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Building
Security
Requirements

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BUILDING SECURITY REQUIREMENTS

I. Purpose of Regulations

Pursuant to Section 10.16.030 of the Montclair Municipal Code, this manual contains the rules and regulations necessary to facilitate the enforcement of Ordinance No. 357 and to set forth the minimum standards of construction for resistance to unlawful entry to the residential, commercial, and business structures located in the City of Montclair. This manual supersedes all previous manuals of rules and regulations pertaining to Ordinance No. 357.

II. Severability

This ordinance shall be deemed supplemental to any local, state or federal laws, regulations or codes dealing with life safety factors.

If any subsection, subdivision, sentence, clause, phrase or portion of this Chapter, or the application thereof to any person, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portion of the Chapter or its application to other persons.

III. Definitions of Technical Terms

The following terms used in this Chapter shall have the meanings listed below:

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

(b) "Auxiliary Locking Device" is a secondary locking system added to the primary locking system to provide additional security.

(c) "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 from moving or opening.

(d) "Bolt Projection (or bolt throw)" 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, when subjected to end pressure.

(e) "Burglary-resistant Glazing" means those materials as defined in Underwriters Laboratories Bulletin 972.

(f) "Commercial or Industrial Building" is a building, or portion thereof, used for a purpose other than dwelling.

(g) "Component" as distinguished from a part, is a subassembly which combines with other components to make up a total door or window assembly. For example, the primary components of a door assembly include: door, lock, hinges, jamb/wall, jamb/strike and wall.

(h) "Cylinder" is a subassembly of a lock containing the cylinder core, tumbler mechanism and the key way. A double cylinder lock is one which has a key-actuated cylinder on both the exterior and interior of the door.

(i) "Cylinder Core or Cylinder Plug" is the central part of a cylinder containing the key way, which is rotated BY THE KEY TO OPERATE THE LOCK MECHANISM.

(j) "Cylinder Guard" is a hardened metal ring or plate surrounding the otherwise exposed portion of a cylinder lock to resist cutting, drilling, prying, pulling, or wrenching with common tools.

(k) "Deadbolt" is a lock bolt which does not have a spring action as opposed to a match bolt, which does. The bolt must be actuated by a key and/or a knob or thumb turn and when projected becomes locked against return by end pressure.

(l) "Dead Latch" is 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.

(m) "Door Assembly" means a unit composed of a group of parts or components which make up a closure for a passageway through a wall. For the purposes of this division, a door assembly consists of the following parts: doors, hinges, locking device(s), operation contracts (such as handles, knobs, push plates); miscellaneous hardware and closure; the frame, including the head, threshold, and jambs plus the anchorage devices to the surrounding wall and a portion of the surrounding wall extending 36 inches from each side of the jambs and 16 inches above the head.

(n) "Door Stops" are the projections along the top and sides of a door jamb which check the door's swinging action.

(o) “Double Cylinder Deadbolt” is a deadbolt which can be activated only by a key from either the interior or exterior of the building.

(p) “Dwelling” is a building or portion thereof designated exclusively for residential occupancy, including single-family and multiple-family dwellings.

(q) “Flush bolt” is a normal manual, key/turn operated, or automatic releasing metal throw bolt, normally used on inactive door(s) that is attached to the top and bottom of the door and engages in the head and threshold of the frame.

(r) “Fully-tempered Glass” means those materials meeting or exceeding ANSI Standard 297.1 – Safety Glazing.

(s) “Inactive Leaf or Door” means either leaf or door of a pair of doors which has no surface-mounted hardware and which receives and holds the latch or bolt of the primary locking system.

(t) “Jamb” is the vertical members of a door frame to which the door is secured.

(u) “Jamb/Strike” means that component of a door assembly which receives and holds secure the extended lock bolt; the strike and jamb used together are considered a unit.

(v) “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.

(w) “Key-in-knob” is a lockset having the key cylinder and other lock mechanisms contained in the knob.

(x) “Latch or Latch Bolt” is a beveled, spring-actuated bolt, which may or may not have a deadlocking device.

(y) “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.

(z) “Locked Indicator” is a device indicating whether the lock set (deadbolt, etc.) is locked or open.

(aa) “Locking Device” is a part of a window or sliding door assembly which is intended to prevent movement of the movable sash or door.

(bb) “Minimum Maintained” means measurable light level at furthest point from lighting source at ground level.

(cc) "Multiple-family Dwelling" is a building or portion thereof designed for occupancy by one or more persons living independently of each other, including hotels, motels, apartments, duplexes, townhouses, and condominiums.

(dd) "Panic Hardware" is a latching device on a door assembly for use when emergency egress is required due to a fire or other threat to life safety. Such devices are 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 2/3 of the width of the door and placed at heights suitable for the service required, not less than 30 nor more than 44 inches above the floor.

(ee) "Part" as distinguished from component is a unit (or subassembly) which combines with other units to make up a component.

(ff) "Primary Locking Device" is the single locking system on a door or window unit whose function is to prevent unauthorized intrusion.

(gg) "Private Dwelling or Single-Family Dwelling" is a building designed exclusively for occupancy by one family.

(hh) "Rail" is the horizontal members of a sash frame. A meeting rail is one which mates with a rail of another sash or framing member of the window frame when the sash is in the closed portion.

(ii) "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 movable sash is intended to be opened.

(jj) "Sill" is the lowest horizontal member of a window frame.

(kk) "Single Cylinder Deadbolt" is a deadbolt lock which is activated from the exterior by a key and from the interior by a knob, thumb-turn, lever, or similar mechanism.

(ll) "Solid-Core Door" means a door composed of solid wood or compressed wood equal in strength to solid wood construction.

(mm) "Stile" is a vertical framing member of a window or door. A meeting stile is one which mates with a stile of another sash, or a vertical framing member of a door or window frame when the sash is in the closed position.

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

(oo) "Swinging Door" means a door hinged at the stile or at the head and threshold.

(pp) "U.L. Listed" means tested and listed by Underwriters Laboratories, Inc.

(qq) "Vandal Resistant Cover" is a protective cover constructed of either acrylic, polycarbonate or wire mesh which totally encloses the light source. The wire mesh must have a maximum ¼" mesh. The polycarbonate and acrylic must have a minimum 1/8" thickness. The purpose of the cover is to discourage the willful destruction of the light source.

(rr) "Visibility Corridor" is an opening of at least a 10" square and shall be located a minimum of 36" and not to exceed 50" above ground level.

(ss) "Window Assembly" is a unit composed of a group of parts or components which make up a closure to an opening in a wall or roof (including the anchorage) to control light, air, and other elements.

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

IV. Violations and Penalties

(a) It shall be unlawful for any person, firm, or corporation to erect, construct, enlarge, move, improve, convert, equip, use, occupy, or maintain any building or structure in the City of Montclair, or cause the same to be done, contrary to or in violation of any of the provisions of this Chapter. Any person, firm, corporation violating any of the provisions of this Chapter is guilty of a misdemeanor and shall be punishable for each offense, by fine of not more than \$500, or by confinement in jail for not more than six months, or by both fine and confinement in jail.

(b) Enforcement of this Chapter shall be with the full cooperation and assistance, as necessary, of the Police Chief and Fire Chief, or their designee.

V. Alternate Materials and Methods of Construction

Materials, methods, or construction or structural design limitations provided for in this Chapter are to be used unless an exception is granted.

The use of any material or method of construction not specifically prescribed by this Chapter may be allowed, provided any such alternate method or material has been approved by the enforcing authority prior to use.

The enforcing authority may approve any such alternate provided that they find the proposed design to be satisfactory and the material and method of work offered is for the purpose intended, at least equivalent to that prescribed in this Chapter in quality, strength, effectiveness, crime resistance, durability, and safety.

VI. Appeals

The Administrative Review Committee shall have the power and be required to hear appeals regarding determination of the suitability of alternate materials and methods of construction, and to provide for reasonable interpretation of the provisions of this Chapter in the event of a dispute. Any decision of the Administrative Review Committee may be directly appealed to the City Council of Montclair.

VII. 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 interchange free from locks used in all other separate dwellings, proprietorships or similar distinct occupancies within such tract or commercial development. Every applicant shall be required to provide the enforcing authority with written confirmation of compliance with the above requirements.

VIII. Garage-Type Doors, Roll-up Overhead, One-piece Overhead, Swing, Sliding, or Accordion

All garage-type doors shall conform to the following standards:

(a) Wood doors shall have panels a minimum of 5/16" in thickness with the locking hardware being attached to the support framing. Sectional door panel inserts shall be a minimum of 1/4" in thickness.

(b) Aluminum doors shall be a minimum thickness of .0215" and riveted together a minimum of 12" 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" of the strike area of the pilot or pedestrian access door.

(c) Steel doors shall be a minimum thickness of 26-gauge and meet the standards as set forth in Subsection (b) of this Section.

(d) Fiberglass commercial doors shall have panels a minimum of 6 ounces per square foot from the bottom of the door to a height of 7 feet. Panels above 7 feet and panels in residential structures shall have a density of not less than 5 ounces per square foot.

(e) Sliding or accordion doors; where sliding or accordion doors are utilized, shall be equipped with a retention device which shall be designed so that the door cannot be removed from the track when in the closed and locked position.

(1) One-piece doors shall have two lock receiving points, one located on each side of the door or used in the center of the door with the locking point located either in the floor or door jamb.

(f) All overhead or swinging doors shall be equipped with slidebolts which shall be capable of utilizing padlocks with a minimum 9/32" shackle.

(1) The entire slidebolt assembly shall be constructed of casehardened steel and shall have a frame a minimum of .120" in thickness, and a bolt diameter a minimum of 1/2", and shall protrude at least 1 1/2" into the receiving guide.

(2) Slidebolt assemblies shall be attached to the door with bolts which are nonremovable from the exterior. Rivets shall not be used to attach such bolt assemblies.

(3) Padlocks used with mounted slide bolts shall have a hardened steel shackle a minimum of 9/32" in diameter with heel-toe locking a minimum of five pin tumbler operation. The key shall be nonremovable when in an unlocked position.

(g) Doors utilizing a cylinder lock, the cylinder lock shall have a minimum five pin tumbler operation with the bolt or locking bar extending into the receiving guide a minimum of one inch.

(h) Pedestrian access doors: pedestrian access doors contained in garage-type doors shall comply to the standards set forth in Section XI (b) or (d) (Special Commercial Provisions, Required Equipment for Exterior Swinging Doors).

IX. Windows and Sliding Glass Doors

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

(a) Except as otherwise specified in Section X (Special Residential Building Provisions) and Section XI (Special Commercial Building Provisions), all operable exterior windows and sliding glass doors shall comply with the tests as set forth in Section XII (Tests).

(b) Louvered windows shall not be used when any portion of the window is less than 12 feet vertically or 6 feet horizontally from an accessible surface or any adjoining roof, balcony, landing, stair tread, platform, or similar structure.

X. Special Residential Building Provisions

The following special provisions shall apply to all residential dwellings:

(a) All exterior swinging doors shall be of solid-core construction with a minimum thickness of 1-3/4 inches, or with panels not less than 9/16" thick.

(b) Any swinging door leading from a garage into a residence shall be of solid-core construction with a minimum thickness of 1-3/8 inches.

(c) The above-described doors shall be equipped with a single-cylinder deadbolt having a minimum projection of one inch and embedment of at least $\frac{3}{4}$ inch into the strike receiving the bolt. The bolt shall be constructed to resist cutting tool attacks. 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 $\frac{1}{4}$ inch diameter.

The provisions of this subsection do not apply where panic hardware is provided or an equivalent device is approved by the enforcing authority. Further, a dual locking mechanism, constructed so that both deadbolt and latch can be retracted by a single action of the inside door knob or lever, may be utilized provided it meets all other specifications for locking devices.

(d) Installation and construction of frames and jambs for exterior swinging doors shall be as follows:

(1) 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 6 inches each side of the strike. Finger joints are prohibited within 12 inches vertically of any locking device.

(2) In wood framing, horizontal blocking shall be placed between studs at door lock height for three study spaces each side of the door openings. Trimmers shall be full length from the heads to the floor with solid backing against sole plates.

(e) The inactive leaf of double doors shall be equipped with metal flushbolts having a minimum embedment of 5/8 inch into the head and threshold of the door frame.

(f) Glazing in exterior doors or within 40 inches of a door locking mechanism shall be of fully-tempered glass or rated burglary resistance glazing.

(g) Hinges for out swinging exterior 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.

This requirement shall also apply to exterior hinges on any swinging door which leads from a garage into a residence.

(h) Strikeplates shall be constructed of minimum 16 U.S. gauge steel, bronze or brass a minimum of 3-1/2 inches in length and secured to the jamb with screws a minimum of 2-1/2 inches in length.

(i) All front exterior doors shall be equipped with a wide angle 180 degree door viewer, except where clear vision panels are installed.

(j) When panic hardware is provided, it shall be equipped and installed as follows:

(1) Panic hardware shall contain a minimum of two locking points on each door, one located at the header, the other at the threshold of the 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 door frame. The door shall have an astragal constructed of steel .125 inches thick which shall be attached with nonremovable bolts or welded 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.

(3) Double doors containing panic hardware shall be a full-length steel 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.

(k) The following provisions for address markings shall apply to residential dwellings:

(1) All residential structures shall display a street number in a prominent position so that it shall be easily visible from the street. The numbers shall be no less than 4 inches in height, of a color contrasting to the background and located and maintained so they may be clearly seen and read. Single-family dwellings shall have these numbers illuminated during the hours of darkness. If the structure has rear vehicle access, the street number shall be placed there as well.

(2) At each driveway entrance to a multiple-family dwelling complex or a private residential community which has access from a public roadway, there shall be an illuminated diagrammatic representation (plot plan) of the complex which shows the location of the viewer and the building units within the complex.

(3) In multiple-family dwelling complexes, any building having a separate identifying factor other than the street number shall be clearly identified in the manner described in this section. Each individual unit of residence shall have a unit identifying number, letter or combination thereof displayed upon the door.

(4) Buildings shall be numbered with the approval of the enforcing authority.

(5) This section shall not prevent supplementary numbering such as reflective numbers on street curbs or decorative numbering, but this shall be considered supplemental only and shall not satisfy the requirements of this section.

(6) Maps of the complex shall be furnished to the Police and the Fire departments upon completion of construction. The maps shall be legible and include building identification, unit identification, and shall be drawn to scale on 8-1/2 by 11 inch paper.

(l) All exterior doors within or related to multiple-family dwelling complexes shall be equipped with a lighting device which shall provide a minimum one foot candle of light at ground level during hours of darkness. Lighting devices shall be protected by vandal-resistant covers.

(m) Aisles, passageways and recesses related to and within multiple-family dwelling complexes shall be equipped with lighting devices which shall provide a minimum maintained one foot candle of light at ground level during hours of darkness. Lighting devices shall be protected by vandal-resistant covers.

(n) All parking lots, carports, garages and parking structures of multiple-family dwelling complexes shall be equipped with lighting devices which will provide a minimum maintained one foot candle of light on the parking surface during hours of darkness. Subterranean parking lots shall maintain lighting 24 hours a day. Lighting devices shall be protected by vandal-resistant covers.

(o) All exterior required lighting devices shall be placed at a height which will fully illuminate an average adult.

(p) In multiple-family dwelling complexes where a common laundry is supplied, the laundry room's access door shall be equipped with a window, self-closure device and self-locking door lock which can be manually disengaged on the interior. Lighting shall be maintained inside the laundry room during hours of darkness.

(q) When emergency access to or within a multiple-family dwelling complex or private residential community is unduly difficult because of secured openings or where immediate access is necessary for lifesaving or emergency purposes, a key override is to be installed in an accessible location. The key override shall be mastered to the Police department keys.

(r) All skylights on the roof of any residential structure shall be provided with rated burglary-resistant glazing.

(s) Passenger elevators, the interiors of which are not completely visible when car doors open, shall have mirrors so placed as to make visible the whole of the elevator interior to prospective passengers outside the elevator.

(t) Whenever a mail slot is located within 40 inches of the primary locking device on any exterior door, it shall be covered by an interior hood which will discourage manipulation of the primary locking device.

(u) All exterior block wall fencing of multiple-family dwelling complexes shall have intervals providing visibility corridors, which will allow visibility of the interior from outside the wall, and these visibility corridors shall be placed at regular intervals. These will be required on the side facing the street only, and shall meet aesthetic standards set by the Development Review Committee.

(v) Permanent affixed ladders leading to roofs shall be fully enclosed with a minimum 1/8 inch thick sheet metal to a height of 10 feet. This covering shall be locked against the ladder with a case-hardened hasp, secured with nonremovable screws or bolts and a padlock with a minimum 3/8 inch hardened steel shackle, locking at both heel and toe, and a minimum five pin tumbler operation with nonremovable key when in an unlocked position. Hinges on the cover will be provided with nonremovable pins when using pin-type hinges.

XI. Special Commercial Building Provisions

(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. Hollow metal doors shall be constructed a minimum equivalent to 16 U.S. gauge steel and have sufficient reinforcement to maintain the designed thickness of the door when any locking device is installed; such reinforcement being able to restrict collapsing of the door around the locking device.

(2) Except when double cylinder deadbolts are utilized or safety glazing is required by Chapter 54 of the Uniform Building Code, any glazing installed within 40 inches of any door locking mechanism shall be constructed or protected as follows:

- [i] Fully-tempered glass or rated burglary-resistant glazing; or
- [ii] Iron or steel grills of at least 1/8 inch mesh secured with nonremovable bolts on the inside of the glazing may be utilized; and framing for iron or steel grills shall be by one inch by 1/4 inch flat metal secured by nonremovable bolts; or
- [iii] The glazing shall be covered with iron or steel bars of at least 1/2 inch round or one inch by 1/4 inch flat metal, spaced not more than five inches apart and secured with removal-resistant bolts;
- [iv] The protective bars or grills 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 doors with the exception of aluminum frame swinging 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 cutting tool attacks. The deadbolt shall have an embedment of at least $\frac{3}{4}$ inch into the strike receiving the project 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 $\frac{1}{4}$ inch in diameter. All deadbolts will be equipped with a locked indicator. Exposed installation screws on double cylinder deadbolts shall be nonremovable. The provisions of this subsection do not apply where (1) panic hardware is provided, or (2) an equivalent device is approved by the enforcing authority. Locking devices shall be mounted at a height of not less than 30 inches nor more than 44 inches above the finished floor.

(2) Hinges for out-showing 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.

(3) Whenever a mail slot is located within 40 inches of the primary locking device on any exterior door it shall be covered by an interior hood which will discourage manipulation of the primary locking device.

(4) Strikeplates shall be constructed of minimum 16 U.S. gauge steel, bronze, or brass, a minimum of 3-1/2 inches in length and secured to the jamb with screws a minimum of 2-1/2 inches in length.

(c) All exterior double doors shall be equipped as follows:

(1) The inactive leaf of double doors shall be equipped with automatic releasing metal flushbolts having a minimum embedment of $\frac{5}{8}$ inch into the header and threshold of the door frame or by panic hardware which contains a minimum of two locking points, one located at the header, the other at the threshold of each door.

(2) Double doors shall have a full-length astragal, constructed of steel a minimum of .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 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 inch centers.

(d) Aluminum frame swinging access doors shall conform to the following:

(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 one inch each side of the strike, so as to prevent violation of the strike.

(2) Aluminum-frame swinging doors shall be equipped with a two-point locking mechanism consisting of a deadbolt having a minimum bolt projection of 1-1/2 inches, or a hook-shaped or similar bolt that engages the strike sufficiently to prevent spreading and a metal automatic releasing threshold bolt having a minimum embedment of 5/8 inches into the floor. The deadbolt lock shall have a minimum of five pin tumblers, and a cylinder guard and shall be equipped with a locked indicator.

(e) Panic hardware, whenever provided, shall be equipped and installed as follows:

(1) Panic hardware shall contain a minimum of two locking points on each door, one located at the header, the other at the threshold of the 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 door frame. The door shall have an astragal constructed of steel .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 a full length astragal constructed of steel, attached to the doors at their meeting point which will close the opening between them, but not interfere with the operation of either door.

(f) Installation and construction of frames and jambs for exterior swinging doors shall be as follows:

(1) 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. Finger joints are prohibited.

(2) In wood framing, horizontal blocking shall be placed between studs at door lock height for three study spaces each side of the door openings. Trimmers shall be full length from the heads to the floor with solid backing against sole plates.

(g) In multiple-occupancy office buildings, all entrance doors to individual office suites shall meet the construction and locking requirements for exterior doors.

(h) In multiple-occupancy buildings, interior walls, framing, and covering dividing the individual suites shall not end at the false ceiling, but shall continue to the real roof.

(i) Exterior transoms or windows shall be deemed accessible if less than 12 feet above ground or adjacent to any pedestrian walkway. Accessible windows and transoms having a pane or opening exceeding 96 square inches, with the smallest dimension exceeding 6 inches and not visible from a public or private thoroughfare shall be protected in the following manner:

(1) Fully-tempered glass or burglary-resistant glazing; or
(2) The following window barriers may be used but shall be secured with bolts which are nonremovable from the exterior:

[i] Interior or exterior steel or iron bars of at least ½ inch round or 1 x ¼ inch flat metal spaced not more than five inches apart and securely fastened; or

[ii] Interior or exterior iron or steel grills of at least 1/8 inch metal with not more than a two inch mesh and securely fastened.

(3) The protective bars or grills shall not interfere with the operation of opening windows if such windows are required to be openable by the Uniform Building Code.

(j) Roof openings shall be equipped as follows:

(1) All skylights on the roof of any building or premises used for business purposes shall be provided with:

[i] Rated burglary-resistant glazing; or

[ii] Iron or steel bars of at least ½ inch round or 1 x ¼ inch flat metal spaced not more than five inches on center to cross the narrowest dimension of the opening being covered. If the narrowest dimension of that opening exceeds 18 inches, cross members shall be welded into place, not more than 18 inches apart beginning with a cross member at the center of the opening. Cross members shall be welded to each and every bar it crosses. The entire bar assembly shall be mounted inside the skylight and shall be attached to the building structure by means of machine bolts spaced not more than 18 inches apart or attached by means of an equivalent method approved by the enforcing authority; or

[iii] A steel or iron grill of at least 1/8 inch metal with a maximum of 2 inch mesh mounted inside the skylight and secured by bolts which are nonremovable from the exterior.

[iv] These requirements do not apply on any structure with a height of 35 feet or more where there is no readily available roof access as determined by the enforcing authority.

(2) All hatchway openings on the roof of any building or premises used for business purposes shall be secured as follows:

[i] If the hatchway is of wooden material, it shall be covered on the inside with at least 16 U.S. gauge sheet steel, or its equivalent, attached with screws.

[ii] The hatchway shall be secured from the inside with a slide bar or slide bolts which are attached by nonremovable bolts.

[iii] Outside hinges on all hatchway openings shall be provided with nonremovable pins when using pin-type hinges.

(3) All air duct or air vent openings exceeding 96 square inches on the roof or exterior walls of any commercial building shall be secured by covering same with either of the following:

[i] Iron or steel bars of at least 1/2 inch round or 1 x 1/4 inch flat metal spaced no more than 5 inches apart and securely fastened.

[ii] Iron or steel grills of at least 1/8 inch metal with a maximum of 1 inch mesh and securely fastened.

[iii] If the barrier is on the outside, it shall be secured with bolts which are nonremovable from the exterior.

[iv] The above must not interfere with venting requirements, creating potentially hazardous conditions to health and safety, or conflict with the provisions of the Uniform Building Code or Title 19, California Administrative Code.

(k) Permanently affixed ladders leading to the roofs shall be fully enclosed with minimum 1/8 inch thick sheet metal to a height of 10 feet. This covering shall be locked against the ladder with a case hardened hasp, secured with nonremovable screws or bolts and a padlock with a minimum 3/8 inch hardened steel shackle, locking at both heel and toe, and a minimum five pin tumbler operation with nonremovable key when in an unlocked position. Hinges on the cover will be provided with nonremovable pins when using pin-type hinges.

(l) A building located within 8 feet of utility poles, trees or similar structures which allow access to the building's roof, windows or other openings shall have a such access are barricaded or fenced with materials to deter human climbing.

(m) The following standards for lighting and address markings shall apply to commercial buildings:

(1) The address number of every commercial building shall be located, maintained, and displayed so that it shall be easily visible from the street. Numerals in these numbers shall be no less than six inches in height and be of a color contrasting to the background. In addition, any business which affords vehicular access to the rear through any driveway, alleyway or parking lot shall also display the same numbers and business name on the rear of the building.

(2) In multiple-unit business complexes, any building having a separate identifying factor other than the street number shall be clearly identified pursuant to the provisions of this section.

(3) Maps of the complex shall be furnished to the police and fire departments upon completion of construction. The maps shall be legible and include building identification, unit identification, and shall be drawn to scale on 8-1/2 x 11 inch paper.

(4) All exterior doors shall be equipped with a lighting device which shall provide a minimum maintained one foot candle of light at ground level during hours of darkness. Lighting devices shall be protected by vandal-resistant covers.

(5) All parking lots, and access thereto, providing more than 10 parking spaces and for use by the general public, shall be provided with a minimum maintained one foot candle of light on the parking surface from dusk until the termination of business every operating day. At all other hours of darkness, a minimum maintained .25 foot candle of light shall be provided at ground level.

(6) Exterior lighting shall not shine away from subject property.

(n) Interior night lighting shall be maintained in those areas that are visible from the street (ground floors only).

(o) All exterior block wall fencing shall have intervals providing visibility corridors which will allow visibility of the interior from outside the wall, and these visibility corridors shall be placed at regular intervals. This applies only to block walls visible from the street, and shall meet aesthetic standards set by the Development Review Committee.

(p) Passenger elevators, the interiors of which are not completely visible when the car door is open, shall have mirrors so placed as to make visible the whole of the elevator interior to prospective passengers outside the elevator.

(q) When emergency access to or within a commercial complex is unduly difficult because of secured openings or where immediate access is necessary for life saving or emergency purposes, a key override is to be installed in an accessible location. The key override shall be mastered to the police department keys.

(r) Establishments having a square footage of 6,000 feet or more or having specific type inventories shall be protected by the following burglar alarm service:

(1) Silent burglar alarm system with a central station hook-up and required 24-hour supervised service:

- [i] Jewelry store manufacturing, wholesale or retail.
- [ii] Any establishment manufacturing, storing or selling firearms and ammunition.
- [iii] Establishments selling or storing wholesale liquor, tobacco, or drugs.
- [iv] Facilities selling or storing furs.

(2) Silent burglar alarm system not requiring a central hook-up or supervised services:

- [i] Liquor stores,
- [ii] Drug stores,
- [iii] Pawnshops,
- [iv] Establishments manufacturing, storing or selling electronic equipment,
- [v] Establishments manufacturing, storing or selling industrial tool supplies,
- [vi] Establishments dealing in coins and stamps,
- [vii] Establishments manufacturing, storing, or selling cameras,
- [viii] Clothing stores (new).

(3) Local or audible burglar alarm system:

- [i] Antique dealers,
- [ii] Art galleries,
- [iii] Service stations,
- [iv] Food markets.

(4) Nothing in this subsection shall preclude the use of an alarm system providing a higher level of security than that which is required.

XII. Tests

(a) It shall be the responsibility of the owner of record or owner with right of sole possession, or owner or his designated agent, of a building or structure falling within the provisions of this Chapter 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 Chapter or evidence that any material or any construction does not conform to the requirements of this Chapter, 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 simulate 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.

(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 6 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 the stile within 6 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 directed in Test H.

(2): Repeat Test B (1) 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 6 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 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 C (1) 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 6 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 E (1): With the movable panel lifted upward to its full limit within the confines of the door frames, 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 6 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 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 F (1) 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 simultaneously applying a concentrated load of 50 pounds at the end of the movable bottom rail near the meeting stiles and outward.

Test H: Lift, push, pull, or otherwise manipulate by hand the door relative to the clearance 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 to 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 wide, and no longer than six inches; and
- (2) A straight or Phillips screwdriver with a maximum 6 inch shaft.

Remove from the door assembly all screws, glazing beads, 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 shall be fastened in accordance with the manufacturer's instructions. Tests 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 mid-span 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 mid-span 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 mid-span 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 by manipulating an exposed component; or if one can enter through displaced or damaged portions.

(6) The test 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 test report shall also indicate at what point the assembly fails. The test report shall be certified to be a true copy of the testing laboratory and shall be forwarded direct from the laboratory to the enforcing authority.

(e) For the purpose of this Chapter, 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 test 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.

[i] Test 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 test described in Subsection (d), Paragraph (3), Test H, above.

Test B: 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 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 the 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 area of the same sash member in the direction perpendicular to the plane of the glass towards the interior side of the window. With the load 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 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 towards the interior 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 sliding 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 stile outward.

Test H: Perform the disassembly and manipulation test as described in Subsection (d), Paragraph (3), Test I, above.

[ii] The tests for type 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.

[iii] 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.

(2) 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 by manipulating exposed component; or if one can enter through displaced or damaged portions.

(3) The test report shall contain a description of the results of the test performed in accordance with the test methods above. The test 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 of the testing laboratory and shall be forwarded direct from the laboratory to the enforcing authority.

XIII. Construction Site Security Provisions

All new construction, on site exceeding one acre in area, shall comply with the following security measures until the permanent utilities have been released by the City.

(a) Perimeter lighting shall be installed at a minimum of 150-foot intervals and at a height not less than 15 feet from the ground. The light source used shall have a minimum light output of 2,000 lumens, be protected by a vandalism-resistant cover, and be lighted during the hours of darkness.

(b) In addition to perimeter lighting described in (a) above, one of the following shall be used:

(1) Fencing, not less than six feet in height, which is designed to preclude human intrusion, shall be installed along the perimeter boundaries of the construction site, or

(2) A uniformed security guard, licensed according to Business and Profession Code, Chapter 11, shall continuously patrol the construction site during the hours when construction work has ceased.