are clearly visible from the street on which they are addressed. They 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.
- 2. Numerals shall be no less than six 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 illuminated during the hours of darkness using a light source provided with an uninterruptible A.C. power source or controlled only by a photoelectric device.
- 3. The rear doors of all building shall have address numbers not less than six inches in height and be of a color contrasting to the background to which they are affixed.

4. Buildings 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 four 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 addressed.

# M. Elevators shall be designed as follows:

- 1. 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 two foot-candles of light at floor level.
- 2. Elevator emergency stop buttons shall be so installed and connected as to activate the elevator alarm when utilized.

(Code 1976, § V.I-516; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 92-8, § 3, 7-14-92)

# Sec. 5-9-518. Special parking facilities provisions.

A structure, garage or covered parking surface intended primarily for the storage of motor vehicles for any period of time, except for residential carports, shall comply with this section.

- A. Remote or detached parking facilities or any other parking surfaces which are constructed as a separate entity shall be assigned a street address number. The numerals shall be displayed at the main entrance using numbers a minimum of eight inches in height and of a color contrasting to the background to which they are affixed.
- B. Restrooms shall not be open to the general public and shall be continuously locked, with access provided only to authorized individuals. They shall be located in an area which is highly visible from the parking attendant kiosk or other area where natural surveillance is afforded.
- C. Directional signage, including floor designation and section, shall be provided on each level to expedite movement within the facility. Signage shall be a minimum of 12 inches in height and of a contrasting color to the background. It shall be displayed not less than 60 inches from the parking surface and be highly visible from within any portion of the facility.

- D. Structures or fencing designed to screen trash enclosures from public view shall be designed with no more than three solid walls and an access gate(s). They shall be designed in such a manner as to allow a maximum of six inches clearance between trash bins, walls and gates.
- E. Bicycle storage units or racks shall be located in high visibility areas.
- F. If removal of a metal drainage grating being used at grade along the exterior of the facility would provide access into the interior, the grating shall be securely fastened, rendering it non-removable from the exterior.
- G. Solid perimeter walls shall be either full height floor to ceiling or not exceed 42 inches in height from the parking surface.
- H. The number of pedestrian and vehicular access points shall be minimized. Except at vehicle and primary pedestrian openings, the structure shall be designed, to the satisfaction of the City, to preclude human entry from any exterior accessible surface to a height of eight feet. Chain link fencing shall not be utilized if visible from a public right of way. When required, fire authority openings in the form of swing-out gates shall be provided and secured by a padlock with a minimum 3/8-inch diameter shackle and five-pin tumbler operation.
- I. Exterior pedestrian doors which provide access into the parking facility, shall be constructed and equipped as follows:
- 1. A minimum 18 gauge steel and equipped with automatic hydraulic closure device.
- 2. A minimum 100-square-inch vision panel, with the width not less than five inches, to provide visibility into the area being entered. Vision panels shall meet requirements of the Uniform Building Code.
- 3. Vision panels shall preclude manipulation of the interior locking device from the exterior.
- 4. No openings within twenty-four inches of the locking device which would allow a piece of metal, 1/16-inch diameter or greater to be inserted and access gained to the interior side of the door.

- 5. When panic hardware is required, it shall have a self-locking mechanism and be constructed/equipped as follows:
  - a. Panic hardware on pairs of doors shall contain a minimum of two locking points on each door; or
  - b. On single doors, panic hardware may have one locking point, which is not located at either the top or bottom of the doorframe. When mortise hardware is utilized, a protective astragal consisting of a minimum 0.125 inch thick steel shall be attached to the exterior of the door and rendered nonremovable from the exterior. It shall be two inches wide and extend a minimum of five inches above and below the strike opening and extend a minimum of one inch beyond the edge of the door.
  - c. 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. Fire rated astragals, meeting specifications of the Uniform Building Code, shall be utilized when required. Astragals are not required when panic hardware is utilized with push pads offset a minimum of three inches from the door edges.
- 6. Emergency exits not intended, as a primary entrance shall have no exterior handles, knobs, or levers.
- 7. Hinges shall be equipped with nonremovable hinge pins or a mechanical interlock to preclude removal of the door from the exterior by removing the hinge pins.
- J. Stairways shall be designed as follows:
- 1. Interior doors shall have glazing panels a minimum of five inches wide and 20 inches in height and meet requirements of the Uniform Building Code.
- 2. Areas beneath stairways at or below ground level shall be fully enclosed or access to them restricted.
- 3. Stairways shall be designed to be completely visible from either the interior or exterior or both, unless mandated by the Uniform Building Code to be enclosed.
- 4. Fully enclosed interior or exterior stairways with solid walls, when required, shall have shatter resistant mirrors or other equally reflective material at each level and landing and be designed or placed in such a manner as to provide visibility around corners.

- K. Elevator cabs and lobbies shall be designed as follows:
- 1. Elevators which serve more than two floors, above ground level, with at least one shaft wall exposed to the exterior or interior shall have clear glazing installed in one wall to provide visibility into the elevator cab.
- 2. 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 two foot-candles of light at floor level.
- 3. Elevator emergency stop buttons shall be so installed and connected as to activate the elevator alarm when utilized.
- 4. Elevator lobbies, if enclosed, shall be constructed of glazing, the maximum amount allowed by the Uniform Building Code.
- L. Lighting of driveways, parking areas, walkways and doors shall conform to the following standards:
- 1. All parking, driving, and walking surfaces, except stairways, shall be illuminated at all times with a minimum maintained 1.25 foot-candles of light. *Exception:* Parking facilities which have physically precluded pedestrian and vehicle access during nonbusiness hours may provide a minimum maintained 0.25 of light on the parking, walking and driving surfaces.
- 2. Stairways shall be illuminated at all times with a minimum maintained two foot-candles of light on all landings and stair treads.
- 3. All types of exterior doors shall be illuminated, during the hours of darkness, with a minimum maintained one foot-candle of light, measured within a five-foot radius of each side of the door at ground level.
- 4. Recessed areas of buildings or fences, which have a minimum depth of two feet, a minimum height of five feet, and do not exceed six 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 six 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 two feet in height.
- 5. All luminaires utilized to meet the requirements of this section shall have vandal resistant light fixtures, if on the exterior, with no portion of the fixture placed less than 72 inches above the walking or driving surface.

- 6. The light source utilized to comply with this section to meet parking and drive surface lighting shall have rated average bulb life of not less than 10,000 hours.
- 7. A site plan shall be provided showing buildings' parking area, walkways, detailed landscaping and a point-by-point photometric calculation of the required light levels. Foot-candles shall be measured on a horizontal plane and conform to a uniformity ratio of 4:1 average/minimum. Landscaping shall not be planted so as to obscure required light levels.
- 8. The light source shall be controlled by a photocell device or a time-clock with an astronomic feature and capable of operating during a power failure.
- M. Landscaping around the perimeter of the structure shall not provide access to any portion of the structure unless the accessible point is protected as described in subsection H. hereinabove.

(Ord. No. 98-21, § 1, 12-8-98)

# Sec. 5-9-519. Emergency access.

- A. Private roads and parking areas or structures controlled by unmanned mechanical parking type gates shall provide for police emergency access utilizing an approved key switch device and designed as follows:
- 1. A control pedestal consisting of a metal post/pipe shall be installed at a height of 42 inches and a minimum of 15 feet from the entry/exit gate. It shall be located on the driver's side of the road or driveway and 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.
- 2. A control housing consisting of a heavy gauge metal, vandal and weather resistant square or rectangular housing which shall be installed on the top of the control pedestal. Keyswitch is to be mounted on the side facing the roadway.
- B. All lockable pedestrian gates to residential recreation areas serving six or more dwelling units, and gates or doors to common walkways or hallways of residential complexes where the there are four or more dwelling units within the complex, shall provide for police emergency access utilizing an approved keyswitch device or approved key vault which shall be installed as follows:
- 1. Pedestrian gates/doors using an electromagnetic type lock shall install a keyswitch within a telephone/intercom console or in a control housing as described in section (a)(2) above.
- 2. Pedestrian gates/doors utilizing mechanical locks shall install a key vault adjacent to each gate/door, securely attaching it to a fence or wall.

- C. Nonresidential multi-tenant buildings utilizing electronic access control systems on the main entry doors, and enclosed retail shopping centers shall provide police emergency access utilizing an approved keyswitch-device or approved key vault which shall be installed as follows:
- 1. All doors using an electromagnetic type lock shall install a keyswitch device within the building's exterior telephone/intercom console or in a control housing as described in section (a)(2) above, located within close proximity and in a visible area near the door.
- 2. Exterior main entry doors of an enclosed shopping center utilizing mechanical door locks shall install a key vault within close proximity and in a visible area near the door.

(Code 1976, § V.I-518; Ord. No. 92-8, § 3, 7-14-92; Ord. No. 98-21, § 1, 12-8-98)

# Sec. 5-9-520. Special recreational spaces provisions.

The provisions of this section shall apply to community buildings, parks, open spaces, trails, community swimming pools, and associated sidewalks and parking lots.

- A. Structures shall comply with all provisions of the Uniform Security Code except section 5-9-517, Special nonresidential building provisions, subsection K. regarding lighting standards.
- B. Exterior lighting shall conform to the following standards:
- 1. All types of exterior doors shall be illuminated during the hours of darkness with a minimum maintained one foot-candle of light at ground level, measured within a five-foot radius from the center of the door.
- 2. Recessed areas of buildings or fences, which have a minimum depth of two feet, a minimum height of five feet, and do not exceed feet in width and are capable of human concealment, shall 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 six feet of the edge of a designated walking surface with an unobstructed pathway to it, not hindered by walls or hedge tow landscaping a minimum of two feet in height.
- 3. Stairways shall be illuminated with a minimum one foot-candle of light on all landings and stair treads, during the hours of operation, including one hour thereafter.
- 4. Parking lots and walkways accessing buildings and parking areas shall be illuminated with a minimum maintained one foot-candle of light on the driving or walking surface during the hours of operation and one hour thereafter.

- 5. Bike trails not incorporated in the roadway shall be illuminated with a minimum maintained 0.25 foot-candles of light at ground level during the hours of darkness, except that any bike trail or recreational facility within the designated Natural Community Conservation Plan/Habitat Conservation Plan, Central Coastal Subregion reserve area shall be exempt from the requirements of this subsection.
- 6. Paved walkways in open space areas, not directly serving buildings or parking areas, shall be illuminated with a minimum maintained 0.25 foot-candles of light on the walking surface during the hours of operation and one hour thereafter.
- 7. Swimming pool decks and other hard surface recreation activity areas shall be illuminated with a minimum maintained one foot-candle of light on the walking surface during the hours of operation and one hour thereafter.
- 8. 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 10,000 hours.
- 9. Luminaires utilized to meet the requirements of this section shall have vandal resistant light fixtures, if accessible, and be not less than eight feet in height from ground level. A luminar not less than 42 inches may be utilized to illuminate a walkway if adjacent landscaping is of a variety which does not mature higher than two feet, and it does not interfere with the required light distribution for a distance of 16 feet along the walkway. Light fixtures shall be deemed accessible if mounted within 15 feet vertically or six feet horizontally from any accessible surface or any adjoining roof, balcony, landing, stair treads, platform or similar structure.
- 10. Activation of the required exterior lighting shall be either by a photocell device or a time clock with an astronomic clock feature.
- 11. A site plan shall be provided showing buildings, parking area, walkways, detailed landscaping and a point-by-point photometric calculation of the required light levels. Foot-candles shall be measured on a horizontal plane and conform to a uniformity ratio of 4:1 average/minimum. Landscaping shall not be planted so as to obscure required light levels.
- 12. Public recreation facilities and spaces shall utilize light poles and fixtures listed on the Irvine Community Services Department approved products list. C. Swimming pools shall be secured as follows:
- 1. Restroom doors and pool gates shall be equipped with automatic closure devices, dead latches, and a latch protector consisting of minimum 0.125-inch-thick steel, two inches wide and six inches long.
- 2. The pool equipment room or enclosure to be secured with either a deadbolt lock or padlock with a minimum five-pin tumbler operation, minimum three-eighths-inch thick shackle, and heel and toe locking.

- 3. The on and off switch for the spa is to be keyed.
- 4. Perimeter fencing, using either tubular steel or aluminum, is to be installed at a minimum height of six feet. Vertical fence pickets are to be spaced not more than four inches on-center and be designed to discourage climbing.
- 5. Emergency access to locked gates is to be provided through installation of a Knox box key vault which shall contain all keys required to enter the pool area at any time. The box is to be installed within eight feet of the gate and placed between four and five feet above ground level.
- 6. Selection of landscaping is to consider height of plants regarding providing needed visibility into the pool area from adjacent uses, buildings, and streets.
  - 7. Lighting shall conform to section 5-9-517.K.7 regarding lighting fixtures.
- 8. All entrances to nonpublic pools/spas shall have signage indicating it is private property and no trespassing allowed.
- 9. A public telephone allowing for 911 calls is to be installed and maintained within 25 feet of the main entry gate.
- D. Landscaping guidelines are as follows:
- 1. Plant materials utilized shall take into consideration the need for users of the space to easily view their surroundings as well as police patrols to monitor the area from adjacent streets.
- 2. Trees shall be positioned to avoid interfering with required lighting levels and take into consideration the height of canopies from ground level regarding surveillance opportunities by users of the space and police patrols.
- 3. Planting of wide hedge rows and narrow vertical plants adjacent to solid fences is encouraged.

(Ord. No. 98-21, § 1, 12-8-98; Ord. No. 01-21, § 2, 11-27-01)

Sec. 5-9-521--5-9-527. Reserved.

Sec. 5-9-528. Tests.

A. It shall be the responsibility of the owner, or his designated agent, of a building or structure falling within the provisions of this code to provide the enforcing authority with a written specification performance test report indicating that the materials utilized meet the minimum requirements.

- B. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that any material or any construction does not conform to the requirements of this code, or in order to substantiate claims for alternate materials or methods of construction, the enforcing authority may require tests as proof of compliance to be made at the expense of the owner or his agent by any agency which is approved by the enforcing authority.
- C. Specimens shall be representative, and the construction shall be verified by assembly drawings and bill of materials. Two complete sets of manufacturer or fabricator installation instructions and full-size or accurate scale templates for all items and hardware shall be included.
- D. Tests for sliding glass doors shall be conducted as follows:
- 1. The construction and size of the test door assemblies, jambs and headers, and all hardware components shall be representative of that for which acceptance is desired. The door assembly and mounting in the support fixture shall stimulate the rigidity normally provided to a door assembly in a building by the ceiling, floor and walls.
- 2. Sample doors submitted for testing shall be glazed. Panels shall be closed and locked with the primary locking device only. Doors shall be equipped with interlocking devices to prevent spreading or separation of the meeting stiles.
  - 3. Tests shall be performed on the samples in the following order: TEST A.

With the panels in the test position, a concentrated load of 800 pounds shall be applied to the vertical pull stile incorporating a locking device, at a point on the stile within six inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the door. With the load removed, determine if the primary locking device can be unlocked by manipulation, as described in Test H.

#### TEST B.

- (1) With panels in the test position, a concentrated load of 50 pounds shall be applied to the vertical pull stile incorporating a locking device, at a point on this stile within six inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the door while, simultaneously, an additional concentrated load of 200 pounds is applied to the same area of the same stile in a direction perpendicular to the plane of glass toward the interior side of the building. With the load applied, determine if the primary locking device can be unlocked by manipulation as described in Test H.
- (2) Repeat Test B(1) above, substituting 800 pounds for the indicated 50 pounds. Perform the manipulation tests with the load removed.

### TEST C.

- (1) With the panels in the test position, a concentrated load of 50 pounds shall be applied to the vertical pull stile incorporating a locking device, at a point on the stile within six inches of the loading device, in the direction parallel to the plane of the glass that would tend to open the door while simultaneously, an additional concentrated load of 200 pounds is applied to the same stile in the direction perpendicular to the plane of the glass toward the exterior side of the door. With the load applied, determine if the primary locking device can be unlocked by manipulation as described in Text H.
- (2) Repeat Test C (1) above, substituting 800 pounds for the indicated 50 pounds. Perform the manipulation tests with the load removed.

### TEST D.

With the movable panel lifted upward to its full limit within the confines of the door frame, a concentrated load of 800 pounds shall be applied separately to each vertical pull stile incorporating a locking device, at a point on the stile within six inches of the loading device in the direction parallel to the plane of the glass that would tend to open the door. With the load removed, determine if the primary locking device can be unlocked by manipulation, as described in Test H.

## TEST E.

- (1) With the movable panel lifted upward to its full limit within the confines of the door frame, a concentrated load of fifty pounds shall be applied to the vertical pull stile incorporating a locking device, at a point on the stile within six inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the door while simultaneously, an additional concentrated load of two hundred pounds is applied to the same area of the same stile in the direction perpendicular to the plane of the glass toward the interior side of the door. With load applied, determine if the primary locking device can be unlocked by manipulation as described in Test H.
- (2) Repeat Test E(1) above, substituting eight hundred pounds for the indicated fifty pounds. Perform the manipulation tests with the load removed.

# TEST F.

(1) With the movable panel lifted upward to its full limit within the confines of the door panel, a concentrated load of 50 pounds shall be applied to the vertical stile incorporating a locking device, at a point on the stile within six inches of the locking device, in the direction parallel to the plane of glass that would tend to open the door while, simultaneously, an additional concentrated load of 200 pounds is applied to the same area of the same stile in the direction perpendicular to the plane of the glass toward the exterior side of the door. With the load applied, determine if the primary locking device can be unlocked by manipulation, as described in Test H.

(2) Repeat Test F (1) above, substituting 800 pounds for the indicated 50 pounds. Perform the manipulation tests with the load removed.

### TEST G.

For inside sliding doors, repeat Test D, while simultaneously applying a concentrated load of 50 pounds at the end of the movable bottom rail near the meeting stiles inward. For outside sliding doors, repeat Test D while applying a concentrated load of 50 pounds at the end of the movable bottom rail near the meting stiles and outward.

### TEST H.

Lift, push, pull, or otherwise manipulate by hand the door relative to the clearances within the frame while attempting to open the door. This test shall be conducted continuously for five minutes. Examine the assembly and determine a method and position for inserting a tool through the assembly from the outside so as to contact the primary locking device or the latch. Two different tools shall be used: A knife or spatula with a thin blade approximately 1/32 inch thick, not more than one inch wide, and no longer than six inches; and a piece of stiff steel wire with a diameter of approximately 1/16 inch. Determine whether it is possible to insert the wire or manipulate with either of these tools so as to unlock the door within a five-minute time period.

#### TEST I.

With the following tools:

- (1) A knife or spatula with a thin blade approximately 1/32 inch thick, not more than one inch side, and no longer than six inches; and
- (2) A straight or Phillips screwdriver with a maximum six-inch shaft; remove from the door assembly all screws, glazing beans, or other mechanical fasteners which can be removed readily from the exterior within a time limit of five minutes. Determine if the primary locking device can be unlocked or entry gained by manipulation, as described in Test H.
- 4. Fixed panels. Fixed panels shall be fastened in accordance with the manufacturer's instructions. Test shall be performed in the following order:

## TEST A.

With the panels in the normal position, a concentrated load of 300 pounds shall be applied at midspan of the fixed jamb stile in the direction parallel to the plane of the glass that would tend to remove the fixed panel from the frame jamb pocket. With the load applied, determine if entry can be gained by manipulation, as described in subsection (d), paragraph (3), Test H, above.

TEST B.

With the panels in the normal position, a concentrated load of 300 pounds shall be applied at midspan of the fixed jamb stile in the direction parallel to the plane of the glass that would tend to remove the fixed panel from the frame jamb pocket while simultaneously, an additional concentrated load of 150 pounds is applied at midspan of the fixed panel interlock stile in the direction perpendicular to the plane of the glass which would tend to disengage the meeting stiles. With this load applied, determine if entry can be gained by manipulation, as described in subsection (d), paragraph (3), Test H, above.

### TEST C.

Repeat Test A with the fixed panel lifted upward to its full limit within the confines of the door frame. The lifting force need not exceed 150 pounds at the bottom of the exterior face of the meeting stile. With this load applied, determine if entry can be gained by manipulation, as described in subsection (d), paragraph (3), Test H, above.

- 5. A sliding door assembly shall fail these tests if at any time during or after the test, the sliding door assembly does not remain engaged, intact, and in the closed and locked position, or by manipulating an exposed component; or if one can enter through displaced or damaged portions.
- 6. The report shall include the following: Identification of the samples tested; type, size, location, and number of locking devices; type, location and number of anchors; type and thickness of glazing material, and an indication of whether or not the subject passed the test. The report shall also indicate at what point the assembly fails. The report shall be certified to be a true copy by the testing laboratory and shall be forwarded direct from the laboratory to the enforcing authority.
- 7. After September 1, 1979, all sliding door assemblies utilized under this code, shall have affixed to each a performance label identifying the following:
  - a. Manufacturer of product by name.
  - b. Testing laboratory.
  - c. Certification that the product complies with Section XVI, California Model Building Security Ordinance.
- E. For the purpose of this code, windows are classified as follows:
- Type A: Window assemblies incorporate one or more sashes that open by sliding in the plane of the wall in which the window is installed.
- *Type B:* Window assemblies incorporate one or more framed sashes which are hinged at or near two corners of the individual sash and open toward the exterior of the wall.
- *Type C:* Window assemblies incorporate one or more sashes which open toward the interior and are hinged at or near two corners of the sash.

Type D: Window assemblies incorporate one or more sashes which are hinged or pivot near the center so that part of the sash opens into the interior wall and part opens toward the exterior.

- 1. Window assemblies shall be mounted following the manufacturer's installation instructions. Install the window assembly in a text fixture, which simulates the wall construction required by Chapter 25 of the Uniform Building Code. The unit shall be fully glazed. The sash shall be closed and locked with the primary locking device only.
  - a. Tests for Type A window assemblies shall be performed in the following order:

## TEST A.

With the sliding sash in the normal position, a concentrated load of 200 pounds shall be applied separately to each member incorporating a locking device, at a point on the sash member within six inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the window. With the load removed, apply the manipulation text described in subsection (d), paragraph (3), Test H, above.

## TEST B.

With the sliding sash in the normal position, a concentrated load of 25 pounds shall be applied separately to each sash member incorporating a locking device, at a point on the sash member within six inches of the locking device in the direction parallel to the plane of the glass that would tend to open the window, while simultaneously, an additional concentrated load of 75 pounds is applied in the same area of the same sash member in the direction perpendicular to the plane of the glass toward the interior side of the window. With the load removed, apply the manipulation test described in subsection (d), paragraph (3), Test H, above.

#### TEST C.

With the sliding sash in the normal position, a concentrated load of 200 pounds shall be applied separately to each sash member incorporating a locking device, at a point on the sash member within six inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the window, while simultaneously, an additional concentrated load of 75 pounds is applied to the same area of the same sash member in the direction perpendicular to the plane of the glass toward the exterior side of the window. With the load removed, apply the manipulation test described in subsection (d), paragraph (3), Test H, above.

### TEST D.

With the sliding sash lifted upward to the full limit within the confines of the window frame, a concentrated load of 200 pounds shall be applied separately to each sash member incorporating a locking device, at a point on the sash within six inches of the locking device, in the direction parallel to the plane of glass that would tend to open the window. With the load removed, apply the manipulation test described in subsection (d), paragraph (3), Test H, above.

### TEST E.

With the sliding sash lifted upward to the full limit within the confines of the window frame, a concentrated load of 200 pounds shall be applied separately to each sash member incorporating a locking device, at a point on the sash within six inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the window, while simultaneously, an additional concentrated load of 75 pounds is applied to the same areas of the same sash member in the direction perpendicular to the plane of the glass towards the interior side of the window. With the loads removed, apply the manipulation test described in subsection (d), paragraph (3), Test H, above.

### TEST F.

With the sliding sash lifted upward to the full limit within the confines of the window frame, a concentrated load of 200 pounds shall be applied separately to each sash member incorporating a locking device, at a point on the sash member within six inches of the locking device, in the direction parallel to the plane of the glass that would tend of open the window, while simultaneously, an additional concentrated load of 75 pounds is applied to the same area of the same sash member in the direction perpendicular to the plane of the glass toward the exterior side of the window. With the load removed, apply the manipulation test described in subsection (d), paragraph (3), Test H, above.

## TEST G.

For inside sliding windows, repeat Test F while simultaneously applying a concentrated load of 25 pounds inward at the end of the movable bottom rail near the meeting stile opposite the lock stile. For outside windows, repeat Test F while simultaneously applying a concentrated load of 25 pounds in the same direction as the perpendicular load inward at the end of the movable bottom rail near the meeting stile opposite the lock outward.

## TEST H.

Perform the disassembly and manipulation test as described in subsection (d), paragraph (3), Test I, above.

b. The tests for Types B and C window assemblies shall be performed in the following order:

TEST A.With the swinging sash in the normal position, apply a concentrated load of 100 pounds within three inches of each end of the rail or stile which is opposite the hinged side, in the direction perpendicular to the plane of the glass that would tend to open the window.

### TEST B.

Repeat Test A and simultaneously apply a concentrated load of 100 pounds on the outside within one inch of the end of the stile or rail which is opposite the hinged side, in a direction parallel to the plane of the glazing which would tend to disengage the lock.

### TEST C.

With the swinging sash in the normal position, apply a concentrated load of 200 pounds on the rail or stile containing the locking device within six inches of the lock.

### TEST D.

Repeat Test B while simultaneously applying Test C. The manipulation test described in subsection (d), paragraph (3), Test H, above, shall be applied in Tests A, B, and D to the sash with the load removed.

## TEST E.

Perform the disassembly and manipulation test as described in subsection (d), paragraph (3), Test I, above.

c. Tests for Type D window assemblies shall be performed in the following order:

### TEST A.

With the sash in the normal position, simultaneously apply a concentrated load of 100 pounds within three inches of the ends of each rail or stile which is perpendicular to the pivot sides in the direction that would tend to open the sash.

### TEST B.

With the sash in the normal position, apply a concentrated load of 100 pounds on the rail or stile containing the pivot within one inch of the pivot in a direction parallel to the pivots.

## TEST C.

Repeat Test B applying the load to the opposite rail or stile.

# TEST D.

With the sash in the normal position, apply a concentrated load of 200 pounds on the rail or stile containing the locking device within six inches of the lock.

### TEST E.

Repeat Test D while simultaneously applying the load specified in Test B. Repeat Test D while simultaneously applying the load specified in Test C above. The manipulation test described in subsection (d), paragraph (3), Test H, above, shall be applied in Tests A, B, C and D above to the sash with the load removed.

## TEST F.

Perform the disassembly and manipulation test as described in subsection (d), paragraph (3), Test I, above.

- d. A window assembly shall fail these tests if at any time during or after the tests, the assembly does not remain engaged, intact, and in the closed and locked position, or by manipulating an exposed component; or, if one can enter through displaced or damaged portions.
- e. The report shall contain a description of the results of the test performed in accordance with the test methods above. The report shall include the following: Identification of the samples tested; type, location, and number of anchors; type and thickness of glazing material, and an indication of whether or not the subject passed the test. The report shall also indicate at what point the assembly fails. The test report shall be certified to be a true copy by the testing laboratory and shall be forwarded direct from the laboratory to the enforcing authority.
- f. After September 1, 1979, all window assemblies utilized under this code, shall have affixed to each, a performance label identifying the following:
- (1) Manufacturer of product by name.
- (2) Testing laboratory.
- (3) Certification that the product complies With Section XVI, California Model Building Security Ordinance.

(Code 1976, § V.I-517; Ord. No. 89-30, § 3, 11-28-89; Ord. No. 91-13, § 3, 6-25-91; Ord. No. 98-21, § 1, 12-8-98)