



CITY OF LOS ANGELES



**Title 24, California Code of Regulations
Accessibility Regulations Correction List for
Public Accommodations and Commercial Facilities
(Effective 11-01-2002)**

The State of California delegates to the City/County the authority to ensure compliance with Title 24, Part 2 of the California Code of Regulations. This correction list indicates specific areas of Title 24, Part 2 which are applicable to your project. Please be aware that the owner(s) of this building and his/her consultants are responsible for compliance with Federal Regulations contained in the Americans with Disabilities Act (ADA). Where the ADA requirements exceed those contained in Title 24, Part 2, it is the owner's responsibility to ensure compliance with the ADA, as the City/County is not delegated the authority to plan review or inspect projects for ADA compliance.

PLAN CHECK NO. _____ PLAN CHECK EXPIRATION DATE _____

JOB ADDRESS _____

OCCUPANCY GROUP _____ TYPE OF CONSTRUCTION _____ NO. OF STORIES _____

APPLICANT _____ TELEPHONE _____

E-MAIL _____

ADDRESS _____

REVIEWED BY _____ DATE _____ TELEPHONE _____

RECHECKED BY _____ DATE _____ TELEPHONE _____

INSTRUCTIONS

- Corrections with circled item numbers apply to this plan check.
- In the left hand margin of the circled corrections, please indicate the sheet number and detail or note number on the plans where the corrections are made. Resubmit marked original plans and two corrected sets of plans and this plan review list.
- Items in ***Bold and Italic*** reflect changes effective November 1, 2002.
- Incomplete or unreadable drawings will not be accepted.
- The plan check engineer will be available for conference and telephone calls between the hours of _____ and _____ on the following days: _____. **Appointments are recommended.**

Publicly funded buildings, structures, sidewalks, curbs and related facilities shall be accessible to people with disabilities as follows:

Sec. 101.17.11 Part 1, Title 24, CCR (aka California Building Code).

1. All buildings, structures, sidewalks, curbs and related facilities constructed **in the State** by the use of State, County or municipal funds, or the funds of any political subdivision of the State.
2. All buildings, structures, and facilities, which are leased, rented, contracted, sublet or hired for periods in excess of two years by any municipal county, or State division of government, or by a special district.
3. All publicly funded living accommodations.
4. All publicly funded buildings used for congregate residences or for one or two family dwelling unit purposes shall conform to the provisions applicable to living accommodations.
5. All existing publicly funded buildings and facilities when alterations, structural repairs or additions are made to such buildings or facilities. For detailed requirements on existing buildings, see Chapter 11B, Division IV, Section 1134B.

All **privately funded** public accommodations as defined, and commercial facilities, as defined, shall be accessible to people with physical disabilities as follows: Section 101.17.11, Part 2, Title 24, CCR (aka California Building Code).

Exception: Certain types of privately funded multi-story buildings do not require installation of an elevator to provide access above and below the first floor:

I. Stairs used solely for emergency egress. Sec 1103B.1 Exception 1

ii Floors or portions of floors not customarily occupied, including, but not limited to, elevator pits, piping and equipment catwalks and machinery rooms. Sec 1103B.1, Exception 2.

iii The following types of privately funded multi-story buildings do not require a ramp or elevator above and below the first floor: Sec 1103B.1, Exception 3.

A. Multi-storied office buildings (other than the professional office of a health care provider) and passenger vehicle service stations less than three stories high, or less than 3,000 square feet per story.

B. Any other privately funded multi-storied building that is not a shopping center, shopping mall or professional office of a health care provider, and that is less than three stories high or less than 3,000 square feet per story if a reasonable portion of all facilities and accommodation normally sought and used by the public in such a building are accessible to and usable by persons with disabilities.

1. Any building, structure, facility, complex or improved area or portions thereof which is used by the general public.
2. Any sanitary facilities which are made available for public, clients or employees in such accommodations or facilities.
3. Any curb or sidewalk intended for public use that is constructed in this State with private funds.
4. All existing privately funded public accommodations when alterations, structural repairs or additions are made to such public accommodation as set forth under Section 1134B.

All Public Housing and Private Housing available for Public use. Government Code Sections 4450 and 12955.1(d)

C References to section numbers are to Part 2, Title 24, CCR (aka California Building Code). Prefix "3-" is for Part 3, Title 24, CCR (aka California Electrical Code) and "5-" is for Part 5, Title 24, CCR (aka California Plumbing Code). NFPA refers to National Fire Protection Association.

C Item numbers circled below are required for this project.

C Exemptions claimed for any item shall be requested in writing and shall include all data needed to determine "unreasonable hardship" as described in **Section 222**.

The following attached Supplemental Accessibility Regulations correction list(s) is(are) a part of these corrections:

- 9 **Supplemental Correction List No. 1** (Sanitary Facilities, Drinking Fountains, Telephones, Alterations and Wheelchair Lifts)
- 9 **Supplemental Correction List No. 2** (Group "A" Occupancies-- Assembly Halls, Dining & Drinking, Etc.--, Group "E" Occupancies-- Educational Facilities--, Group "H" Occupancies-- Hazardous Facilities--, Group "I" Occupancies-- Medical Facilities--, and Outdoor Occupancies-- Recreational Facilities)
- 9 **Supplemental Correction List No. 3** (Group "B" Occupancies-- Office Buildings, Police & Fire Dept. and Courtrooms, Etc.-, Group "M" Occupancies - Sales Facilities -,Factories, Warehouses and ATM's)
- 9 **Supplemental Correction List No. 4** (Group "R" Occupancies-- Hotels, Motels, Transient Lodging, Etc.--, and Bathing Facilities & Lockers)
- 9 **Supplemental Correction List No. 5** (Elevators, Egress and Areas for Evacuation Assistance)
- Correction List No.6** (Group "R" Occupancies- Multi Family Dwellings, Apartments, Condominiums, Licensed care facilities)

SITE DEVELOPMENT & ACCESSIBLE ROUTE OF TRAVEL

NOTE: Accessible Route of Travel is defined as "a continuous unobstructed path connecting all accessible elements and spaces in an accessible building or facility that can be negotiated by a person with a severe disability using a wheelchair and that is also safe for and usable by persons with other disabilities". (1102B)

1. Site development and grading shall be designed to provide access to all entrances and exterior ground floor exits, and access to normal paths of travel, and where necessary to provide access, shall incorporate pedestrian ramps, curb ramps, etc. (1127B.1)
2. At least one accessible route within the boundary of the site shall be provided from public transportation stops, accessible parking and accessible passenger loading zones, and public streets or sidewalks, to the accessible building entrance they serve. The accessible route shall, to the maximum extent feasible, coincide with the route for the general public. (1114B.1.2)
3. The accessible route of travel shall be the most practical direct route between accessible building entrances, accessible site facilities, and the accessible entrance to the site. (1127B.1)
4. When more than one building or facility is located on a site, accessible routes of travel shall be provided between buildings and accessible site facilities. (1127B.1)
5. When a building or portion of a building is required to be accessible or adaptable, an accessible route of travel shall be provided to all portions of the building, to accessible building entrances, and between the building and the public way. (1114B.1.2)
6. At least one accessible route shall connect the following: (1114B.1.2)
 - a. Accessible buildings, facilities, elements and spaces that are on the same site.
 - b. Accessible building or facility entrances with all accessible spaces and elements and with all accessible dwelling units within the building or facility.
7. Where more than one route of travel is provided, all routes shall be accessible. (1114B.1.2)

ACCESSIBLE PARKING

NOTE: Each lot or parking structure where parking is provided for the public as clients, guests or employees, shall provide accessible parking as required by Section 1129B. (1129B.1)

1. Provide ____ disabled parking spaces as required by Table 11B-7 (see next column) for _____ parking lot/structure. (1129B.1)
2. At facilities providing medical care and other services for persons with mobility impairments, parking spaces complying with Section 1129B shall be provided in accordance with Table 11B-7 except as follows: (1129B.3)
 - a. Outpatient units and facilities: 10% of the total number of parking spaces provided serving each such outpatient unit or facility. (1129B.3.1)
 - b. Units and facilities that specialize in treatment or services for persons with mobility impairments: 20% of the total number of parking spaces provided serving each such unit or facility. (1129B.3.2)
3. Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance (as near as practical to an accessible entrance). (1129B.1)

4. In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility. (1129B.1)

TABLE 11B-7

Total # of parking spaces provided	Total # of disabled spaces required
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401- 500	9
501-1000	2% of total
1001 & over	20 plus 1 for each 100 or fraction thereof > 1001

5. In buildings with multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located closest to the accessible entrances. (1129B.1)
6. Where single accessible parking spaces are provided, they shall be 14' wide and outlined to provide a 9' parking area and a 5' loading and unloading access aisle on the passenger side of the vehicle. **The word "NO PARKING" shall be painted on the ground within each five- foot loading and unloading access aisles. This notice shall be painted in white letters not less than 12 inches high and located so that it is visible to traffic enforcement officials.** (1129B.4.1, Fig 11B-18B)
7. When more than one accessible parking space is provided, in lieu of providing a 14' wide space for each parking space, two spaces can be provided within a 23' wide area lined to provide a 9' parking area on each side of a 5' loading and unloading access aisle in the center. **The word "NO PARKING" shall be painted on the ground within each five- foot loading and unloading access aisles. This notice shall be painted in white letters not less than 12 inches high and located so that it is visible to traffic enforcement officials.** (1129B.4.1, Fig 11B-18A & C)
8. One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96" wide minimum **placed on the side opposite the driver's side when the vehicle is going forward into the parking space** and shall be designated "van accessible". All such spaces may be grouped on one level of a parking structure. (**Fig. 11B-18B**, 1129B.4.2)
9. When less than 5 parking spaces are provided at buildings and facilities subject to these regulations, one shall be 14' wide and lined to provide a 9' parking area and a 5' loading and unloading area. However, there is no requirement that the space be reserved exclusively or identified for use by persons with disabilities only. (1129B.2)
10. The minimum length of an accessible parking space shall be 18'. (1129B.4.1, Fig 11B-18A, B & C)
11. Accessible parking spaces shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own. **Ramp shall not encroach into any accessible parking space or the adjacent access aisle. The maximum cross slope in any direction for both parking space and access aisle shall not exceed 2 % slope.** (1129B.4.3)

PASSENGER DROP-OFF & LOADING ZONES

NOTE: When provided, passenger drop-off and loading zones shall be located on an accessible route of travel. (1131B.1)

1. Where provided, one passenger drop-off and loading zone shall provide an access aisle at least 60" wide and 20' long adjacent and parallel to the vehicle pull-up space. Such zones shall be located on a surface with a slope not exceeding 1 vertical in 50 horizontal. If there are curbs between the access aisle and the vehicle pull-up space, then a curb ramp shall be provided. (1131B.2.1. , Fig 11B-24)
2. If there are no curbs, the boundary between the access aisle and the vehicle pull-up space shall be defined by a continuous detectable warning which is 36" wide. (1133B.8.4)
3. Provide minimum vertical clearance of 9'-6" at accessible passenger loading zones and along at least one vehicle access route to such areas from site entrances and exits. (1131B.2.2)
4. Valet parking facilities shall provide a passenger loading zone and shall be located on an accessible route to the entrance of the facility. The parking space requirements of Section 1129B apply to facilities with valet parking. (1131B.3)
5. Where provided, bus stop pads **shall be** 96" long (measured parallel to curb or road edge) and 60" wide (measured perpendicular to curb or road edge) to the maximum extent allowed by legal or site constraints. Bus stop pads shall connect to an accessible route. Newly constructed bus stop pads must provide a square curb surface between the pad and the road or other detectable warning **approved by Department of State Architect in accordance with Section 1133B.8.5**. Bus stop pads shall be at the same slope as the roadway in the direction parallel to the roadway and a maximum 2% slope perpendicular to the roadway. (1131B.4)
6. Where provided, provide bus stop shelters installed so as to permit a wheelchair user to enter the shelter and access a clear floor area of 30" by 48", completely within the shelter. Bus stop shelters shall connect to an accessible route and to bus stop pads. (1131B.4)

WALKS & SIDEWALKS

1. Walks and sidewalks shall have a continuous common surface, not interrupted by steps or by abrupt changes in level exceeding 1/2". (1133B.7.1)
2. Walks and sidewalks shall be 48" minimum in width. (1133B.7.1, Fig 11B-27(A))
3. When changes in level not exceeding 1/2" occur, they shall be beveled with a slope no greater than 1:2, except that level changes not exceeding 1/4" may be vertical. (1133B.7.4, Fig 11B-5E(c) & (d))
4. Abrupt changes in level along any accessible route exceeding 1/2" shall comply with the requirements for curb ramps. (1133B.7.4)
5. Walk and sidewalk surfaces shall be slip-resistant as follows: (1133B.7.1)
 - a. Surfaces with a slope of less than 6% gradient shall be at least a slip -resistant as that described as a medium salted finish. (1133B.7.1.1)
 - b. Surfaces with a slope of 6% or greater gradient shall be slip-resistant. (1133B.7.1.2)
6. When the slope in the direction of travel of any walk exceeds 1 vertical to 20 horizontal, it shall comply with the provisions of Section 1133B.5 as a pedestrian ramp. (1133B.5)
7. Walk and sidewalk surface cross slopes shall not exceed 1/4" per foot. (1133B.7.1.3)

12. Surface slopes of accessible parking spaces shall be the minimum possible and shall not exceed 1 unit vertical to 50 units horizontal. (1129B.4.4)
13. All entrances to and exits from a building and vertical clearances within parking structures shall have a minimum vertical clearance of 8'-2" to any beam, ceiling, pipe etc., where required for accessibility to accessible parking spaces. (1130B)
14. In each parking area, a bumper or curb shall be provided and located to prevent encroachment of cars over the required width of walkways. (1129B.4.3., Fig 11B-18A, B & C)
15. Pedestrian ways which are accessible to people with disabilities shall be provided from each accessible parking space to related facilities, including curb cuts or ramps as needed. (1129B.4.3, Fig 11B-18A, B & C)
16. Curb ramps shall not encroach into any parking space, with the exception of a transition ramp from a loading/unloading area to an adjacent walk/sidewalk. The transition ramp shall be a minimum of 48" in width, a maximum of 60" in length, with a maximum slope of 1:12 and with flared side slopes of 1 vertical to 10 horizontal maximum. (1129B.4.3, Fig 11B-18A, B & C)
17. Each parking space reserved for persons with disabilities shall be identified by a reflectorized sign permanently posted immediately adjacent to and visible from each stall or space, consisting of a profile view of a wheelchair with occupant in white on dark blue background. The sign shall not be smaller than 70 square inches in area and, when in a path of travel, shall be posted at a minimum height of 80" from the bottom of the sign to the parking space finished grade. (1129B.5, Fig 11B-18A, B & C)
18. Signs to identify accessible parking spaces may also be centered on a wall at the interior end of the parking space at a minimum height of 36" from the parking space finished grade, ground or sidewalk. (1129B.5)
19. Van accessible parking spaces shall have an additional sign stating "Van Accessible" mounted below the symbol of accessibility. (1129B.5)
20. An additional sign shall also be posted, in a conspicuous place, at each entrance to off-street parking facilities, or immediately adjacent to and visible from each stall or space. The sign shall be not less than 17" by 22" in size with lettering not less than 1" in height, which clearly and conspicuously states the following: (1129B.5)

"Unauthorized vehicles parked in designated accessible spaces not displaying distinguishing placards or license plates issued for persons with disabilities may be towed away at owner's expense. Towed vehicles may be reclaimed at _____ or by telephoning _____."

NOTE: Blank spaces are to be filled in with appropriate information as a permanent part of the sign.

21. The surface of each accessible parking space or stall shall have a surface identification duplicating either of the following schemes: (1129B.5, Fig 11B-18A, B & C)
 - a. By outlining or painting the stall or space in blue and outlining on the ground in the stall or space in white or suitable contrasting color a profile view depicting a wheelchair with occupant;

OR
 - b. By outlining a profile view of a wheelchair with occupant in white on blue background. The profile view shall be located so that it is visible to a traffic enforcement officer when a vehicle is properly parked in the space and shall be 36" high by 36" wide.

8. All walks with continuous gradients shall have level areas at least 5' in length at intervals of at least every 400'. (1133B.7.6)
9. Walks shall be provided with a level area not less than 60" by 60" at a door or gate that swings toward the walk, and not less than 48" wide by 44" deep at a door or gate that swings away from the walk. (1133B7.5., Fig 11B-26)
10. Level area of walk shall extend 24" to the side of the strike edge of a door or gate that swings toward the walk. (1133B.7.5)
11. Walks, sidewalks, and pedestrian ways shall be free of gratings whenever possible. For gratings located in the surface of any of these areas, grid openings in gratings shall be limited to ½" in the direction of traffic flow. If gratings have elongated openings, they shall be placed so that the long dimension is perpendicular to the dominant direction of travel. (1133B7.2, Fig 11B-7B(a))

CURB RAMPS

NOTE: Curb Ramp is defined as a sloping pedestrian way, intended for pedestrian traffic, which provides access between a walk or sidewalk to a surface located above or below an adjacent curb face.

NOTE: Curb Ramps shall be constructed where a pedestrian way crosses a curb. The preferred and recommended location for curb ramps is in the center of the crosswalk or each street corner. Where it is necessary to locate a curb ramp in the center of the curb return and the street surfaces are marked to identify pedestrian crosswalks, the lower end of the curb ramp shall terminate within such crosswalk areas. Sec 1127B.5.1 Fig 11B-19 through 11B-23

1. Provide a curb ramp at _____ (1127B.5.1)
2. Curb ramps shall be a minimum of 4' in width and shall lie, generally, in a single sloped plane, with a minimum of surface warping and cross slope. (1127B.5.2)
3. The slope of curb ramps shall not exceed 1 vertical to 12 horizontal. (1127B.5.3)
4. Transitions from ramps to walks, gutters, or streets shall be flush and free of abrupt changes, except that the lower end of each curb ramp shall have a ½" lip beveled at 45 degrees. (1127B.5.3 & 5)
5. Maximum slopes of adjoining gutters, road surface immediately adjacent to the curb ramp or accessible route, shall not exceed 1:20 within 4' of the top and bottom of the curb ramp. The slope of the fanned or flared sides of curb ramps shall not exceed 1 vertical to 10 horizontal. (1127B.5.3)
6. A level landing 4' deep shall be provided at the upper end of each curb ramp over its full width to permit safe egress from the ramp surface, or the slope of the fanned or flared sides of the curb ramp shall not exceed 1 vertical to 12 horizontal. (1127B.5.4)
7. The surface of each curb ramp and its flared sides shall be stable, firm, and slip-resistant and shall be of contrasting finish from that of the adjacent sidewalk. (1127B.5.6)
8. All curb ramps shall have a grooved border 12" wide at the level surface of the sidewalk along the top and each side approximately 3/4" on center. All curb ramps constructed between the face of the curb and the street shall have a grooved border at the level surface of the sidewalk. (1127B.5.7, Fig. 11B-19C & 11B-20GH)
9. A curb ramp shall have a detectable warning that extends the full width and depth of the curb ramp inside the grooved border when the ramp slope is less than 1 vertical to 15 horizontal. Detectable warnings shall consist of raised truncated domes with a diameter of nominal 0.9" at the based tapering to 0.45" at the top, a height of nominal 0.2", and a center-to-center spacing of nominal 2.35", in compliance with Figure 11B-23. "Nominal", as used here, shall

be in accordance with Section 12-31-102, State Referenced Standards Code. The detectable warning shall contrast visually with adjoining surfaces, either light-on-dark or dark-on-light. The material used to provide contrast shall be an integral part of the walking surface. The domes may be constructed in a variety of methods, including cast-in-place or stamped, or may be part of a prefabricated surface treatment. **Only approved DSA/AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations, Title 24, Part 1, Articles 2, 3, and 4.** (1127B.5.8)

10. Curb ramps shall be located or protected to prevent their obstruction by parked cars. (1127B.5.9)

PEDESTRIAN GRADE SEPARATIONS (OVERPASSES AND UNDERPASSES)

1. Pedestrian ramps on pedestrian grade separations shall comply with the requirements of Section 1133B.5 for ramps. The least possible slope shall be used for any ramp. (1128B)
2. Cross slopes of walking surfaces shall be the minimum possible and shall not exceed 1/4" per foot. The slope of any appreciably warped walking surface shall not exceed 1 vertical in 12 horizontal in any direction. (1128B)
3. Where pedestrian grade separations cross streets or other vehicular traffic ways, and where a street level crossing can reasonably and safely be used by persons with disabilities, there shall be provided conforming curb ramps and a usable pathway. (1128B)

RAMPS (EXTERIOR OR INTERIOR)

NOTE: Any path of travel shall be considered a Ramp if its slope is greater than 1' rise in 20' of horizontal run. The least possible slope shall be used for any ramp. (1133B.5)

1. The maximum slope of a ramp that serves any exitway, provides access for persons with disabilities, or is in the path of travel shall be 1' rise in 12' of horizontal run. (1133B.5.3)
2. The cross slope of ramp surfaces shall be no greater than 1:50. (1133B.5.3.1)
3. The width of ramps shall be as required for stairways and exits. (1133B.5.2, Fig 11B-38 & 39)
4. **Where the ramp is the only exit discharge path serving entrances to buildings or when it serves an occupant load of 300 or more**, the width of such ramp shall have a minimum width of 60". (1133B.5.2.2)
5. All other pedestrian ramps serving primary entrances shall be a minimum width of 48". (1133B.5.2.2)
6. Landings shall be provided at the top and bottom of each ramp. (1133B.5.4, Fig 11B-38 & 39)
7. Intermediate landings shall be provided at intervals not exceeding 30" of vertical rise and at each change of direction in excess of 30 degrees. (1133B.5.4, Fig 11B-38 & 39)
10. Top landings shall be not less than 60" wide and shall have a length of not less than 60" in the direction of ramp run. (1133B.5.4.2, Fig 11B-38 & 39)
11. Doors in any position shall not reduce the minimum dimension of the ramp landing to less than 42" and shall not reduce the required width by more than 3" when fully open. (1003.3.4.4, Fig 11-B-38 & 39)
12. The width of the landing shall extend 24" past the strike edge of any door or gate for exterior ramps and 18" past the strike edge for interior ramps. (1003.3.4.4, Fig 11B-38 & 39)
13. All ramp landings shall be level with maximum slope in any direction not to exceed 2 % slope. (1133B.5.4.1)

14. At bottom and intermediate landings, the width shall be at least the same as required for the ramp. (1133B.5.4.5, Fig 11B-38 & 39)
15. Intermediate landing at a change of direction in excess of 30 degrees and bottom landings shall have a dimension in the direction of ramp run of not less than 72" to accommodate the handrail extension. (1133B.5.4.6, Fig 11B-38)
16. Other intermediate landings shall have a dimension in the direction of ramp run of not less than 60". (1133B.5.4.7, Fig 11B-38)
17. Handrails are required on ramps that provide access if the ramp slope exceeds 1' rise in 20' of horizontal run, except that at exterior door landings, handrails are not required on ramps less than 6" rise or 72" in length. (1133B.5.5.1)
18. Handrails shall be placed on each side of each ramp, shall be continuous the full length of the ramp, shall be 34" to 38" above the ramp surface, shall extend a minimum of 1' beyond the top and bottom of the ramp, and the ends shall be returned. (1133B.5.5.1, Fig 11B-27(b) & (c))
19. The grip portion of handrails shall be not less than 1-1/4" nor more than 1-1/2" nominal diameter, or the shape shall provide an equivalent gripping surface, and all surfaces shall be smooth with no sharp corners. Handrails shall not rotate within their fittings. (1133B.5.5.1, Fig 11B-36)
20. Handrail projecting from a wall shall have a space of 1-1/2" between the wall and the handrail. (1133B.5.5.1, Fig 11B-36)
21. Handrails may be located in a recess if the recess is a maximum of 3" deep and extends at least 18" above the top of the rail. (1133B.5.5.1, Fig 11B-36)
22. Any wall or other surface adjacent to handrails shall be free of sharp or abrasive elements. Edges shall have a minimum radius of 1/8". (1133B.5.5.1, Fig 11B-36)
23. Where the ramp surface is not bounded by a wall or fence and the ramp exceeds 10' in length, the ramp shall comply with one of the following requirements. (1133B.5.6, Fig 11B-27(A & B))
- a. A guide curb a minimum of 2" in height shall be provided at each side of the ramp; (1133B.5.6.1)
- OR
- b. A wheel guide rail shall be provided, centered 3"± 1" above the surface of the ramp. (1133B.5.6.2)
24. **Where the extension of the handrail in the direction of the ramp run would create a hazard, the termination of the extension shall be made either rounded or returned smoothly to floor, wall or post or the extension on the handrail may be turned 90 degrees to the run of the ramp.** (1133B.5.5.1.1, 1133B.4.2.4)
25. **Ramps more than 30" above the adjacent ground shall be provided with guardrails as required by section 1133B.5.7 and 1003.3.4.6. Such guardrail shall be continuous from the top of the ramp to the bottom of the ramp.** (1133B.5.7)

ENTRANCES & EXITS

NOTE: Exit as defined is "a continuous and unobstructed means of egress to a public way and shall include intervening aisles, doors, doorways, gates, corridors, exterior exit balconies, ramps, stairways, smokeproof enclosures, horizontal exits, exit passageways, exit courts, and yards".

NOTE: Public Way as defined is "any street, alley or similar parcel of land essentially unobstructed from the ground to the sky which is deeded, dedicated, or otherwise permanently appropriated to the

public for public use and having a clear width of not less than 10 feet. (1002)

NOTE: For the purposes of Title 24, the use of the term Exit Door in Section 1003.3.1 applies to all doors that provide access, that is, entrances, passage doors, etc.

1. All entrances and all exterior ground floor exit doors to buildings and facilities shall be made accessible to persons with disabilities. (1133B.1.1.1)
2. Elevators or escalators shall not be used as a required exit. (1003.2)
3. Revolving doors shall not be used as a required entrance for persons with disabilities. (1003.3.1.2)
4. During periods of partial or restricted use of a building or facility, the entrances used for primary access shall be accessible to and usable by persons with disabilities. (1133B.1.1.1.3)
5. Recessed doormats shall be adequately anchored to prevent interference with wheelchair traffic. (1133B.1.1.1.3, Fig 11B-25)
6. All gates, including ticket gates, shall meet all applicable accessibility specifications of doors. (1133B.1.1.1.4)
7. Every required exit doorway which is located within an accessible path of travel shall be **capable of opening at least 90 degrees, shall have a minimum clear opening of 32"**, and shall be of a size as to permit the installation of a door not less than 3' in width and not less than 6'-8" in height. (1133B.1.1.1.1, 1133B.2.2)
8. The space between two consecutive door openings in a vestibule, serving other than a required exit stairway, shall provide a minimum of 48" of clear space from any door opening into such vestibule when the door is positioned at an angle of 90 degrees from its closed position. Doors in a series shall swing either in the same direction or away from the space between the doors. See Figures 11B-30 & 31 for strike edge clearance. (1133B.2.4.4)
9. In existing stairways where there is no landing, doors shall be conspicuously marked with a sign stating "Danger! Stairway--No Landing" or equivalent wording and there shall be adequate illumination. (1004.9.2.1.a(5))

DOORS

1. Manually operated edge- or surface-mounted flush bolts and surface bolts are prohibited. When exit doors are used in pairs and approved automatic flush bolts are used, the door leaf having the automatic flush bolts shall have no door knob or surface-mounted hardware. The unlatching of any leaf shall not require more than one operation. (1003.3.1.7)
2. Latching and locking doors that are hand activated and which are in a path of travel shall be operable with a single effort by lever type hardware, by panic bars, push-pull activating bars, or other hardware designed to provide passage without requiring the ability to grasp the opening hardware. (1133B.2.5.1)
3. Doors to individual hotel or motel units shall operate similarly, to above, except that when bolt and unlatching operation is key operated from corridor or exterior side of unit door, large bow keys 2" (full bow) or 1-1/4" (half bow) shall be provided in lieu of lever type hardware on the corridor side. Separate deadlock activation on room side of corridor doors in hotels or motels shall have lever handle or large thumb turn in an easily reached location. (1133B.2.5.1)
4. Hand-activated door opening hardware shall be centered between 30" and 44" above the floor. (1133B.2.5.1)
5. When installed, exit doors shall be capable of opening so that the clear width of the exit is not less than 32". (1133B.1.1.1.1, Fig 11B-5B & 11B-33)

6. For hinged doors, the opening width shall be measured with the door positioned at an angle of 90 degrees from its closed position.
(1133B.2.3, Fig 11B-33(a))
7. Where a pair of doors is utilized, at least one of the doors shall provide a clear, unobstructed opening width of 32" with the leaf positioned at an angle of 90 degrees from its closed position.
(1133B.2.3.1)
8. When an automatic door operator is utilized to operate a pair of doors, at least one of the doors shall provide a clear, unobstructed opening width of 32" with the door positioned at an angle of 90 degrees from its closed position. (1133B.2.3.2)
9. Minimum maneuvering clearances at doors shall be as shown in Figure 11B-26. The floor or ground area within the required clearances shall be level and clear. (1133B.2.4.2)
10. There shall be a level and clear floor or landing on each side of a door. The level area shall have a length in the direction of door swing of at least 60" and the length opposite the direction of door swing of 48" as measured at right angles to the plane of the door in the closed position. **Where the plane of the doorway is offset or located in an alcove a distance more than 8 inches measured from the plane of the doorway to the face of the wall, the door shall be provided with 60" maneuvering clearance for front approach.**
(1133B.2.4.2 , 1133B.2.5.3, Fig 11B-26, Fig 11B-33)
11. The width of the level area on the side to which the door swings shall extend 24" past the strike edge of the door for exterior doors and 18" past the strike edge for interior doors. **Where the door is recessed or located in an alcove, the projection distance allowed to project into the required door strike clearance measured from the face of the wall to the face of the door is limited to 8".**
(1133B.2.4.3, 1133B.2.4.5, Fig 11B-33(a))
12. Provide clear space of 12" past strike edge of the door on the opposite side to which the door swings if the door is equipped with both a latch and a closer. (Fig 11B-26(a))
13. The floor or landing shall be not more than 1/2" lower than the threshold of the doorway. (1133B.2.4.1)
14. Where the door opens into a stair of a smoke proof enclosure, the landing need not have a length of 60". (1004.9.2.3a)
15. The bottom 10" of all doors except automatic and sliding shall have a smooth, uninterrupted surface to allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition. Where narrow frame doors are used, a 10" high smooth panel shall be installed on the push side of the door, which will allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition.
(1133B.2.6, Fig 11B-29)
16. Maximum effort to operate exterior and interior doors shall not exceed 5 pounds, with such pull or push effort being applied at right angles to hinged doors and at the center plane of sliding or folding doors. Compensating devices or automatic door operators may be utilized to meet the above standards. When fire doors are required, the maximum effort to operate the door may be increased to the minimum allowable by the appropriate administrative authority, not to exceed 15 pounds. (1133B.2.5)
17. **When the door has a closer, then the sweep period of the closer shall be adjusted so that from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3" from the latch, measured to the landing edge of the door.** (1133B.2.5.1)
18. Where turnstiles and crowd control barriers are utilized in a facility for the purpose of providing fully controlled access, such as where an admission price is charged, a door or gate that is accessible to persons with disabilities shall be provided adjacent to or within a distance not to exceed 30' from each turnstile exit

or entrance. This alternate passageway shall be maintained in an unlocked condition during business hours and the door or gate shall not activate a publicly audible alarm system. is posted stating "The door or gate may be latched where all gates are restricted and controlled by an attendant and a sign." All gates are restricted and controlled by an attendant." The accessible door or gate shall provide the same use pattern. Where posts, rails, or other pedestrian controls are utilized to create crowd control aisles or lanes, a minimum aisle width not less than indicated in Figure 11B-5E (a) and (b) with 32" of clear opening.(1133B.2.3.4)

FLOORS AND LEVELS

NOTE: **Level area is defined as "a specified surface that does not have a slope in any direction exceeding 1/4 inch in one foot from the horizontal (2.083% gradient)."** (1102B)

1. In buildings and facilities, floors of a given story shall be a common level throughout, or shall be connected by pedestrian ramps, passenger elevators, or special access lifts. (1120B.1)
2. Ground and floor surfaces along accessible routes and in accessible rooms and spaces, including floors, walks, ramps, stairs, and curb ramps, shall be stable, firm, and slip-resistant. (1120B.2 & 1124B.1)
3. Changes in level up to 1/4 inch may be vertical and without edge treatment. (1124B.2, Fig 11B-5E(c))
4. Changes in level between 1/4 inch and 1/2 inch shall be accomplished by means of a ramp no steeper than 1 vertical to 2 horizontal. (1124B.2, Fig 11B-5E(d))
5. If carpet or carpet tile is used on a ground or floor surface, it shall be securely attached; have a firm cushion, pad or backing or no cushion or pad; and have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. The maximum pile height shall be 1/2". Exposed edges of carpet shall be fastened to floor surfaces and have trim along the entire length of the exposed edge. Carpet edge trim shall comply with Section 1124B.2. (1124B.3, Fig 11B-7B)
6. If gratings are located on floors, then they shall have spaces no greater than 1/2" wide in one direction. If gratings have elongated openings, they shall be placed so that the long dimension is perpendicular to the dominant direction of travel. (1124B.4, Fig 11B-7B)

CORRIDORS & AISLES

1. Every corridor serving an occupant load of 10 or more shall not be less than 44" in width. (1133B.3.1)
2. Corridors serving an occupant load of less than 10 shall not be less than 36" in width. (1133B.3.1)
3. Corridors which are located on accessible route and exceed 200' in length shall: (1133B.3.2, Fig 11B-34)
 - a. Have a minimum clear width of 60";
OR
 - b. Have, at reasonable intervals, a 60" by 60" minimum wheelchair turning space or passing alcove; not to exceed 200'
OR
 - c. Have, at a central location, an intervening crossing or tee corridor, a minimum of 44" in width
4. Circulation aisles and pedestrian ways shall be sized according to functional requirements and in no case shall be less than 36" in clear width. (1105B.3.6.1)
5. Every portion of every building in which are installed seats, tables, merchandise, equipment, or similar materials shall be provided with aisles leading to an exit. (1133B.6.1)

6. Every aisle shall be not less than 3' wide if serving only one side, and not less than 3'-8" wide if serving both sides. (1133B.6.2)

HAZARDS AND PROTRUDING OBJECTS

1. Abrupt changes in level, except between a walk or sidewalk and an adjacent street or driveway, exceeding 4" in a vertical dimension, such as at planters or fountains located in or adjacent to walks, sidewalks, or other pedestrian ways, shall be identified by warning curbs projecting at least 6" in height above the walk or sidewalk surface to warn the blind of a potential drop off. (1133B.8.1)
2. When a guardrail or handrail is provided, no warning curb is required when a guide rail is provided centered 3" ± 1" above the surface of the walk or sidewalk, the walk is 5 percent or less gradient, or no adjacent hazard exists. (1133B.8.1, Fig 11B-27(c))
3. Objects projecting from walls with their leading edges between 27" and 80" above the finished floor shall protrude no more than 4" into walks, halls, corridors, passageways, or aisles. (1121B.1, Fig 11B-7A)
4. Objects mounted with their leading edges at or below 27" above the finished floor may protrude any amount into walks, halls, corridors, passageways, or aisles. (1121B.1, Fig 11B-7A)
5. Free-standing objects mounted on posts or pylons may overhang 12" maximum from 27" to 80" above the ground or finished floor. (1121B.1)
6. Protruding objects shall not reduce the clear width of an accessible route or maneuvering space. (1121B.1)
7. Walks, halls, corridors, passageways, aisles, or other circulation spaces shall have 80" minimum clear head room. (1121B.2, Fig 11B-7A)
8. Any obstruction that overhangs a pedestrian way shall be a minimum of 80" above the walking surface as measured from the bottom of the obstruction. (1121B.2, Fig 11B-28)
9. Where a guy support is used parallel to a path of travel, including, but not limited to, sidewalks, a guy brace, sidewalk guy or similar device shall be used to prevent an overhanging obstruction as defined. (1133B.8.2)
10. If a walk crosses or adjoins a vehicular way, and the walking surfaces are not separated by curbs, railings, or other elements between the pedestrian areas and vehicular areas, the boundary between the areas shall be defined by a continuous detectable warning which is 36" wide, complying with Section 1024.3. (1133B.8.5)
11. Transit boarding platforms shall conform to the requirements of Section 1133B.8.3. **Only approved DSA/AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations, Title 24, Part 1, Articles 2, 3, and 4.** (1133B.8.4)

STAIRWAYS

1. Stairways shall have handrails on each side, and every stairway required to be more than 88" in width shall be provided with not less than one intermediate handrail for each 88" of required width. Intermediate handrails shall be spaced approximately equally across the entire width of the stairway. (1003.3.3.6)
2. Each stairway adjacent to an area for evacuation assistance shall have a minimum clear width of 48" between handrails. (1114B.2.2.3)
3. Handrails shall be 34" to 38" above the nosing of the treads. (1133B.4.2.1, Fig 11B-35)

4. Handrails shall extend a minimum of 12" beyond the top nosing and 12" plus the tread width beyond the bottom nosing and ends shall be returned or terminate in newel posts or safety terminals. (1133B.4.2, Fig 11B-35 & 37)
5. Where the extension of the handrail in the direction of the stair run would create a hazard, the termination of the extension shall be made either rounded or returned smoothly to the floor, wall, or post. Where the stairs are continuous from landing to landing, the inner rail shall be continuous and need not extend out into the landing. (1133B.4.2.4, Fig 11B-37)
6. The handgrip portion of handrails shall be not less than 1-1/4" nor more than 1-1/2" in cross-sectional nominal dimension or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners. Gripping surfaces (top and sides) shall be uninterrupted by newel posts, other construction elements, or obstructions. Any wall or other surface adjacent to the handrail shall be free of sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch. (1133B.4.2.6.1, Fig 11B-36)
7. **The orientation of at least one handrail shall be in the direction of the run of the stair nosing and, and shall not reduce the minimum required width of stairs.** (1133B.4.2.6.2)
8. Handrails projecting from a wall shall have a space of 1-1/2" between the wall and the handrail. Handrails may be located in a recess if the recess is a maximum of 3" deep and extends at least 18" above the top of the rail. Handrails shall not rotate within their fitting. (1133B.4.2.5, Fig 11B-36)
9. The upper approach and the lower tread of each stair shall be marked by a strip of clearly contrasting color at least 2" wide and not more than 4" wide placed parallel to and not more than 1" from the nose of the step or landing to alert the visually impaired. The strip shall be of material that is at least as slip resistant as the other treads of the stair. (1133B.4.4, Fig 11B-35)
10. Where stairways occur outside a building, the upper approach and all treads shall be marked by a strip of clearly contrasting color at least 2" wide and not more than 4" wide placed parallel to and not more than 1" from the nose of the step or landing to alert the visually impaired. The strip shall be of a material that is at least as slip-resistant as the other treads of the stair. A painted strip shall be acceptable. (1133B.4.4, Fig 11B-35)
11. All tread surfaces shall be slip-resistant. Weather exposed stairs and their approaches shall be designed so that water will not accumulate on walking surfaces. Treads shall have smooth, rounded, or chamfered exposed edges, and no abrupt edges at the nosing (lower front edge). (1133B.4.5.1, Fig 11B-35)
12. The nosing shall not project more than 1-1/2" past the face of the riser below. (1133B.4.5.2, Fig 11B-35)
13. Open risers are not permitted. On any given flight of stairs, all steps shall have uniform riser height and uniform tread widths consistent with 1006.3. Stair treads shall be no less than 11" deep, measured from riser to riser. Risers shall be sloped or the underside of the nosing shall have an angle not less than 60 degrees from the horizontal. (1133B.4.5.3, Fig 11B-35)
14. **Approved Tactile stairway identification signs that comply with Section 1117B.5.1 shall be located at each floor level in all enclosed stairways in buildings two or more stories in height. The sign shall identify the stairway, indicate whether there is roof access, the floor level, and the upper and lower terminus of the stairway. The sign shall be located approximately 5' above the floor landing in a position which is readily visible when the door is in the open or closed position or, the sign shall be located approximately 5' above the floor landing immediately adjacent to the door on the strike side. Signs shall comply with the requirements of UBC Std. No. 10-2.** (1133B.4.3)

CONTROLS & OPERATING MECHANISMS

1. Controls and operating mechanisms required to be accessible by Section 101.4.11 shall comply with the requirements of Section 1117B.6 (1117B.6.1)
2. Clear floor space complying with Section 1118B.4 that allows a forward or parallel approach by a person using a wheelchair shall be provided at controls, dispensers, receptacles, and other operable equipment. (1117B.6.2)
3. The highest and lowest operable part of all controls, dispensers, receptacles, and other operable equipment shall be placed within 48" of the floor but not lower than 15" if forward approached and within 54" but not lower than 9" if side approached. Electrical and communication system receptacles on walls shall be mounted no less than 15" above the floor. (1117B.6.3)
4. Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, punching, or twisting of the wrist. To force required to activate controls shall be no greater than 5 pounds of force. (1117B.6.4)
5. Vending machines shall be installed in compliance with Sections 1117B.6 through 1117B.6.4.
6. Faucet controls and operating mechanisms for kitchen sinks shall be operable with one hand and shall not require grasping, pinching, or twisting of the wrist. The force required to active faucet controls and operating mechanisms for kitchen sinks shall be no greater than 5 lbf. Lever-operated, push-type, and electronically controlled mechanisms are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds. (1115B.2.1.6.1)

SPACE ALLOWANCE & REACH RANGES

1. The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30" by 48". The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object. Clear floor or ground space for wheelchairs may be a part of the knee space required under some objects. (1117B.2.3 & 1118B.4.1, Fig 11-B-5A)
2. One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair clear floor space. If a clear floor or ground space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided. (1117B.2.4 & 1118B.4.2, Fig 11-B-5A)
3. The space required for a wheelchair to make a 180 degree turn is a clear space of 60" diameter or a T-shaped space. (1118B.3, Fig 11B-12(a) & (b))
4. The minimum clear width required for a wheelchair to turn around an obstruction shall be 36" where the obstruction is 48" or more in length and 42" and 48" where the obstruction is less than 48" in length. (Fig 11B-5E)
5. The minimum clear width for single wheelchair passage shall be 32" at a point (24" maximum length) and 36" continuously. (1118B.1, Fig 11B-10)
6. The minimum width for two wheelchairs to pass is 60". (1118B.2, Fig 11B-11)
7. If the clear floor space only allows forward approach to an object, the maximum high forward reach allowed shall be 48". See Figure 11B-c(a). The minimum low forward reach is 15". If the high forward reach is over an obstruction, reach and clearances shall be as shown in Figure 11B-5C(b). (1118B.5)

8. If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54" and the low side reach shall be no less than 9" above the floor as shown in Figures 11B-5D(a) & (b). If the side reach is over and obstruction, the reach and clearances shall be as shown in Figure 11B-5D(c). (1118B.6)

EMPLOYEE WORK AREAS & WORK STATIONS

NOTE: General Employee Areas are "those areas commonly used by multiple employees, such as restrooms, break rooms, conference and meeting space, etc." Even when these areas are restricted for employee use only, they must comply with Title 24 accessibility requirements.

NOTE: Specific Work Stations is intended to mean "places where individuals do their work, such as a chef's chopping block in a commercial restaurant or a computer terminal in an office." These work stations are not required to be accessible themselves, except that aisle and floor and level requirements must be met and entryways must be at least 32" in clear width.

1. Employee areas shall conform to all requirements of the Office of the State Architect/Access Compliance Section in the California Building Code, Plumbing Code, and Electrical Code. (1123B.1)
2. Specific work stations, with the exception of work stations in sales facilities, check stands, ticket booths, and other work stations with specific requirements contained in other portions of the regulations, need only comply with aisle width and floors and levels, and entryways shall be 32" in clear width. (1123B.2)
3. Employee work areas shall be accessible by means of 36" minimum aisle and 32" minimum clear opening door width. (1105B.3.2.3, 1105B.3.3.2, & 1108B.5)

FIXED OR BUILT-IN SEATING, TABLES & COUNTERS

1. Where fixed or built-in seating, tables, or counters are provided for the public, and in general employee areas, 5% but never less than 1 must be accessible, as required in Section 1122B. (1122B.1)
2. If Seating spaces for people in wheelchair are provided at fixed tables or counters, clear floor space complying with Section 1118B.4 shall be provided. Such clear floor space shall not overlap knee space by more than 19". (1122B.2, Fig 11B-13)
3. If seating for people in wheelchairs is provided at fixed tables or counters, knee spaces at least 27" high, 30" wide, and 19" deep shall be provided. (1122B.3, Fig 11B-13)
4. The tops of tables and counters shall be 28" to 34" from the floor or ground. (1122B.4)
5. Where a single counter contains more than one transaction station, such as a bank counter with multiple teller windows or a retail sales counter with multiple cash register stations, at least 5%, but never less than 1, of each type of station shall be located at a section of counter that is at least 36" long and no more than 28" to 34" high. (1122B.4)

SIGNS & IDENTIFICATION

NOTE: ***California's standards for signage are more stringent and are significantly larger and wider than Federal law, Americans with Disabilities Act (ADA) Section 4.30.***

(1117B.5)

NOTE: The International Symbol of Accessibility shall be the standard used to identify facilities that are accessible to and usable by physically disabled persons as set forth in Title 24 and as specifically required in this Section. (1117B.5.8.1, Fig 11B-6)

1. The International Symbol of Accessibility shall consist of a white figure on a blue background. The blue shall be equal to Color No. 15090 in Federal Standard 595B. (1117B.5.8.1.1)
2. All building entrances that are accessible to and usable by persons with disabilities and at every major junction along or leading to an accessible route of travel shall be identified with a sign displaying the International Symbol of Accessibility and with additional directional signs, as required, to be visible to persons along approaching pedestrian ways. (1117B.5.8.1.2. & 1127B.3)
3. When permanent identification is provided for rooms and spaces **of a building or site**, raised letters shall be provided and shall be accompanied by Braille in conformance with Section **1117B.5.2** through **1117B.5.7**. Signs shall be installed on the wall adjacent to the latch outside of the door. Where there is no wall space on the latch side, including at double leaf doors, signs shall be placed on the nearest adjacent wall, preferably on the right. Mounting height shall be 60" above the finished floor to the centerline of the sign. Mounting location shall be determined so that a person may approach within 3" of signage without encountering protruding objects or standing within the swing of a door. (1117B.5.1.1, **1117B.5.7**)
4. **When signs direct to or give information about permanent rooms and space of a building or site, they shall comply with Sections 1117B.5.2, 1117B.5.3, 1117B.5.5, 1117B.5.6, 1117B.5.7. Means of egress signs and identification for visual exit signs, graphics, illumination, power source, tactile exit signage, tactile stair level identification and special egress control devices shall comply with Sections 1003.2.8.1, 1003.2.8.5, 1003.2.9, 1003.2.10 and 1003.3.1.10. (1117B.5.1.3)**
5. When raised characters or symbols are used, they shall conform to the following: (1117B.5.5)
 - a. Letters and numbers on signs shall be raised or recessed 1/32" minimum and shall be sans-serif uppercase characters accompanied by Grade 2 Braille. (1117B.5.5.1)
 - b. Raised characters or symbols shall be a minimum of 5/8" high (maximum of 2"). (1117B.5.5.2)
 - c. Pictorial symbol signs (pictograms) shall be accompanied by the verbal description placed directly below the pictogram. The outside dimension of the pictogram shall be a minimum of 6" in height. (1117B.5.5.3)
6. **Characters on signs** shall have a width-to-height ratio of between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10. (1117B.5.3)
7. Characters, symbols and their background **shall have a non-glare** finish. Characters and symbols shall contrast with their background, either light characters on a dark background or dark characters on a light background. (1117B.5.2)
8. Characters and numbers on signs shall be sized according to the viewing distance from which they are to be read. The minimum height is measured using an upper case X. Lower case characters are permitted. For signs suspended or projected above the finish floor in compliance with Section 1121B, the minimum character height shall be 3". (1117B.5.4)
9. Contracted Grade 2 Braille shall be used wherever Braille symbols are specifically required in other portions of these **Standards**. Dots shall be 1/10" on centers in each cell with 2/10" space between cells. Dots shall be raised a minimum of 1/40" above the background. (1117B.5.6)
10. Pole supported pedestrian traffic control buttons shall be identified with color coding consisting of a textured horizontal yellow band 2" in width encircling the pole, and a 1" wide dark border band above and below this yellow band. Color coding should be placed

immediately above the control button. Control buttons shall be located no higher than 48" above the surface adjacent to the pole. (1117B.5.9)

ELECTRICAL

1. The center of junction box for electrical and communication system receptacle outlets shall be installed at an accessible location meeting the clearances and reach range requirements of Section 1118B and not less than 15" above the floor or working platforms. (1117B.6.3 & 3-210-7(g.1))
2. The center of the grip of the operating handle of controls or switches intended to be used by the occupant of the room or area to control lighting and receptacle outlets, appliances, or cooling, heating, and ventilating equipment shall meet the requirements of Part 2, California Building Code (CBC), Section 1118B, Space Allowance and Reach Ranges, for persons with disabilities and shall not be more than 48" above the floor or working platform. (3-380-8(c))
3. The center of fire alarm initiating devices (boxes) shall be located 48" above the level of the floor, working platform, ground surface, or sidewalk. (3-760-16)

NOTIFICATION APPLIANCES FOR THE HEARING IMPAIRED

NOTE: If emergency warning systems are required, they shall activate a means of warning the hearing impaired. (1114B.2.4)

1. Approved notification appliances for the hearing impaired shall be installed in accordance with the provisions of NFPA 72 in the following areas: (Ch 35, Sec 4-4.5)
 - a. Restrooms
 - b. Corridors
 - c. Music practice rooms
 - d. Band rooms
 - e. Gymnasiums
 - f. Multipurpose rooms
 - g. Occupational shops
 - h. Occupied rooms where ambient noise impairs hearing of the fire alarm
 - i. Lobbies
 - j. Meeting rooms
 - k. Any other area for common use
2. Strobe signaling devices required for the hearing impaired shall be State Fire Marshall approved and listed. (7203(c))
3. Audible signals intended for operation in the public mode shall have a sound level of not less than 75dBA at 10' or more than 110dBA at the minimum hearing distance from the audible appliance. (Ch 35 Sec 4-3.2.1)
4. Audible signals intended for operation in the private mode shall have a sound level of not less than 45 dBA at 10' or more than 110dBA at the minimum hearing distance from the audible appliance. (Ch 35 Sec 4-3.3.1)
5. The flash rate shall not exceed 2 flashes per second nor be less than 1 flash every second throughout the listed voltage range of the appliance. (NFPA 72 Sec 4-4.2)
6. The light source color shall be clear or nominal white and shall not exceed 1000 candela (effective intensity). (NFPA 72 Sec 4-4.2.2)
7. Wall-mounted appliances shall be mounted such that the entire lens is not less than 80" and not greater than 96" above the finished floor. Ceiling-mounted appliances shall be installed per Table 4-4.4.1.1(b). (NFPA 72 Sec 4-4.4)

