

**DIVISION OF THE STATE ARCHITECT - ACCESS COMPLIANCE**

**CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2  
COMBINED IBC AND DOJ RULEMAKINGS**

**Chapters 1, 2, 3, 4, 5, 9, 10, 11B, 11C, 16, 24, 27, 29, 30, 31, 31B, 33, 34 and 35**

---

The Division of the State Architect - Access Compliance structured its 2006 Rulemaking submittal into two separate items:

- **ITEM #1 - 2006 IBC RELATED ACCESSIBILITY STANDARDS** contained adoptions and amendments related to the model code adoption of the 2006 International Building Code.
- **ITEM #2 - US DOJ ADA CERTIFICATION RELATED ACCESSIBILITY STANDARDS** contained adoptions and amendments to address items identified by the USDOJ which do not meet or exceed the accessibility requirements of the ADA Standards for Accessible Design.

This document is a compilation of the two separate rulemaking submittals.

---

**CALIFORNIA CHAPTER 1  
GENERAL CODE PROVISIONS**

**SECTION 101  
GENERAL**

**101.1 Title.** *These regulations shall be known as the California Building Code, may be cited as such and will be referred to herein as "this code." The California Building Code is part 2 of eleven parts of the official compilation and publication of the adoptions, amendment, and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2006 International Building Code of the International Code Council with necessary California amendments.*

**101.2 Purpose.** *The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation, and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.*

*[DSA-AC] The purpose of this code is to ensure that barrier-free design is incorporated in all buildings, facilities, site work and other developments to which this code applies and to ensure that they are accessible to and usable by persons with disabilities.*

**101.3 Scope.** *The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout the State of California.*

**101.3.1 Non-state-regulated buildings, structures, and applications.** *Except as modified by local ordinance pursuant to Section 101.8, the building standards in the California Code of Regulations, Title 24, Parts 2, 3, 4, 5, 6, 9 and 10 shall apply to all occupancies and applications not regulated by a state agency.*

**101.3.2 State-regulated buildings, structures, and applications.** *The model code, state amendments to the model code, and/or state amendments where there are no relevant model code provisions, shall apply to the following buildings, structures, and applications regulated by state agencies as referenced in the Matrix Adoption Tables and as specified in Sections 102 through 114, except where modified by local ordinance pursuant to Section 101.8. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the State Legislature.*

**Note:** *See Preface to distinguish the model code provisions from the California provisions.*

**1.** *State-owned buildings, including buildings constructed by the Trustees of the California State University, and to the extent permitted by California laws, buildings designed and constructed by the Regents of the University of California, and regulated by the Building Standards Commission. See Section 102 for additional scope provisions.*

**2.** *Local detention facilities regulated by the Board of Corrections. See Section 103 for additional scope provisions.*

**3.** *Barbering, cosmetology or electrolysis establishments, acupuncture offices, pharmacies, veterinary facilities, and structural pest control locations regulated by the Department of Consumer Affairs. See Section 104 for additional scope provisions.*

**4.** *Energy efficiency standards regulated by the California Energy Commission. See Section 105 for additional scope provisions.*

**5.** *Dairies and places of meat inspection regulated by the Department of Food and Agriculture. See Section 106 for additional scope provisions.*

**6.** *Organized camps, laboratory animal quarters, public swimming pools, radiation protection, commissaries serving mobile food preparation vehicles, and wild animal quarantine facilities regulated by the Department of Health Services. See Section 107 for additional scope provisions.*

**7.** *Hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing, and other types of dwellings containing sleeping accommodations with or without common toilets or cooking facilities. See Section 108 for additional scope provisions.*

**8.** *Accommodations for persons with disabilities in buildings containing newly constructed covered multifamily dwellings, new common use spaces serving existing covered multifamily dwellings, additions to existing buildings where the addition alone meets the definition of a covered multifamily dwelling, and common-use spaces serving covered multifamily dwellings which are regulated by Department of Housing and Community Development. See Section 108 for additional scope provisions.*

**9.** *Permanent buildings and permanent accessory buildings or structures constructed within mobilehome parks and special occupancy parks regulated by the Department of Housing and Community Development. See Section 108 for additional scope provisions.*

**10.** *Accommodations for persons with disabilities regulated by the Division of the State Architect. See Section 109.1 for additional scope provisions.*

**11.** *Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential service buildings regulated by the Division of the State Architect. See Section 109.2 for additional scope provisions.*

**12.** *Qualified historical buildings and structures and their associated sites regulated by the State Historical Building Safety Board with the Division of the State Architect. See Section 109.3 for additional scope provisions.*

**13.** *General acute care hospitals, acute psychiatric hospitals, skilled nursing and/or intermediate care facilities, clinics licensed by the Department of Health Services, and correctional treatment centers regulated by the Office of Statewide Health Planning and Development. See Section 110 for additional scope provisions.*

**14.** *Applications regulated by the Office of State Fire Marshal include but are not limited to the following in accordance with Section 111:*

**1.** *Buildings or structures used or intended for use as an:*

**1.1.** *Asylum, jail*

**1.2.** *Mental hospital, hospital, home for the elderly, children's nursery, children's home or institution, school or any similar occupancy of any capacity*

**1.3.** *Theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education*

**1.4.** *Small family day care homes, large family day-care homes, residential facilities and residential facilities for the elderly, residential care facilities*

**1.5.** *State institutions or other state-owned or state-occupied buildings*

**1.6.** *High rise structures*

**1.7.** *Motion picture production studios*

**1.8.** *Organized camps*

**1.9.** *Residential structures*

**2.** *Tents, awnings or other fabric enclosures used in connection with any occupancy*

3. Fire alarm devices, equipment and systems in connection with any occupancy

4. Hazardous materials, flammable and combustible liquids

5. Public school automatic fire detection, alarm, and sprinkler systems

6. Wildland urban interface fire areas

15. Public libraries constructed and renovated using funds from the California Library Construction and Renovation Bond Act of 1988 and regulated by the State Librarian. See Section 112 for additional scope provisions.

16. Graywater systems regulated by the Department of Water Resources. See Section 113 for additional scope provisions.

17. For applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance, outdoor environments and uses shall be classified according to accessibility uses described in Chapters 11A, 11B and 11C.

18. Marine Oil Terminals regulated by the California State Lands Commission, see Section 114 for additional scope provisions.

**101.4 Appendices.** Provisions contained in the appendices of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section 18938 (b) for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts. See Section 101.8 of this code.

**101.5 Referenced Codes.** The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code. When this code does not specifically cover any subject related to building design and construction, recognized architectural or engineering practices shall be employed. The National Fire Codes and the Fire Protection Handbook of the National Fire Prevention Association are permitted to be used as authoritative guides in determining recognized fire-prevention engineering practices.

**101.6 Non-Building Standards, Orders and Regulations.** Requirements contained in the International Building Code, or in any other referenced standard, code or document, which are not building standards as defined in Section 18909, Health and Safety Code, shall not be construed as part of the provisions of this code. For non-building standards, orders, and regulations, see other titles of the California Code of Regulations.

#### **101.7 Order of Precedence and Use.**

**101.7.1 Differences.** In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.

**101.7.2 Specific provisions.** Where a specific provision varies from a general provision, the specific provision shall apply.

**101.7.3 Conflicts.** When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, the most restrictive requirement shall prevail.

**101.8 City, County, or City and County Amendments, Additions or Deletions.** The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with Section 101.8.1. The effective date of amendments, additions, or deletions to this code of cities, counties, or city and counties filed pursuant to Section 101.8.1 shall be the date filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code.

Local modifications shall comply with Health and Safety Code Section 18938 (b) for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law or Health and Safety Code Section 13869.7 for Fire Protection Districts.

### **101.8.1 Findings and Filings.**

1. The city, county, or city and county shall make express findings for each amendment, addition or deletion based upon climatic, topographical, or geological conditions.

**Exception:** Hazardous building ordinances and programs mitigating unreinforced masonry buildings.

2. The city, county, or city and county shall file the amendments, additions, or deletions expressly marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire departments shall file the amendments, additions or deletions, and the findings with the California Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.
3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and filed with the California Department of Housing and Community Development at 1800 3<sup>rd</sup> Street, Room 260, Sacramento, CA 95814.

**101.9 Effective Date of this Code.** Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the History Note page of this code.

**101.10 Availability of Codes.** At least one entire copy each of Titles 8, 19, 20, 24, and 25 with all revisions shall be maintained in the office of the building official responsible for the administration and enforcement of this code. See Health and Safety Code Section 18942 (d) (1) & (2).

**101.11 Format.** This part fundamentally adopts the International Building Code by reference on a chapter-by-chapter basis. Such adoption is reflected in the Matrix Adoption Table of each chapter of this part. When the Matrix Adoption Tables make no reference to a specific chapter of the International Building Code, such chapter of the International Building Code is not adopted as a portion of this code.

**101.12 Validity.** If any chapter, section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes, or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

## **SECTION 109 DIVISION OF THE STATE ARCHITECT**

### **109.1 Division of the State Architect - Access Compliance.**

**General.** The purpose of this code is to ensure that barrier-free design is incorporated in all buildings, facilities, site work and other improvements to which this code applies in compliance with state law to ensure that these improvements are accessible to and usable by persons with disabilities. Additions, alterations and structural repairs in all buildings and facilities shall comply with these provisions for new buildings, except as otherwise provided and specified herein.

The provisions of these regulations shall apply to any portable buildings leased or owned by a school district, and shall also apply to temporary and emergency buildings and facilities. Temporary buildings and facilities are not of permanent construction but are extensively used or are essential for public use for a period of time. Examples of temporary buildings or facilities covered include, but are not limited to: reviewing stands, temporary classrooms, bleacher areas, exhibit areas, temporary banking facilities, temporary health screening services, or temporary safe pedestrian passageways around a construction site.

In addition, to incorporate standards at least as restrictive as those required by the federal government for barrier-free design under (1) Title III (Public Accommodations and Commercial Facilities), Subpart D (New Construction and Alteration) and Appendix A (Americans with Disabilities Act Standards for Accessible Design) (see 28 C.F.R., Part 36), and (2) Title II (Public Entities), Section 35.151 (New Construction and Alterations) (see 28 C.F.R., Part 35) both from the Americans with Disabilities Act of 1990, and (3) under the Fair Housing Amendments Act of 1988. Some of these regulations may be more stringent than state law in order to meet the federal requirement.

**109.1.1 Application.** See Government Code commencing with Section 4450.

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

**109.1.1.1** 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.

**109.1.1.2** All buildings, structures and facilities that are leased, rented, contracted, sublet or hired by any municipal, county, or state division of government, or by a special district.

**109.1.1.3** 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.

**109.1.1.4** 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.

**109.1.1.5** With respect to buildings, structures, sidewalks, curbs and related facilities not requiring a building permit, building standards published in the California Building Standards Code relating to access for persons with disabilities and other regulations adopted pursuant to Government Code Section 4450, and in effect at the time construction is commenced, shall be applicable.

**109.1.2 Application.** See Health and Safety Code commencing with Section 19952.

All privately funded public accommodations, as defined, and commercial facilities, as defined, shall be accessible to persons with disabilities as follows:

**Exception:** Certain types of privately funded multistory buildings do not require installation of an elevator to provide access above and below the first floor. See Chapter 11B.

**109.1.2.1** Any building, structure, facility, complex, or improved area, or portions thereof, which are used by the general public.

**109.1.2.2** Any sanitary facilities which are made available for the public, clients or employees in such accommodations or facilities.

**109.1.2.3** Any curb or sidewalk intended for public use that is constructed in this state with private funds.

**109.1.2.4** All existing privately funded public accommodations when alterations, structural repairs or additions are made to such public accommodations as set forth under Chapter 11B.

**109.1.3 Application - Public Housing and Private Housing Available for Public Use.** See Government Code Sections 4450 and 12955.1(d).

**109.1.4 Enforcing Agency.**

**109.1.4.1** The director of the Department of General Services where state funds are utilized for any project or where funds of counties, municipalities or other political subdivisions are utilized for the construction of elementary, secondary or community college projects.

**109.1.4.2** The governing bodies where funds of counties, municipalities or other political subdivisions are utilized except as otherwise provided above.

**109.1.4.3** The building department of every city, county, or city and county within the territorial area of its city, county, or city and county, where private funds are utilized. "Building department" means the department, bureau or officer charged with the enforcement of laws or ordinances regulating the erection or construction, or both the erection and construction, of buildings.

**109.1.5 Special Conditions for Persons with Disabilities Requiring Appeals Action Ratification.** Whenever reference is made in these regulations to this section, the findings and determinations required to be rendered by the local enforcing agency shall be subject to ratification through an appeals process.

**109.1.6 Authority Cited.** Government Code Section 4450.

**109.1.7 Reference Cited.** *Government Code Sections 4450 through 4461, 12955.1(d) and Health and Safety Code Sections 18949.1, 19952 through 19959.*

## **APPENDIX CHAPTER 1 ADMINISTRATION**

**110.2 Certificate issued.** After the building official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the department of building safety, the building official shall issue a certificate of occupancy that contains the following:

1. The building permit number.
2. The address of the structure.
3. The name and address of the owner.
4. A description of that portion of the structure for which the certificate is issued.
5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
6. The name of the building official.
7. The edition of the code under which the permit was issued.
8. The use and occupancy, in accordance with the provisions of Chapter 3.
9. The type of construction as defined in Chapter 6.
10. The design occupant load.
11. If an automatic sprinkler system is provided, whether the sprinkler system is required.
12. Any special stipulations and conditions of the building permit.

## **CHAPTER 2 DEFINITIONS AND ABBREVIATIONS**

### **SECTION 202 DEFINITIONS**

**ACCESS AISLE.** [DSA-AC] See Chapter 11B, Section 1102B.

**ACCESSIBILITY.** [DSA-AC] See Chapter 11A, Section 1107A.1-A and Chapter 11B, Section 1102B.

**ACCESSIBLE.** [DSA-AC] See Chapter 11A, Section 1107A.1-A and Chapter 11B, Section 1102B.

**ACCESSIBLE ELEMENT.** [DSA-AC] See Chapter 11B, Section 1102B.

**ACCESSIBLE MEANS OF EGRESS.** See Section 1002.1.

**ACCESSIBLE ROUTE.** [DSA-AC] See Chapter 11A, Section 1107A.1-A.

**ACCESSIBLE ROUTE OF TRAVEL.** [DSA-AC] See Chapter 11B, Section 1102B.

**ACCESSIBLE SPACE.** [DSA-AC] See Chapter 11B, Section 1102B.

**ADAPTABILITY.** [DSA-AC] See Chapter 11B, Section 1102B.

**ADAPTABLE DWELLING UNIT.** [DSA-AC] See Chapter 11A, Section 1107A.1-A.

**ADDITION. . . .**

[DSA-AC] "Addition" is an extension, expansion, or increase in floor area or height of a building, facility or structure.

**ADMINISTRATIVE AUTHORITY.** [DSA-AC] See Chapter 11B, Section 1102B.

**AISLE. . . .**

[DSA-AC] See Chapter 11B, Section 1102B.

**AISLE, EMPLOYEE AREAS.** [DSA-AC] See Chapter 11B, Section 1102B.

**ALTERNATE CARD READER.** [DSA-AC] See Chapter 11C, Section 1101C.1.

**ALTERATION (or ALTER).** . . .

[DSA-AC] "Alteration (or Alter)" is any change, addition or modification in construction or occupancy or structural repair or change in primary function to an existing structure made by, on behalf of, or for the use of a public accommodation or commercial facility, that affects or could affect the usability of the building or facility or part thereof. Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions.

**ANSI.** [DSA-AC] "ANSI" means the American National Standards Institute.

**APPROVED.** . . .

[DSA-AC] "Approved" means meeting the approval of the enforcing agency, except as otherwise provided by law, when used in connection with any system, material, type of construction, fixture or appliance as the result of investigations and tests conducted by the agency, or by reason of accepted principles or tests by national authorities or technical, health, or scientific organizations or agencies.

1. See Health and Safety Code Section 17920 for "Approved" as applied to residential construction and buildings or structures accessory thereto, as referenced in Section 108.2.1.1.

2. See Health and Safety Code Section 17921.1 for "Approved" as applied to the use of hotplates in residential construction referenced in Section 108.2.1.1.

3. See Health and Safety Code Section 17921.3 for "Approved" as applied to low-flush water closets in residential construction, as referenced in 108.2.1.1.

4. See Health and Safety Code Section 19966 for "Approved" as applied to factory-built housing as referenced in Section 108.3.2.5.

**APPROVED TESTING AGENCY.** [DSA-AC] "Approved Testing Agency" is any agency, which is determined by the enforcing agency, except as otherwise provided by statute, to have adequate personnel and expertise to carry out the testing of systems, materials, type of construction fixtures or appliances.

**AREA OF REFUGE.** See Section 1002.1.

**ASSEMBLY AREA.** [DSA-AC] See Chapter 11B, Section 1102B.

**ASSISTIVE DEVICE.** [DSA-AC] See Chapter 11A, Section 1107A.1-A.

**AUTOMATIC DOOR.** [DSA-AC] See Chapter 11A, Section 1107A.1-A and Chapter 11B, Section 1102B.

**BATHROOM.** [DSA-AC] See Chapter 11A, Section 1107A.2-B.

**BUILDING.** Any structure used or intended for supporting or sheltering any use or occupancy.

**BUILDING ENTRANCE ON AN ACCESSIBLE ROUTE.** [DSA-AC] See Chapter 11A, Section 1107A.2-B.

**BUILDING, EXISTING.** [DSA-AC] "Building, Existing" is a building erected prior to the adoption of this code, or one for which a legal building permit has been issued.

**BUILDING OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.

**CCR.** [DSA-AC] "CCR" means the California Code of Regulations.

**CIRCULATION PATH.** [DSA-AC] See Chapter 11B, Section 1102B.

**CLEAR.** [DSA-AC] See Chapter 11B, Section 1102B.

**CLEAR FLOOR SPACE.** [DSA-AC] See Chapter 11B, Section 1102B.

**CLOSED-CIRCUIT TELEPHONE.** [DSA-AC] See Chapter 11B, Section 1102B.

**COMMERCIAL FACILITIES.** [DSA-AC] “Commercial Facilities” are facilities that are intended for nonresidential use and whose operations will affect commerce, including factories, warehouses, office buildings, and other buildings in which employment may occur. Commercial facilities shall not include railroad locomotives, railroad freight cars, railroad cabooses, railroad cars covered under Title II of the Americans with Disabilities Act of 1990, or facilities that are covered or expressly exempted from coverage under the Fair Housing Amendment Act of 1988 (42 USC 3601-3631, et seq).

**COMMON USE AREAS.** [DSA-AC] See Chapter 11A, Section 1107A.3-C and Chapter 11B, Section 1102B.

**COVERED MULTIFAMILY DWELLINGS.** [DSA-AC] See Chapter 11A, Section 1107A.3-C.

**CROSS SLOPE.** [DSA-AC] See Chapter 11A, Section 1107A.3-C and Chapter 11B, Section 1102B.

**CURB CUT.** [DSA-AC] See Chapter 11A, Section 1107A.3-C and Chapter 11B, Section 1102B.

**CURB RAMP.** [DSA-AC] See Chapter 11A, Section 1107A.3-C and Chapter 11B, Section 1102B.

**DETECTABLE WARNING.** [DSA-AC] See Chapter 11A, Section 1107A.4-D and Chapter 11B, Section 1102B.

**DIRECTIONAL SIGN.** [DSA-AC] “Directional Sign” is a publicly displayed notice which indicates by use of words or symbols a recommended direction or route of travel.

**DISABILITY.** [DSA-AC] “Disability” is (1) a physical or mental impairment that limits one or more of the major life activities of an individual, (2) a record of such an impairment, or (3) being regarded as having such an impairment.

**DISABLED.** [DSA-AC] See “Disability”.

**DORMITORY.** See Section 308.4.6 and 310.2.

**DWELLING UNIT. . . .**

[DSA-AC] See Chapter 11A, Section 1107A.4-D and Chapter 11B, Section 1102B.

**ELEMENT.** [DSA-AC] See Chapter 11B, Section 1102B.

**ELEVATOR, PASSENGER.** [DSA-AC] See Chapter 11B, Section 1102B.

**ENFORCING AGENCY.** [DSA-AC] “Enforcing Agency” is the designated department or agency as specified by statute or regulation.

**ENTRANCE.** [DSA-AC] See Chapter 11B, Section 1102B.

**EQUIVALENT FACILITATION.** [DSA-AC] See Chapter 11A, Section 1107A.5-E and Chapter 11B, Section 1102B.

**EXISTING BUILDINGS.** [DSA-AC] See “Building, Existing.”

**EXIT.** See Section 1002.1.

**FACILITY (or FACILITIES).** [DSA-AC] See Chapter 11A, Section 1107A.6-F and Chapter 11B, Section 1102B.

**FREE-STANDING PEDESTAL.** [DSA-AC] See Chapter 11C, Section 1101C.1.

**GRAB BAR.** [DSA-AC] See Chapter 11A, Section 1107A.7-G and Chapter 11B, Section 1102B.

**GRADE (Adjacent Ground Elevation).** [DSA-AC] “Grade (Adjacent Ground Elevation)” is the lowest point of elevation of the finished surface of the ground, paving or sidewalk within the area between the building and the property line or, when the property line is more than 5 feet (1524 mm) from the building, between the building and a line 5 feet (1524mm) from the building. See Health and Safety Code Section 19955.3 (d).

**GROUND FLOOR.** [DSA-AC] See Chapter 11A, Section 1107A.7-G.

**GUARD [DSA-AC] (or GUARDRAIL).** See Section 1002.1.

**HANDRAIL.** See Section 1002.1.

**HEALTH CARE PROVIDER.** [DSA-AC] See “Professional Office of a Health Care Provider” in Chapter 11B, Section 1102B.

**HISTORICAL BUILDINGS.** [DSA-AC] See Qualified Historical Building or Property, Chapter 34, Division II, Section 8-218-Q.”

**HOTEL (or MOTEL).** [DSA-AC] “Hotel” or “Motel” is any building containing six or more guest rooms intended or designed to be used, or which are used, rented or hired out to be occupied, or which are occupied for sleeping purposes by guests.

**INDEPENDENT ENTITY.** [DSA-AC] “Independent Entity” is a not-for-profit product safety testing and certification organization, dedicated to testing for public safety. An independent entity would operate for the testing, certification and quality assessment of products, systems and services.

**INTERNATIONAL SYMBOL OF ACCESSIBILITY.** [DSA-AC] See Chapter 11A, Section 1107A.9-I and Chapter 11B, Section 1102B.

**KICK PLATE.** [DSA-AC] See Chapter 11A, Section 1107A.11-K and Chapter 11B, Section 1102B Definitions as applicable.

**LEVEL ACCESSIBLE AREA.** [DSA-AC] See Chapter 11C, Section 1101C.1.

**LEVEL AREA.** [DSA-AC] See Chapter 11A, Section 1107A.12-L and Chapter 11B, Section 1102B.

**LIFT, SPECIAL ACCESS.** [DSA-AC] See “Special Access Lift” Chapter 11A, Section 1107A.12-L and Chapter 11B, Section 1102B.

**MARKED CROSSING.** [DSA-AC] See Chapter 11A, Section 1107A.13-M and Chapter 11B, Section 1102B.

**MOTEL.** [DSA-AC] See “Hotel (or Motel)”.

**MULTISTORY DWELLING UNIT.** [DSA-AC] See Chapter 11A, Section 1107A.13-M.

**MULTIPLE-ACCOMMODATION TOILET FACILITY.** [DSA-AC] “Multiple-Accommodation Toilet Facility” is a room that has more than one sanitary fixture, is intended for the use of more than one person at a time, and which usually is provided with privacy compartments or screens shielding some fixtures from view. A bathroom serving a hotel guest room and a privacy toilet in small offices, stores and similar locations are not included in this category.

**NEWLY CONSTRUCTED.** [DSA-AC] See Chapter 11A, Section 1107A.14-N.

**NFPA.** [DSA-AC] “NFPA” is the National Fire Protection Association.

**NOSING (or NOSE).** . . .  
[DSA-AC] See Chapter 11A, Section 1107A.14-N and Chapter 11B, Section 1102B.

**OCCUPIABLE SPACE.** A room or enclosed space designed for human occupancy in which individuals congregate for amusement, educational or similar purposes or in which occupants are engaged at labor, and which is equipped with means of egress and light and ventilation facilities meeting the requirements of this code.

**OPEN RISER.** [DSA-AC] See Chapter 11A, Section 1107A.15-O and Chapter 11B, Section 1102B.

**OPERABLE PART.** [DSA-AC] See Chapter 11B, Section 1102B.

**PASSAGE DOOR.** [DSA-AC] See Chapter 11A, Section 1107A.16-P and Chapter 11B, Section 1102B.

**PASSENGER ELEVATOR.** [DSA-AC] See Elevator, Passenger in Chapter 11B, Section 1102B.

**PATH OF TRAVEL.** [DSA-AC] See Chapter 11B, Section 1102B.

**PEDESTRIAN.** [DSA-AC] See Chapter 11A, Section 1107A.16-P and Chapter 11B, Section 1102B.

**PEDESTRIAN GRADE SEPARATION.** [DSA-AC] See Chapter 11B, Section 1102B.

**PEDESTRIAN RAMP.** [DSA-AC] See Chapter 11A, Section 1107A.16-P and Chapter 11B, Section 1102B.

**PEDESTRIAN WAY.** [DSA-AC] See Chapter 11A, Section 1107A.16-P and Chapter 11B, Section 1102B.

**PERMANENT.** [DSA-AC] "Permanent" shall mean facilities, which, are intended to be used for periods longer than those designated in this code under the definition of "temporary."

**PERMIT.** An official document or certificate issued by the authority having jurisdiction which authorizes performance of a specified activity.

**PERSONS WITH DISABILITIES.** [DSA-AC] See Chapter 11A, Section 1107A.16-P.

**PLATFORM.** See Section 410.2.

**POWDER ROOM.** [DSA-AC] See Chapter 11A, Section 1107A.16-P.

**POWER-ASSISTED DOOR.** [DSA-AC] "Power-Assisted Door" is a door used for human passage with a mechanism that helps to open the door, or relieves the opening resistance of a door, upon the activation of a switch or a continued force applied to the door itself.

**PROFESSIONAL OFFICE OF A HEALTH CARE PROVIDER.** [DSA-AC] See Chapter 11B, Section 1102B.

**PUBLIC ACCOMMODATION.** [DSA-AC] "Public Accommodation" includes, but is not limited to, any building or facility or other specific public use facilities not listed in Items 1 through 12 if they fall into one or more of the following categories:

1. Places of public lodging.
2. Establishments serving food or drink open to public use.
3. Places of exhibition or entertainment open to public use.
4. Places of public gathering.
5. Sales or rental establishments open to public use.
6. Service establishments open to public use.
7. Stations used for public transportation.
8. Places of public display or collection.
9. Places of public recreation.
10. Places of public education.
11. Social service center establishments open to public use.
12. Places of exercise or recreation open to public use.

Examples of public accommodations for purposes of this code shall include, but not be limited to, the following private entities:

1. An inn, hotel, motel or other place of public lodging, except for a lodging house located within a building that contains not more than five rooms for rent or hire and that is actually occupied by the proprietor of such establishment as the residence of such proprietor.
2. A restaurant, bar, or other establishment serving food or drink.
3. A motion picture house, theater, concert hall, stadium or other place of exhibition or entertainment.
4. An auditorium, convention center, lecture hall, or other place of public gathering.
5. A bakery, grocery store, clothing store, hardware store, shopping center, or other sales or retail establishment.
6. A laundromat, dry cleaner, bank, barber shop, beauty shop, travel service, shoe repair service, funeral parlor, gas station, office of an accountant or lawyer, pharmacy, insurance office, professional office of a health care provider, hospital or other service establishment.
7. A terminal, depot, or other station used for specified public transportation.
8. A museum, library, gallery, or other place of public display or collection.
9. A park, zoo, amusement park, or other place of recreation.

10. A nursery, elementary, secondary, undergraduate, or postgraduate private school, or other place of education.
11. A day-care center, senior citizen center, homeless shelter, food bank, adoption agency or other social service center establishment.
12. A gymnasium, health spa, bowling alley, golf course, or other place of exercise.
13. A church.
14. An office building.
15. A public curb or sidewalk.

**PUBLIC-USE AREAS.** [DSA-AC] See Chapter 11A, Section 1107A.16-P and Chapter 11B, Section 1102B.

**PUBLIC WAY.** See Section 1002.1.

**PUBLICLY FUNDED.** [DSA-AC] "Publicly Funded" for the purpose of housing, all buildings, structures, sidewalks, curbs and related facilities constructed in the state and used or intended to be used as a public use area, as defined in Section 1107A.16-P, shall comply with the accessibility standards of Chapter 11B of this code when state, county or municipal funds, or funds of any political subdivision of the state are used.

**QUALIFIED HISTORICAL BUILDING (or PROPERTY).** [DSA-AC] See Chapter 34, Division II, Section 8-218-Q.

**RAIL TRANSIT BOARDING PLATFORM.** [DSA-AC] See "Transit Boarding Platform" in Chapter 11B, Section 1102B.

**RAMP. . . .**  
[DSA-AC] See Chapter 11A, Section 1107A.18-R.

**REASONABLE PORTION.** [DSA-AC] "Reasonable Portion" shall mean that segment of a building, facility, area, space or condition, which would normally be necessary if the activity therein is to be accessible by persons with disabilities.

**RECOMMEND.** [DSA-AC] "Recommend" does not require mandatory acceptance, but identifies a suggested action that shall be considered for the purpose of providing a greater degree of accessibility to persons with disabilities.

**REMODELING.** [DSA-AC] See "Alteration (or Alter)".

**REPAIR.** The reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

**RISER.** [DSA-AC] See Chapter 11A, Section 1107A.18-R and Chapter 11B, Section 1102B.

**RUNNING SLOPE.** [DSA-AC] See Chapter 11B, Section 1102B.

**SANITARY FACILITY.** [DSA-AC] "Sanitary Facility" is any single water closet, urinal, lavatory, bathtub or shower, or a combination thereof, together with the room or space in which they are housed.

**SHALL.** [DSA-AC] "Shall" as used in this code means mandatory.

**SHOPPING CENTER (or SHOPPING MALL).** [DSA-AC] See Chapter 11B, Section 1102B.

**SHOULD.** [DSA-AC] See "Recommend".

**SIDEWALK.** [DSA-AC] "Sidewalk" is a surfaced pedestrian way contiguous to a street used by the public. (As differentiated from the definition of walk in Chapter 11A, Section 1107A.23-W and Chapter 11B, Section 1102B.)

**SIGNAGE.** [DSA-AC] "Signage" is displayed verbal, symbolic, tactile, and/or pictorial information.

**SINGLE-ACCOMMODATION SANITARY FACILITY.** [DSA-AC] "Single-Accommodation Sanitary Facility" is a room that has not more than one of each type of sanitary fixture, is intended for use by only one person at a time, has no partition around the toilet, and has a door that can be locked on the inside by the room occupant.

**SITE.** [DSA-AC] "Site" is a parcel of land bounded by a property line or a designated portion of a public right of way.

**SITE DEVELOPMENT.** [DSA-AC] “Site Development” is “on-site” and “off-site” work, including, but not limited to, walks, sidewalks, ramps, curbs, curb ramps, parking facilities, stairs, planting areas, pools, promenades, exterior gathering or assembly areas and raised or depressed paved areas.

**SLEEPING ACCOMMODATIONS.** [DSA-AC] See Chapter 11A, Section 1107A.19-8 and Chapter 11B, Section 1102B.

**SLOPE.** [DSA-AC] See Chapter 11A, Section 1107A.19-S.

**SPACE.** [DSA-AC] “Space” is a definable area, for example, room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.

**SPECIAL ACCESS LIFT.** [DSA-AC] See Chapter 11A, Section 1107A.19-S and Chapter 11B, Section 1102B.

**SPECIFIED PUBLIC TRANSPORTATION.** [DSA-AC] See Chapter 11B, Section 1102B.

**STAGE.** See Section 410.2.

**STAIR.** See Section 1002.1.

**STAIRWAY.** See Section 1002.1.

**STORY. . . .**

[DSA-AC] See Chapter 11B, 1102B.

**STORY, FIRST.** [DSA-AC] See Chapter 11B, Section 1102B.

**STRUCTURAL FRAME.** [DSA-AC] See Chapter 11B, Section 1102B.

**STRUCTURE.** That which is built or constructed.

**TACTILE.** [DSA-AC] “Tactile” describes an object that can be perceived using the sense of touch.

**TECHNICALLY INFEASIBLE. . . .**

[DSA-AC] “Technically Infeasible” means, with respect to an alteration of a building or a facility, that it has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member which is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility.

**TEMPORARY.** [DSA-AC] “Temporary” shall mean buildings and facilities intended for use at one location for not more than one year and seats intended for use at one location for not more than 90 days.

**TEXT TELEPHONE.** [DSA-AC] See Chapter 11B, Section 1102B.

**TOEBOARD.** [DSA-AC] See Chapter 11A, Section 1107A.15-O.

**TOWNHOUSE. . . .**

[DSA-AC] For applications required to provide accommodations for persons with disabilities, see Chapter 11A, Section 1107A.20-T.

**TRANSIENT LODGING.** [DSA-AC] See Chapter 11B, Section 1102B.

**TRANSIT BOARDING PLATFORM.** [DSA-AC] See Chapter 11B, Section 1102B.

**TREAD.** [DSA-AC] See Chapter 11A, Section 1107A.20-T and Chapter 11B, Section 1102B.

**TREAD DEPTH.** [DSA-AC] See Chapter 11A, Section 1107A.20-T and Chapter 11B, Section 1102B.

**TREAD RUN.** [DSA-AC] See Chapter 11A, Section 1107A.20-T and Chapter 11B, Section 1102B.

**TYPE OF MOTOR FUEL.** [DSA-AC] See Chapter 11C, Section 1101C.1.

**UNREASONABLE HARDSHIP.** [DSA-AC] “Unreasonable Hardship” exists when the enforcing agency finds that compliance with the building standard would make the specific work of the project affected by the building standard unfeasible, based on an overall evaluation of the following factors:

1. The cost of providing access.
2. The cost of all construction contemplated.
3. The impact of proposed improvements on financial feasibility of the project.
4. The nature of the accessibility which would be gained or lost.
5. The nature of the use of the facility under construction and its availability to persons with disabilities.

The details of any finding of unreasonable hardship shall be recorded and entered in the files of the enforcing agency.

**VEHICULAR OR PEDESTRIAN ARRIVAL POINTS.** [DSA-AC] See Chapter 11A, Section 1107A.22-V.

**VEHICULAR WAY.** [DSA-AC] See Chapter 11B, Section 1102B.

**WALK.** [DSA-AC] See Chapter 11A, Section 1107A.23-W and Chapter 11B, Section 1102B.

**WHEELCHAIR.** [DSA-AC] “Wheelchair” is a chair mounted on wheels to be propelled by its occupant manually or with the aid of electric power, of a size and configuration conforming to the recognized standard models of the trade.

**WHEELCHAIR OCCUPANT (or WHEELCHAIR USER).** [DSA-AC] “Wheelchair Occupant (or Wheelchair User)” is an individual who, due to a physical impairment or disability, utilizes a wheelchair for mobility.

**WORK STATION.** . . .

[DSA-AC] See Chapter 11B, Section 1102B.

## CHAPTER 3 USE AND OCCUPANCY CLASSIFICATION

### SECTION 302 CLASSIFICATION

**302.1 General.** Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed below. A room or space that is intended to be occupied at different times for different purposes shall comply with all of the requirements that are applicable to each of the purposes for which the room or space will be occupied. Structures with multiple occupancies or uses shall comply with Section 508. Where a structure is proposed for a purpose that is not specifically provided for in this code, such structure shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard involved.

1. Assembly (see Section 303): Groups A-1, A-2, A-3, A-4 and A-5
2. Business (see Section 304): Group B
3. Educational (see Section 305): Group E
4. Factory and Industrial (see Section 306): Groups F-1 and F-2
5. High Hazard (see Section 307): Groups H-1, H-2, H-3, H-4 and H-5
6. Institutional (see Section 308): Groups I-1, I-2, I-3 and I-4
7. Mercantile (see Section 309): Group M
8. Residential (see Section 310): Groups R-1, R-2, R-3 and R-4
9. Storage (see Section 311): Groups S-1 and S-2
10. Utility and Miscellaneous (see Section 312): Group U

### SECTION 310 RESIDENTIAL GROUP R

**310.2 Definitions.** The following words . . .

**DORMITORY.** A space in a building where group sleeping accommodations are provided in one room, or in a series of closely associated rooms, for persons not members of the same family group, under joint occupancy and single management, as in college dormitories or fraternity houses.

**CHAPTER 4  
SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY**

**SECTION 406  
MOTOR-VEHICLE-RELATED OCCUPANCIES**

**406.2 Parking Garages.**

**406.2.2 Clear height.** The clear height of each floor level in vehicle and pedestrian traffic areas shall not be less than 7 feet (2134 mm). *[DSA-AC] The clear height of vehicle and pedestrian areas required to be accessible shall comply with Chapter 11A or 11B, as applicable.*

**SECTION 410  
STAGES AND PLATFORMS**

**410.2 Definitions. . . .**

**PLATFORM.** A raised area within a building used for worship, the presentation of music, plays or other entertainment; the head table for special guests; the raised area for lecturers and speakers; boxing and wrestling rings; theater-in-the-round stages; and similar purposes wherein there are no overhead hanging curtains, drops, scenery or stage effects other than lighting and sound. A temporary platform is one installed for not more than 30 days.

**STAGE.** A space within a building utilized for entertainment or presentations, which includes overhead hanging curtains, drops, scenery or stage effects other than lighting and sound.

**SECTION 412  
AIRCRAFT-RELATED OCCUPANCIES**

**412.1 Airport traffic control towers.**

**412.1.6 Accessibility.** *[DSA-AC] In air traffic control towers, an accessible route shall not be required to serve the cab and the equipment areas on the floor immediately below the cab.*

**CHAPTER 5  
GENERAL BUILDING HEIGHTS AND AREAS**

**SECTION 508  
MIXED USE AND OCCUPANCY**

**508.3 Mixed occupancies.**

**508.3.1 Accessory occupancies. . . .**

**Exceptions:**

1. . . .

2. Assembly areas that are accessory to Group E occupancies are not considered separate occupancies except when applying the assembly occupancy requirements of *Chapter 11B*,

3. . . .

**CHAPTER 9  
FIRE PROTECTION SYSTEMS**

**SECTION 907  
FIRE ALARM AND DETECTION SYSTEMS**

**907.3 Manual fire alarm boxes. . . .**

**907.3.1 Location. . . .**

**907.3.2 Height.** The height of the manual fire alarm boxes shall be a minimum of 42 inches (1067 mm) and a maximum of 48 inches (1219 mm), measured vertically, from the floor level to the *[DSA-AC] highest point of the activating handle or lever of the box. [DSA-AC] Manual fire alarm boxes shall also comply with Section 1117B.6 Item 4.*

*Exception: [DSA-AC] In existing buildings there is no requirement to retroactively relocate existing manual fire alarm boxes to a minimum of 42 inches (1067 mm) and a maximum of 48 inches (1219 mm) from the floor level to the activating handle or lever of the box.*

**907.9 Alarm notification appliances. . . .**

**907.9.1 Visible alarms.** Visible alarm notification appliances shall be provided in accordance with Sections 907.9.1.1 through 907.9.1.5.

**Exceptions:**

1. *In other than Group I-2 and I-2.1, visible alarm notification appliances are not required in alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.*

2. *Visible alarm notification appliances shall not be required in enclosed exit stairways, exterior exit stairs, and exterior exit ramps.*

**907.9.1.1 Public and common use areas.** Visible alarm notification appliances shall be provided in public use areas and common use areas, *including but not limited to:*

1. *Sanitary facilities including restrooms, bathrooms and shower rooms*
2. *Corridors*
3. *Music practice rooms*
4. *Band rooms*
5. *Gymnasiums*
6. *Multipurpose rooms*
7. *Occupational shops*
8. *Occupied rooms where ambient noise impairs hearing of the fire alarm*
9. *Lobbies*
10. *Meeting rooms*
11. *Classrooms*

**907.9.1.2 Employee work areas.** Where employee work areas have audible alarm coverage, the notification appliance circuits serving the employee work areas shall be initially designed with a minimum of 20 percent spare capacity to account for the potential of adding visible notification appliances in the future to accommodate hearing impaired employees.

**907.9.1.3 Groups I-1 and R-1.** Group I-1 and R-1 sleeping units in accordance with Table 907.9.1.3 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system.

**TABLE 907.9.1.3  
VISIBLE AND AUDIBLE ALARMS**

| <b>NUMBER OF SLEEPING UNITS</b> | <b>SLEEPING UNITS WITH VISIBLE AND AUDIBLE ALARMS</b> |
|---------------------------------|---|
| 6 to 25                         | 2   |
| 26 to 50                        | 4   |
| 51 to 75                        | 7   |
| 76 to 100                       | 9   |
| 101 to 150                      | 12  |
| 151 to 200                      | 14  |
| 201 to 300                      | 17  |
| 301 to 400                      | 20  |
| 401 to 500                      | 22  |
| 501 to 1,000                    | 5% of total   |
| 1,001 and over                  | 50 plus 3 for each 100 over 1,000                     |

*[DSA-AC] Also see Chapter 11B, Section 1111B.4.5, Table 11B-3, and Table 11B-4.*

**907.9.1.4 Group R-2.** In Group R-2 occupancies required by Section 907 to have a fire alarm system, all dwelling units and sleeping units shall be provided with the capability to support visible alarm notification appliances in accordance with *NFPA 72*.

**907.9.1.5 Group I-1, R-3.1 and R-4.** *Protective social care facilities which house persons who are hearing impaired, shall be provided with notification appliances for the hearing impaired installed in accordance with NFPA 72 and which shall activate upon initiation of the fire alarm system or the smoke alarms.*

**907.9.2 Audible alarms.** Audible alarm notification appliances shall be provided and shall sound a distinctive sound that is not to be used for any purpose other than that of a fire alarm. The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at least 60 seconds, whichever is greater, in every occupied space within the building. The minimum sound pressure levels shall be: 75 dBA in occupancies in Groups R and I-1; 90 dBA in mechanical equipment rooms and 60 dBA in other occupancies. The maximum sound pressure level for audible alarm notification appliances shall be 110 dBA at the minimum hearing distance from the audible appliance. Where the average ambient noise is greater than 95 dBA, visible alarm notification appliances shall be provided in accordance with *NFPA 72* and audible alarm notification appliances shall not be required.

*In Group I-2 occupancies, audible appliances placed in patient areas shall be only chimes or similar sounding devices for alerting staff.*

**Exception:** Visible alarm notification appliances shall be allowed in lieu of audible alarm notification appliances in *patient* areas of Group I-2 occupancies.

**907.9.2.1 Audible Alarm Signal.** *The audible signal shall be the standard fire alarm evacuation signal, ANSI S3.41 Audible Emergency Evacuation Signal, "three pulse temporal pattern", as described in NFPA 72.*

**Exception:** *The use of the existing evacuation signaling scheme shall be permitted where approved by the enforcing agency.*

## CHAPTER 10 MEANS OF EGRESS

### SECTION 1002 DEFINITIONS

#### 1002.1 Definitions. . . .

**ACCESSIBLE MEANS OF EGRESS.** A continuous and unobstructed way of egress travel from any accessible point in a building or facility to a public way.

**AREA OF REFUGE.** An area where persons unable to use stairways can remain temporarily to await instructions or assistance during emergency evacuation.

**EXIT.** That portion of a means of egress system which is separated from other interior spaces of a building or structure by fire-resistance-rated construction and opening protectives as required to provide a protected path of egress travel between the exit access and the exit discharge. Exits include exterior exit doors at ground level, exit enclosures, exit passageways, exterior exit stairs, exterior exit ramps and horizontal exits.

**GUARD [DSA-AC] (or GUARDRAIL).** A building component or a system of building components located at or near the open sides of elevated walking surfaces that minimizes the possibility of a fall from the walking surface to a lower level.

**HANDRAIL.** A horizontal or sloping rail intended for grasping by the hand for guidance or support.

**PUBLIC WAY.** A street, alley or other parcel of land open to the outside air leading to a street, that has been deeded, dedicated or otherwise permanently appropriated to the public for public use and which has a clear width and height of not less than 10 feet (3048 mm).

**STAIR.** A change in elevation, consisting of one or more risers.

**STAIRWAY.** One or more flights of stairs, either exterior or interior, with the necessary landings and platforms connecting them, to form a continuous and uninterrupted passage from one level to another.

### **SECTION 1003 GENERAL MEANS OF EGRESS**

**1003.1 Applicability.** The general requirements specified in Sections 1003 through 1013 shall apply to all three elements of the means of egress system, in addition to those specific requirements for the exit access, the exit and the exit discharge detailed elsewhere in this chapter.

*[DSA-AC] In addition to the requirements of this chapter, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 108.2.1.2 regulated by the Department of Housing and Community Development, or Section 109.1 regulated by the Division of the State Architect-Access Compliance shall also comply with Chapter 11A or Chapter 11B, as applicable.*

**1003.3.4 Clear width.** Protruding objects shall not reduce the minimum clear width of accessible routes as required in Chapter 11A or Chapter 11B, Section 1133B.8.6.

**1003.5 Elevation change. . . .**

**Exceptions:**

1. A single step with a maximum riser height of 7 inches (178 mm) is permitted for buildings with occupancies in Groups F, H, R-2 and R-3, and Groups S and U at exterior doors not required to be accessible by Chapters 11A or 11B.
2. A stair with a single riser or with two risers and a tread is permitted at locations not required to be accessible by Chapters 11A or 11B, provided that the risers and treads comply with Section 1009.3, the minimum depth of the tread is 13 inches (330 mm) and at least one handrail complying with Section 1012 is provided within 30 inches (762 mm) of the centerline of the normal path of egress travel on the stair.
3. A step is permitted in aisles serving seating that has a difference in elevation less than 12 inches (305 mm) at locations not required to be accessible by Chapters 11A or 11B, provided that the risers and treads comply with Section 1025.11 and the aisle is provided with a handrail complying with Section 1025.13.

Any change in elevation in a corridor serving nonambulatory persons in a Group I-2 occupancy shall be by means of a ramp or sloped walkway.

### **SECTION 1007 ACCESSIBLE MEANS OF EGRESS**

**1007.1 Accessible means of egress required.** Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress is required by Section 1015.1 or 1019.1 from any accessible space, each accessible portion of the space shall be served by accessible means of egress *[DSA-AC] in at least the same number as required by Section 1015.1 or 1019.1. In addition to the requirements of this chapter, means of egress, which provide access to, or egress from, buildings for persons with disabilities, shall also comply with the requirements of Chapters 11A or 11B, as applicable.*

**Exceptions:**

1. Accessible means of egress are not required in alterations to existing buildings.
2. One accessible means of egress is required from an accessible mezzanine level in accordance with Section 1007.3, 1007.4 or 1007.5 and Chapters 11A or 11B, as applicable.
3. In assembly spaces with sloped floors, one accessible means of egress is required from a space where the common path of travel of the accessible route for access to the wheelchair spaces meets the requirements in Section 1025.8 and Chapters 11A or 11B, as applicable.

**1007.2 Continuity and components.** Each required accessible means of egress shall be continuous to a public way and shall consist of one or more of the following components:

1. Accessible routes complying with *Chapter 11A, Sections 1110A.1 and 1120A or Chapter 11B, Section 1114B.1.2, as applicable.*
2. Stairways within vertical exit enclosures complying with Sections 1007.3, 1020 and *Chapter 11A, Section 1123A or Chapter 11B, Section 1133B.4, as applicable.*
3. Exterior exit stairways complying with Sections 1007.3, 1023 and *Chapter 11A, Section 1115A or Chapter 11B, Section 1133B.4, as applicable.*
4. Elevators complying with Section 1007.4 and *Chapter 11A, Section 1124A or Chapter 11B, Section 1116B.1, as applicable.*
5. Platform lifts complying with Section 1007.5 and *Chapter 11A, Section 1124A or Chapter 11B, Section 1116B.2 and 1116B.3, as applicable.*
6. Horizontal exits complying with Section 1021.
7. Ramps complying with Section 1010 and *Chapter 11A, Sections 1114A and 1122A or Chapter 11B, Section 1133B.5, as applicable.*
8. Areas of refuge complying with Section 1007.6.

**Exceptions:**

1. Where the exit discharge is not accessible, an exterior area for assisted rescue must be provided in accordance with Section 1007.8.
2. Where the exit stairway is open to the exterior, the accessible means of egress shall include either an area of refuge in accordance with Section 1007.6 or an exterior area for assisted rescue in accordance with Section 1007.8.

**1007.2.1 Elevators required.** In buildings where a required accessible floor is four or more stories above or below a level of exit discharge, at least one required accessible means of egress shall be an elevator complying with Section 1007.4.

**Exceptions:**

1. In buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a horizontal exit and located at or above the level of exit discharge.
2. In buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a ramp conforming to the provisions of Section 1010.

**1007.3 Exit stairways.** In order to be considered part of an accessible means of egress, an exit stairway shall have a clear width of 48 inches (1219 mm) minimum between handrails and shall either incorporate an area of refuge within an enlarged floor-level landing or shall be accessed from either an area of refuge complying with Section 1007.6 or a horizontal exit. *[DSA-AC] In addition, exit stairways shall comply with Chapter 11A, Sections 1115A and 1123A or Chapter 11B, Section 1133B.4, as applicable.*

**Exceptions:**

1. Unenclosed exit stairways as permitted by Section 1020.1 are permitted to be considered part of an accessible means of egress.
2. The area of refuge is not required at unenclosed exit stairways as permitted by Section 1020.1 in buildings or facilities that are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

3. The clear width of 48 inches (1219 mm) between handrails is not required at exit stairways in buildings or facilities equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
4. The clear width of 48 inches (1219 mm) between handrails is not required for exit stairways accessed from a horizontal exit.
5. Areas of refuge are not required at exit stairways serving open parking garages.

**1007.4 Elevators.** In order to be considered part of an accessible means of egress, an elevator shall comply with the emergency operation and signaling device requirements of Section 2.27 of ASME A17.1. Standby power shall be provided in accordance with Sections 2702 and 3003. The elevator shall be accessed from either an area of refuge complying with Section 1007.6 or a horizontal exit.

**Exception:** Elevators are not required to be accessed from an area of refuge or horizontal exit in open parking garages.

**1007.5 Platform lifts.** Platform (wheelchair) lifts shall not serve as part of an accessible means of egress, except where allowed as part of a required accessible route in *Chapter 11A, Section 1121A or Chapter 11B, Sections 1116B.2.1 through 1116B.2.4, as applicable.* Standby power shall be provided in accordance with Section 2702.2.6 for platform lifts permitted to serve as part of a means of egress.

*[DSA-AC] See Chapter 11B, Section 1116B.3 for additional accessible means of egress requirements at platform or special access lifts.*

**1007.5.1 Openness.** Platform lifts on an accessible means of egress shall not be installed in a fully enclosed or fire rated shaft.

**1007.6 Areas of refuge.** Every required area of refuge shall be accessible from the space it serves by an accessible means of egress. The maximum travel distance from any accessible space to an area of refuge shall not exceed the travel distance permitted for the occupancy in accordance with Section 1016.1. Every required area of refuge shall have direct access to an enclosed stairway complying with Sections 1007.3 and 1020.1 or an elevator complying with Section 1007.4. Where an elevator lobby is used as an area of refuge, the shaft and lobby shall comply with Section 1020.1.7 for smokeproof enclosures except where the elevators are in an area of refuge formed by a horizontal exit or smoke barrier.

*[DSA-AC] Areas of refuge shall comply with the requirements of this code and shall adjoin an accessible route of travel complying with Section 1114B.1.2.*

**1007.6.1 Size.** Each area of refuge shall be sized to accommodate *two* wheelchair spaces *that are not less than 30 inches by 48 inches (762 mm by 1219 mm) each. The total number of such 30-inch by 48-inch (762 mm by 1219 mm) spaces per story shall be not less than one for every 200 persons of calculated occupant load served by the area of refuge.* Such wheelchair spaces shall not reduce the required means of egress width. Access to any of the required wheelchair spaces in an area of refuge shall not be obstructed by more than one adjoining wheelchair space.

**Exception:** *[DSA-AC] The enforcing agency may reduce the size of each required area of refuge to accommodate one wheelchair space that is not less than 30 inches by 48 inches (762 mm by 1219 mm) on floors where the occupant load is less than 200.*

**1007.6.2 Separation.** Each area of refuge shall be separated from the remainder of the story by a smoke barrier complying with Section 709 or a horizontal exit complying with Section 1021. Each area of refuge shall be designed to minimize the intrusion of smoke.

**Exception:** Areas of refuge located within a vertical exit enclosure.

**1007.6.3 Two-way communication.** Areas of refuge shall be provided with a two-way communication system between the area of refuge and a central control point. If the central control point is not constantly attended, the area of refuge shall also have controlled access to a public telephone system. Location of the central control point shall be approved by the fire department. The two-way communication system shall include both audible and visible signals.

**1007.6.3.1 Visible communication method.** *[DSA-AC] A button complying with Section 1117B.6 in the area of refuge shall activate both a light in the area of refuge indicating that rescue has been requested and a light at the*

central control point indicating that rescue is being requested. A button at the central control point shall activate both a light at the central control point and a light in the area of refuge indicating that the request has been received.

**1007.6.4 Instructions.** In areas of refuge that have a two-way emergency communications system, instructions on the use of the area under emergency conditions shall be posted adjoining the communications system. The instructions shall include all of the following and shall comply with 1117B.5.1 Item 2:

1. Directions to find other means of egress.
2. Persons able to use the exit stairway do so as soon as possible, unless they are assisting others.
3. Information on planned availability of assistance in the use of stairs or supervised operation of elevators and how to summon such assistance.
4. Directions for use of the emergency communications system.

**1007.6.5 Identification.** Each door providing access to an area of refuge from an adjacent floor area shall be identified by a sign complying with Section 1117B.5.1 Item 2, stating: AREA OF REFUGE, and including the International Symbol of Accessibility. Where exit sign illumination is required by Section 1011.2, the area of refuge sign shall be illuminated. Additionally, tactile signage complying with Section 1117B.5.1 Item 1 shall be located at each door to an area of refuge.

**1007.7 Signage.** At exits and elevators serving a required accessible space but not providing an approved accessible means of egress, signage shall be installed indicating the location of accessible means of egress. [DSA-AC] Signs shall comply with Chapter 11A or Chapter 11B, Section 1117B.5.1 Items 2 and 3, as applicable.

**1007.8 Exterior area for assisted rescue.** The exterior area for assisted rescue must be open to the outside air and meet the requirements of Section 1007.6.1. Separation walls shall comply with the requirements of Section 704 for exterior walls. Where walls or openings are between the area for assisted rescue and the interior of the building, the building exterior walls within 10 feet (3048 mm) horizontally of a nonrated wall or unprotected opening shall have a fire-resistance rating of not less than 1 hour. Openings within such exterior walls shall be protected by opening protectives having a fire protection rating of not less than 3/4 hour. This construction shall extend vertically from the ground to a point 10 feet (3048 mm) above the floor level of the area for assisted rescue or to the roof line, whichever is lower.

**1007.8.1 Openness.** The exterior area for assisted rescue shall be at least 50 percent open, and the open area above the guards shall be so distributed as to minimize the accumulation of smoke or toxic gases.

**1007.8.2 Exterior exit stairway.** Exterior exit stairways that are part of the means of egress for the exterior area for assisted rescue shall provide a clear width of 48 inches (1219 mm) between handrails.

**1007.8.3 Identification.** Exterior areas for assisted rescue shall have identification as required for area of refuge that complies with Section 1007.6.5.

**1007.9 Alarms/emergency warning systems/accessibility.** [DSA-AC] If emergency warning systems are required, they shall activate a means of warning the hearing impaired. Emergency warning systems as part of the fire-alarm system shall be designed and installed in accordance with NFPA 72, as amended in Chapter 35.

## **SECTION 1008 DOORS, GATES AND TURNSTILES**

[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance shall also comply with Chapter 11A or Chapter 11B, Section 1133B.2, as applicable.

**1008.1.1 Size of doors. . . .**

**Exceptions:**

1. The . . .
2. Other than those required to be accessible by Chapter 11B, door openings to resident sleeping units in Group I-3 occupancies shall have a clear width of not less than 28 inches (711 mm).

3. Door . . .

4. Width . . .

5. Door . . .

6. Exterior . . .

7. In other than Group R-1 occupancies, the minimum widths shall not apply to interior egress doors within a dwelling unit or sleeping unit that is not required to be *adaptable or accessible as specified in Chapters 11A or 11B, as applicable*.

8. Door openings required to be accessible within *dwelling* units shall have a minimum clear width as *specified in Chapters 11A or 11B, as applicable*.

#### 1008.1.6 Thresholds. . . .

**Exception:** The threshold height shall be limited to 7.75 inches (197 mm) where the occupancy is Group R-2 or R-3; the door is an exterior door that is not a component of the required means of egress; the door, other than an exterior storm or screen door does not swing over the landing or step; and the doorway is not on an accessible route as required by *Chapter 11A or 11B* and is not part of an *adaptable or accessible dwelling unit*.

**1008.1.8.1 Hardware.** Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by *Chapter 11A or Chapter 11B* shall not require tight grasping, tight pinching or twisting of the wrist to operate.

**1008.1.8.6 Delayed egress locks.** Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A, E and H occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic detection system.

2. The doors unlock upon loss of power controlling the lock or lock mechanism.

3. The door locks shall have the capability of being unlocked by a signal from fire command center.

4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for 1 second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only. *For applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance, see Chapter 11B, Section 1133B.2.5.*

**Exception:** Where approved, a delay of not more than 30 seconds is permitted.

5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: *"KEEP PUSHING. THIS DOOR WILL OPEN IN 15 [30] SECONDS. ALARM WILL SOUND"*. Sign lettering shall be at least 1 inch (25 mm) in height and shall have a stroke of not less than 1/8 inch (3.2 mm).

**5.1** A tactile sign shall also be provided in Braille and raised characters, which complies with Section 1117B.5.1 Item 1.

## SECTION 1009 STAIRWAYS

*[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance shall also comply with Chapter 11A or Chapter 11B, Section 1133B.4, as applicable.*

#### 1009.3 Stair treads and risers. . . .

**Exceptions:**

1. Alternating . . .

2. Spiral . . .
3. Aisle . . .
4. In . . .
5. See the Section 3403.4 for the replacement of existing stairways. *For applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance, see Chapter 11B, Section 1134B.*

**1009.10 Handrails.** Stairways shall have handrails ...

**Exceptions:**

1. Aisle stairs ...
2. Stairways within ...
3. Decks, patios ...
4. In Group R-3 ...
5. Changes in ...

*[DSA-AC] For applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance, see Chapter 11B, Section 1133B.4.1.*

**SECTION 1010  
RAMPS**

*[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance shall also comply with Chapter 11A or Chapter 11B, Section 1133B.5, as applicable.*

**1010.1 Scope. . . .**

**Exceptions:**

1. Other than ramps that are part of the accessible routes providing access in accordance with *Chapter 11A or Chapter 11B*, ramped aisles within assembly rooms or spaces shall conform with the provisions in Section 1025.11.
2. Curb ramps shall comply with *Chapter 11A or 11B, Section 1127B.5, as applicable.*
3. Vehicle . . .

**1010.6.5 Doorways.** Where doorways are located adjacent to a ramp landing, maneuvering clearances required for accessibility are permitted to overlap the required landing area as specified in *Chapter 11A or Chapter 11B, Section 1133B.5.*

**1010.9 Edge protection. . . .**

**Exceptions:**

1. Edge protection is not required on ramps not required to have handrails, provided they have flared sides that comply with the *Chapter 11A or Chapter 11B, Section 1127B.5.*
2. Edge . . .
3. Edge . . .

**SECTION 1011  
EXIT SIGNS**

**1011.3 Tactile exit signs.** *For the purposes of Section 1011.3, the term "tactile exit signs" shall mean those required signs that comply with Section 1117B.5.1 Item 1. Tactile exit signs shall be required at the following locations:*

1. *Each grade-level exterior exit door shall be identified by a tactile exit sign with the word, EXIT.*
2. *Each exit door that leads directly to a grade-level exterior exit by means of a stairway or ramp shall be identified by a tactile exit sign with the following words as appropriate:*

- A. EXIT STAIR DOWN
- B. EXIT RAMP DOWN
- C. EXIT STAIR UP

#### **D. EXIT RAMP UP**

3. Each exit door that leads directly to a grade-level exterior exit by means of an exit enclosure that does not utilize a stair or ramp, or by means of an exit passageway shall be identified by a tactile exit sign with the words, EXIT ROUTE.
4. Each exit access door from an interior room or area that is required to have a visual exit sign, shall be identified by a tactile exit sign with the words, EXIT ROUTE.
5. Each exit door through a horizontal exit shall be identified by a tactile exit sign with the words, TO EXIT.

#### **SECTION 1012 HANDRAILS**

*[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance shall also comply with Chapter 11A or Chapter 11B, Section 1133B.4.1, as applicable.*

#### **SECTION 1013 GUARDS**

**1013.1 Where required.** Guards shall be located along open-sided walking surfaces, mezzanines, industrial equipment platforms, stairways, ramps and landings that are located more than 30 inches (762 mm) above the floor or grade below. Guards shall be adequate in strength and attachment in accordance with Section 1607.7. Where glass is used to provide a guard or as a portion of the guard system, the guard shall also comply with Section 2407. Guards shall also be located along glazed sides of stairways, ramps and landings that are located more than 30 inches (762 mm) above the floor or grade below where the glazing provided does not meet the strength and attachment requirements in Section 1607.7.

**Exception** Guards are not required for the following locations:

1. On the loading side of loading docks or piers.
2. On the audience side of stages and raised platforms, including steps leading up to the stage and raised platforms.
3. On raised stage and platform floor areas, such as runways, ramps and side stages used for entertainment or presentations.
4. At vertical openings in the performance area of stages and platforms.
5. At elevated walking surfaces appurtenant to stages and platforms for access to and utilization of special lighting or equipment.
6. Along vehicle service pits not accessible to the public.
7. In assembly seating where guards in accordance with Section 1025.14 are permitted and provided.

**1013.2 Height.** Guards shall form a protective barrier not less than 42 inches (1067 mm) high, measured vertically above the leading edge of the tread, adjacent walking surface or adjacent seatboard.

**Exceptions:**

1. For occupancies in Group R-3, and within individual dwelling units in occupancies in Group R-2, guards whose top rail also serves as a handrail shall have a height not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from the leading edge of the stair tread nosing.
2. The height in assembly seating areas shall be in accordance with Section 1025.14.

**1013.3 Opening limitations.** Open guards shall have balusters or ornamental patterns such that a 4-inch diameter (102 mm) sphere cannot pass through any opening.

**Exceptions:**

1. The triangular openings formed by the riser, tread and bottom rail at the open side of a stairway shall be of a maximum size such that a sphere of 6 inches (152 mm) in diameter cannot pass through the opening.
2. At elevated walking surfaces for access to and use of electrical, mechanical or plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere with a diameter of 21 inches (533 mm) cannot pass through any opening.
3. In areas that are not open to the public within occupancies in Group I-3, F, H or S, balusters, horizontal intermediate rails or other construction shall not permit a sphere with a diameter of 21 inches (533 mm) to pass through any opening.
4. In assembly seating areas, guards at the end of aisles where they terminate at a fascia of boxes, balconies and galleries shall have balusters or ornamental patterns such that a 4-inch-diameter (102 mm) sphere cannot pass through any opening up to a height of 26 inches (660 mm). From a height of 26 inches (660 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, a sphere 8 inches (203 mm) in diameter shall not pass.
5. Within individual dwelling units and sleeping units in Group R-2 and R-3 occupancies, openings for required guards on the sides of stair treads shall not allow a sphere of 4.375 inches (111 mm) to pass through.

**SECTION 1014  
EXIT ACCESS**

**1014.4 Aisles. . . .**

*[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance shall also comply with Chapter 11A or Chapter 11B, Section 1133B.6, as applicable.*

**1014.4.1 Aisles in Groups B and M. . . .**

**Exception:** Nonpublic aisles serving less than 50 people and not required to be accessible by *Chapter 11B* (see *Sections 1103B.1 Exception 2 and 1123B.2 Exception*) need not exceed 28 inches (711 mm) in width.

**SECTION 1020  
VERTICAL EXIT ENCLOSURES**

**1020.1 Enclosures required. . . .**

**1020.1.6 Stairway floor number signs. . . .**

**1020.1.6.2 Tactile floor designation signs in stairways.** *[DSA-AC] When accessibility is required, tactile floor designation signs that comply with 1117B.5.1 Item 1 shall be located at the landing of each floor level, placed adjacent to the door on the latch side, in all enclosed stairways in buildings two or more stories in height to identify the floor level. At the exit discharge level, the sign shall include a raised five pointed star located to the left of the identifying floor level. The outside diameter of the star shall be the same as the height of the raised characters.*

**CHAPTER 11A  
HOUSING ACCESSIBILITY**

Both DSA-AC and HCD/1AC are proposing to adopt the same standards in Chapter 11A. DSA-AC does not adopt the Exception in Section 1102A.3.1. This chapter also includes those provisions promulgated by the Office of the State Fire Marshal (SFM). (See HCD Initial Statement of Reasons and Express Terms.)

**DSA-AC is proposing adoption of this Chapter with amendment as shown in the Matrix Adoption Table. Modifications are identified below.**

**Sections: 1101A.1 through 1150A.2, including Figures contained in Division VII, of the California Building Code.**

These previously existing California amendments are intended to be brought forward to the 2007 CBC with non-substantive amendments to punctuation, capitalization, section references, feet to inches, new IBC occupancy group designations, etc. They do not represent substantive changes to the application or effect from the 2001 Triennial California Building Standards Code. The amendments provide clarity and specificity for the code user.

**Section: 1118A of the California Building Code.**

This previous section is proposed to be repealed by SFM. The 2006 IBC contains similar provisions in Section 1007. HCD is re-locating some of the language to that section and is providing a reference for the code user. The term "Area of Evacuation Assistance" has been revised to "Areas of Refuge" to provide consistency with proposed amendments of DSA and SFM. The amendments provide clarity and specificity for the code user.

**CHAPTER 11B**  
**ACCESSIBILITY TO PUBLIC BUILDINGS, PUBLIC ACCOMMODATIONS,**  
**COMMERCIAL BUILDINGS AND PUBLICLY FUNDED HOUSING**

*For housing accessibility, see Chapter 11A.*

**Division I – NEW BUILDINGS**

**SECTION 1101B**  
**SCOPE**

See Chapter 1, Section 109.1.

**1101B.1 General.** *Buildings or portions of buildings shall be accessible to persons with disabilities as required by this chapter.*

**1101B.2 Design.** *The design and construction of accessible building elements shall be in accordance with this chapter and Section 1114B.1.1.*

**1101B.3 Maintenance of Accessible Features.**

1. *A public accommodation shall maintain in operable working condition those features of facilities and equipment that are required to be accessible to and usable by persons with disabilities.*

2. *This section does not prohibit isolated or temporary interruptions in service or access due to maintenance or repairs.*

**1101B.4 Dimension Conventions.** *Dimensions that are not stated as “maximum” or “minimum” are absolute.*

**1101B.5 Construction and Manufacturing Tolerances.** *All dimensions are subject to conventional industry tolerances except where the requirement is stated as a range with specific minimum and maximum end points.*

**1101B.6 Commercial Facilities Located in Private Residences.**

1. *When a commercial facility is located in a private residence, the portion of the residence used exclusively as a residence is not covered by this chapter, except as required by Section 1111B.5, but that portion used both for the commercial facility and for residential purposes is covered by the new construction and alterations requirements of this code.*

2. *The portion of the residence covered extends to those elements used to enter the commercial facility, including the homeowner’s front sidewalk, if any, the door or entryway, and hallways; and those portions of the residence, interior or exterior, available to or used by employees or visitors of the commercial facility, including sanitary facilities.*

**SECTION 1102B**  
**DEFINITIONS**

*For additional definitions pertinent to the Division of the State Architect-Access Compliance accessibility requirements, see Chapter 2, Section 202.*

*For the purpose of the chapter, certain terms are defined as follows:*

**ACCESS AISLE** *is an accessible pedestrian space adjacent to or between parking spaces that provides clearances in conformance with this chapter.*

**ACCESSIBILITY** *is the combination of various elements in a building, facility, site, or area, or portion thereof which allows access, circulation and the full use of the building and facilities by persons with disabilities in conformance with this chapter.*

**ACCESSIBLE** *is approachable and usable by persons with disabilities in compliance with this code.*

**ACCESSIBLE ELEMENT** is an element specified by the regulations adopted by the Division of the State Architect-Access Compliance.

**ACCESSIBLE MEANS OF EGRESS.** See Section 1002.1.

**ACCESSIBLE ROUTE OF TRAVEL** is 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 disability using a wheelchair and that is also safe for and usable by persons with other disabilities, and that is consistent with the definition of "path of travel" in this section. Interior accessible routes may include corridors, floors, ramps, elevators, lifts, and clear floor space at fixtures. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, sidewalks, ramps, and lifts. An accessible route does not include stairs, steps, or escalators.

**ACCESSIBLE SPACE** is a space that complies with the regulations adopted by the Division of the State Architect-Access Compliance.

**ADAPTABILITY** refers to the capability of spaces or facilities to be readily modified and made accessible.

**ADMINISTRATIVE AUTHORITY** is a governmental agency that adopts or enforces regulations and guidelines for the design, construction, or alteration of buildings and facilities.

**AISLE** is a circulation path between objects such as seats, tables, merchandise, equipment, displays, shelves, desks, etc. that provides clearances in conformance with this chapter.

**AISLE, EMPLOYEE AREAS** (as required for architectural accessibility) is a space that serves as a passage-way, which is created by architectural components such as walls, fixed cabinetry or fixtures and not moveable components such as furniture.

**AREA OF REFUGE.** See Section 1002.1.

**ASSEMBLY AREA** is a room or space accommodating a group of individuals for recreational, educational, political, social, or amusement purposes, or for the consumption of food and drink.

**AUTOMATIC DOOR** is a door equipped with a power operated mechanism and controls that open and close the door automatically upon receipt of a momentary actuating signal. The switch that begins the automatic cycle may be a photoelectric device, floor mat or manual switch.

**CIRCULATION PATH** is an exterior or interior way of passage from one place to another for pedestrians, including, but not limited to, walks, hallways, courtyards, stairways and stair landings.

**CLEAR** means unobstructed.

**CLEAR FLOOR SPACE** is the minimum unobstructed floor or ground space required to accommodate a single, stationary wheelchair and occupant.

**CLOSED-CIRCUIT TELEPHONE** is a telephone with dedicated line(s) such as a house phone, courtesy phone or phone that must be used to gain entrance to a facility.

**COMMON USE AREAS** are those interior and exterior rooms, spaces, or elements that are made available for the use of a restricted group of people (for example, occupants of a homeless shelter, the occupants of an office building, or the guests of such occupants).

**CROSS SLOPE** is the slope that is perpendicular to the direction of travel (as differentiated from running slope).

**CURB CUT** is an interruption of a curb at a pedestrian way, which separates surfaces that are substantially at the same elevation.

**CURB RAMP** is 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.

**DETECTABLE WARNING** is a standardized surface or feature built into or applied to walking surfaces or other elements to warn visually impaired persons of hazards in the path of travel. Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR).

Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

**DWELLING UNIT** is a single unit of residence for a family of one or more persons. Examples of dwelling units covered by this chapter include condominiums, an apartment unit within an apartment building, and other types of dwellings in which sleeping accommodations are provided but toileting or cooking facilities are shared by occupants of more than one room or portion of the dwelling. Examples of the latter include dormitory rooms and sleeping accommodations in shelters intended for occupancy as residences for homeless persons.

**ELEMENT** is an architectural or mechanical component of a building, facility, space, or site, for example, a telephone, curb ramp, door, drinking fountain, seating, or water closet.

**ELEVATOR, PASSENGER** is an elevator used primarily to carry passengers.

**ENTRANCE** means any access point to a building or portion of a building or facility used for the purpose of entering. An entrance includes the approach walk, the vertical access leading to the entrance platform, the entrance platform itself, vestibules if provided, the entry door(s) or gate(s), and the hardware of the entry door(s) or gate(s).

**EQUIVALENT FACILITATION** is an alternate means of complying with the literal requirements of these standards and specifications that provides access in terms of the purpose of these standards and specifications. See Section 109.1.

In determining equivalent facilitation, consideration shall be given to means that provide for the maximum independence of persons with disabilities while presenting the least risk of harm, injury or other hazard to such persons or others.

**EXIT.** See Section 1002.1.

**FACILITY (or FACILITIES)** is a building, structure, room, site, complex or any portion thereof, that is built, altered, improved or developed to serve a particular purpose. Facilities shall include all or any portion of buildings, structures, site developments, complexes, equipment, roads, walks, sidewalks, passageways, parking lots, or other real or personal property located on a site.

**GRAB BAR** is a bar for the purpose of being grasped by the hand for support.

**GUARD (or GUARDRAIL).** See Section 1002.1.

**HANDRAIL.** See Section 1002.1.

**HEALTH CARE PROVIDER.** See "Professional Office of a Health Care Provider".

**INDEPENDENT ENTITY.** See Section 202.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

**INTERNATIONAL SYMBOL OF ACCESSIBILITY** is that symbol adopted by Rehabilitation International's 11<sup>th</sup> World Congress for the purpose of indicating that buildings and facilities are accessible to persons with disabilities. See Figure 11B-6.

**KICK PLATE** is an abrasion-resistant plate affixed to the bottom portion of a door to prevent a trap condition and protect its surface.

**LEVEL AREA** is a specified surface that does not have a slope in any direction exceeding 1/4 inch (6.4 mm) in 1 foot (305 mm) from the horizontal (2.083 percent gradient).

**LIFT, SPECIAL ACCESS.** See "Special Access Lift."

**MARKED CROSSING** is a crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.

**NEWLY CONSTRUCTED.** See Chapter 11A, Section 1107A.14-N.

**NOSE, NOSING,** is that portion of a tread projecting beyond the face of the riser immediately below.

**OPEN RISER** is the air space between tread projecting beyond the face of the riser immediately below.

**OPERABLE PART** is a part of a piece of equipment or appliance used to insert or withdraw objects, or to activate, deactivate or adjust the equipment or appliance (for example, coin slot, pushbutton, handle).

**PASSAGE DOOR** is a door other than an exit door through which persons may traverse.

**PATH OF TRAVEL** is a passage that may consist of walks and sidewalks, curb ramps and pedestrian ramps, lobbies and corridors, elevators, other improved areas, or a necessary combination thereof, that provides free and unobstructed access to and egress from a particular area or location for pedestrians and/or wheelchair users. A "path of travel" includes a continuous, unobstructed way of pedestrian passage by means of which a particular area may be approached, entered, and exited, and which connects a particular area with an exterior approach (including sidewalks, streets, and parking areas), an entrance to the facility, and other parts of the facility. In existing buildings, when alterations, structural repairs or additions are made, the term "path of travel" also includes the sanitary facilities, telephones, drinking fountains, and signs serving the altered area.

**PEDESTRIAN** is an individual who moves in walking areas with or without the use of walking assistive devices such as crutches, leg braces, wheelchairs, white cane, service animal, etc.

**PEDESTRIAN GRADE SEPARATION** is a structure erected over or under an obstacle such as a freeway, roadway, street, railroad, stream, etc., and intended primarily for pedestrian use.

**PEDESTRIAN RAMP** is a walking surface which has a running slope greater than 1:20 intended for pedestrian traffic and as differentiated from a curb ramp.

**PEDESTRIAN WAY** is a route by which a pedestrian may pass.

**PLATFORM.** See Section 410.2.

**PRIMARY ENTRY LEVEL** is the floor or level of the building on which the primary entry is located.

**PROFESSIONAL OFFICE OF A HEALTH CARE PROVIDER** is a location where a person or entity, regulated by the State to provide professional services related to the physical or mental health of an individual, makes such services available to the public. The facility housing the "professional office of a health care provider" only includes floor levels housing at least one health care provider, or any floor level designed or intended for use by at least one health care provider.

**PUBLIC USE AREA** means interior or exterior rooms or spaces of a building that are made available to the general public and does not include common use areas. Public use areas may be provided at a building that is privately or publicly owned.

**PUBLIC WAY.** See Section 1002.1.

**RAIL TRANSIT BOARDING PLATFORM.** See "Transit Boarding Platform".

**RISER** is the vertical distance from the top of the tread to the top of the next higher tread.

**RUNNING SLOPE** is the slope that is parallel to the direction of travel (as differentiated from cross slope).

**SHOPPING CENTER (or SHOPPING MALL)** is one or more sales or rental establishments or stores. A shopping center may include a series of buildings on a common site, connected by a common pedestrian access route on,

above or below the ground floor, that is either under common ownership or common control or developed either as one project or as a series of related projects. For the purposes of this section, shopping center or shopping mall includes a covered mall building.

**SIDEWALK.** See Section 202.

**SLEEPING ACCOMMODATIONS** are rooms in which people may sleep; for example, dormitory and hotel or motel guest rooms or suites.

**SPECIAL ACCESS LIFT** is a hoisting and lowering mechanism equipped with a car or platform, or support that serves two landings of a building or structure and is designed to carry a passenger or passengers and (or) luggage or other material a vertical distance as may be allowed.

**SPECIFIED PUBLIC TRANSPORTATION** is transportation by bus, rail, or any other conveyance (other than by aircraft) that provides the general public with general or special service (including charter service) on a regular and continuing basis.

**STAGE.** See Section 410.2.

**STAIR.** See Section 1002.1.

**STAIRWAY.** See Section 1002.1.

**STORY** means that portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor level directly above a basement or unused under-floor space is more than six feet (1829 mm) above grade for more than 50 percent of the total perimeter or is more than 12 feet (3658 mm) above grade at any point, the basement or unused under-floor space shall be considered as a story. There may be more than one floor level within a story as in the case of a mezzanine or mezzanines.

**STORY, FIRST** means the lowest story in a building which qualifies as a story and which provides the basic services or functions for which the building is used. A floor level in a building having only one floor level shall be classified as a first story, if the floor level is not more than four feet (1219 mm) below grade, for more than 50 percent of the total perimeter, or more than eight feet (2438 mm) below grade at any point.

**STRUCTURAL FRAME** is considered to be the columns and the girders, beams, trusses, and spandrels having direct connections to the columns and all other members which are essential to the stability of the building as a whole.

**TEXT TELEPHONE** is machinery or equipment that employs interactive graphic (for example, typed) communications through the transmission of coded signals across the standard telephone network. Text telephones can include, for example, devices known as TTYs (telecommunication display devices) or computers.

**TRANSIENT LODGING** is a building, facility, or portion thereof, excluding inpatient medical care facilities, that contains one or more dwelling units or sleeping accommodations. Transient lodging may include, but is not limited to, resorts, group homes, hotels, motels and dormitories.

**TRANSIT BOARDING PLATFORM** is a horizontal, generally level surface, whether raised above, recessed below, or level with a transit rail, from which persons embark/disembark a fixed rail vehicle.

**TREAD** is the horizontal member of a step.

**TREAD DEPTH** is the horizontal distance from the front to back of tread, including nosing when used.

**TREAD RUN** is the horizontal distance from the leading edge of a tread to the leading edge of an adjacent tread.

**VEHICULAR WAY** is a route intended for vehicular traffic, such as a street, driveway or parking lot.

**WALK** is a surfaced pedestrian way not located contiguous to a street used by the public. (As differentiated from the definition of sidewalk in Section 202.)

**WORK STATION** is an area defined by equipment and/or work surfaces intended for use by employees only, and generally for one or a small number of employees at a time. Examples include ticket booths; the employee side of grocery store checkstands; the bartender area behind a bar; the employee side of snack bars, sales counters and public counters; guardhouses; toll booths; kiosk vending stands; lifeguard stations; maintenance equipment closets; counter and equipment areas in restaurant kitchens; file rooms; storage areas; etc.

## **SECTION 1103B BUILDING ACCESSIBILITY**

**1103B.1 Scope.** Accessibility to buildings or portions of buildings shall be provided for all occupancy classifications except as modified or enhanced by this chapter. Occupancy requirements in this chapter may modify general requirements, but never to the exclusion of them. When a building or facility contains more than one use, the occupancy specific accessibility provisions for each portion of the building or facility shall apply.

An accessible route of travel complying with Section 1114B.1.2 shall connect all elements and spaces within a building or facility. Multistory buildings and facilities must provide access to each level, including mezzanines, by ramp or passenger elevator complying with Section 1116B. If more than one elevator is provided, each passenger elevator shall comply with Section 1116B.

### **Exceptions:**

1. Floors or portions of floors not customarily occupied, including, but not limited to, nonoccupiable or employee spaces accessed only by ladders, catwalks, crawl spaces, very narrow passageways or freight (nonpassenger) elevators, and frequented only by service personnel for repair or maintenance purposes: such spaces as elevator pits and elevator penthouses, piping and equipment catwalks, and machinery rooms.

2. The following types of privately funded multistory buildings do not require a ramp or elevator above and below the first floor:

**2.1** Multistoried 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 (279 m<sup>2</sup>) per story.

**2.2** Any other privately funded multistoried building that is not a shopping center, shopping mall or the professional office of a health care provider, or a terminal, depot, or other station used for specified public transportation, or an airport passenger terminal [In such a facility, any area housing passenger services, including boarding and debarking, loading and unloading, baggage claim, dining facilities, and other common areas open to the public must be on an accessible route from an accessible entrance] and that is less than three stories high or less than 3,000 square feet (279 m<sup>2</sup>) per story if a reasonable portion of all facilities and accommodations normally sought and used by the public in such a building are accessible to and usable by persons with disabilities.

The elevator exception set forth in this section does not obviate or limit in any way the obligation to comply with the other accessibility requirements in this code. For example, floors above or below the accessible ground floor must meet the requirements of this section except for elevator service. If toilet or bathing facilities are provided on a level not served by an elevator, then toilet or bathing facilities must be provided on the accessible ground floor.

If a building or facility is eligible for this exception but a passenger elevator is nonetheless planned, that elevator shall meet the requirements of Section 1116B and shall serve each level in the building. A passenger elevator that provides service from a garage to only one level of a building or facility is not required to serve other levels.

**1103B.2 Distance to elevators.** In new construction of buildings and only where elevators are required, pursuant to Section 1103B.1, and which exceed 10,000 square feet on any floor, an accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet of travel of each stairs and each escalator. In existing buildings that exceed 10,000 square feet on any floor and in which elevators are otherwise required pursuant to Section 1103B.1, whenever a newly constructed means of vertical access is provided via stairs or an escalator, an accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet of travel of each new stairs or escalator.

**Exception:** Stairs used solely for emergency egress.

**SECTION 1104B**  
**ACCESSIBILITY FOR GROUP A OCCUPANCIES**

**1104B.1 General.** All Group A Occupancies shall be accessible as provided in this chapter. See also the general requirements in Section 1114B.1.1.

**1104B.2 Assistive-listening Systems in Assembly Areas.** Assembly areas, conference and meeting rooms shall provide assistive-listening systems for persons with hearing impairments as provided in this section.

**Exception:** This section does not apply to systems used exclusively for paging, or background music, or a combination of these two uses.

**1. Number of personal receivers required.** The minimum number of receivers to be provided shall be equal to 4 percent of the total number of seats, but in no case less than two.

**2. Types of listening systems.** Types of assistive-listening systems include, but are not limited to, audio-induction loops, radio frequency systems (AM or FM) and infrared transmission.

**3. Location.** If the assistive-listening system provided is limited to specific areas or seats, then such areas or seats shall be within a 50-foot (15 240 mm) viewing distance of the performing area.

**4. Signage.** A sign shall be posted in a prominent place (for example, a customer service counter, ticket booth, or assembly area entrance) indicating the availability of assistive-listening devices. The sign complying with Section 1117B.5.1, Items 2 and 3 shall include the international symbol of access for hearing loss complying with Figure 11B-14C and include wording that states "Assistive-Listening System Available".

**5. Fees and charges.** Nothing in this section shall preclude a facility charging for such assistive-listening system its usual fee for audiovisual equipment. However, no surcharge may be placed directly on any particular individual with a disability or any group of individuals with disabilities to cover the costs of such equipment.

**6. Permanent and portable systems.** Permanently installed assistive-listening systems are required in areas if (1) they accommodate at least 50 persons or if they have audio-amplification systems, and (2) they have fixed seating. If portable assistive-listening systems are used for conference or meeting rooms, the system may serve more than one room. An adequate number of electrical outlets or other supplementary wiring necessary to support a portable assistive listening system shall be provided.

**1104B.3 Auditoriums, Assembly Halls, Theaters and Related Facilities.**

**1104B.3.1 Seating.** In all assembly places where seating is provided, there shall be spaces for persons using wheelchairs and semi-ambulant persons, as provided in this section.

**Exceptions:**

**1.** In existing buildings and facilities when the enforcing agency determines that compliance with the seating requirements of this code would create an unreasonable hardship, such requirements shall not apply. When the unreasonable hardship finding is applied, at least 1 percent of the total seating provided shall be accessible to and usable by persons with disabilities who use wheelchairs and such seating shall comply with the level requirements and the individual space requirements of this code.

**2.** When an existing theater is subdivided into more than one facility having upper levels not accessible by ramp or elevator, and the enforcing agency determines that full compliance with this code would create an unreasonable hardship, such upper levels need not be made accessible, provided all facilities at grade are accessible and any event, showing of motion pictures or other activities made available to the public in all of the facilities are scheduled to ensure that all such functions are available to the public in the accessible facility.

**1104B.3.2 Accessibility to key facilities.** Seating for persons with disabilities shall be accessible from the main lobby or from a primary entrance, together with related toilet facilities.

**1104B.3.3 Variety of locations.** Accessible seating or accommodations in places of public amusement and resort, including theaters, concert halls and stadiums, but not including hotels and motels, shall be provided in a variety of locations so as to provide persons with disabilities a choice of admission prices otherwise available to members of the general public.

**1104B.3.4 Wheelchair spaces.**

1. The number of such spaces is as shown in Table 11B-1.

**TABLE 11B-1 – WHEELCHAIR SEATING SPACES**

| <b>SEATING CAPACITY</b> | <b>NO. OF WHEELCHAIR SEATING SPACES</b> |
|-------------------------|---|
| 4 to 25                 | 1                                       |
| 26 to 50                | 2                                       |
| 51 to 300               | 4                                       |
| 301 to 500              | 6                                       |

In addition, 1 percent, but not less than one, of all fixed seats, shall be aisle seats with no armrests on the aisle side, or removable or folding armrests on the aisle side. Each such seat shall be identified by a sign or marker. Signage notifying patrons of the availability of such seats shall be posted at the ticket office.

2. When the seating capacity exceeds 500, one additional wheelchair seating space shall be provided for each total seating capacity increase of 100.

3. The ground or floor at spaces shall be level and shall comply with Section 1124B.

**1104B.3.5 Placement of wheelchair locations.** Wheelchair areas shall be an integral part of any fixed seating plan, and shall be arranged so as to provide persons with disabilities a choice of admission prices and lines of sight comparable to those for members of the general public. Each wheelchair area shall adjoin an accessible route which shall also serve as a means of egress in case of emergency. At least one companion fixed seat shall be provided next to each wheelchair seating area. When the seating capacity exceeds 300, wheelchair spaces shall be provided in more than one location in addition to complying with Section 1104B.3.3.

**Exceptions:**

1. Accessible viewing positions where seating capacity is less than 300 may be clustered for bleachers, balconies and other areas having sight lines that require slopes of greater than 5 percent. Equivalent accessible viewing positions may be located on levels having accessible egress.

2. Where it is determined that dispersing accessible seating throughout an existing assembly area would create an unreasonable hardship, accessible seating areas may be clustered. Each accessible seating area shall have provisions for companion seating and shall be located on an accessible route that also serves as a means of emergency egress.

**1104B.3.6 Size of wheelchair location.** Each wheelchair location shall provide minimum clear floor or ground space as shown in Figure 11B-15, and shall adjoin an egress aisle on at least one side.

**1104B.3.7 Removable seats.** Readily removable seats may be installed in these wheelchair spaces when such spaces are not required to accommodate wheelchair users.

**1104B.3.8 Seating for semi-ambulant individuals.** In addition to spaces provided for wheelchair users as noted in Sections 1104B.3.4 through 1104B.3.7 above, there shall be provided seating for semi-ambulant individuals. The number of such seating shall be equal to at least 1 percent of the total seating and shall be no fewer than two. Such seats shall provide at least 24 inches (610 mm) clear leg space between the front of the seat to the nearest obstruction or to the back of the seat immediately in front.

**1104B.3.9 Life safety.** In determining the location of seating for persons with disabilities, life safety shall be considered, and all seating provided must comply with the fire and panic safety requirements of the State Fire Marshal.

**1104B.3.10 Access to performing areas.** An accessible route shall connect wheelchair seating locations with performing areas, including stages, arena floors, dressing rooms, locker rooms and other spaces used by performers.

**1104B.3.11 Stages, enclosed and unenclosed platforms, and orchestra pits.** Stages, enclosed and unenclosed platforms and orchestra pits shall be made accessible to persons with disabilities.

**Exceptions:**

1. When the enforcing agency finds that requiring compliance with this code, for an enclosed or unenclosed platform or depressed area not more than 24 inches (610 mm) above or below an adjacent accessible level, would create an unreasonable hardship, the enclosed and unenclosed platform or depressed area shall be made accessible by a portable ramp with a slope not exceeding 1 unit vertical to 12 units horizontal (8.33% slope).

2. In existing buildings and facilities, all stages, enclosed or unenclosed platforms, and orchestra pits need not be accessible when the enforcing agency determines that compliance with this code would create an unreasonable hardship.

**1104B.3.12 Ticket booths.** Customer and employee sides of ticket booths and of concession and refreshment sales facilities shall be made accessible to persons with disabilities.

**1104B.3.13 Miscellaneous areas.** Public toilets and other public areas shall be made accessible to persons with disabilities.

**1104B.4 Stadiums, Grandstands, Bleachers, Athletic Pavilions, Gymnasiums and Miscellaneous Sport-related Facilities.**

**1104B.4.1 Spectator seating.** Spectator seating shall comply with Section 1104B.3.

**1104B.4.2 Ticket booth.** The customer side of a ticket booth shall be, and the employee side may be, accessible.

**1104B.4.3 Participation areas.** Participation areas shall be accessible to persons with disabilities, including the following listed and similar activity areas:

1. Tennis, racquetball and handball courts.
2. Gymnasium floor areas and general exercise rooms.
3. Basketball, volleyball and badminton courts, and bowling lanes.
4. Swimming pool deck areas must be accessible, and a mechanism to assist persons with disabilities in gaining entry into the pool and in exiting from the pool shall be provided. Such a mechanism may consist of a swimming pool lift device as long as the device meets all of the following criteria:

4.1 Have a seat that meets all of the following:

4.1.1 The seat must be rigid;

4.1.2 The seat must be not less than 17 inches (423 mm) and not more than 19 inches (483 mm), inclusive of any cushioned surface that might be provided, above the pool deck;

4.1.3 The seat must have two armrests. The armrest on the side of the seat by which access is gained shall be either removable or fold clear of the seat;

4.1.4 The seat must have a back support that is at least 12 inches (305 mm) tall;

4.1.5 The seat must have an occupant restraint for use by the occupant of the seat, and the restraint must meet the standards for operable controls in compliance with Section 1117B.6, Items 1 through 4.

4.2 Be capable of unassisted operation from both the deck and water levels.

4.3 Be stable and not permit unintended movement when a person is getting into or out of the seat.

4.4 Be designed to have a live-load capacity of not less than 300 pounds.

4.5 Be positioned so that, if the pool has water of different depths, it will place the operator into water that is at least three feet (914 mm) deep.

4.6 Lower the operator at least 18 inches (457 mm) below the surface of the water.

5. Athletic team rooms and facilities, playing fields and running tracks.

**1104B.4.4 Clubrooms.** Clubrooms shall be made accessible to persons with disabilities.

**1104B.4.5 Sanitary and locker facilities.** Where spectator and/or participant sanitary and/or locker facilities are provided, they shall conform with the requirements in Section 1115B.

**Exceptions:**

1. Where the enforcing agency determines that compliance with these regulations would create an unreasonable hardship, an exception may be granted when equivalent facilitation is provided through the use of other methods or materials.

2. In existing buildings, when the enforcing agency finds that compliance with regulations would create an unreasonable hardship, an exception may be granted when all of the following minimum conditions are met:

2.1 When the total seating does not exceed 5,000 at least 1 percent of such seating shall be accessible to and usable by persons with disabilities. When the total seating provided exceeds 5,000, one additional seat for each 2,000 seats provided over 5,000 shall be accessible to and usable by persons with disabilities.

2.2 Sanitary facilities, ticket booths, clubrooms, concessions and refreshment facilities shall be accessible.

2.3 One of each type of participation areas is usable and accessible.

**1104B.5 Dining, Banquet and Bar Facilities.**

1. **General.** Dining, banquet, and bar facilities shall be made accessible to persons with disabilities as provided in this section.

**Exceptions:**

1. In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.

2. In existing buildings, these regulations shall not apply when legal or physical constraints would not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

2. **Entrance.** Access to these facilities shall be provided at entrances and exits as required by Section 1133B.1.1.

3. **Functional activity.** All dining areas, including raised or sunken dining areas, loggias, outdoor seating areas, and all areas where each type of functional activity occurs shall be accessible. For existing buildings see Section 1120B – Floors and Levels.

4. **Seating.** Each dining, banquet and bar area shall have one wheelchair seating space for each 20 seats, with at least one minimum wheelchair seating space per functional area. Such seating shall be designed and arranged to permit use by wheelchair occupants, and shall comply with Section 1122B, "Fixed or Built-in Seating, Tables, and Counters." Access to such seating spaces shall be provided with main aisles not less than 36 inches (914 mm) clear width. In establishments where separate areas are designated for smoking and non-smoking patrons, the required number of accessible fixed tables (or counters) shall be proportionally distributed between the smoking and non-smoking areas. Accessible seating spaces shall be integrated with general seating to allow a reasonable selection of seating area and to avoid having one area specifically highlighted as the area for persons with disabilities. The ratio of accessible seating is based on the total number of seats provided. Where food or drink is served at counters exceeding 34 inches (865 mm) in height for consumption by customers seated or standing at the counter, a portion of the main counter which is 60 inches (1525 mm) in length minimum shall be provided in compliance with Section 1122B.

5. **Food service aisles.** Food service aisles shall be a minimum of 36 inches (914 mm) of clear width with a preferred width of 42 inches (1067 mm) where passage of stopped wheelchairs by pedestrians is desired. Tray slides shall be mounted no higher than 34 inches (864 mm) above the floor as shown in Figure 11B-16. If self-service

shelves are provided, at least 50 percent of each type must be within the reach ranges in Sections 1118B.5 and 1118B.6.

**6. Tableware and condiment areas.** Self-service tableware, dishware, condiments, food and beverage display shelves, and dispensing devices shall comply with Sections 1118B and 1122B.4. See Figure 11B-17.

**7. Restrooms.** Restrooms and powder rooms shall conform to requirements in Section 1115B.

**8. Food preparation areas.** Access to food preparation areas shall comply with the provisions for entrance doors and doorways in Section 1008, and aisles in Sections 1014.4 and 1014.4.1.

#### **1104B.6 Religious Facilities.**

**1104B.6.1 General.** Religious facilities shall be made accessible to persons with disabilities as provided in this section.

**Exception:** In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.

**1104B.6.2 Sanctuary.** Sanctuary areas shall be made accessible to persons with disabilities.

**1104B.6.2.1** Wheelchair seating spaces in these areas shall conform to the requirements in Section 1104B.3.1.

**1104B.6.2.2** Wheelchair access shall be provided to raised platforms, choir rooms, choir lofts, performing areas and other similar areas.

**Exception:** In existing buildings, these regulations shall not apply to choir lofts when the enforcing agency determines that such compliance would create an unreasonable hardship.

**1104B.6.3 Assembly areas.** Assembly areas shall be made accessible to persons with disabilities. Enclosed and unenclosed platforms and stages in assembly areas shall conform to these requirements.

**1104B.6.4 Classrooms and offices.** Classrooms and offices shall have entry doors that conform to the requirements in Chapter 10.

**1104B.6.5 Sanitary facilities.** Sanitary facilities shall conform to the requirements in Section 1115B.

### **SECTION 1105B ACCESSIBILITY FOR GROUP B OCCUPANCIES**

Group B Occupancies shall be accessible as provided in this chapter. See also the general requirements in Section 1114B.1.1.

#### **Exceptions:**

1. In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.

2. In existing buildings, the provisions of this section shall not apply when legal or physical constraints will not allow compliance with these building standards or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

3. For floors and levels in new and existing buildings, see Section 1120B.

**1105B.1 General.** The provisions of this section apply to the specified types of facilities and identify specific requirements of accessibility and usability which shall be provided for each of the listed occupancy uses.

**1105B.2 Group B Occupancies.** Group B Occupancies used for assembly purposes shall conform to the requirements as specified in Section 1114B.1.1. For floors and levels in dining, banquet and bar facilities, see Section 1120B.

**1105B.3 Office Buildings and Personal and Public Service Facilities.** Office buildings and personal and public service facilities shall conform to the provisions of this section.

**1105B.3.1 Facilities covered.** Facilities covered in this section are those that are used by the public as customers, clients, visitors or which are potentially places of employment and shall include, but not be limited to, the following requirements:

1. All types of general and specialized business professional offices, including those related to professional medicine or dentistry, insurance, real estate, attorneys, credit bureaus, consultants, counseling and accounting.
2. All types of sales establishments, including outlets for all general and special merchandise and equipment, including personal and household furnishings and supplies, foods, sporting equipment, office supplies, vehicles and related parts and supplies, building materials, and pet shops.
3. All personal and public service facilities, including banks, savings and loan companies, credit unions, newspaper and printing establishments, photographic studios, launder mats, cleaning and laundry outlets, veterinarian clinics and hospitals, automobile rental agencies, travel bureaus, public utility facilities, police stations and detention facilities, courtrooms and fire stations.
4. In addition to the requirements of this section, all areas used for business transactions with the public shall comply with Sections 1110B.1 Sales and 1122B Fixed or Built in Seating, Tables, and Counters.

**1105B.3.2 Business and professional offices.** Areas to be made accessible include the following:

1. Client and visitor areas and office areas, together with related toilet rooms.
2. Conference rooms, counseling rooms or cubicles and similar areas.
3. Employee work areas shall have a minimum of 36 inches (914 mm) clear width access, except as modified in other portions of these regulations. See Sections 1133B.6.1 and 1133B.6.2.
4. Professional medical and dental offices shall be made accessible and shall also comply with Section 1109B.

**1105B.3.3 Personal and public service facilities.** Areas to be made accessible include the following:

1. Client and visitor areas, office areas, and related toilet rooms shall be made accessible.
2. Employee work areas shall have a minimum of 36 inches (914 mm) clear width access, except as modified in other portions of these regulations. See Sections 1133B.6.1 and 1133B.6.2.
3. Automated teller machines used by a financial institution and its customers for the primary purposes of executing financial transactions shall be located on an accessible route of travel complying with Section 1114B.1.2 and shall comply with Section 1117B.7.

**1105B.3.4 Public utility facilities.** Areas to be made accessible include the following:

1. Office areas, meeting rooms and similar areas together with related toilet rooms shall be made accessible.
2. Public tour areas, to the extent that such public tours are conducted through or about a facility, or where the public is permitted to walk in such areas, shall provide accessibility in those portions of the facility and grounds where this occurs.

**Exceptions:**

1. Facilities located in operational areas which would not have any reasonable availability to or usage by persons who use wheelchairs for mobility are not subject to the wheelchair accessibility requirements of these regulations.
2. When the enforcing agency determines that compliance with this subsection would create an unreasonable hardship, an exception to such provision shall be granted when equivalent facilitation is provided.

3. Visitor overlook facilities, orientation areas and similar public-use areas, and any sanitary facilities that serve these facilities shall be made accessible.
4. Where public parking is provided, spaces shall be provided for persons with disabilities as specified in Sections 1129B and 1130B.

**1105B.3.5 Police department, law enforcement, fire department facilities and courtrooms.** Areas to be made accessible include the following:

1. Office areas, conference rooms, classrooms, dispatch rooms and similar areas, along with related sanitary facilities, shall be made accessible.
2. Detention-area visitor room shall be made accessible.
3. At least one detention cell facility with supporting sanitary facilities shall be made accessible.
4. Courtroom areas, including the judge's chambers and bench, counsel tables, jury box, witness stand and public seating area shall be made accessible.

**1105B.3.6 Miscellaneous general standards.**

1. Circulation aisles and pedestrian ways shall be sized according to functional requirements and in no case shall be less than 36 inches (914 mm) in clear width.
2. **Storage areas.** The doorway providing access to all such areas shall not be less than 32 inches (813 mm) in clear width. Storage areas shall be made accessible in the number and dimensions provided in Section 1125B.

## **SECTION 1106B ACCESSIBILITY FOR GROUP E OCCUPANCIES**

**1106B.1 General.** Group E Occupancies shall be accessible as provided in this chapter. See also the general requirements in Section 1114B.1.1.

**Exceptions:**

1. In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.
2. In existing buildings, where the enforcing agency determines that, because of physical constraints, compliance with these regulations or equivalent facilitation would create an unreasonable hardship, these regulations shall not apply. See Section 109.1.5.

**1106B.2 Laboratory Rooms.** Laboratory rooms shall have at least one workstation and at least 5 percent of all workstations accessible to and usable by persons with disabilities in compliance with Section 1118B, "Space Allowance and Reach Ranges" and Section 1122B, "Fixed or Built-in Seating, Tables, and Counters".

**Exception:** Where the enforcing agency determines that it would create an unreasonable hardship to require compliance with these regulations for special-use rooms such as laboratory preparation rooms, supply rooms, small research laboratories, and areas containing specialized equipment not readily usable by persons with particular disabilities, such facilities need not comply with these regulations, except that a clear width of 32 inches (813 mm) shall be maintained into such rooms.

**1106B.3 Teaching Facility Cubicles, Study Carrels, etc.** Teaching facility cubicles, study carrels, etc., shall have 5 percent, but always at least one cubicle or carrel in each group (language, dental, audiovisual, typing, drafting, darkrooms, etc.) made accessible to and usable by persons with disabilities in compliance with Section 1118B, "Space Allowance and Reach Ranges" and Section 1122B, "Fixed or Built-in Seating, Tables, and Counters."

**1106B.4 Library General Use Areas.**

1. **General.** Library general use areas such as those housing card files, book stacks, periodicals, reading and study areas, reference areas, information desks, circulation counters, reserve areas, special facilities or collections, etc., shall be made accessible to persons with disabilities.

**2. Open book stacks.** Open book stacks (those available for customer use) shall be on an accessible route complying with Section 1114B.1.2, may be of normal height, and shall have main aisles no less than 44 inches (1118 mm) in clear width and side, range and end aisles no less than 36 inches (914 mm) in clear width.

*In existing buildings, multitiered, closed book stacks (those restricted to employee use) are exempt from these accessibility standards.*

**3. Height of book shelves.** Unless an attendant is available to assist persons with disabilities, all book shelving shall be located not more than 54 inches (1372 mm) above the floor.

**4. Card catalogs and magazine displays.** Minimum clear aisle space and maximum reach heights at card catalogs and magazine displays shall comply with Section 1118B, with a height of 48 inches (1219 mm) preferred irrespective of reach allowed.

## **SECTION 1107B FACTORIES AND WAREHOUSES**

Factories and warehouses shall conform to the provisions of this section, Section 1103B.1 and Section 1103B.1, Exception 2, for multistory buildings. See also the general requirements in Section 1114B.1.1.

**Exception:** *In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.*

### **1107B.1 Factories.**

1. Major or principal floor areas shall be made accessible.
2. Office areas shall be made accessible.
3. Sanitary facilities serving these areas shall be made accessible.

### **1107B.2 Warehouses.**

1. Miscellaneous warehousing areas which are located on the floor nearest grade and those areas on other floors that are otherwise provided with access by level entry, ramp or elevator shall be made accessible.
2. Office areas shall be made accessible.
3. Sanitary facilities serving these areas shall be made accessible.

## **SECTION 1108B ACCESSIBILITY FOR GROUP H OCCUPANCIES**

**1108B.1 General.** Group H Occupancies shall be accessible as provided in this chapter. See also the general requirements in Section 1114B.1.1.

**Exceptions:**

1. *In existing Group H Occupancies, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation and protection are provided.*

2. *In existing Group H Occupancies, the provisions of this section shall not apply when legal or physical constraints prevent compliance with these building standards or the provisions of equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.*

**1108B.2 Accessible Sanitation Facilities.** Accessible sanitation facilities in all Group H Occupancies shall be provided as specified in this chapter.

**1108B.3 Accessible Routes.** Entrances, stairs, ramps, doors, turnstiles, corridors, walks, sidewalks and hazards shall provide accessibility as specified in Section 1133B.

**1108B.4 Accessible Floors and Levels.** Accessible floors and levels shall comply with the requirements specified in this chapter.

**1108B.5 Employee Work Areas.** Employee work areas shall be accessible by means of a 36 inch-minimum (914 mm) aisle width and a 32 inch-minimum (813 mm) clear opening door width, as specified in Sections 1133B.6.1 and 1133B.6.2.

**1108B.6** Accessible facilities covered in this chapter are those that are used by the public as customers, clients, visitors or which are potential places of employment.

## **SECTION 1109B ACCESSIBILITY FOR GROUP I OCCUPANCIES**

**1109B.1 General.** All Group I Occupancies shall be accessible as provided in this chapter. See also the general requirements in Section 1114B.1.1.

**Exception:** In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.

**1109B.2 Entrance.** At least one accessible entrance shall be protected from the weather by canopy or roof overhang. Such entrances shall incorporate a passenger loading zone. Passenger loading zones shall provide an access aisle at least 60 inches (1524 mm) wide and 20 feet (6096 mm) long adjacent and parallel to the vehicle pull-up space. If there are curbs between the access aisle and the vehicle pull-up space, then a curb ramp complying with Chapter 11B shall be provided. Vehicle standing spaces and access aisles shall be level with surface slopes not exceeding 1 unit vertical in 50 units horizontal (2% slope) in all directions. Minimum vertical clearance of 114 inches (2896 mm) at accessible passenger loading zones and along vehicle access routes to such areas from site entrances shall be provided.

**Exception:** Clinics and other medical facilities that are not intended for patient stays of 24 hours or more, and that are located above the first story of a building, and that do not have a dedicated entrance from the exterior of the building at the first story.

**1109B.3 Patient Bedrooms and Toilet Rooms.** Patient bedrooms and associated toilet facilities shall be made accessible as follows:

1. Long-term-care facilities, including skilled nursing facilities, intermediate care facilities, bed and care, and nursing homes shall have at least 50 percent of patient bedrooms and toilet rooms, and all public-use and common-use areas, accessible.
2. General-purpose hospitals, psychiatric facilities, and detoxification facilities shall have at least 10 percent of patient bedrooms and toilets, and all public-use and common-use areas, accessible.
3. Hospitals and rehabilitation facilities that specialize in treating conditions that affect mobility, or units within either that specialize in treating conditions that affect mobility, shall have all patient bedrooms and toilets and all public-use and common-use areas accessible.

**1109B.4 Patient Bedroom Areas.** Accessible patient bedrooms shall comply with the following requirements:

1. Each bedroom shall have a turning space measuring 60 inches (1524 mm) clear in diameter, or that is a T-shaped space complying with Figure 11B-12. In rooms with two beds, it is preferable that this space be located between beds.
2. Each bedroom shall have a minimum clear floor space of 36 inches (914 mm) along each side of the bed, and shall provide an accessible route to each side of the bed.
3. Each bedroom shall have an accessible door that complies with Section 1133B.2.

**1109B.5 Patient Toilet Rooms and Bathing Facilities.** Patient toilet rooms and bathing facilities required to be accessible shall comply with Section 1115B.

**1109B.6 Diagnostic and Treatment Areas.** Diagnostic and treatment areas and, where applicable, at least one dressing room, sanitary facility, etc., for each unit or suite, shall be made accessible.

**1109B.7 Waiting Areas, Offices and Sanitary Facilities.** Waiting areas, offices and sanitary facilities serving them shall be made accessible as covered in other portions of these standards.

**1109B.8 Offices and Suites.** In buildings that house offices and suites of physicians, dentists, etc., all such offices or suites shall be made accessible, subject to other provisions of these regulations.

**SECTION 1110B  
ACCESS FOR GROUP M OCCUPANCIES**

**1110B.1 Sales.**

**1110B.1.1 General areas.** General sales, display and office areas together with related toilet rooms shall be made accessible. See also the general requirements in Section 1114B.1.1.

**Exceptions:**

1. Minor specialized display areas that do not exceed 200 square feet (18.6 m<sup>2</sup>) in floor area and to which the general public is excluded need not be made accessible.
2. Offices in sales facilities that do not exceed 5,000 square feet (465 m<sup>2</sup>) in total area, that are located on nonaccessible levels, need not be made accessible.

**1110B.1.2 Work areas.** Sales employee workstations shall be located on accessible levels, and the customer side of sales or check-out stations shall be accessible. Employee work areas shall be sized and arranged to provide access to employees in wheelchairs.

**1110B.1.3 Check stands.** In new construction, check stands, including service counters requiring a surface for transactions, shall be made accessible by providing a 36-inch (914 mm) minimum clear aisle width on the customer side of the check stand. Where check stands are provided, the number of check stands that are accessible shall be as shown in Table 11B-2.

**TABLE 11B – 2-CHECKSTANDS**

| TOTAL NUMBER OF CHECKSTANDS OF EACH DESIGN | NUMBER OF CHECKSTANDS OF EACH DESIGN TO BE ACCESSIBLE |
|--|---|
| 1 to 4                                     | 1   |
| 5 to 8                                     | 2   |
| 9 to 15                                    | 3   |
| over 15                                    | 3 plus 20% of additional aisles                       |

In new and existing construction, accessible check stands shall provide a minimum clear checkout aisle width of 36 inches (914 mm) with a maximum adjoining counter height not exceeding 38 inches (965 mm) above the finish floor. The top of the counter lip shall not exceed 40 inches (1016 mm) above the finish floor. Accessible check-stands shall always be open to customers with disabilities and shall be identified by a sign clearly visible to those in wheelchairs. The sign shall display the International Symbol of Accessibility in white on a blue background and shall state "This check stand to be open at all times for customers with disabilities".

In existing buildings, at least one checkout aisle shall be accessible in facilities with less than 5,000 square feet (465 m<sup>2</sup>) of selling space. In facilities of 5,000 square feet (465 m<sup>2</sup>) or more of selling space, at least one of each design of checkout aisle shall be made accessible when altered until the number of accessible checkout aisles of each design equals the number required in new construction.

Examples of checkout aisles of different design include those which are specifically designed to serve different functions. Different design includes, but is not limited to, the following features: length of belt or no belt, or permanent signage designating the aisle as an express lane.

**1110B.1.4 Point-of-sale machines.** All point-of-sale machines used by customers for the primary purpose of executing transactions between the business entity and the customer shall comply with Section 1117B.7.

**1110B.1.5 Turnstiles.** See Section 1133B.2.3.4.

**1110B.1.6 Theft prevention barriers.** Where shopping cart theft prevention barriers are used, they shall conform to the following requirements:

1. Each entrance and exit provided for public use shall be accessible to and usable by persons with disabilities.
2. Shopping cart barriers located at a public entrance or exit shall be designed to provide a clear, unobstructed opening at least 32 inches (813 mm) in width for ingress and egress of persons with disabilities.
3. Where gates are used, they shall open in the direction of travel, provide a clear unobstructed opening 32 inches (813 mm) in width and be maintained unlocked during business hours. Gates shall not operate a publicly audible alarm system or require more than 5 foot-pounds of force (22.2 N-m).
4. Where a clear unobstructed opening is provided, a level area is required on both sides of the clear opening or gate which extends a minimum of 44 inches (1118 mm) on each side of the opening and is at least 48 inches (1219 mm) in width.
5. Where a gate is used, the level area on both sides of the clear opening or gate shall be a minimum of 60 inches (1524 mm) in width and extend a minimum of 60 inches (1524 mm) (measured from the gate in a closed position) in the direction of the gate swing. The level area opposite the gate swing shall be a minimum of 48 inches (1219 mm) in width and extend a minimum of 42 inches (1067 mm).
6. Where a gate is used, the bottom of the gate shall be within 3 inches (76 mm) of the surface of the path of travel. The surface of the gate on each side shall be smooth to present no hazard to persons with disabilities using the gate and shall be structurally adequate to allow it to be opened with the wheelchair foot pedals.
7. The path of travel to and through the clear opening or gate shall be designed to prevent barriers from obstructing it and shall be continuously maintained unobstructed during business hours. Also, the design shall specifically prevent parked vehicles from obstructing ingress and egress.
8. Interior and exterior pedestrian traffic barriers (posts, rails, turnstiles, etc.) shall allow unobstructed travel for persons with disabilities through a 32-inch (813 mm) clear opening.

#### **1110B.2 Miscellaneous General Standards.**

**1110B.2.1 Circulation.** Shelves or display units allowing self-service by customers in mercantile occupancies shall be located on an accessible route of travel complying with Section 1114B.1.2. Circulation aisles and pedestrian ways shall be sized according to functional requirements and in no case shall be less than 36 inches (914 mm) in clear width.

**1110B.2.2 Storage areas.** The doorway providing access to all such areas shall not be less than 32 inches (813 mm) in clear width. Storage areas shall be made accessible in the number and dimensions provided in Section 1125B.

### **SECTION 1111B ACCESSIBILITY FOR GROUP R OCCUPANCIES**

**1111B.1 General.** Group R Occupancies shall be accessible or adaptable as provided in this chapter. Public-use and common-use areas serving adaptable guest and/or dwelling units shall be accessible. See also the general accessibility requirements in Sections 1114B.1.1 and 1111B.

**Exception:** When the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.

**1111B.2 Public- and Common-use Rooms or Areas.** Public- and common-use rooms and similar areas shall be made accessible to persons with disabilities, subject to specific provisions contained in other portions of these regulations. See also general requirements in Section 1114B.1.1.

At least one of each type of amenity (such as washers, dryers and similar equipment installed for the use of occupants) in each common area shall be accessible and shall be located on an accessible route to any accessible unit or sleeping accommodation.

**Exception:** Where elevators are not required, accessible amenities are not required on inaccessible floors as long as one of each type is provided in common areas on accessible floors.

**1111B.3 Recreational Facilities.** When recreational facilities are provided, including swimming pools, they shall comply with Sections 1104B.4.3 and 1132B.2.

**1111B.4 Hotels, Motels, Inns, Dormitories, Resorts, Homeless Shelters, Halfway Houses, Transient Group Homes and Similar Places of Transient Lodging.** Hotels, motels, inns, dormitories, resorts, homeless shelters, halfway houses, transient group homes, and similar places of transient lodging shall provide access for persons with disabilities in accordance with the provisions of the accessibility requirements of this California Building Code, except as herein provided.

Facilities with multi-bed rooms or spaces shall comply with Sections 1111B.4.2 and 1111B.4.3.

Occupancies which are not homeless shelters but are being altered to provide shelter accommodations shall meet the requirements of this section.

**1111B.4.1 Available range of accommodations.** Accessible guest rooms or suites shall be dispersed among the various classes of sleeping accommodations to provide a range of options applicable to room sizes, costs, amenities provided, and the number of beds provided.

**1111B.4.2 Guest rooms and suites.** Places of transient lodging shall incorporate the accessibility requirements of this code as modified by this chapter in at least one guest room or dormitory room together with their sanitary facilities as required in Table 11B-3. All accessible sleeping rooms or suites required by Table 11B-3 shall comply with the requirements of Section 1111B.4.5 for hearing impaired guests.

**1111B.4.2.1 Spaces.** Where provided as part of an accessible unit, sleeping room, or suite, the following spaces shall be accessible and shall be on an accessible route complying with Section 1114B.1.2:

1. the living area;
2. the dining area;
3. at least one sleeping area;
4. patios, terraces, or balconies;
5. where full bathrooms are provided, at least one full bathroom (that is, one with a water closet, a lavatory, and a bathtub or shower);
6. where only half baths are provided, at least one half bath;
7. carports, garages, or parking spaces.

**1111B.4.2.2 Accessible route.** Guest rooms and suites shall be on an accessible route complying with Section 1114B.1.2. An accessible route shall also connect all accessible spaces and elements, including telephones, within the unit, sleeping room or suite.

**1111B.4.2.3 Doors.**

**1111B.4.2.3.1 Doors into and within covered rooms and suites.** Doors and doorways designed to allow passage into and within all sleeping rooms, suites or other covered units shall comply with Section 1133B.2.

**1111B.4.2.3.2 Doors into and within all other rooms and suites.** Doors and doorways designed to allow passage into and within all other sleeping rooms and suites shall comply with Section 1133B.2.2.

**1111B.4.2.4 Alterations in existing facilities.** When guest rooms are being altered in an existing facility, or portion thereof, subject to the requirements of this section, at least one guest room or suite that complies with the

accessibility requirements of this code as modified by this chapter shall be provided for each 25 guest rooms, or fraction thereof, of rooms being altered until the number of such rooms provided equals the number required to be accessible in Table 11B-3. In addition, at least one guest room or suite that complies with the requirements of Section 1111B.4.5 shall be provided for each 25 guest rooms, or fraction thereof, of rooms being altered until the number of such rooms equals the number required to be accessible in Table 11B-4.

**1111B.4.3 Access to beds.** Accessible sleeping rooms shall have a 36-inch (914 mm) clear width maneuvering space located along both sides of a bed, except that where two beds are provided, this requirement can be met by providing a 36-inch-wide (914 mm) maneuvering space located between the beds.

In addition, there shall be a clear space under the bed for the use of a personal lift device. The clear space shall be on a long side of the bed adjacent to an accessible aisle. The clear space shall extend horizontally to points not more than 12 inches (305 mm) from each end of the bed, vertically not less than 7 inches (178 mm), and not less than 30 inches (762 mm) deep.

**1111B.4.4 Kitchens, kitchenettes, or wet bar facilities.** When accommodations are provided with kitchens, kitchenettes, wet bar units, or similar amenities, they shall be accessible and meet the requirements of Section 1133A. Kitchens shall be provided per the number required to be accessible in conformance with Table 11B-3.

**1111B.4.5 Visual alarms, notification devices and telephones for persons with hearing impairments.** In addition to those accessible sleeping rooms and suites required by Section 1111B.4.2, additional sleeping rooms and suites shall be provided with the following features as required by Table 11B-4 as follows:

**1111B.4.5.1 Visual alarms.** Visual alarms shall be provided and shall comply with NFPA 72 and Chapter 9, Sections 907.9.1 and 907.9.2.

**1111B.4.5.2 Visual notification devices.** Visual notification devices shall also be provided in units, sleeping rooms and suites to alert room occupants of incoming telephone calls and a door knock or bell. Notification devices shall not be connected to visual alarm signal appliances.

**1111B.4.5.3 Telephones.** Permanently installed telephones shall have volume controls complying with Section 1117B.2.8; an accessible electrical outlet within 48 inches (1219 mm) of a telephone connection shall be provided to facilitate the use of a text telephone.

**1111B.4.6 Bathrooms in hotels, motels, inns, dormitories, resorts, homeless shelters, halfway houses, transient group homes and similar places of transient lodging.** Required accessible bathrooms for places of transient lodging shall comply with the following provisions:

**Exception:** Hotel and motel bathrooms beyond those specified in Section 1111B.4 need not comply with the provisions of this section or other accessibility provisions of the California Building, Electrical, and Plumbing Codes if they provide the following features:

1. All bathroom fixtures are in a location that allows a person using a wheelchair measuring 30 inches by 48 inches (762 mm by 1219 mm) to touch the wheelchair to any lavatory, urinal, water closet, tub, sauna, shower stall and any other similar sanitary installation, if provided.

2. All bathroom entrance doors have a clear opening width of 32 inches (813 mm) and shall be either sliding doors or shall be hung to swing in the direction of egress from the bathroom.

1. **Doors.** Doors to accessible bathrooms shall comply with Section 1133B.2. Doors shall not swing into the floor space required for any fixture.

2. **Clear floor space.** All fixtures and controls shall be on an accessible route. There must be within the bathroom a clear floor space measuring 30 inches by 60 inches (762 mm by 1524 mm). The clear floor spaces at fixtures and controls, the accessible route, and the turning space may overlap.

3. **Water closets.** If a toilet compartment is provided, it shall comply with Section 1115B.3.1 or 1115B.3.2; its water closet shall comply with Section 1115B.4.1 of this code.

4. **Lavatory and mirrors.** If a lavatory and/or mirror is provided, they shall comply with Sections 1115B.4.3 and 1115B.8.1, as applicable.

**5. Controls and dispensers.** If controls, dispensers, receptacles, or other types of equipment are provided, then at least one of each shall be on an accessible route and shall comply with Section 1117B.6, "Controls and Operating Mechanisms."

**6. Bathing and shower facilities.** If tubs or showers are provided, then at least one accessible tub that complies with Section 1115B.4.5 or at least one accessible shower that complies with Section 1115B.4.4 of this code shall be provided.

**7. Toilet facilities.** Toilet facilities shall comply with Section 1111B.4.6, as modified for hotel, motel and dormitory accommodations.

**1111B.4.7 Dormitory rooms.** Dormitory rooms beyond those specified herein shall comply with the adaptability requirements of Section 1111B.5.

**1111B.5 Buildings and Complexes Containing Publicly Funded Dwelling Units.**

**1111B.5.1 General.** Buildings and complexes containing publicly funded dwelling units shall be accessible as required by Chapter 11A, Housing Accessibility, except that scoping requirements for covered multifamily dwellings include one or more publicly funded dwelling units, and is required to comply with Division IV - Accessibility for Existing Buildings, beginning with Section 1134B.

**TABLE 11B-3  
ADDITIONAL ACCESSIBILITY REQUIRED IN GUEST ROOMS OR SUITES\***

| TOTAL NUMBER OF ROOMS | FULLY ACCESSIBLE ROOMS            | PLUS ADDITIONAL ACCESSIBLE ROOMS WITH ROLL-IN SHOWERS |
|-----------------------|-----------------------------------|---|
| 1 to 25               | 0                                 | 1   |
| 26 to 50              | 1                                 | 1   |
| 51 to 75              | 3                                 | 1   |
| 76 to 100             | 4                                 | 1   |
| 101 to 150            | 5                                 | 2   |
| 151 to 200            | 6                                 | 2   |
| 201 to 300            | 7                                 | 3   |
| 301 to 400            | 8                                 | 4   |
| 401 to 500            | 9                                 | 4 plus 1 for each additional 100 over 400             |
| 501 to 1,000          | 2% of total                       | 4 plus 1 for each additional 100 over 400             |
| 1,001 and over        | 20 plus 1 for each 100 over 1,000 |   |

\*Provisions of this chapter are additional modifications to general requirements listed in Section 1114B.1.1.

**TABLE 11B-4  
ADDITIONAL ACCESSIBILITY REQUIRED FOR HEARING IMPAIRED IN GUEST ROOMS\***

| TOTAL NUMBER OF ROOMS | NUMBER OF ROOMS EQUIPPED FOR HEARING IMPAIRED |
|-----------------------|---|
| 1 to 25               | 1   |
| 26 to 50              | 2   |
| 51 to 75              | 3   |
| 76 to 100             | 4   |
| 101 to 150            | 5   |
| 151 to 200            | 6   |
| 201 to 300            | 7   |
| 301 to 400            | 8   |
| 401 to 500            | 9   |
| 501 to 1,000          | 2% of total                                   |
| 1,001 and over        | 20 plus 1 for each 100 over 1,000             |

\*Provisions of this chapter are additional modifications to general requirements listed in Section 1114B.1.1. For Group I-1 and R-1 occupancies, also see Section 907.9.1.3.

**SECTION 1112B**

## **ACCESSIBILITY FOR GROUP S OCCUPANCIES**

*(Reserved for future use.)*

## **SECTION 1113B ACCESSIBILITY FOR GROUP U OCCUPANCIES**

*(Reserved for future use.)*

## **SECTION 1114B FACILITY ACCESSIBILITY**

*When buildings are required to be accessible, buildings and facilities shall be accessible as provided in this section.*

### **1114B.1 Design and Construction.**

**1114B.1.1 General.** *When accessibility is required by this chapter, it shall be designed and constructed to meet the minimum requirements of the following sections:*

**Chapter 11B. Accessibility;** *Division I, New Buildings; Division II, Site Accessibility; Division III, Accessibility for Entrances, Exits and Paths of Travel; and Division IV, Accessibility for Existing Buildings*

**Entrances** – *[for HCD 1/AC] Section 1120A.1; [for DSA-AC] Section 1133B.1.1*

**Doors** – *[for HCD 1/AC] Section 1114A.4.4, 1117A.2, 1122A.3.4, 1126A, 1132A; [for DSA-AC] Section 1133B.2*

**Corridors** – *[for HCD 1/AC] Section 1120A; [for DSA-AC] Section 1133B.3*

**Stairways** – *[for HCD 1/AC] Section 1115A.6, 1123A; [for DSA-AC] Section 1133B.4*

**Ramps** – *[for HCD 1/AC] Section 1112A, 1114A, 1122A; [for DSA-AC] Section 1133B.5*

**Aisles** – *[for DSA-AC] Section 1133B.6*

**Walks and Sidewalks** – *[for HCD 1/AC] Section 1113A; [for DSA-AC] Section 1133B.7*

**Hazards** – *[for HCD 1/AC] Section 1116A, 1125A; [for DSA-AC] Section 1133B.8*

**Elevators** – *[for HCD 1/AC] Section 3003; [for DSA-AC] Section 1116B*

**Special Access (Wheelchair) Lifts** – *[for HCD 1/AC] Section 1124A; [for DSA-AC] Section 1116B.2*

**Alarms** – *Chapter 9, Sections 907.9.1 and 907.9.2*

**Bathing and Toilet Facilities** – *Section 1115B*

**Signs and Identification** – *Section 1117B.5*

**Detectable Warnings [DSA-AC]** – *Section 1121B.3.1 item 8(a), 1127B.5.7, 1133B.8.5, Part 12 – Chapter 12-11A and 12-11B*

*See also Part 3, California Electrical Code.*

**1114B.1.2 Accessible route of travel.** *When a building, or portion of a building, is required to be accessible or adaptable, an accessible route of travel complying with 1102B, 1114B, 1124B, 1133B.3, 1133B.5, 1133B.7, and 1133B.8.6 shall be provided to all portions of the building, to accessible building entrances and between the building and the public way. Except within an individual dwelling unit, an accessible route of travel shall not pass through kitchens, storage rooms, restrooms, closets or other spaces used for similar purposes. 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. At least one accessible route shall connect accessible buildings, facilities, elements and spaces that are on the same site. At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and*

elements and with all accessible dwelling units within the building or facility. An accessible route shall connect at least one accessible entrance of each accessible dwelling unit with those exterior and interior spaces and facilities that serve the accessible dwelling unit.

Where more than one route of travel is provided, all routes shall be accessible.

**Exception:** Where an elevator is provided for vertical access, only one elevator is required. Where more than one elevator is provided, all elevators shall be accessible.

See Section 1114B.1.1 for a list of code sections applicable to accessible route of travel.

**1114B.1.3 Primary entry access.** All entrances and all exterior ground-level exits shall be accessible in compliance with Section 1133B.1.1.

**1114B.1.4 Signs.** See Section 1117B.5.

**1114B.1.5 Adaptable dwelling units.** See Section 1111B.

**1114B.2 Egress and Areas of Refuge.**

**1114B.2.1 General.** In buildings or facilities or portions of buildings or facilities required to be accessible, accessible means of egress shall be provided as required by Chapter 10, Section 1007.

**1114B.2.2 Alarms/emergency warning systems/accessibility.** If emergency warning systems are provided, they shall include both audible alarms and visual alarms complying with NFPA 72 and Chapter 9, Section 907.9.1 and 907.9.2.

## **SECTION 1115B BATHING AND TOILET FACILITIES (SANITARY FACILITIES)**

**1115B.1 General.** Bathing and toilet facilities that serve buildings, facilities or portions of buildings or facilities that are required by these standards to be accessible to persons with disabilities, shall be on an accessible route and shall conform to the following requirements.

The accessible fixtures and controls required in this section shall be on an accessible route. An unobstructed turning space complying with Section 1115B.3.1, Item 1 or 1115B.3.2, Item 1, as applicable, shall be provided within an accessible toilet facility. The clear floor spaces at fixtures and controls, the accessible route, and the turning space may overlap.

See Section 1111B.4.6 and Chapter 11A for bathrooms in residential occupancies.

**Exception:** In existing buildings or facilities, when the enforcing agency determines that compliance with any building standard under this section would create an unreasonable hardship, an exception to such standard may be granted when equivalent facilitation is provided. When equivalent facilitation is used, the following criteria shall apply:

1. All sanitary facilities are not required to comply with these building standards when the enforcing agency determines that sanitary facilities are accessible to and usable by persons with disabilities within a reasonable distance of accessible areas.
2. When existing sanitary facilities are not being altered to provide accessibility, signage complying with Sections 1117B.5.1, Items 2 and 3, and 1117B.5.8.1 shall be provided at such inaccessible facilities indicating the location of the nearest accessible sanitary facility.

**1115B.1.1 Separate and unisex facilities.** Where separate facilities are provided for persons of each sex, these facilities shall be accessible to persons with disabilities. Where unisex facilities are provided, these facilities shall be accessible to persons with disabilities.

**1115B.1.2 Where used by children.** Where facilities are to be used solely by small children, the specific heights and clearances may be adjusted to meet their accessibility needs. See Table 1115B-1 for suggested mounting heights and clearances.

**TABLE 1115B-1  
SUGGESTED DIMENSIONS FOR CHILDREN'S USE**

|  |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|
| <p>The Division of the State Architect - Access Compliance recommends the following dimensions as adequately serving the needs of children in projects under our jurisdiction. These recommendations are based on the federal "Recommendations for Accessibility for Children in Elementary School" and other recognized publications on access for children:<br/> A = Adult Dimensions (age 12 and over)<br/> E = Elementary Dimensions<br/> K = Kindergarten and Pre-school Dimensions</p> |                       |                       |                       |
|  | <b>SUGGESTED</b>      |                       |                       |
| <b>DIMENSION</b>   | <b>A<br/>(Inches)</b> | <b>E<br/>(Inches)</b> | <b>K<br/>(Inches)</b> |
| Toilet centering from wall   | 18                    | 15                    | 12                    |
| Toilet seat height/Dimensions to top of seat   | 17-19                 | 15                    | 10-12                 |
| Grab bar height (side)   | 33                    | 27                    | 20-22                 |
| Toilet paper in front of toilet  | 12 max                | 6 max                 | 6 max                 |
| Napkin disposal in front of toilet   | 12 max                | 12 max                | N/A                   |
| Dispenser or mirror height   | 40 max                | 36 max                | 32 max                |
| Lavatory/sink top height   | 34 max                | 29 max                | 24 max                |
| Lavatory/sink knee clearance   | 27 min                | 24 min                | 19 min                |
| Urinal lip height  | 17 max                | 15 max                | 13 min                |
| Urinal flush handle height   | 44 max                | 37 max                | 32 max                |
| Drinking fountain bubbler height   | 36 max                | 32 max                | 30 max                |
| Drinking fountain knee clearance   | 27 min                | 24 min                | 22 min                |
| Ramp/stair handrail height   | 34-38                 | 27                    | 22                    |

**1115B.2 Bathing and Shower Facilities.** Where facilities for bathing are provided for the public, clients or employees, including showers or bathtubs, at least one shower or bathtub and support facilities such as lockers, and not less than 1 percent of all facilities, shall be accessible and conform to the following standards:

1. **Shower areas.** Showers in all occupancies shall be finished as specified in Section 1115B.3.1 item 6 to a height of not less than 70 inches (1778 mm) above the drain inlet. Materials other than structural elements used in such walls shall be of a type which is not adversely affected by moisture.
2. **Doors and panels.** Doors and panels of shower and bathtub enclosures shall be substantially constructed from approved, shatter-resistant materials. Hinged shower doors shall open outward.
3. **Glazing for shower and bathtub enclosures.** Glazing used in doors and panels of shower and bathtub enclosures shall be fully tempered, laminated safety glass or approved plastic. When glass is used, it shall have minimum thickness of not less than 1/8 inch (3.2 mm) when fully tempered, or 1/4 inch (6.4 mm) when laminated, and shall pass the test requirements of Section 2406.
4. **Plastics.** Plastics used in doors and panels of showers and bathtub enclosures shall be of a shatter-resistant type.

**1115B.3 Toilet Facilities.**

**1115B.3.1 Multiple-accommodation toilet facilities.** Multiple-accommodation toilet facilities shall have the following:

1. **Wheelchair clearance.** A clear space measured from the floor to a height of 27 inches (686 mm) above the floor, within the sanitary facility room, of sufficient size to inscribe a circle with a diameter not less than 60 inches (1524 mm) in size. Other than the door to the accessible water closet compartment, a door, in any position, may encroach into this space by not more than 12 inches (305 mm).
2. **Clear floor space at fixtures.** Doors shall not swing into the clear floor space required for any fixture.
3. **Accessible water closet.** Provide a minimum of one accessible water closet in compliance with Section 1115B.4.1.

**4. Accessible water closet compartment.** Accessible water closet compartments shall comply with the following:

**4.1.** The compartment shall be a minimum of 60 inches (1524 mm) wide.

**4.2.** If the compartment has a side-opening door, a minimum 60 inches wide (1524 mm) and 60 inches deep (1524 mm) clear floor space shall be provided in front of the water closet.

**4.3.** If the compartment has an end-opening door (facing the water closet), a minimum 60 inches wide (1524 mm) and 48 inches deep (1219 mm) clear floor space shall be provided in front of the water closet. The door shall be located in front of the clear floor space and diagonal to the water closet, with a maximum stile width of 4 inches (102 mm).

**4.4.** The water closet compartment shall be equipped with a door that has an automatic-closing device, and shall have a clear, unobstructed opening width of 32 inches (813 mm) when located at the end and 34 inches (864 mm) when located at the side with the door positioned at an angle of 90 degrees from its closed position.

**4.5.** The inside and outside of the compartment door shall be equipped with a loop or U-shaped handle immediately below the latch. The latch shall be flip-over style, sliding, or other hardware not requiring the user to grasp or twist. Except for door-opening widths and door swings, a clear, unobstructed access of not less than 44 inches (1118 mm) shall be provided to water closet compartments designed for use by persons with disabilities. Maneuvering space at the compartment door shall comply with Sections 1133B.2.4.2 and 1133B.2.4.3 except that the space immediately in front of a water closet compartment shall not be less than 48 inches (1219 mm) as measured at right angles to compartment door in its closed position.

**5. Large toilet rooms.** Where six or more compartments are provided within a multiple-accommodation toilet room, at least one compartment shall comply with Items 3 and 4 above, and at least one additional ambulatory accessible compartment shall be 36 inches (914 mm) wide with an outward swinging self-closing door and parallel grab bars complying with Section 1115B.4.1 Item 3.

**6. Interior surfaces.** In other than dwelling units, toilet room floors shall have a smooth, hard, nonabsorbent surface such as Portland cement, concrete, ceramic tile or other approved material which extends upward onto the walls at least 5 inches (127 mm). Walls within water closet compartments and walls within 24 inches (610 mm) of the front and sides of urinals shall be similarly finished to a height of 48 inches (1219 mm) and, except for structural elements, the materials used in such walls shall be a type which is not adversely affected by moisture.

**1115B.3.2 Single-accommodation toilet facilities.** Single-accommodation toilet facilities shall have the following:

**1. Wheelchair clearance.** There shall be sufficient space in the toilet room for a wheelchair measuring 30 inches (762 mm) wide by 48 inches (1219 mm) long to enter the room and permit the door to close. There shall be in the room a clear floor space of at least 60 inches (1524 mm) in diameter, or a T-shaped space complying with Figure 11B-12 (a) and (b). No door shall encroach into this space for more than 12 inches (305 mm). See Figure 11B-1A.

**2. Clear floor space at fixtures.** Doors shall not swing into the clear floor space required for any fixture.

**3. Accessible water closet.** Provide one accessible water closet in compliance with Section 1115B.4.1.

**4. Accessible Route.** All doors, fixtures and controls shall be on an accessible route. The minimum clear width of an accessible route shall be 36 inches (914 mm) except at doors (see Section 1133B.2). If a person in a wheelchair must make a turn around an obstruction, the minimum clear width of the accessible route shall be as shown in Figure 11B-5E. See also Figure 11B-1A.

**5. Interior surfaces.** In other than dwelling units, toilet room floors shall have a smooth, hard, nonabsorbent surface such as Portland cement, concrete, ceramic tile or other approved material which extends upward onto the walls at least 5 inches (127 mm). Walls within water closet compartments and walls within 24 inches (610 mm) of the front and sides of urinals shall be similarly finished to a height of 48 inches (1219 mm) and, except for structural elements, the materials used in such walls shall be a type which is not adversely affected by moisture.

**6. Accessible lavatory.** Provide one accessible lavatory in compliance with Section 1115B.4.3.

**7. Privacy latch.** The entrance door shall contain a privacy latch which complies with Section 1117B.6 – Controls and Operating Mechanisms.

For bathrooms serving residential occupancies, see Section 1111B.4.6 and Chapter 11A.

**Exception:** In an existing building, a single-accommodation toilet facility may have the water closet fixture located in an area which provides a clear space of not less than 36 inches (914 mm) wide by 48 inches (1219 mm) long in front of the water closet.

#### **1115B.4 Accessible Fixtures.**

**1115B.4.1 Accessible water closets.** Water closets required to be accessible shall comply with this subsection:

1. The centerline of the water closet fixture shall be 18 inches (457 mm) from the side wall or partition. On the other side of the water closet, provide a minimum of 28 inches (711 mm) wide clear floor space if the water closet is adjacent to a fixture or a minimum of 32 inches (813 mm) wide clear floor space if the water closet is adjacent to a wall or partition. This clear floor space shall extend from the rear wall to the front of the water closet.

2. A minimum 60 inches (1524 mm) wide and 48 inches (1219 mm) deep clear floor space shall be provided in front of the water closet.

3. Grab bars for water closets not located within a compartment shall comply with Section 1115B.7 and shall be provided on the side wall closest to the water closet and on the rear wall. Grab bars for water closets located within an accessible compartment shall comply with Section 1115B.7 and shall be provided on the side wall closest to the water closet and on the rear wall. Grab bars for water closets located within ambulatory accessible compartments shall comply with Section 1115B.7 and shall be provided on both sides of the compartment.

Grab bars shall not project more than 3 inches (76 mm) into the required clear floor space.

**3.1. Side wall.** The side grab bar shall be 42 inches (1067 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1372 mm) minimum from the rear wall with the front end positioned 24 inches (610 mm) minimum in front of the water closet. The side grab bar shall be securely attached and centered 33 inches (838 mm) above and parallel to the floor.

**3.2. Rear wall.** The rear grab bar shall be 36 inches (914 mm) long minimum and extend from the centerline of the water closet 12 inches (305 mm) minimum on one side and 24 inches (610 mm) minimum on the other side. The rear grab bar shall be securely attached and centered 33 inches (838 mm) above and parallel to the floor, except that where a tank-type toilet is used which obstructs placement at 33 inches (838 mm), the grab bar may be as high as 36 inches (914 mm) and the space between the grab bar and the top of the tank shall be 1-1/2 inches (38 mm) minimum.

4. The height of accessible water closets shall be a minimum of 17 inches (432 mm) and a maximum of 19 inches (483 mm) measured to the top of a maximum 2-inch (51 mm) high toilet seat.

**Exception:** A 3-inch (76 mm) high seat shall be permitted only in alterations where the existing fixture is less than 15 inches (381 mm) high.

5. Controls shall be operable with one hand and shall not require tight grasping, pinching or twisting. Controls for the flush valves shall be mounted on the wide side of toilet areas, no more than 44 inches (1118 mm) above the floor. The force required to activate controls shall be no greater than 5-pound-force (lbf) (22.2 N).

6. See the Section 1134A.7 for additional requirements for water closets in publicly funded housing and all nonresidential occupancies.

7. Automatic “spring to lifted position” seats are not allowed.

**1115B.4.2 Accessible urinals.** Urinals required to be accessible shall comply with this subsection.

1. Urinals shall be floor mounted, stall-type, or wall hung. Where one or more wall hung urinals are provided, at least one with an elongated rim projecting a minimum of 14 inches (356 mm) from the wall and a maximum of 17 inches (432 mm) from the wall and a maximum of 17 inches (432 mm) above the floor shall be provided.

2. Flush controls shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist and shall be mounted no more than 44 inches (1118 mm) above the floor. The force required to activate controls shall be no greater than 5 lbf (22.2 N). Electronic automatic flushing controls are acceptable and preferable.

3. Where urinals are provided, at least one shall have a clear floor space 30 inches by 48 inches (762 mm by 1219 mm) in front of the urinal to allow forward approach. This clear space shall comply with Section 1118B.4.

**1115B.4.3 Accessible lavatories.** Lavatories required to be accessible shall comply with this subsection. The requirements of this subsection shall apply to lavatory fixtures, vanities and built-in lavatories.

1. Faucet controls and operating mechanisms shall be operable with one hand in accordance with this chapter and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf (22.2 N). Lever-operated, push-type and electronically controlled mechanisms (preferable) are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds.

2. Lavatories, when located adjacent to a side wall or partition, shall be a minimum of 18 inches (457 mm) to the centerline of the fixture. All lavatories that are designated to be accessible shall be a minimum 17 inches (432 mm) in horizontal depth and mounted with the rim or counter edge no higher than 34 inches (864 mm) above the finished floor and with vertical clearance measured from the bottom of the apron or the outside bottom edge of the lavatory of 29 inches (737 mm) reducing to 27 inches (686 mm) at a point located 8 inches (203 mm) back from the front edge. In addition, a minimum 9 inch (230 mm) high toe clearance must be provided extending back toward the wall to a distance no more than 6 inches (150 mm) from the back wall. The toe clearance space must be free of equipment or obstructions.

3. A clear floor space 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4 shall be provided in front of a lavatory to allow forward approach. Such clear floor space shall adjoin or overlap an accessible route and shall extend a maximum of 19 inches (483 mm) into knee and toe space underneath the lavatory. See Figure 11B-1D--Knee Clearance.

4. Hot water and drainpipes accessible under lavatories shall be insulated or otherwise covered. There shall be no sharp or abrasive surfaces under lavatories.

**1115B.4.4 Accessible showers.** Showers required to be accessible shall comply with this subsection:

**1115B.4.4.1 Size and clearances.** Accessible showers shall comply with one of the following:

1. Roll-in shower 60 inches (1524 mm) minimum in width between wall surfaces and 30 inches (762 mm) minimum in depth with a full opening width on the long side. Shower compartment size and clear floor space shall comply with Figure 11B-2A.

2. Alternate roll-in shower 60 inches (1524 mm) minimum in width between wall surfaces and 36 inches (914 mm) in depth with an entrance opening width of 36 inches (914 mm) minimum. Shower compartment size and clear floor space shall comply with Figure 11B-2B.

3. Alternate roll-in shower 60 inches (1524 mm) minimum in width between wall surfaces and 36 inches (914 mm) minimum in depth as long as the entrance opening width is a minimum 36 inches (914 mm). Shower compartment size and clear floor space shall comply with Figure 11B-2C.

**1115B.4.4.2 Thresholds.** Thresholds in roll-in type showers shall be 1/2 inch (12.7 mm) high maximum and shall comply with Section 1124B.2.

**1115B.4.4.3 Orientation.** Where, within the same functional area, two or more accessible showers are provided, there shall be at least one shower constructed opposite hand from the other or others (that is, one left-hand controls versus right-hand controls).

**1115B.4.4.4 Water controls.** Water controls shall be of a single-lever design, operable with one hand, and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf (22.2N). The centerline of the controls shall be located at 40 inches (1016 mm) above the shower floor.

1. Controls in a 60 inch (1524 mm) minimum by 30 inch (762 mm) minimum roll-in shower shall be located on the back wall of the compartment adjacent to the seat and the centerline of the controls shall be within a range of no less than 19 inches (457 mm) and no more than 27 inches (610 mm) from the seat wall as shown in Figure 11B-2A.

2. Controls in a 60 inch (1524 mm) minimum by 36 inch (914 mm) alternate roll-in shower shall be located on the side wall of the compartment adjacent to the seat and the centerline of the controls shall be within a range of no less than 19 inches (457 mm) and no more than 27 inches (610 mm) from the seat wall as shown in Figure 11B-2B.

3. Controls in a 60 inch (1524 mm) minimum by 36 inch (914 mm) minimum alternate roll-in shower with optional enclosure shall be located on the back wall of the compartment adjacent to the seat and the centerline of the controls shall be within a range of no less than 19 inches (457 mm) and no more than 27 inches (610 mm) from the seat wall as shown in Figure 11B-2C.

**1115B.4.4.5 Hand-held sprayer unit.** A flexible hand-held sprayer unit with a hose at least 60 inches (1524 mm) long that can be used both as a fixed shower head and as a hand-held shower shall be provided. This unit shall be mounted such that the top of the mounting bracket is at a maximum height of 48 inches (1219 mm) above the shower floor.

1. The hand-held sprayer unit in a 60 inch (1524 mm) minimum by 30 inch (762 mm) minimum roll-in shower shall be located on the back wall of the compartment adjacent to the seat and the centerline of the unit shall be no more than 27 inches (610 mm) from the seat wall as shown in Figure 11B-2A.

2. The hand-held sprayer unit in a 60 inch (1524 mm) minimum by 36 inch (914 mm) alternate roll-in shower shall be located on the side wall of the compartment adjacent to the seat and the centerline of the unit shall be 18 inches (457 mm) from the seat wall as shown in Figure 11B-2B.

3. The hand-held sprayer unit in a 60 inch (1524 mm) minimum by 36 inch (914 mm) minimum alternate roll-in shower with optional enclosure shall be located on the back wall of the compartment adjacent to the seat and the centerline of the unit shall be no more than 27 inches (610 mm) from the seat wall as shown in Figure 11B-2C.

**1115B.4.4.6 Sprayer unit alternative.** Except within guest rooms and suites in hotels, motels and similar transient lodging establishments where accessible shower facilities are provided in areas subject to excessive vandalism, in lieu of providing the fixed flexible hose, two wall mounted shower heads shall be installed. Each shower head shall be installed so that it can be operated independently of the other and shall have swivel angle adjustments, both vertically and horizontally. One shower head shall be located at a height of 48 inches (1219 mm) above the floor.

**1115B.4.4.7 Floor slope.** The maximum slope of the floor shall be 2 percent in any direction. Where drains are provided, grate openings shall be a maximum of 1/4 inch (6.4 mm) and located flush with the floor surface.

**1115B.4.4.8 Shower accessories.** Shower accessories shall include:

1. A folding seat mounted 18 inches (457 mm) above the floor, and with a minimum space of 1 inch (25 mm) and maximum space of 1-½ inches (38 mm) allowed between the edge of the seat and any wall. When folded, the seat shall not extend more than 6 inches (152 mm) from the mounting wall. The seat dimensions and mounting position shall comply with Figures 11B-2A, 11B-2B, 11B-2C and 11B-2D. The structural strength of seats and their attachments shall comply with 1115B.7.2.

2. Grab bars located on walls adjacent to and opposite the seat. Grab bars shall also comply with the diameter, loading and projection requirements of Section 1115B.7. Grab bars shall be mounted between a minimum of 33 inches (838 mm) and a maximum of 36 inches (914 mm) above the shower floor with an L-shaped grab bar mounted on walls opposite and adjacent to the front edge of the seat, but not extended to include that portion of wall over the seat. See Figure 11B-2A or 11B-2B.

**1115B.4.4.9 Soap dish.** When a soap dish is provided, it shall be located on the control wall at a maximum height of 40 inches (1016 mm) above the shower floor, and within reach limits from the seat.

**1115B.4.4.10 Enclosures.** Enclosures, when provided for shower compartments, shall not obstruct controls or obstruct transfer from wheelchairs onto shower seats.

See Figures 11B-2A, 11B-2B, 11B-2C and 11B-2D.

**1115B.4.5 Accessible bathtubs.** Bathtubs required to be accessible shall comply with this subsection.

1. **Floor space.** Clear floor space at bathtubs shall be as shown in Figure 11B-8.
2. **Seat.** An in-tub seat or a seat at the head end of the tub shall be provided as shown in Figures 11B-8 and 11B-9. The structural strength of seats and their attachments shall comply with Section 1115B.7.2. Seats shall be mounted securely and shall not slip during use.
3. **Grab bars.** Grab bars complying with Section 1115B.7 shall be provided as shown in Figure 11B-9.
4. **Controls.** Faucets and other controls shall be located as shown in Figure 11B-9. They shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds (22.2 N).
5. **Shower unit.** A shower spray unit with a hose at least 60 inches (1524 mm) long that can be used both as a fixed shower head and as a hand-held shower shall be provided.
6. **Bathtub enclosures.** If provided, enclosures for bathtubs shall not obstruct controls or transfer from wheelchairs onto bathtub seats or into tubs. Enclosures on bathtubs shall not have tracks mounted on their rims.

**1115B.4.6 Accessible drinking fountains.** Where drinking fountains are provided, they shall comply with this section:

1. **General.** Where only one drinking fountain area is provided on a floor, there shall be a drinking fountain that is accessible to individuals who use wheelchairs in accordance with this section and one accessible to those who have difficulty bending or stooping. This can be accommodated by the use of "hi-low" fountains, or by such other means as would achieve the required accessibility for each group on each floor.

Where more than one drinking fountain is provided on a floor, 50% of those provided shall comply with Items 1, 2, 4 and 5 of this section and shall be on an accessible route complying with 1114B.1.2. All drinking fountains shall comply with Item 3 of this section.

2. **Clearances.** Wall and post-mounted cantilevered drinking fountains shall be a minimum of 18 inches (457 mm) and a maximum of 19 inches (483 mm) in depth and shall have a clear knee space between the bottom of the apron and the floor or ground not less than 27 inches (686 mm) in height, 30 inches (762 mm) in width, and 8 inches (203 mm) in depth, the depth measurements being taken from the front edge of the fountain back toward the wall or mounting post. The knee clearance space must be free of equipment or obstructions. Additionally, there shall be toe clearance of 9 inches (229 mm) in height above the floor and 17 inches (432 mm) in depth from the front edge of the fountain. The toe clearance space must be free of equipment or obstructions. A clear floor space at least 30 inches (762 mm) by 48 inches (1219 mm) complying with Section 1118B.4 shall be provided in front of the drinking fountain to allow forward approach. A side approach drinking fountain is not acceptable.

3. **Alcoves.** All drinking fountains shall be located completely within alcoves or otherwise positioned so as not to encroach into pedestrian ways. The alcove in which the drinking fountain is located shall not be less than 32 inches (813 mm) in width and 18 inches (457 mm) in depth. See Figure 11B-3 of this code. Additionally, alcoves shall comply with Section 1118B.4 item 2. Protruding objects located in alcoves or otherwise positioned so as to limit encroachment into pedestrian ways are permitted to project 4 inches into walks, halls, corridors, passageways or aisles.

**Exception:** When the enforcing agency determines that it would create an unreasonable hardship to locate the drinking fountain in an alcove, the drinking fountain may project into the path of travel, and the path of travel shall be identifiable to the blind as follows. Wing walls shall be provided on each side of the

drinking fountain. The wing walls shall project out from the supporting wall at least as far as the drinking fountain to within 6 inches (152 mm) of the surface of the path of travel. There shall also be a minimum of 32 inches (813 mm) clear between the wing walls. Additionally, maneuvering clearances shall comply with Section 1118B.4 item 2. The drinking fountain and wing walls shall comply with Section 1133B.8.6.

4. The bubbler shall be activated by a manually operated system complying with Section 1117B.6 item 4 that is front mounted or side mounted and located within 6 inches (152 mm) of the front edge of the fountain or an electronically controlled device (preferably). The bubbler outlet orifice shall be located within 6 inches (152 mm) of the front edge of the drinking fountain and within 36 inches (914 mm) of the floor. The water stream from the bubbler shall be substantially parallel to the front edge of the drinking fountain.

5. The spout shall provide a flow of water at least 4 inches (102 mm) high so as to allow the insertion of a cup or glass under the flow of water. On an accessible drinking fountain with a round or oval bowl, the spout must be positioned so the flow of water is within 3 inches (75 mm) of the front edge of the fountain.

#### **1115B.4.7 Accessible sinks.**

1. **Accessible kitchen sinks.** A clear floor space at least 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4 shall be provided in front of a sink to allow forward approach. The clear floor space shall be on an accessible route and shall extend a maximum of 19 inches (485 mm) underneath the sink (see Figure 11B-1D).

Each accessible sink shall be a maximum of 6-1/2 inches (165 mm) deep. Sinks shall be mounted with the counter or rim no higher than 34 inches (865 mm) above the finish floor. Knee clearance that is at least 27 inches (685 mm) high, 30 inches (762 mm) wide, and 19 inches (485 mm) deep shall be provided underneath sinks. Hot water and drain pipes exposed under sinks shall be insulated or otherwise configured so as to protect against contact. There shall be no sharp or abrasive surfaces under sinks.

Faucet controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be not greater than 5 lbf (22.2 N). 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.

2. **Noncommercial kitchen and counter bar sinks.** A clear floor space at least 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4 shall be provided in front of a sink to allow forward approach. The clear floor space shall be on an accessible route and shall extend a maximum of 19 inches (485 mm) underneath the sink (see Figure 11B-1D).

Each accessible sink shall be a maximum of 6-1/2 inches (165 mm) deep. Sinks shall be mounted with the counter or rim no higher than 34 inches (865 mm) above the finish floor. Knee clearance that is at least 27 inches (685 mm) high, 30 inches (762 mm) wide, and 19 inches (485 mm) deep shall be provided underneath sinks. Hot water and drain pipes exposed under sinks shall be insulated or otherwise configured so as to protect against contact. There shall be no sharp or abrasive surfaces under sinks.

Kitchen and counter bar sinks located in common use areas shall have faucet controls and operating mechanisms operable with one hand in accordance with this chapter and shall not require grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf (22.2 N). Lever-operated, push-type and electronically controlled mechanisms are examples of acceptable designs.

**1115B.5 Passageways.** Passageways leading to sanitary facilities shall have a clear access. All doorways leading to such sanitary facilities shall comply with Section 1133B.2 Doors. Doors shall not swing into the clear floor space required for any fixture. Accessible fixtures and controls shall be on an accessible route.

**1115B.6 Identification Symbols.** Doorways leading to men's sanitary facilities shall be identified by an equilateral triangle, 1/4 inch (6.4 mm) thick with edges 12 inches (305 mm) long and a vertex pointing upward. Women's sanitary facilities shall be identified by a circle, 1/4 inch (6.4 mm) thick and 12 inches (305 mm) in diameter. Unisex sanitary facilities shall be identified by a circle, 1/4 inch (6.4 mm) thick, 12 inches (305 mm) in diameter with a 1/4-inch (6.4 mm) thick triangle superimposed on the circle and within the 12-inch (305 mm) diameter. These geometric symbols shall be centered on the door at a height of 60 inches (1524 mm) and their color and contrast shall be distinctly different from the color and contrast of the door. See also Section 1117B.5.1 item 1 for additional signage requirements applicable to sanitary facilities.

**1115B.7 Grab Bars, Tub and Shower Seats.** All grab bars, tub and shower seats shall comply with this section.

**1115B.7.1 Diameter or width.** The diameter or width of the gripping surfaces of a grab bar shall be 1-¼ inches to 1-½ inches (32 mm to 38 mm) or the shape shall provide an equivalent gripping surface. If grab bars are mounted adjacent to a wall, the space between the wall and the grab bars shall be 1-½ inches (38 mm). See Figure 11B-1C.

**1115B.7.2 Structural strength.** The structural strength of grab bars, tub and shower seats, fasteners, and mounting devices shall meet the following specifications:

1. Bending stress in a grab bar or seat induced by the maximum bending moment from the application of a 250-pound (1112 N) point load shall be less than the allowable stress for the material of the grab bar or seat.
2. Shear stress induced in a grab bar or seat by the application of a 250-pound (1112 N) point load shall be less than the allowable shear stress for the material of the grab bar or seat, and its mounting bracket or other support is considered to be fully restrained, then direct and torsional shear stresses shall not exceed the allowable shear stress.
3. Shear force induced in fastener or mounting device from the application of a 250-pound (1112 N) point load shall be less than the allowable lateral load of either the fastener or mounting device or the supporting structure, whichever is the smaller allowable load.
4. Tensile force induced in a fastener by a direct tension force of a 250-pound (1112 N) point load, plus the maximum moment from the application of a 250-pound (1112 N) point load, shall be less than the allowable withdrawal load between the fastener and supporting structure.
5. Grab bars shall not rotate within their fittings.

**1115B.7.3 Surface.** A grab bar and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch (3.2 mm).

**1115B.8 Accessories.**

**1115B.8.1 Mirrors.** Mirrors shall be mounted with the bottom edge of the reflecting surface no higher than 40 inches (1016 mm) from the floor.

**1115B.8.2 Medicine cabinets.** If medicine cabinets are provided, at least one shall be located with a usable shelf no higher than 44 inches (1118 mm) above the floor. A clear floor space 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4 shall be provided in front of a medicine cabinet to allow a forward or parallel approach.

**1115B.8.3 Towel, sanitary napkins, waste receptacles, dispensers and controls.** Where towel, sanitary napkins, waste receptacles, dispensers, other equipment, and controls are provided, at least one of each type shall be located on an accessible route, with all operable parts, including coin slots, within 40 inches (1016 mm) from the finished floor and shall comply with Section 1117B.6, Controls and Operating Mechanisms.

**1115B.8.4 Toilet tissue dispensers.** Toilet tissue dispensers shall be located on the wall within 12 inches (305 mm) of the front edge of the toilet seat, mounted below the grab bar, at a minimum height of 19 inches (485 mm), and 36 inches (914 mm) maximum to the far edge from the rear wall. Dispensers that control delivery or that do not permit continuous paper flow shall not be used. See Figure 11B-1A.

**1115B.8.5 Lockers.** Where lockers are provided for the public, clients, employees, members or participants, at least one locker and not less than 1 percent of all lockers shall be made accessible to persons with disabilities. A path of travel not less than 36 inches (914 mm) in clear width shall be provided to these lockers.

## **SECTION 1116B ELEVATORS AND SPECIAL ACCESS (WHEELCHAIR) LIFTS**

**1116B.1 Elevators.** Passenger elevators shall be accessible. Elevators required to be accessible shall be designed and constructed to comply with this section and with the ASME A17.1, Safety Code for Elevators and Escalators.

**1116B.1.1 General.** Size of cab and control locations and requirements for accommodation of persons with disabilities.

*In buildings two or more stories in height, served by an elevator, or a building served by an elevator required by Chapter 11B, or a building served by an elevator required for accessibility by Section 109.1, if more than one passenger elevator is provided, each full passenger elevator shall comply with this chapter.*

**Exceptions:**

- 1. In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception to such regulation shall be granted when equivalent facilitation is provided.*
- 2. In existing buildings, where existing shaft configuration or technical infeasibility prohibits strict compliance with Section 1116B.1.8, the minimum car plan dimensions may be reduced by the minimum amount necessary, but in no case shall the inside car area be smaller than 48 inches (1219 mm) by 48 inches (1219 mm).*
- 3. In existing buildings, equivalent facilitation may be provided with an elevator car of different dimensions where it can be demonstrated that a person using a wheelchair can enter and operate the elevator and when all other elements required to be accessible comply with the applicable provisions of Section 1116B.*
- 4. These provisions shall not apply to existing buildings when legal or physical constraints will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.*

**1116B.1.2 Operation and leveling.** *The elevator shall be automatic and provided with a self-leveling feature that will automatically bring the car to the floor landings within a tolerance of plus or minus 1/2 inch (12.7 mm) under normal loading and unloading conditions. This self-leveling shall, within its zone, be entirely automatic and independent of the operating device and shall correct the overtravel or undertravel. The car shall also be maintained approximately level with the landing, irrespective of load.*

*The clearance between the car platform sill and the edge of the hoistway landing shall be no greater than 1-¼ inches (32 mm).*

**1116B.1.3 Door operation.** *Power-operated horizontally sliding car and hoistway doors opened and closed by automatic means shall be provided.*

**1116B.1.4 Door size.** *Minimum clear width for elevator doors shall be 36 inches (914 mm).*

**1116B.1.5 Door protective and reopening device.** *Doors closed by automatic means shall be provided with a door-reopening device that will function to stop and reopen a car door and adjacent hoistway door in case the car door is obstructed while closing.*

*This reopening device shall also be capable of sensing an object or person in the path of a closing door without requiring contact for activation at a nominal 5 inches and 29 inches (127 mm and 737 mm) above the floor.*

*Door-reopening devices shall remain effective for a period of not less than 20 seconds.*

*After such an interval, the doors may close in accordance with the requirements of ASME A17.1.*

**1116B.1.6 Hall call.** *The minimum acceptable time from notification that a car is answering a call (lantern and audible signal) until the doors of the car start to close shall be calculated by the following equation:*

$$T = D / (1.5 \text{ ft/s}) \text{ or } T = D / (455 \text{ mm/s})$$

*Where T is the total time in seconds and D is the distance from a point in the lobby or landing area 60 inches (1524 mm) directly in front of the farthest call button controlling that car to the centerline of its hoistway door (see Figure 11B-40D). For cars with in-car lanterns, T begins when the lantern is visible from the vicinity of hall call buttons and an audible signal is sounded. The minimum acceptable notification time shall be 5 seconds.*

**1116B.1.7 Car call.** *The minimum acceptable time for doors to remain fully open shall not be less than 5 seconds.*

**1116B.1.8 Car inside.** The car inside shall allow for the turning of a wheelchair. The minimum clear distance between walls or between wall and door, excluding return panels, shall not be less than 80 inches by 54 inches (2032 mm by 1372 mm) for center opening doors, and 68 inches by 54 inches (1727 mm by 1372 mm) for side-slide opening doors. See Figure 11B-40A. Minimum distance from wall to return panel shall not be less than 51 inches (1295 mm).

The centerline of elevator floor buttons shall be no higher than 54 inches (1372 mm) above the finish floor for side approach and 48 inches (1219 mm) for front approach. Emergency controls, including the emergency stop and alarm, shall be grouped in or adjacent to the bottom of the panel and shall be no lower than 2 feet 11 inches (889 mm) from the floor.

For multiple controls only, one set must comply with these height requirements. Floor buttons shall be provided with visual indicators to show when each call is registered. The visual indicators shall be extinguished when each call is answered.

Emergency two-way communication systems between the elevator and a point outside the hoistway shall comply with ASME A17.1. The emergency telephone handset shall be positioned no higher than 4 feet (1219 mm) above the floor, and the handset cord shall be a minimum of 2 feet 5 inches (737 mm) in length. It shall be identified by a raised telephone symbol and corresponding Braille lettering complying with Section 1117B.5.1 Item 1 and located adjacent to the device. If the telephone system is located in a closed compartment, the compartment door hardware shall be lever type conforming to the provisions of Section 1008.1.8, Type of Lock or Latch. Emergency intercommunication shall not require voice communication.

Where possible, a 48-inch (1219 mm) maximum height for elevator floor buttons is preferred.

Controls shall be located on a front wall if cars have center opening doors, and at the side wall or at the front wall next to the door if cars have side opening doors. See Figure 11B-40A.

**1116B.1.9 Car controls.** Identification for the visually impaired shall be as follows:

Passenger elevator car controls shall have a minimum dimension of 3/4 inch (19.1 mm) and shall be raised 1/8 inch (3.2 mm) plus or minus 1/32 inch (0.8 mm) above the surrounding surface.

Control buttons shall be illuminated, shall have square shoulders and shall be activated by a mechanical motion that is detectable.

All control buttons shall be designated by 5/8 inch (15.9 mm) minimum raised characters and standard raised symbols that conform to Sections 1117B.5.2, 1117B.5.3, 1117B.5.5 and 1117B.5.7 immediately to the left of the control button. Grade 2 Braille that conforms to Section 1117B.5.6 shall be located immediately below the character or symbol. A minimum clear space of 3/8 inch (9.5 mm) or other suitable means of separation shall be provided between rows of control buttons. See Figure 11B-40B.

The raised characters and symbols shall be white on a black background.

Controls and emergency equipment identified by raised symbols shall include, but not be limited to, door open, door close, alarm bell, emergency stop and telephone. The call button for the main entry floor shall be designated by a raised star at the left of the floor designation.

In elevator cars, a visual car position indicator shall be provided above the car control panel or over the door to show the position of the elevator in the hoistway. As the car passes or stops at a floor served by the elevators, the corresponding numerals shall illuminate, and an audible signal shall sound. Numerals shall be a minimum of 1/2 inch (13 mm) high. The audible signal shall be no less than 20 decibels with a frequency no higher than 1500 Hz. An automatic verbal announcement of the floor number at which a car stops or which a car passes may be substituted for the audible signal.

**1116B.1.10 Hall call buttons.** The centerline of the hall call buttons shall be 42 inches (1067 mm) above the floor. Buttons shall be a minimum of 3/4 inch (19.1 mm) in size and shall be raised 1/8 inch (3.2 mm) [plus or minus 1/32 inch (0.8 mm)] above the surrounding surface. The button designating the up direction shall be on top. Visual indication shall be provided to show each call registered and extinguished when answered. Objects adjacent to, and below, hall call buttons shall not project more than 4 inches (102 mm) from the wall. Hall call buttons shall be internally illuminated with a white light over the entire surface of the button.

**1116B.1.11 Handrails.** A handrail shall be provided on one wall of the car, preferably the rear. The rails shall be smooth, and the inside surface at least 1-½ inches (38 mm) clear of the walls at a nominal height of 32 inches (813 mm) from the floor. Nominal equals ± 1 inch (25 mm). Thirty-two inches (813 mm) required to reduce interference with car controls where lowest button is centered at 35 inches (889 mm) above floor.

**1116B.1.12 Minimum illumination.** The minimum illumination at the car controls threshold and the landing when the car and landing doors are open shall not be less than 5 foot-candles (54 lx).

**1116B.1.13 Hall lantern.** A visual and audible signal shall be provided at each hoistway entrance indicating to the prospective passenger the car answering the call and its direction of travel as follows:

The visual signal for each direction shall be a minimum of 2-½ inches (64 mm) high by 2-½ inches (64 mm) wide and visible from the proximity of the hall call button.

The audible signal shall sound once for the up direction and twice for the down direction or shall have verbal annunciators that say “up” or “down”.

The centerline of the fixture shall be located a minimum of 6 feet (1829 mm) in height from the lobby floor.

The use of in-car lanterns, located in or on the car doorjamb, visible from the proximity of the hall call buttons and conforming to the above requirements, shall or will be acceptable.

The use of arrow shapes is preferred for visible signals.

**1116B.1.14 Doorjamb marking.** Passenger elevator landing jambs on all elevator floors shall have the number of the floor on which the jamb is located designated by raised characters that are a minimum of 2 inches (51 mm) in height and conform to Section 1117B.5.5 and Grade 2 Braille that conforms to Section 1117B.5.6 located 60 inches (1524 mm) on center above the floor on the jamb panels on both sides of the door so that they are visible from within the elevator. On the grade level, a raised five pointed star shall be placed to the left of the raised character. The outside diameter of the star shall be 2 inches (51 mm). Braille shall be placed below the corresponding raised characters.

The raised characters shall otherwise comply with Sections 1117B.5.3, 1117B.5.4 and 1117B.5.2. See Figure 11B-40C. Permanently applied plates are acceptable if they are permanently fixed to the jambs.

**1116B.1.15 Location.** Passenger elevators shall be on an accessible route, located near a major path of travel, and provisions shall be made to ensure that they remain accessible and usable at all times the building is occupied.

**1116B.2 Special Access (Wheelchair) Lifts.** Special access (wheelchair) lifts may be provided between levels in lieu of passenger elevators when the vertical distance between landings, as well as the structural design and safeguards are as allowed by ASME A18.1 Safety Standard for Platform Lifts and Stairway Chair Lifts; the State of California, Division of the State Architect-Access Compliance; the Department of Industrial Relations, Division of Occupational Safety and Health and any applicable safety regulations of other administrative authorities having jurisdiction.

If lifts are provided, they shall be designed and constructed to facilitate unassisted entry, operation and exit from the lift and shall comply with the restrictions and enhancements of this section in conjunction with Title 8, of the California Code of Regulations.

Additionally, lifts may be provided as part of an accessible route only for the following conditions:

**1116B.2.1** To provide an accessible route to a performing area in an assembly occupancy, or to a speaking area or similar place (such as a dais or “head table”) in an assembly or Group B Occupancy.

**1116B.2.2** To comply with the wheelchair viewing position line-of-sight and dispersion requirements of Section 1104B.3.5.

**1116B.2.3** To provide access to incidental occupiable spaces and rooms which are not open to the general public and which house no more than five persons, including, but not limited to, equipment control rooms and projection booths.

**1116B.2.4** To provide access where existing site constraints or other constraints make use of a ramp or an elevator infeasible.

**1116B.2.4.1 Landing size.** In new construction, the minimum size of landings specified in this section shall be 60 inches by 60 inches (1524 mm by 1524 mm). Other dimensions may be substituted where it can be demonstrated that a person using a wheelchair measuring 30 inches by 48 inches (762 mm by 1219 mm) can enter and operate the lift safely.

**1116B.2.4.2 Relationship to the path of travel.** Level and clear floor areas or landings as specified in this section shall be part of "path of travel" requirements.

**Exceptions:**

1. The provisions of this section shall not apply to existing buildings when physical constraints will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.
2. When the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception to such regulation shall be granted when equivalent facilitation is provided.
3. The installation of lifts as part of an accessible route for additions or alterations is not limited to the four conditions required by Section 1116B.2.

**1116B.3 When provided as a means of egress.** Special access (wheelchair) lifts, when provided as a component in an accessible means of egress, shall conform to the requirements of Section 1116B.3.

**1116B.3.1 Standby power.** To ensure continued operation in case of primary power loss, special access (wheelchair) lifts shall be provided with standby power or with self-rechargeable battery power that provides sufficient power to operate all platform lift functions for a minimum of five (5) upward and downward trips.

**1116B.3.2** Special access (wheelchair) lifts, when provided per Section 1116B.2.2, are permitted to be a component of an accessible means of egress when the area served by the special access lift does not serve more than 4 wheelchair viewing positions and where any one of the following conditions exist:

1. The building has a supervised automatic sprinkler system.
2. The maximum distance from the point where the wheelchair occupant is seated to a point where the occupant has a choice of two directions of travel to an exit shall not exceed 30 feet (9144 mm). The length of the path of travel shall include the vertical travel distance of the lift.

**1116B.4 Doors and Gates.** Lifts shall have low energy power-operated doors or gates. Doors and gates shall remain open for 20 seconds minimum. End doors shall be 32 inches (813 mm) minimum clear width. Side doors shall be 42 inches (1067 mm) minimum clear width.

**Exception:** Lifts having doors or gates on opposite sides shall be permitted to have manual doors or gates.

**SECTION 1117B  
OTHER BUILDING COMPONENTS**

**1117B.1 Water Fountains (Drinking).** See Section 1115B.4.6.

**1117B.2 Telephones.**

**1117B.2.1 General.** If public pay telephones, public closed circuit telephones, or other public telephones are provided, they shall comply with this section to the extent required by the following table. See Figure 11B-4.

| Number of each type of telephone provided on each floor | Minimum number of telephones required to comply with Section 1117B.2 <sup>1</sup>  |
|---|--|
| 1 or more single units                                  | 1 or at least 50 percent of telephone unit(s) per floor  |
| 1 telephone bank  | 1 or at least 50 percent of telephone unit(s) per bank   |
| 2 or more banks   | 1 or at least 50 percent of telephone unit(s) per bank<br>At least 1 telephone per floor shall meet the requirements for a forward reach telephone |

<sup>1</sup>Additional public telephones may be installed at any height.

**1117B.2.2 Clear floor ground space.** A clear floor or ground space at least 30 inches by 48 inches (762 mm by 1219 mm) that allows either a forward or parallel approach by a person using a wheelchair shall be provided at telephones.

**1117B.2.3 Size and approach.** The minimum clear floor ground space required to accommodate a single, stationary wheelchair and occupant is 30 inches by 48 inches (762 mm by 1219 mm). 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 part of the knee space required under some objects. See Figure 11B-5A.

**1117B.2.4 Relationship of maneuvering clearances to wheelchair spaces.** One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin another wheelchair clear floor space. If a clear floor space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided. See Figure 11B-5A.

**1117B.2.5 Floor surfaces of wheelchair spaces.** Floor surfaces of wheelchair spaces shall conform to Section 1124B. Bases, enclosures and fixed seats shall not impede approaches to telephones by people who use wheelchairs.

**1117B.2.6 Mounting height.** The highest operable part of the telephone shall be within the reach ranges specified in Sections 1118B.5 and 1118B.6. Telephones mounted diagonally in a corner that require wheelchair users to reach diagonally shall have the highest operable part no higher than 54 inches (1372 mm) above the floor. See Figure 11B-4.

**1117B.2.7 Enclosures.** If telephone enclosures are provided, they may overhang the clear floor space required in Sections 1117B.2.2, 1117B.2.3 and 1117B.2.4 within the following limits:

- 1. Side reach possible.** Where a parallel approach is provided at a telephone within an enclosure, the enclosure and counter may extend beyond the face of the telephone a maximum of 10 inches (254 mm). The enclosure and counter may not overlap the required clear floor or ground space. See Figure 11B-4.
- 2. Full-height enclosures.** Entrances to full-height enclosures shall be 30 inches (762 mm) minimum. See Figure 11B-4.
- 3. Forward reach required.** Where a front approach is provided at a telephone within an enclosure, the counter may extend beyond the face of the telephone a maximum of 20 inches (508 mm) into the required clear floor or ground space and the enclosure may extend beyond the face of the telephone a maximum of 24 inches (610 mm). If an additional 6 inches (152 mm) in width of clear floor space is provided, creating a clear floor space of 36 inches by 48 inches (914 mm by 1219 mm), the enclosure may extend more than 24 inches (610 mm) beyond the face of the telephone. See Figure 11B-4.
- 4. Protruding telephone enclosures.** Where telephone enclosures protrude into walks, halls, corridors or aisles, they shall also comply with Section 1133B.8.6.

**1117B.2.8 Telephone equipment for hearing impaired persons.** Telephones shall be equipped with a receiver that generates a magnetic field in the area of the receiver cap. If banks of public telephones are provided, at least one in each bank and a total of at least 25 percent of the total number of public telephones, including closed-circuit telephones in a building or facility, shall be equipped with a volume control. Such telephones shall be capable of a minimum of 12 dBA and a maximum of 18 dBA above normal. If an automatic reset is provided, 18 dBA may be exceeded. Public telephones with volume control shall be hearing aid compatible and shall be identified by a sign containing a depiction of a telephone handset with radiating sound waves.

**1117B.2.9 Text telephones.**

**1117B.2.9.1 Where required.**

- 1.** If a total of four or more public pay telephones (including both interior and exterior phones) are provided at a site, and if at least one of the total is in an interior location, then at least one interior public text telephone shall be provided.

2. If an interior public pay telephone is provided in a stadium or arena, in a convention center, in a hotel with a convention center, or in a covered mall, at least one interior public text telephone shall be provided in the facility.

3. If a public pay telephone is located in or adjacent to a hospital emergency room, hospital recovery room or hospital waiting room, one public text telephone shall be provided at each location.

**1117B.2.9.2 General.** Text telephones shall comply with the following requirements:

1. Text telephones used with a pay telephone shall be permanently affixed within or adjacent to the telephone enclosure. If an acoustic coupler is used, the telephone cord shall be sufficiently long to allow connection of the text telephone and the telephone receiver.

2. Where a bank of telephones in the interior of a building consists of three or more public pay telephones, at least one public pay telephone in each such bank shall be equipped with a shelf and an electrical outlet within or adjacent to the telephone enclosure. The telephone handset shall be capable of being placed flush on the surface of the shelf. The shelf shall be capable of accommodating a text telephone and shall have 6 inches (152 mm) minimum vertical clearance in the area where the text telephone is to be placed.

3. Equivalent facilitation may be substituted for the requirements of this section. For example, a portable text telephone may be made available in a hotel at a registration desk if it is available on a 24-hour basis for use with nearby public pay phones. In this instance, at least one pay phone shall comply with Item 2 above. In addition, if an acoustic coupler is used, the telephone handset cord shall be sufficiently long to allow connection of the text telephone and the telephone receiver. Directional signage shall comply with Section 1117B.5.

**1117B.2.9.3 Signage.** Text telephones shall be identified by the International TTY symbol (see Figure 11B-14A). If a facility has a public text telephone, directional signage indicating the location of the nearest such telephone shall be placed adjacent to all banks of telephones that do not contain a text telephone. Such directional signage shall include the International TTY symbol. If a facility has no banks of telephones, the directional signage shall be provided at the entrance or in a building directory.

**1117B.2.10 Controls.** Telephones shall have push-button controls where service for such equipment is available.

**1117B.2.11 Cord length.** The cord from the telephone to the handset shall be at least 29 inches (737 mm) long.

**1117B.2.12 Telephone books.** If telephone books are provided, they shall be located in a position that complies with the reach ranges in Sections 1118B.5 and 1118B.6.

**1117B.3 Kitchens.** See Section 1133A.

**1117B.4 Swimming Pools.** See Section 1104B.4.3.

**1117B.5 Signs and Identification.** 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.5.1 General.** When new or additional signs and/or identification devices are provided, or when existing signs and/or identification devices are replaced or altered, the new or altered signs and/or identification devices shall comply with Section 1117B.5. The addition of or replacement of signs and/or identification devices shall not trigger any additional path of travel requirements.

1. **Identification signs.** When signs identify permanent rooms and spaces of a building or site, they shall comply with Sections 1117B.5.2, 1117B.5.3, 1117B.5.5, 1117B.5.6 and 1117B.5.7. For other means of egress signs and identification provisions adopted by SFM and DSA-AC see Chapter 10, Sections 1011.3 for Tactile Exit Signs, 1020.1.6.2 for Tactile Floor Designation Signs in Stairways, 1008.1.8.6(5) for Delayed Egress Locks, 1007.6.5 for Areas of Refuge, and 1007.7 for Exits and Elevators. See also section 1116B for additional signage requirements applicable to elevators and section 1115B.6 for sanitary facilities.

2. **Directional and informational signs.** When signs direct to or give information about permanent rooms and functional spaces of a building or site, they shall comply with Sections 1117B.5.2, 1117B.5.3 and 1117B.5.4.

**3. Accessibility signs.** When signs identify, direct to or give information about accessible elements and features of a building or site, they shall include the appropriate symbol of accessibility and shall comply with Sections 1117B.5.2 and 1117B.5.8.

**4. Plan review and inspection.** Signs and identification as specified in Section 1117B.5.1, when included in the construction of new buildings or facilities, or when included, altered or replaced due to additions, alterations or renovations to existing buildings or facilities, and when a permit is required, shall comply with the following plan review and inspection requirements:

**4.1. Plan review.** Plans, specifications or other information indicating compliance with these regulations shall be submitted to the enforcing agency for review and approval.

**4.2. Inspection.** Signs and identification shall be field inspected after installation and approved by the enforcing agency prior to the issuance of a final certificate of occupancy per Appendix Chapter 1, Section 110.2, or final approval where no certificate of occupancy is issued. The inspection shall include, but not be limited to, verification that Braille dots and cells are properly spaced and the size, proportion, and type of raised characters are in compliance with these regulations.

**4.3. Other signs and identification.** Tactile exit signage in Sections 1011.3 and 1011.3.2, tactile floor designation signs in stairways in Section 1020.1.6.2, tactile special egress-control device signs in Section 1008.1.8.6(5), elevator car control identification required in Section 1116B.1.9, elevator doorjamb marking required in Section 1116B.1.14, and sanitary facilities signage required in Section 1115B.6 shall also comply with this section.

**1117B.5.2 Finish and contrast.** Characters, symbols and their background shall have a non-glare finish. Characters and symbols shall contrast with their background, either light on a dark background or dark on a light background.

**1117B.5.3 Proportions.** Characters on signs shall have a width-to-height ratio of between 3:5 and 1:1 and a stroke width-to-height ratio of between 1:5 and 1:10.

**1117B.5.4 Character height.** 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 uppercase X. Lowercase characters are permitted. For signs suspended or projected above the finish floor in compliance with Section 1133B.8.6, the minimum character height shall be 3 inches (76 mm).

**1117B.5.5 Raised characters and pictorial symbol signs.** When raised characters are required or when pictorial symbols (pictograms) are used on such signs, they shall conform to the following requirements:

**1. Character type.** Characters on signs shall be raised 1/32-inch (0.794 mm) minimum and shall be sans serif uppercase characters accompanied by Grade 2 Braille complying with Section 1117B.5.6.

**2. Character size.** Raised characters shall be a minimum of 5/8 inch (15.9 mm) and a maximum of 2 inches (51 mm) high.

**3. Pictorial symbol signs (pictograms).** Pictorial symbol signs (pictograms) shall be accompanied by the verbal description placed directly below the pictogram. The outside dimension of the pictogram field shall be a minimum of 6 inches (152 mm) in height.

**4. Character placement.** Characters and Braille shall be in a horizontal format. Braille shall be placed a minimum of 3/8 inch (9.5 mm) and a maximum of 1/2 inch (12.7 mm) directly below the tactile characters; flush left or centered. When tactile text is multi-lined, all Braille shall be placed together below all lines of tactile text.

**1117B.5.6 Braille.** Contracted Grade 2 Braille shall be used wherever Braille is required in other portions of these standards. Dots shall be 1/10 inch (2.54 mm) on centers in each cell with 2/10-inch (5.08 mm) space between cells, measured from the second column of dots in the first cell to the first column of dots in the second cell. Dots shall be raised a minimum of 1/40 inch (0.635 mm) above the background. Braille dots shall be domed or rounded.

**1117B.5.7 Mounting location and height.** Where permanent identification signs are provided for rooms and spaces, signs shall be installed on the wall adjacent to the latch side 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.

Where permanent identification signage is provided for rooms and spaces they shall be located on the approach side of the door as one enters the room or space. Signs that identify exits shall be located on the approach side of the door as one exits the room or space.

Mounting height shall be 60 inches (1524 mm) above the finish floor to the center line of the sign. Mounting location shall be determined so that a person may approach within 3 inches (76 mm) of signage without encountering protruding objects or standing within the swing of a door.

See also Section 1115B.6 for additional signage requirements applicable to sanitary facilities.

#### **1117B.5.8 Symbols of accessibility.**

**1117B.5.8.1 International Symbol of Accessibility.** 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 these building standards and as specifically required in this section. See Figure 11B-6.

**Exception:** Signs need not be provided for facilities within an adaptable dwelling unit, or within an accessible patient or guest room.

**1117B.5.8.1.1 Color of symbol.** The symbol specified above shall consist of a white figure on a blue background. The blue shall be equal to Color No. 15090 in Federal Standard 595B.

**Exception:** The appropriate enforcement agency may approve other colors to complement decor or unique design. The symbol contrast shall be light on dark or dark on light.

**1117B.5.8.1.2 Entrance signs.** All building and facility entrances that are accessible to and usable by persons with disabilities shall be identified with a minimum of one International Symbol of Accessibility and with additional directional signs, utilizing the symbol, at junctions where the accessible route of travel diverges from the regular circulation path, to be visible to persons along approaching circulation paths. Entrances which are not accessible shall have directional signage complying with Section 1117B.5.1 Items 2 and 3, which indicates the location of and route to the nearest accessible entrance.

**1117B.5.8.1.3 Information posted.** Buildings that provide specific sanitary facilities and/or elevators for public use that conform to these building standards shall have this information posted in the building lobby, preferably as part of the building directory. The information shall be accompanied by the International Symbol of Accessibility. Inaccessible sanitary facilities shall have directional signage complying with 1117B.5.1 Items 2 and 3 to indicate the location of the nearest accessible sanitary facility.

**1117B.5.8.2 International TTY Symbol.** Where the International TTY Symbol is required, it shall comply with Figure 11B-14A.

**1117B.5.8.3 Volume control telephones.** Where telephones with volume controls are required to be identified, the identification symbol shall be a telephone handset with radiating sound waves, such as shown in Figure 11B-14B.

**1117B.5.8.4 Assistive listening systems.** Where assistive listening systems are required to be identified by the International Symbol of Access for Hearing Loss, it shall comply with Figure 11B-14C.

**1117B.5.9 Traffic-control devices.** Pole-supported pedestrian traffic-control buttons shall be identified with color coding consisting of a textured horizontal yellow band 2 inches (51 mm) in width encircling the pole, and a 1-inch wide (25 mm) 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 inches (1219 mm) above the surface adjacent to the pole.

**1117B.5.10 Signs for text telephones.** Whenever signs shall refer to text telephones for people who are deaf or hard of hearing, the term "TTY" shall be used; the term "TDD" shall not be used.

#### **1117B.5.11 Cleaner air symbol.**

"STRICTLY FOR PUBLICLY FUNDED FACILITIES OR ANY FACILITIES LEASED OR RENTED BY STATE OF CALIFORNIA. NOT CONCESSIONAIRES". This symbol shall be the standard used to identify a room, facility and paths of travel that are accessible to and usable by people who are adversely impacted by airborne chemicals or particulate(s) and/or the use of electrical fixtures and/or devices. When used, the symbol shall comply with Figure 11B-40.

**1117B.5.11.1 Color and size of symbol.** The symbol shall be used when the following minimum conditions are met. The symbol, which shall include the text "Cleaner Air" as shown, shall be displayed either as a negative or positive image within a square that is a minimum of 6 inches on each side. The symbol may be shown in black and white or in color. When color is used, it shall be Federal Blue (Color No. 15090 Federal Standard 595B) on white, or white on Federal Blue. There shall be at least a 70% color contrast between the background of the sign from the surface that it is mounted on.

Strictly for publicly funded public facilities or any facilities leased or rented by State of California. Not concessionaires.

**1117B.5.11.2 Conditions of use.** Use of the cleaner air symbol is voluntary. The cleaner air symbol shall be permitted for use to identify a path of travel, and a room or a facility when the following is met.

1. Floor or wall coverings, floor or wall covering adhesives, carpets, formaldehyde-emitting particleboard cabinetry, cupboards or doors have not been installed or replaced in the previous 12 months.
2. Incandescent lighting provided in lieu of fluorescent or halogen lighting, and electrical systems and equipment shall be operable by or on behalf of the occupant or user of the room, facility or path of travel.
3. Heating, ventilation, air conditioning and their controls shall be operable by or on behalf of the occupant or user.
4. To maintain "cleaner-air" designation only nonirritating, nontoxic products will be used in cleaning, maintenance, disinfection, pest management or for any minimal touch-ups that are essential for occupancy of the area. Deodorizers or Fragrance Emission Devices and Systems (FEDS) shall not be used in the designated area. Pest control practices for cleaner-air areas shall include the use of bait stations using boric acid, sticky traps and silicon caulk for sealing cracks and crevices. Areas shall be routinely monitored for pest problems. Additional nontoxic treatment methods, such as temperature extremes for termites, may be employed in the event of more urgent problems. These pest control practices shall not be used 48 hours prior to placement of the sign, and the facility shall be ventilated with outside air for a minimum of 24 hours following use or application.
5. Signage shall be posted requesting occupants or users not to smoke or wear perfumes, colognes or scented personal care products. Fragranced products shall not be used in the designated cleaner-air room, facility or path of travel.
6. A log shall be maintained on site, accessible to the public either in person or by telephone, e-mail, fax or other accessible means as requested. One or more individuals shall be designated to maintain the log. The log shall record any product or practice used in the cleaner-air designated room, facility or path of travel, as well as scheduled activities, that may impact the cleaner-air designation. The log shall also include the product label as well as the Material Safety Data Sheets (MSDS).

**1117B.5.11.3 Removal of symbol.** If the path of travel, room and/or facility identified by the cleaner-air symbol should temporarily or permanently cease to meet the minimum conditions as set forth above, the cleaner-air symbol shall be removed and shall not be replaced until the minimum conditions are again met.

#### **1117B.6 Controls and Operating Mechanisms.**

1. **General.** Controls and operating mechanisms in accessible spaces, along accessible routes, or as parts of accessible elements (for example, light switches and dispenser controls) and those required to be accessible by Section 109.1 shall comply with the requirements of this section.
2. **Clear floor space.** 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.
3. **Height.** The highest operable part of all controls, dispensers, receptacles and other operable equipment shall be placed within at least one of the reach ranges specified in Sections 1118B.5 and 1118B.6. Electrical and communication systems receptacles on walls shall be mounted no less than 15 inches (381 mm) above the floor.

**Exception:** These requirements do not apply where the use of special equipment dictates otherwise or where electrical and communication systems receptacles are not normally intended for use by building occupants.

**4. Operation.** Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds (22.2 N) of force.

**5. Installation heights of electrical switches and receptacle outlets.**

**5.1 Electrical switches.** 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 be 48 inches (1219 mm) above the floor or working platform.

**5.2 Electrical receptacle outlets.** The center of electrical receptacle outlets on branch circuits of 30 amperes or less shall be installed not more than 48 inches (1219 mm) nor less than 15 inches (381 mm) above the floor or working platform.

**Exceptions:**

1. Receptacle outlets installed as part of permanently installed baseboard heaters are exempt.
2. Required receptacle outlets shall be permitted in floors when adjacent to sliding panels or walls.
3. Baseboard electrical outlets used in relocatable partitions, window walls or other electrical convenience floor outlets are not subject to the minimum height requirements.
4. This section shall not apply to existing buildings when the enforcing agency determines that compliance with these standards would create an unreasonable hardship.

**1117B.7 Automated Teller Machines and Point of Sale Machines.**

**1117B.7.1 Definitions.**

**1. AUTOMATED TELLER MACHINE (ATM)** means any electronic information processing device, including a point-of-sale machine, used by a financial institution or other business entity and its customers for the primary purpose of executing financial transactions between itself and its customers. For the purposes of this section, automated teller machine includes point-of-sale machines used in grocery stores, ticket sales facilities, and other business entities, but does not include card reading devices located on fuel pump islands at gasoline service stations and motor-vehicle fuel facilities.

**2. ATM SITE** means that immediate area which is within or made or to be made part of an existing building or a building to be constructed, and to which one or more ATMs is or shall be affixed.

**3. ATM INSTALLATION** means a single ATM structurally affixed to a building or other structure.

**1117B.7.2 General.** Where ATMs are provided for the public, they shall comply with this section.

**Exceptions:**

1. In grocery stores and other retail outlets with point-of-sale machines located at individual check stands, machines that are located at accessible check stands must be made accessible. Where machines are located away from individual check stands, they must all be made accessible.
2. Where the enforcing agency determines that compliance with this regulation would create an unreasonable hardship, an exception may be granted when equivalent facilitation is provided through the use of other methods or materials.
3. In existing buildings, these regulations shall not apply when legal or physical constraints would not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.
4. Drive-up only automated teller machines are not required to comply with this section.
5. Card reading devices located on fuel pump islands at gasoline service stations and motor-vehicle fuel facilities are not required to comply with Sections 1114B through 1126B and all subsections there under.

**1117B.7.3 Controls.** Controls for user activation shall comply with the requirements of Section 1117B.6, Item 4, which states that controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds (22.2 N) of force.

**1117B.7.4 Clearances and reach range.** Free-standing or built-in units not having a clear space under them shall comply with the following as to clearance and reach range.

**1117B.7.4.1 Where one ATM is provided.** Where one ATM is provided at a location, it shall meet the specifications of Section 4.34 of the Americans with Disabilities Act Standards for Accessible Design as follows:

1. The ATM shall be located so that clear floor space complying with Section 1118B.4 is provided to allow a person using a wheelchair to make a forward approach, a parallel approach, or both, to the machine.
2. **Forward approach only.** If only a forward approach is possible, operable parts of all controls shall be placed within the forward reach range specified in Section 1118B.5.
3. **Parallel approach only.** If only a parallel approach is possible, operable parts of controls shall be placed as follows:

**3.1. Reach depth not more than 10 inches (254 mm).** Where the reach depth to the operable parts of all controls as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the automated teller machine or surround is not more than 10 inches (254 mm), the maximum height from the floor shall be 54 inches (1372 mm).

**3.2. Reach depth more than 10 inches (254 mm).** Where the reach depth to the operable parts of any control as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the ATM or surround is more than 10 inches (254 mm), the maximum height from the floor shall be as shown in Table 11B-5.

**4. Forward and parallel approach.** If both a forward and parallel approach are possible, operable parts of controls shall be placed within at least one of the reach ranges in Item 2 or 3.

**5. Bins.** Where bins are provided for envelopes, waste paper, or other purposes, at least one of each type provided shall comply with the applicable reach ranges in Item 2, 3 or 4.

**Exception:** Where a function can be performed in a substantially equivalent manner by using an alternate control, only one of the controls needed to perform that function is required to comply with this section. If the controls are identified by tactile markings, such markings shall be provided on both controls.

**1117B.7.4.2 Where two ATMs are provided.** Where two ATMs are provided at a location, one shall comply with Section 1117B.7.4.1, except that the highest operable part shall be 48 inches (1219 mm) maximum. The second ATM is not regulated as to height, including height of display.

**1117B.7.4.3 Where three or more ATMs are provided.** Where three or more ATMs are provided, two shall be used to satisfy Section 1117B.7.4.2, above. For the additional ATMs beyond the first two, at least 50 percent shall comply with Section 1117B.7.4.1. The remainder are not regulated as to height, including height of display. If features provided differ from ATM to ATM, all features shall be equally represented among the accessible ATMs.

**1117B.7.5 Display.** LED, cathode ray, or other screen devices intended to be viewed by the user shall be positioned so they are readily visible to and usable by a person sitting in a wheelchair with approximate eye level of 45 inches (1143 mm), and shall comply with the following requirements:

**1. Vertically mounted screen devices.** If mounted vertically or tipped no more than 30 degrees away from the viewer, the center line of screens and other screen devices shall be located a maximum of 52 inches (1321 mm) above grade.

**2. Angle-mounted screen devices.** If mounted at an angle between 30 degrees and 60 degrees tipped away from the viewer, the center line of screens and other screen devices shall be located a maximum of 44 inches (1118 mm) above grade.

**3. Horizontally mounted screen devices.** If mounted at an angle between 60 degrees and 90 degrees tipped away from the viewer, the center line of screens and other screen devices shall be located a maximum of 34 inches (864 mm) above grade.

**Exception:** Automated teller machines unregulated as to height in Sections 1117B.7.4 through 1117B.7.4.3 above are also exempt from this section.

**TABLE 11B-5 – MAXIMUM REACH DEPTH FOR AUTOMATED TELLER MACHINES**

| REACH DEPTH (X)<br>(Inches) | MAXIMUM HEIGHT (Y)<br>(Inches) |
|-----------------------------|--------------------------------|
| × 25.4 for mm               |                                |
| 10                          | 54                             |
| 11                          | 53.5                           |
| 12                          | 53                             |
| 13                          | 52.5                           |
| 14                          | 51.5                           |
| 15                          | 51                             |
| 16                          | 50.5                           |
| 17                          | 50                             |
| 18                          | 49.5                           |
| 19                          | 49                             |
| 20                          | 48.5                           |
| 21                          | 47.5                           |
| 22                          | 47                             |
| 23                          | 46.5                           |
| 24                          | 46                             |

See Figure 11B-5F (d).

**1117B.7.6 ATM equipment for persons with vision impairments.** Instructions and all information for use shall be made accessible to and independently usable by persons with vision impairments.

**1117B.8 Fitting and dressing rooms.** Where fitting or dressing rooms are provided for male or female customers, patients, employees, or the general public, 5 percent, but never less than one, of dressings rooms for each type of use in each cluster of dressing rooms shall be accessible and located on an accessible route complying with Section 1114B.1.2. Examples of types of dressing rooms are those serving different genders or distinct and different functions as in different treatment or examination facilities. Where only unisex dressing rooms are provided, accessible unisex dressing rooms may be used to fulfill this requirement.

Entry doors shall conform to the requirements of Section 1133B.2 and aisles leading to such doors shall conform to Sections 1133B.6.1 and 1133B.6.2.

The bottom of mirrors provided for use by persons with disabilities shall not be greater than 20 inches (508 mm) from the floor. Mirrors to be used by persons with disabilities shall be full-length, measuring at least 18 inches (457 mm) wide by 54 inches (1372 mm) high, and shall be mounted in a position affording a view to a person on the bench as well as to a person in a standing position.

Clothing hooks shall be located not greater than 48 inches (1219 mm) from the floor.

Every accessible dressing room shall have a 24-inch by 48-inch (610 mm by 1219 mm) bench fixed to the wall along the longer dimension. The bench shall be mounted 17 to 19 inches (432 to 483 mm) above the finish floor. Clear floor space shall be provided alongside the bench to allow a person using a wheelchair to make a parallel transfer onto the bench. The structural strength of the bench and attachments shall comply with Section 1115B.7.2. Where installed in conjunction with showers, swimming pools, or other wet locations, water shall not accumulate upon the surface of the bench and the bench shall have a slip-resistant surface.

The minimum clear space within the room shall be 60 inches (1524 mm) in width and length. No door shall encroach into the required space.

## **SECTION 1118B SPACE ALLOWANCE AND REACH RANGES**

**1118B.1 Wheelchair Passage Width.** The minimum clear width for single wheelchair passage shall be 32 inches (813 mm) at a point and 36 inches (914 mm) continuously. See Figure 11B-10.

**1118B.2 Width for Wheelchair Passing.** *The minimum width for two wheelchairs to pass is 60 inches (1524 mm). See Figure 11B-11.*

**1118B.3 Wheelchair Turning Space.** *The space required for a wheelchair to make a 180 degree turn is a clear space of 60 inches (1524 mm) diameter [see Figure 11B-12 (a)] or a T-shaped space. See Figure 11B-12 (b).*

**1118B.4 Clear Floor or Ground Space for Wheelchairs.**

**1. Size and approach.** *The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30 inches by 48 inches (762 mm by 1219 mm). 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 part of the knee space required under some objects. See Figure 11B-5A.*

**2. Relationship of maneuvering clearances to wheelchair spaces.** *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 space is located in an alcove or otherwise confined on all or a part of three sides, additional maneuvering clearances shall be provided as shown in Figure 11B-5A (b).*

**1118B.5 Forward Reach.** *If the clear floor space allows only forward approach to an object, the maximum high forward reach allowed shall be 48 inches (1219 mm) [see Figure 11B-5C (a)]. The minimum low forward reach is 15 inches (381 mm). If the high forward reach is over an obstruction, reach and clearances shall be as shown in Figure 11B-5C (b).*

**1118B.6 Side reach.** *If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54 inches (1372 mm) and the low side reach shall be no less than 9 inches (229 mm) above the floor [see Figure 11B-5D (a) and (b)]. If the side reach is over an obstruction, the reach and clearances shall be as shown in Figure 11B-5D (c).*

**SECTION 1119B  
SPECIAL STANDARDS OF ACCESSIBILITY FOR BUILDINGS WITH HISTORICAL SIGNIFICANCE**

See Section 1135B.

**SECTION 1120B  
FLOORS AND LEVELS**

**1120B.1 Floors Within Each Story.** *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.*

**Exceptions:**

- 1. In existing buildings, other than dining banquet and bar facilities, when the enforcing agency determines that compliance with this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.*
- 2. In existing dining, banquet and bar facilities, when the enforcing agency determines that compliance with this section would create an unreasonable hardship, an exception shall be granted provided that a minimum of 75 percent of the dining, banquet and bar area shall be a common level throughout or shall be connected by pedestrian ramps, passenger elevators or special lifts and provided that the same services and décor are provided in an accessible space usable by the general public and are not restricted to use by people with disabilities.*
- 3. In existing buildings, this section shall not apply when legal or physical constraints would not allow compliance with this section or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.*
- 4. Where specifically exempted in other portions of this code.*

**1120B.2 Floor Surface.** *The surface of floors shall be slip resistant and shall comply with Section 1124B.*

**SECTION 1121B  
TRANSPORTATION FACILITIES**

**1121B.1 General.** Every station, bus stop, bus stop pad, terminal, building or other transportation facility, shall incorporate the accessibility requirements of this code as modified by this chapter. The exceptions for elevators in Section 1103B do not apply to a terminal, depot, or other station used for specified public transportation, or an airport passenger terminal, or facilities subject to Title II of the Americans with Disabilities Act.

#### **1121B.2 Bus Stops and Terminals.**

**1121B.2.1 New construction.** Where provided, bus stop pads shall have a firm, stable surface with a minimum clear length of 96 inches (2438 mm) (measured from the curb or vehicle roadway edge) and a minimum clear width of 60 inches (1524 mm) (measured parallel to the vehicle roadway) to the maximum extent allowed by legal or site constraints. Bus stop pads shall connect to streets, sidewalks or pedestrian paths as part of an accessible route complying with Section 1114B.1.2. Newly constructed bus stop pads must provide a square curb surface between the pad and road or other detectable warning in accordance with Section 1133B.8.5.

Bus stop pads shall be at same slope as roadway in the direction parallel to roadway, and maximum 2 percent slope perpendicular to roadway.

Where provided, bus stop shelters shall be installed so as to permit a wheelchair user to enter the shelter from the public way and access a clear floor area of 30 by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4, completely within the shelter. Such shelters shall be connected by an accessible route to the boarding area. Where provided, all bus route identification signs shall comply with Section 1117B.5.1 Item 2.

Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing, evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

#### **1121B.2.2 Bus stop siting and alterations.**

1. Bus stop sites shall be chosen such that the areas where lifts or ramps are to be deployed comply with Section 1121B.2.1.

2. When new bus route identification signs are installed or old signs are replaced, they shall comply with the requirements of Section 1121B.2.1.

#### **1121B.3 Fixed Facilities and Stations.**

**1121B.3.1 New construction.** New stations in rapid rail, light rail, commuter rail, intercity bus, intercity rail, high speed rail, and other fixed guideway systems (for example, automated guideway transit, monorails, etc.) shall comply with the following provisions, as applicable:

1. Elements such as ramps, elevators or other circulation devices, fare vending or other ticketing areas, and fare collection areas shall be placed to minimize the distance which wheelchair users and other persons who cannot negotiate steps may have to travel compared to the general public. The circulation paths, each including an accessible entrance and an accessible route, for persons with disabilities shall, to the maximum extent practicable, coincide with the circulation path for the general public. Where a circulation path is different, signage complying with Section 1117B.5.1 Items 2 and 3 shall be provided to indicate direction to and identify the accessible entrance and accessible route.

2. If different entrances to a station serve different transportation fixed routes or groups of fixed routes, entrances serving each group or route shall comply with Section 1133B.1.

3. Direct connections to commercial, retail, or residential facilities shall have an accessible route complying with Section 1114B.1.2 from the point of connection to boarding platforms and all transportation system elements

used by the public. Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and all transportation system elements used by the public.

4. Where signs are provided at entrances to stations identifying the station or the entrance, or both, at least one sign at each entrance shall comply with Section 1117B.5.1 Item 1. Such signs shall be placed in uniform locations at entrances within the transit system.

**Exception:** Where the station has no defined entrance, but signage is provided, the accessible signage shall be placed in a central location.

5. Stations covered by this section shall have identification signs complying with Section 1117B.5.1 Item 2. Signs shall be placed at frequent intervals and shall be clearly visible from within the vehicle on both sides when not obstructed by another train. When station identification signs are placed close to vehicle windows (that is, on the side opposite from boarding) each shall have the top of the highest letter or symbol below the top of the vehicle window and the bottom of the lowest letter or symbol above the horizontal mid-line of the vehicle window.

6. Lists of stations, routes, or destinations served by the station and located on boarding areas, platforms, or mezzanines shall comply with Section 1117B.5.1 Item 2. A minimum of one sign identifying the specific station and complying with Section 1117B.5.1 Item 1 shall be provided on each platform or boarding area. All signs referenced in this paragraph shall be placed in uniform locations within the transit system.

7. Automatic fare vending, collection and adjustment (for example, add-fare) systems shall comply with Section 1117B.7. Such devices shall be located on an accessible route complying with Section 1114B.1.2.

If self-service fare collection devices are provided for the use of the general public, a minimum of 5% but not less than one accessible device for entering, and at least one for exiting, unless one device serves both functions, shall be provided at each location where such devices are provided.

Accessible fare collection devices shall have a minimum clear opening width of 32 inches (813 mm) and shall comply with the applicable requirements of Section 1117B.6.

Gates which must be pushed open by wheelchair or mobility aid users shall have a smooth continuous surface extending from 2 inches (51 mm) above the floor to 27 inches (686 mm) above the floor and shall comply with Sections 1133B.1 and 1133B.2.

8. Platform edges bordering a drop-off and not protected by platform screens or guards shall have a detectable warning. Such detectable warnings shall comply with the following provisions as applicable, and shall run the full length of the platform drop-off.

**(a) Detectable warnings at transit boarding platforms.** Transit boarding platforms shall have a detectable warning texture extending the full length of the loading area. This detectable warning texture shall have the following features:

Width 24 to 36 inches (610 mm to 914 mm) placed at the edge of the drop-off or safe area.

Durable, slip-resistant material having a surface texture composed of raised, truncated domes in a staggered pattern with a diameter of nominal 0.9 inch (22.9 mm) at the base tapering to 0.45 inch (11.4 mm) at the top, a height of nominal 0.2 inch (5.08 mm), and a center-to-center spacing of nominal 2.35 inches (59.7 mm) in compliance with Figure 11B-23A. "Nominal" as used here shall be in accordance with California State Referenced Standards Code Sections 12-11A and B-102. 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. Warning surfaces shall differ from adjoining walking surfaces in resiliency or sound on cane contact. This surface shall be reserved for warning.

Color yellow conforming to Federal Color No. 33538, as shown in Table IV of Standard No. 595B. Where the color value contrast between the yellow warning and the main walking surface is less than 70 percent, a 1 inch-wide (25 mm) black strip shall separate the yellow warning from the main walking surface. Contrast shall be determined by:

$Contrast = [(B1-B2/B1)] \times 100$  percent where B1 = light reflectance value (LRV) of the lighter area and B2 = light reflectance value (LRV) of the darker area.

Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

**(b) Detectable directional texture at boarding platforms.** At transit boarding platforms, the pedestrian access shall be identified with a detectable directional texture. This detectable directional texture shall comply with Figure 11B-23B and shall be 0.1 inch (2.54 mm) in height that tapers off to 0.04 inch (1.02 mm), with bars raised 0.2 inch (5.08 mm) from the surface. The raised bars shall be 1.3 inches (33.02 mm) wide and 3 inches (76 mm) from center-to-center of each bar. This surface shall differ from adjoining walking surfaces in resiliency or sound on cane contact. The color of the directional texture shall comply with Section 1121B.3.1, item 8(a). This surface will be placed directly behind the yellow detectable warning texture specified in Section 1121B.3.1, item 8(a), aligning with all doors of the transit vehicles where passengers will embark. The width of the directional texture shall be equal to the width of the transit vehicle's door opening. The depth of the texture shall not be less than 36 inches (914 mm).

Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

**9.** In stations covered by this section, rail-to-platform height in new stations shall be coordinated with the floor height of new vehicles so that the vertical difference, measured when the vehicle is at rest, is within plus or minus 5/8 inch (15.9 mm) under normal passenger load conditions.

For slow moving automated guideway "people mover" transit systems, the horizontal gap in new stations shall be no greater than 1 inch (25 mm).

**Exceptions:**

**1.** Existing vehicles operating in new stations may have a vertical difference with respect to the new platform within plus or minus 1-1/2 inches (38 mm).

**2.** In light rail, commuter rail and intercity rail systems where it is not operationally or structurally feasible to meet the horizontal gap or vertical difference requirements, mini-high platforms, car-borne or platform-mounted lifts, ramps or bridge plates, or similar manually deployed devices, meeting the applicable requirements of 36 CFR Part 1192, or 49 CFR Part 38 shall suffice.

**10.** Stations shall not be designed or constructed so as to require persons with disabilities to board or alight from a vehicle at a location other than one used by the general public.

**11.** Illumination levels in the areas where signage is located shall be uniform and shall minimize glare on signs. Lighting along circulation routes shall be of a type and configuration to provide uniform illumination.

**12.** Text Telephones. The following shall be provided in accordance with Sections 1117B.2.9.2 and 1117B.2.9.3:

*(a) If an interior public pay telephone is provided in a transit facility (as defined by the federal Department of Transportation) at least one interior public text telephone shall be provided in the station.*

*(b) Where four or more public pay telephones serve a particular entrance to a rail station and at least one is in an interior location, at least one interior public text telephone complying with Sections 1117B.2.9.2 and 1117B.2.9.3 shall be provided to serve that entrance.*

*13. Where it is necessary to cross tracks to reach boarding platforms, the route surface shall be level and flush with the rail top at the outer edge and between rails, except for a maximum 2-1/2 inch (64 mm) gap on the inner edge of each rail to permit passage of wheel flanges. Such crossings shall comply with Section 1133B.8.5. Where gap reduction is not practicable, an above-grade or below-grade accessible route shall be provided.*

*14. Where public address systems are provided to convey information to the public in terminals, stations, or other fixed facilities, a means of conveying the same or equivalent information to persons with hearing loss or who are deaf shall be provided.*

*15. Where clocks are provided for use by the general public, the clock face shall be uncluttered so that its elements are clearly visible. Hands, numerals, and/or digits shall contrast with the background either light-on-dark or dark-on-light. Where clocks are mounted overhead, numerals and/or digits shall comply with Section 1117B.5.4. Clocks shall be placed in uniform locations throughout the facility and system.*

*16. Where provided in below grade stations, escalators shall have a minimum clear width of 32 inches (813 mm). At the top and bottom of each escalator run, at least two contiguous treads shall be level beyond the comb plate before the risers begin to form. All escalator treads shall be marked by a strip of clearly contrasting color, 2 inches (51 mm) in width, placed parallel to and on the nose of each step. The strip shall be of a material that is at least as slip resistant as the remainder of the tread. The edge of the tread shall be apparent from both ascending and descending directions.*

*17. Where provided, elevators shall be glazed or have transparent panels to allow an unobstructed view both into and out of the car. Elevators shall comply with Section 1116B.*

**Exception:** *Elevator cars with a clear floor area in which a 60 inch (1524 mm) diameter circle can be inscribed may be substituted for the minimum car dimensions of Section 1116B and Figure 11B-40A.*

*18. Where provided, ticketing areas shall comply with Section 1122B.5, and the customer side of the baggage check-in area shall be accessible.*

*19. Where provided, baggage check-in and retrieval systems shall be on an accessible route complying with Section 1114B.1.2 and shall have space immediately adjacent complying with Section 1118B.*

*If unattended security barriers are provided, at least one gate shall comply with Sections 1133B.1 and 1133B.2. Passageways containing security barriers shall comply with Section 1133B.2.3.4.*

*Gates which must be pushed open by wheelchair or mobility aid users shall have a smooth continuous surface extending from 2 inches (51 mm) above the floor to 27 inches (686 mm) above the floor.*

**1121B.3.2 Existing facilities - alterations.** *Alterations of transportation facilities shall comply with Section 1134B.*

#### **1121B.4 Airports.**

##### **1121B.4.1 New construction.**

*1. Elements such as ramps, elevators or other vertical circulation devices, ticketing areas, security checkpoints, or passenger waiting areas shall be placed to provide equitable travel distances for wheelchair users and other persons who cannot negotiate steps compared to the route for the general public.*

*2. The circulation paths, each including an accessible entrance and an accessible route, for persons with disabilities shall, to the maximum extent practicable, coincide with the circulation path for the general public. Where a circulation path is different, signage complying with Section 1117B.5.1 Items 2 and 3 shall be provided to indicate direction to and identify the accessible entrance and accessible route.*

3. Where provided, ticketing areas shall comply with Section 1122B.5, and the customer side of the baggage check-in area shall be accessible.

4. Where public pay telephones are provided, and at least one is at an interior location, a public text telephone shall be provided in compliance with Sections 1117B.2.9.2 and 1117B.2.9.3. Additionally, if four or more public pay telephones are located in any of the following locations, at least one public text telephone shall also be provided in that location: (a) a main terminal outside the security areas; (b) a concourse within the security areas; or (c) a baggage claim area in a terminal.

5. Where provided, baggage check-in and retrieval systems shall be on an accessible route complying with Section 1114B.1.2 and shall have space immediately adjacent complying with Section 1118B.

If unattended security barriers are provided, at least one gate shall comply with Sections 1133B.1 and 1133B.2. Passageways containing security barriers shall comply with Section 1133B.2.3.4.

Gates which must be pushed open by wheelchair or mobility aid users shall have a smooth continuous surface extending from 2 inches (51 mm) above the floor to 27 inches (686 mm) above the floor.

6. Terminal information systems which broadcast information to the general public through a public address system shall provide a means to provide the same or equivalent information to persons with a hearing loss or who are deaf. Such methods may include, but are not limited to, visual paging systems using video monitors and computer technology. For persons with certain types of hearing loss such methods may include, but are not limited to, an assistive listening system complying with Section 1104B.2.

7. Where clocks are provided for use by the general public the clock face shall be uncluttered so that its elements are clearly visible. Hands, numerals, and/or digits shall contrast with their background either light-on-dark or dark-on-light. Where clocks are mounted overhead, numerals and/or digits shall comply with Section 1117B.5.4. Clocks shall be placed in uniform locations throughout the facility.

## **SECTION 1122B FIXED OR BUILT-IN SEATING, TABLES, AND COUNTERS**

**1122B.1 Minimum Number.** Where fixed or built-in seating, tables, or counters are provided in accessible public use or common use areas, 5 percent, but never less than one, must be accessible as provided in this section. An accessible route of travel complying with Section 1114B.1.2 shall lead to and through such fixed or built-in seating areas, or tables.

**1122B.2 Seating.** If seating spaces for persons in wheelchairs 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 inches (483 mm) (see Figure 11B-13).

**1122B.3 Knee Clearance.** If seating for persons in wheelchairs is provided at fixed tables or counters, knee spaces at least 27 inches (686 mm) high, 30 inches (762 mm) wide and 19 inches (483 mm) deep shall be provided (see Figure 11B-13).

**Exception:** Knee clearance is not required at checkout counters or service counters.

**1122B.4 Height of Work Surfaces.** The tops of tables and counters shall be 28 inches to 34 inches (711 mm to 864 mm) from the floor or ground.

Where a single counter contains more than one transaction station, such as (but not limited to) a bank counter with multiple teller windows or a retail sales counter with multiple cash register stations, at least 5 percent, but never less than one, of each type of station shall be located at a section of counter that is at least 36 inches (914 mm) long and no more than 28 to 34 inches (711 to 864 mm) high.

### **1122B.5 Sales and Service Counters, Teller Windows, and Information Counters.**

In department stores and miscellaneous retail stores where counters have cash registers and are provided for sales or distribution of goods or services to the public, at least one of each type shall have a portion of the counter which is at least 36 inches (915 mm) in length with a maximum height of 34 inches (864 mm) above the finish floor and located on an accessible route complying with Section 1114B.1.2.

At ticketing counters, teller stations in a bank, registration counters in hotels and motels, box office ticket counters, and other counters that may not have a cash register but at which goods or services are sold or distributed, a portion of the main counter which is a minimum of 36 inches (915 mm) in length shall be provided with a maximum height of 34 inches (864 mm).

**Exception:** In existing buildings where it is determined that providing an accessible counter would create an unreasonable hardship, equivalent facilitation may consist of one of the following:

1. An auxiliary counter, in close proximity to the main counter, meeting these requirements may be provided.
2. Provision of a folding shelf attached to the main counter on which an individual with disabilities can write.

## **SECTION 1123B ACCESS TO EMPLOYEE AREAS**

**1123B.1 General.** Employee areas shall conform to all requirements of the Division of the State Architect-Access Compliance in the California Building Code, Plumbing Code and Electrical Code.

**1123B.2 Work Stations.** Specific work stations need only comply with aisle width (Sections 1133B.6.1 and 1133B.6.2) and floors and levels (Section 1120B), and entryways shall be 32 inches (813 mm) in clear width.

**Exception:** Accessibility is not required to (1) observation galleries used primarily for security purposes; or (2) in nonoccupiable spaces accessed only by ladders, catwalks, crawl spaces, very narrow passageways, or freight (nonpassenger) elevators, and frequented only by service personnel for repair purposes; such spaces include, but are not limited to, elevator pits, elevator penthouses, mechanical rooms, piping or equipment catwalks.

## **SECTION 1124B GROUND AND FLOOR SURFACES**

**1124B.1 General.** 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, slip resistant, and shall comply with this section.

**1124B.2 Changes in Level.** Changes in level up to 1/4 inch (6.4 mm) may be vertical and without edge treatment [see Figure 11B-5E (c)]. Changes in level between 1/4 inch (6.4 mm) and 1/2 inch (12.7 mm) shall be beveled with a slope no greater than 1:2 [see Figure 11B-5E (d)]. Changes in level greater than 1/2 inch (12.7 mm) shall be accomplished by means of a curb ramp, ramp, elevator, or platform lift that complies with Section 1127B.5, 1133B.5, 1116B.1, or 1116B.2, respectively.

**1124B.3 Carpet.** If carpet or carpet tile is used on a ground or floor surface, then 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 inch (12.7 mm). See Figure 11B-7E (b). 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.4 Gratings.** If gratings are located in walking surfaces, then they shall have spaces no greater than 1/2 inch (12.7 mm) wide in one direction (see Figure 11B-7E). If gratings have elongated openings, then they shall be placed so that the long dimension is perpendicular to the dominant direction of travel (see Figure 11B-7E).

## **SECTION 1125B STORAGE**

**1125B.1 General.** If fixed storage facilities such as cabinets, shelves, closets or drawers are provided where access is required by Section 109.1, at least one of each type shall comply with this section. Additional storage may be provided outside of the reach ranges shown in Figure 11B-5D.

**1125B.2 Clear Floor Space.** A clear floor space at least 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4 that allows either a forward or parallel approach by a person using a wheelchair shall be provided at accessible storage facilities.

**1125B.3 Height.** Accessible storage spaces shall be within at least one of the reach ranges specified in Sections 1118B.5 and 1118B.6. Clothes rods shall be a maximum of 54 inches (1372 mm) from the floor for a side approach (See Figure 11B-5D). Where the distance from the wheelchair to the clothes rod or shelf exceeds 10 inches (254 mm), as in closets without accessible doors, the height and depth to the rod or shelf shall comply with Figure 11B-5D.

**1125B.4 Hardware.** Hardware for accessible storage facilities shall comply with Section 1117B.6. Touch latches and U-shaped pulls are acceptable.

**SECTION 1126B  
VENDING MACHINES AND OTHER EQUIPMENT**

Spaces for vending machines and other equipment shall comply with Section 1118B and shall be located on an accessible route complying with Section 1114B.1.2. Controls for vending machines and other equipment shall comply with Section 1117B.6, "Controls and Operating Mechanisms."

## **Division II – SITE ACCESSIBILITY**

### **SECTION 1127B EXTERIOR ROUTES OF TRAVEL**

**1127B.1 General.** 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. Access shall be provided within the boundary of the site from public transportation stops, accessible parking spaces, passenger loading zones if provided, and public streets or sidewalks. When more than one building or facility is located on a site, accessible routes of travel complying with Section 1114B.1.2 shall be provided between buildings and accessible site facilities, accessible elements, and accessible spaces that are on the same site. 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. If access is provided for pedestrians from a pedestrian tunnel or elevated walkway, entrances to the building from each tunnel or walkway must be accessible.

#### **Exceptions:**

1. Where the enforcing agency determines that compliance with these regulations would create an unreasonable hardship because of topography, natural barriers, etc., an exception may be granted when equivalent facilitation is provided through the use of other methods and materials.
2. In existing buildings, this section shall not apply in those conditions where, due to legal or physical constraints, the site of the project would not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship.

See Section 109.1.5.

**1127B.2 Design and Construction.** When accessibility is required by this section, it shall be designed and constructed in accordance with this Building Code. See Section 1114B.1 for a list of applicable sections.

**1127B.3 Signs.** At every primary public entrance and at every major junction where the accessible route of travel diverges from the regular circulation path along or leading to an accessible route of travel, entrance, or facility, there shall be a sign displaying the International Symbol of Accessibility. Signs shall indicate the direction to accessible building entrances and facilities and shall comply with the requirements found in Sections 1117B.5.1 Item 2 and 1117B.5.8.1.

**1127B.4 Outside Stairways.** See Section 1133B.4.

#### **1127B.5 Curb Ramps.**

**1. General.** Curb ramps shall be constructed at each corner of street intersections and where a pedestrian way crosses a curb. Built-up curb ramps shall be located so that they do not project into vehicular traffic lanes. The preferred and recommended location for curb ramps is in the center of the crosswalk of 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. See Figure 11B-20C, Case E and Figure 11B-22.

**2. Width of curb ramps.** Curb ramps shall be a minimum of 4 feet (1219 mm) in width and shall lie, generally, in a single sloped plane, with a minimum of surface warping and cross slope.

**3. Slope of curb ramps.** The slope of curb ramps shall not exceed 1 unit vertical to 12 units horizontal (8.33% slope). The slope shall be measured as shown in Figure 11B-20E. Transitions from ramps to walks, gutters, or streets shall be flush and free of abrupt change. Maximum slopes of adjoining gutters, road surface immediately adjacent to the curb ramp, or accessible route shall not exceed 1 unit vertical to 20 units horizontal (5% slope) within 4 feet (1219 mm) of the top and bottom of the curb ramp. The slope of the fanned or flared sides of curb ramps shall not exceed 1 unit vertical to 10 units horizontal (10% slope).

**4. Level landing.** A level landing 4 feet (1219 mm) 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 unit vertical to 12 units horizontal (8.33% slope).

**5. Finish.** The surface of each curb ramp and its flared sides shall comply with Section 1124B Ground and Floor Surfaces, and shall be of contrasting finish from that of the adjacent sidewalk.

**6. Border.** All curb ramps shall have a grooved border 12 inches (305 mm) wide at the level surface of the sidewalk along the top and each side approximately 3/4 inch (19 mm) 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. See Figures 11B-19A and 11B-19B.

**7. Detectable warnings.** Curb ramps shall have a detectable warning that extends the full width and depth of the curb ramp, excluding the flared sides, inside the grooved border. Detectable warnings shall consist of raised truncated domes with a diameter of nominal 0.9 inch (22.9 mm) at the base tapering to 0.45 inch (11.4 mm) at the top, a height of nominal 0.2 inch (5.08 mm) and a center-to-center spacing of nominal 2.35 inches (59.7 mm) in compliance with Figure 11B-23A. "Nominal" here shall be in accordance with Section 12-11A and B-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 (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

**8. Obstructions.** Curb ramps shall be located or protected to prevent their obstruction by parked vehicles.

**9. Diagonal curb ramps.** If diagonal (or corner-type) curb ramps have returned curbs or other well-defined edges, such edges shall be parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have 48 inches (1219 mm) minimum clear space as shown in Figure 11B-22 (c) and (d). If diagonal curb ramps are provided at marked crossings, the 48-inch (1219 mm) clear space shall be within the markings (see Figure 11B-22 (c) and (d)). If diagonal curb ramps have flared sides, they shall also have at least a 24 inch long (610 mm) segment of straight curb located on each side of the curb ramp and within the marked crossing [see Figure 11B-22 (c)].

**NOTES:**

1. For additional curb details, see Figures 11B-19A and 11B-19B.

2. If distance from curb to back of sidewalk is too short to accommodate ramp and a 4-foot (1219 mm) platform as in Figure 11B-20A, Case A, the side walk may be depressed longitudinally as in Figure 11B-20A, Case B, or Figure 11B-20B, Case C, or may be widened as in Figure 11B-20B, Case D.

3. If sidewalk is less than 5 feet (1524 mm) wide, the full width of the sidewalk shall be depressed as shown in Figure 11B-20B, Case C.

4. As an alternate to Figure 11B-20A, Case A, one ramp may be placed in the center of the curb return as in Figure 11B-20C, Case E.

5. When ramp is located in center of curb return, crosswalk configuration must be similar to that shown on the plan to accommodate wheelchairs. See Figure 11B-22.

6. If planting area width is equal to or greater than ramp length, ramp side slope distance equals 3 feet (914 mm). See Figure 11B-20D, Case G.

7. For Figure 11B-20C, Case F and Figure 11B-20D, Case G, the longitudinal portion of the sidewalk may need to be depressed as shown in Figure 11B-20A, Case B.

8. If located on a curve, the sides of the ramp need not be parallel, but the minimum width of the ramp shall be 4 feet (1219 mm).

9. The ramp shall have a 12 inch wide (305 mm) border with 1/4 inch (6 mm) grooves approximately 3/4 inch (19 mm) on center. See grooving detail, Figure 11B-20 D, Case H.

**SECTION 1128B  
PEDESTRIAN GRADE SEPARATIONS (OVERPASSES AND UNDERPASSES)**

Pedestrian ramps on pedestrian grade separations shall comply with the requirements of Section 1133B.5 for ramps.

Cross slopes of walking surfaces shall be the minimum possible and shall not exceed 1/4 inch (6 mm) per foot (2.083% gradient). The slope of any appreciably warped walking surface shall not exceed 1 unit vertical in 12 units horizontal (8.33% slope) in any direction. 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 physical disabilities, there shall be provided conforming curb ramps and a usable pathway.

**Exceptions:**

1. When the grade differential of the walking surface of a pedestrian grade separation exceeds 14 feet (4267 mm) due to required height clearance and grade conditions, and the enforcing agency finds that because of right-of-way restrictions, topography or natural barriers, wheelchair accessibility or equivalent facilitation would create an unreasonable hardship, such accessibility need not be provided. However, the requirements in these regulations relating to other types of mobility shall be complied with.
2. For existing facilities, this section shall not apply where, due to legal or physical constraints, the site of the project will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship.

See Section 109.1.5.

**SECTION 1129B  
ACCESSIBLE PARKING REQUIRED**

**1129B.1 General.** Each lot or parking structure where parking is provided for the public as clients, guests or employees, shall provide accessible parking as required by this section. Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel (complying with Section 1114B.1.2) from adjacent parking to an accessible entrance. 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. In buildings with multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located closest to the accessible entrances. Table 11B-6 establishes the number of accessible parking spaces required.

**1129B.2 Medical Care Outpatient Facilities.** At facilities providing medical care and other services for persons with mobility impairments, parking spaces complying with this section shall be provided in accordance with Table 11B-6 except as follows:

1. **Outpatient units and facilities.** Ten percent of the total number of parking spaces provided serve each such outpatient unit or facility.
2. **Units and facilities that specialize in treatment or services for persons with mobility impairments.** Twenty percent of the total number of parking spaces provided serve each such unit or facility.

**TABLE 11B-6 – SPACES REQUIRED**  
*Establishes the number of accessible parking spaces required.*

| TOTAL NUMBER OF PARKING SPACES IN LOT OR GARAGE | MINIMUM REQUIRED NUMBER OF SPACES |
|---|-----------------------------------|
| 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                                 |
| 501-1,000                                       | *                                 |

|                |    |
|----------------|----|
| 1,001 and over | ** |
|----------------|----|

\*Two percent of total.

\*\*Twenty plus one for each 100, or fraction over 1,001.

**1129B.3 Parking Space Size.** Accessible parking spaces shall be located as near as practical to a primary entrance and shall be sized as follows:

**1. Dimensions.** Where single spaces are provided, they shall be 14 feet (4267 mm) wide and lined to provide a 9-foot (2743 mm) parking area and a 5-foot (1524 mm) loading and unloading access aisle on the passenger side of the vehicle. When more than one space is provided in lieu of providing a 14-foot-wide (4267 mm) space for each parking space, two spaces can be provided within a 23-foot-wide (7010 mm) area lined to provide a 9-foot (2743 mm) parking area on each side of a 5-foot (1524 mm) loading and unloading access aisle in the center. See Figure 11B-18A. Parking access aisles shall be part of an accessible route of travel (complying with Section 1114B.1.2) to the building or facility entrance. Parked vehicle overhangs shall not reduce the clear width of an accessible route. The minimum length of each parking space shall be 18 feet (5486 mm). The words NO PARKING shall be painted on the ground within each five-foot (1524 mm) loading and unloading access aisle. This notice shall be painted in white letters no less than 12 inches (305 mm) high and located so that it is visible to traffic enforcement officials. See Figures 11B-18A, 11B-18B and 11B-18C.

**2. Van space(s).** One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches (2438 mm) 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 as required by Section 1129B.4. All such spaces may be grouped on one level of a parking structure. The words NO PARKING shall be painted on the ground within each eight-foot (2438 mm) loading and unloading access aisle. This notice shall be painted in white letters no less than 12 inches (305 mm) high and located so that it is visible to traffic enforcement officials. See Figures 11B-18A, 11B-18B and 11B-18C.

**3. Arrangement of parking space.** In each parking area, a bumper or curb shall be provided and located to prevent encroachment of cars over the required width of walkways. Also, the space shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own. Pedestrian ways which are accessible to persons with disabilities shall be provided from each such parking space to related facilities, including curb cuts or ramps as needed. Ramps shall not encroach into any accessible parking space or the adjacent access aisle. The maximum cross slope in any direction of an accessible parking space and adjacent access aisle shall not exceed 2%.

**Exceptions:** See Figures 11B-18A through 11B-18C.

**1.** Where the enforcing agency determines that compliance with any regulation of this section would create an unreasonable hardship, a variance or waiver may be granted when equivalent facilitation is provided.

**2.** Parking spaces may be provided which would require a person with a disability to wheel or walk behind other than accessible parking spaces when the enforcing agency determines that compliance with these regulations or providing equivalent facilitation would create an unreasonable hardship.

See Section 109.1.5.

**4. Slope of parking space.** Surface slopes of accessible parking spaces shall be the minimum possible and shall not exceed 1 unit vertical to 50 units horizontal (2% slope) in any direction.

**1129B.4 Identification of Parking Spaces for Off-Street Parking Facilities.** 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 the International Symbol of Accessibility in white on dark blue background. The sign shall not be smaller than 70 square inches (4516 mm<sup>2</sup>) in area and, when in a path of travel, shall be posted at a minimum height of 80 inches (2032 mm) from the bottom of the sign to the parking space finished grade. Signs may also be centered on the wall at the interior end of the parking space. Spaces complying with Section 1129B.3, Item 2 shall have an additional sign stating "Van-Accessible" mounted below the symbol of accessibility. Signs identifying accessible parking spaces shall be located so they cannot be obscured by a vehicle parked in the space.

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 not be less than 17 inches by 22 inches

(432 mm by 559 mm) in size with lettering not less than 1 inch (25 mm) in height, which clearly and conspicuously states the following:

*“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 \_\_\_\_\_.*

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

*In addition to the above requirements, the surface of each accessible parking space or stall shall have a surface identification duplicating either of the following schemes:*

- 1. 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*
- 2. 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 inches high by 36 inches wide (914 mm by 914 mm). See Figures 11B-18A through 11B-18C.*

### **SECTION 1130B PARKING STRUCTURES**

*All entrances to and vertical clearances within parking structures shall have a minimum vertical clearance of 8 feet 2 inches (2489 mm) where required for accessibility to accessible parking spaces.*

#### **Exceptions:**

- 1. Where the enforcing agency determines that compliance with Section 1130B would create an unreasonable hardship, an exception may be granted when equivalent facilitation is provided.*
- 2. This section shall not apply to existing buildings where the enforcing agency determines that, due to legal or physical constraints, compliance with these regulations or equivalent facilitation would create an unreasonable hardship. See Section 109.1.5.*

### **SECTION 1131B PASSENGER DROP-OFF AND LOADING ZONES**

**1131B.1 Location.** *When provided, passenger drop-off and loading zones shall be located on an accessible route of travel (complying with Section 1114B.1.2) and shall comply with 1131B.2.*

#### **1131B.2 Passenger Loading Zones.**

**1. General.** *Where provided, one passenger drop-off and loading zone shall provide an access aisle at least 60 inches (1524 mm) wide and 20 feet (6096 mm) long adjacent and parallel to the vehicle pull-up space. Vehicle standing spaces and access aisles shall be level with surface slopes not exceeding 1:50 (2%) in all directions. If there are curbs between the access aisle and the vehicle pull-up space, a curb ramp shall be provided. Each passenger drop-off and loading zone designed for persons with disabilities shall be identified by a reflectorized sign, complying with 1117B.5.1 Items 2 and 3, permanently posted immediately adjacent to and visible from the passenger drop-off or loading zone stating “Passenger Loading Zone Only” and including the International Symbol of Accessibility, in white on dark blue background.*

**2. Vertical clearance.** *Provide minimum vertical clearance of 114 inches (2896 mm) at accessible passenger loading zones and along at least one vehicle access route to such areas from site entrances and exits.*

**1131B.3 Valet Parking.** *Valet parking facilities shall provide a passenger loading zone complying with Section 1131B.2 above and shall be located on an accessible route of travel (complying with Section 1114B.1.2) to the entrance of the facility. The parking space requirements of Sections 1129B through 1130B apply to facilities with valet parking.*

**1131B.4 Bus Stop Pads and Shelters.** *See Section 1121B.2.1.*

### **SECTION 1132B**

## OUTDOOR OCCUPANCIES

**1132B.1 General.** Outdoor occupancies shall be accessible as required in this chapter. See also the general requirements in Section 1114B.1.1.

**1132B.2 Parks and Recreational Areas.** The following parks and recreational areas shall comply with these regulations.

**Exceptions:**

1. In existing buildings, when the enforcing agency determines that compliance would create an unreasonable hardship, a variance shall be granted when equivalent facilitation is provided.

2. Where the enforcing agency finds that, in specific areas, the natural environment would be materially damaged by compliance with these regulations, such areas shall be subject to these regulations only to the extent that such material damage would not occur.

3. Automobile access shall not be provided or paths of travel shall not be made accessible when the enforcing agency determines that compliance with these regulations would create an unreasonable hardship.

1. **Campsites.** Campsites, a minimum of two and no fewer than three for each 100 campsites provided, shall be accessible by level path or ramp and shall have travel routes with slopes not exceeding 1 unit vertical in 12 units horizontal (8.33% slope) to sanitary facilities. Permanent sanitary facilities serving campgrounds shall be accessible to wheelchair occupants.

2. **Beaches, picnic areas.** Beaches, picnic areas, day-use areas, vista points and similar areas shall be accessible.

3. **Sanitary facilities.** Sanitary facilities, to the extent that such facilities are provided, each public use area that is accessible to wheelchair occupants by automobile, walks or other paths of travel.

4. **Boat docks.** Boat docks, fishing piers, etc., shall be accessible.

5. **Parking lots.** Parking lots shall be provided with accessible parking spaces and with curb cuts leading to all adjacent walks, paths or trails.

6. **Trails and paths.** Trails, paths and nature walk areas, or portions of these, shall be constructed with gradients which will permit at least partial use by wheelchair occupants. Hard surface paths or walks shall be provided to serve buildings and other functional areas.

7. **Nature trails.** Nature trails and similar educational and informational areas shall be accessible to the blind by the provision of rope guidelines, raised Arabic numerals and symbols for identification, information signs, and related guide and assistance devices.

For museums, orientation buildings, visitor centers, office buildings, retail stores, restaurants, etc., and sanitary facilities serving these uses, see Sections 1104B through 1111B and sections listed in Section 1114B.1.1.

**1132B.3 Highway Rest Areas.** The specific standards of accessibility for highway rest areas and similar facilities shall be as follows in Section 1132B.3.1, subject to other provisions in these regulations.

**1132B.3.1 Permanent facilities.** At least one kind of permanent functional area or facility, as applicable, shall be accessible to persons with disabilities, including:

1. A sanitary facility for each sex.

2. At least one picnic table and one additional table for each 20 tables, or fraction thereof provided.

3. Information and display areas.

4. Drinking fountains.

5. At least one parking space.

6. Curb ramps conforming to Section 1127B.5 shall be provided at pedestrian ways where appropriate.

**Division III – ACCESSIBILITY FOR ENTRANCES, EXITS AND PATHS OF TRAVEL**

*This division includes additional requirements which supersede less restrictive requirements in Chapter 10 where access is required.*

**SECTION 1133B  
GENERAL ACCESSIBILITY FOR ENTRANCES, EXITS AND PATHS OF TRAVEL**

**1133B.1 Building Accessibility.** See this chapter.

**1133B.1.1 Entrances.**

**1133B.1.1.1 Entrances and exterior ground floor exit doors.**

**1133B.1.1.1.1** All entrances and exterior ground-floor exit doors to buildings and facilities shall be made accessible to persons with disabilities. Such entrances shall be connected by an accessible route (complying with Section 1114B.1.2) to public transportation stops, to accessible parking and passenger loading zones, and to public streets or sidewalks if available. Entrances shall be connected by an accessible route to all accessible spaces or elements within the building or facility. Doorways shall have a minimum clear opening of 32 inches (813 mm) with the door open 90 degrees, measured between the face of the door and the opposite stop (see Figure 11B-5B). Openings more than 24 inches (610 mm) in depth shall comply with Section 1118B.

**Exceptions:**

1. Exterior ground-floor exits serving smoke-proof enclosures, stairwells and exit doors servicing stairs only need not be made accessible.
2. Exits in excess of those required by Chapter 10, and which are more than 24 inches (610 mm) above grade are not required to be accessible. Such doors shall have signs warning that they are not accessible. Warning signs shall comply with Section 1117B.5.1 Item 2.
3. In existing buildings where the enforcing agency determines that compliance with the building standards of this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided. Equivalent facilitation would require at least one entrance to be accessible to and usable by persons with disabilities.
4. These building standards shall not apply to existing buildings when legal or physical constraints will not allow compliance with these building standards or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5, Special Conditions for Persons with Disabilities Requiring Appeals Action Ratification.

**1133B.1.1.1.2 Temporary restrictions.** 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 Recessed doormats.** Recessed doormats shall be adequately anchored to prevent interference with wheelchair traffic.

**1133B.1.1.1.4 Gates.** All gates, including ticket gates, shall meet all applicable specifications for doors.

**1133B.2 Doors.**

**1133B.2.1 Type of lock or latch.** See Chapter 10, Section 1008.1.8.

**1133B.2.2 Width and height.** Every required exit doorway shall be of a size as to permit the installation of a door not less than 3 feet (914 mm) in width and not less than 6 feet 8 inches (2032 mm) in height.

*When installed in exit doorways, exit doors shall be capable of opening at least 90 degrees and shall be so mounted that the clear width of the exitway is not less than 32 inches (813 mm) measured between the face of the door and the opposite stop (see Figure 11B-5B). In computing the exit width the net dimension of the exitway shall be used.*

**Exception:** Doors not requiring full user passage, such as shallow closets, may have the clear opening reduced to 20 inches (510 mm) minimum.

**1133B.2.3 Hinged doors.** For hinged doors, the opening width shall be measured with the door positioned at an angle of 90 degrees from its closed position.

**1133B.2.3.1 Pairs of doors.** Where a pair of doors is utilized, at least one of the doors shall provide a clear, unobstructed opening width of 32 inches (813 mm) with the leaf positioned at an angle of 90 degrees from its closed position.

**1133B.2.3.2 Automatic and power-assisted doors.** If an automatic door is used, then it shall comply with BHMA A156.10. Slowly opening, low-powered, automatic doors shall comply with BHMA A156.19. Such doors shall not open to back check faster than 3 seconds and shall require no more than 15 lbf (66.72 N) to stop door movement. If a power-assisted door is used, its door-opening force shall comply with 1133B.2.5 and its closing shall conform to the requirements in BHMA A156.19. 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 inches (813 mm) with the door positioned at an angle of 90 degrees from its closed position.

**Exceptions:**

1. The provisions of Section 1133B.2.3 shall not apply to existing buildings, except when otherwise required under conditions applicable to access for persons with disabilities. In existing buildings, the following shall apply:

Where the occupant load is less than 10, except Group I, Division 1 Occupancies, or where the occupant load is greater than 10 and it is determined that compliance with Section 1133B.2.3 would create an unreasonable hardship, a projection of 5/8 inch (16 mm) maximum will be permitted for the latch side stop.

2. In existing buildings, the provisions of this section shall not apply when legal or physical constraints will not allow compliance with these building standards or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

**1133B.2.3.3 Revolving doors.** Revolving doors shall not be used as a required entrance for persons with disabilities.

**1133B.2.3.4 Turnstiles, rails and pedestrian controls.** 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 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. The door or gate may be latched where all gates are restricted and controlled by an attendant and a sign is posted stating, "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 of one lane shall be accessible and shall provide a minimum aisle width no less than indicated in Figure 11B-5E (a) and (b) with 32 inches (813 mm) of clear opening.

**Exception:** In existing buildings, Section 1133B.2.3 shall not apply when physical constraints or equivalent facilitation will not allow compliance with these building standards without creating an unreasonable hardship. See Section 109.1.5.

**1133B.2.4 Floor level at doors.** Regardless of the occupant load, there shall be a floor or landing on each side of a door.

**1133B.2.4.1 Thresholds.** The floor or landing shall not be more than ½ inch (12.7 mm) lower than the threshold of the doorway. Change in level between ¼ inch (6 mm) and ½ inch (12.7 mm) shall be beveled with a slope no greater than 1 unit vertical to 2 units horizontal (50% slope). Change in level greater than ½ inch (12.7 mm) shall be accomplished by means of a ramp. See Section 1133B.5.1.

**1133B.2.4.2 Maneuvering clearances at doors.** Minimum maneuvering clearances at doors shall be as shown in Figure 11B-26A and 11B-26B. The floor or ground area within the required clearances shall be level and clear.

The level area shall have a length in the direction of door swing of at least 60 inches (1524 mm) and the length opposite the direction of door swing of 48 inches (1219 mm) as measured at right angles to the plane of the door in its closed position.

**Exception:** The length opposite the direction of door swing shall be a minimum of 44 inches (1118 mm) where the door has no closer and approach to the door by a person in a wheelchair can be made from the latch side,

or if the door has neither latch nor closer and approach can be made from the hinge side. See Figure 11B-26A and 11B-26B.

**1133B.2.4.3** The width of the level area on the side to which the door swings shall extend 24 inches (610 mm) past the strike edge of the door for exterior doors and 18 inches (457 mm) past the strike edge for interior doors.

Twenty-four inches (610 mm) is preferred for strike-side clearance.

**1133B.2.4.4** The space between two consecutive door openings in a vestibule, serving other than a required exit stairway shall provide a minimum of 48 inches (1219 mm) 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 and 11B-31.

**1133B.2.4.5** Where a door required to be accessible by Section 1133B.1.1.1 is located in a recess or alcove where the distance from the face of the wall to the face of the door is greater than 8 inches, strike side clearances as prescribed in Section 1133B.2.4.3 shall be provided. See Figure 11B-33(a).

**1133B.2.5 Closer-effort to operate doors.** Maximum effort to operate doors shall not exceed 5 pounds (22.2 N) for exterior and interior doors, 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 (66.72 N).

**1133B.2.5.1 Door closer.** If 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 inches (75 mm) from the latch, measured to the leading edge of the door.

**1133B.2.5.2 Hand-activated door opening hardware, handles, pulls, latches, locks, and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. Hardware shall be centered between 30 inches (762 mm) and 44 inches (1118 mm) above the floor. 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, panic bars, push-pull activating bars or other hardware designed to provide passage. Locked exit doors shall operate as above in egress direction.**

**1133B.2.5.3 Recessed doors.** Where the plane of the doorway is offset 8 or more inches (205 mm) from any obstruction within 18 inches (455 mm) measured laterally on the latch side, the door shall be provided with maneuvering clearance for front approach. See Figure 11B-33(a).

**1133B.2.6 Smooth surface.** The bottom 10 inches (254 mm) 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-inch (254 mm) 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.3 Corridors, Hallways and Exterior Exit Balconies.**

**1133B.3.1 Corridor and hallway widths.** Every corridor and hallway serving an occupant load of 10 or more shall not be less than 44 inches (1118 mm) in width. Corridors and hallways serving an occupant load of less than 10 shall not be less than 36 inches (914 mm) in width.

**1133B.3.2 Corridors and hallways over 200 feet (60 960 mm).** Corridors and hallways that are located on an accessible route and exceed 200 feet (60 960 mm) in length shall have a minimum clear width of 60 inches (1524 mm), then passing spaces at least 60 inches by 60 inches (1524mm by 1524 mm) shall be located at reasonable intervals not to exceed 200 feet (60 960 mm). A "T" intersection of two corridors or walks is an acceptable passing place.

#### **Exceptions:**

1. In existing buildings, when the enforcing agency determines that compliance with any building standard under this section would create an unreasonable hardship, an exception to such building standard shall be granted when equivalent facilitation is provided.

2. In existing buildings, the provisions of this section shall not apply when legal or physical constraints will not allow compliance with these building standards or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

#### **1133B.4 Stairways.**

##### **1133B.4.1 Handrails.**

**1133B.4.1.1 Required handrails.** Stairways shall have handrails on each side, and every stairway required to be more than 88 inches (2235 mm) in width shall be provided with not less than one intermediate handrail for each 88 inches (2235 mm) of required width. Intermediate handrails shall be spaced approximately equally across with the entire width of the stairway. Handrails shall be continuous along both sides of a stairway.

##### **1133B.4.2 Handrail configuration.**

**1133B.4.2.1** The top of handrail gripping surface shall be mounted between 34 to 38 inches (864 to 965 mm) above the nosing of the treads.

**1133B.4.2.2** Handrails shall extend a minimum of 12 inches (305 mm) beyond the top nosing and 12 inches (305 mm), plus the tread width, beyond the bottom nosing. At the top, the extension shall be parallel with the floor or ground surface. At the bottom, the handrail shall continue to slope for a distance of the width of one tread from the bottom riser; the remainder of the extension shall be horizontal. See Figures 11B-35 and 11B-37.

##### **Exceptions:**

1. In new construction, the inside handrail on switchback or dogleg stairs shall always be continuous.
2. In existing buildings and facilities, full extension of handrails at stairs shall not be required in alterations where such extensions would be hazardous or impossible due to plan configuration.

**1133B.4.2.3** Ends shall be returned smoothly to floor, wall or post.

**1133B.4.2.4** The orientation of at least one handrail shall be in the direction of the run of the stair and perpendicular to the direction of the stair nosing, and shall not reduce the minimum required width of the stairs.

**1133B.4.2.5** Handrails projecting from a wall shall have a space of 1-½ inches (38 mm) between the wall and the handrail.

Handrails may be located in a recess if the recess is a maximum of 3 inches (76 mm) deep and extends at least 18 inches (457 mm) above the top of the rail. Handrails shall not rotate in their fittings.

**1133B.4.2.6 Handgrips.** The handgrip portion of handrails shall be not less than 1-¼ inches (32 mm) nor more than 1-½ inches (38 mm) 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 or 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 (3.2 mm).

##### **Exceptions:**

1. In existing buildings when the enforcing agency determines that compliance with any requirement under Section 1133B.4.2 would create an unreasonable hardship, an exception to the requirement for persons with disabilities may be granted when equivalent facilitation is provided.
2. These regulations shall not apply in existing buildings where legal or physical constraints will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

**1133B.4.3 Tactile floor designation signs in stairways.** Tactile floor designation signs that comply with Section 1117B.5 Item 1 shall be located at each floor level landing in all enclosed stairways in buildings two or more stories in height to identify the floor level. At exit discharge level, the sign shall include a raised five pointed star located to the left of the identifying floor level. The outside diameter of the star shall be the same as the height of the raised characters.

**1133B.4.4 Striping for the visually impaired.** The upper approach and the lower tread of each stair shall be marked by a strip of clearly contrasting color at least 2 inches (51 mm) wide placed parallel to and not more than 1 inch (25.4 mm) 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.

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 inches (51 mm) wide and placed parallel to and not more than 1 inch (25.4 mm) 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.4.5 Treads, nosing and risers.**

**1133B.4.5.1 Treads.** All tread surfaces shall be slip resistant. Weather-exposed stairs and their approaches shall be designed so that water will not accumulate on the walking surfaces. Treads shall have smooth, rounded or chamfered exposed edges, and no abrupt edges at the nosing (lower front edge). The radius of curvature at the leading edge of the tread shall be no greater than ½ inch (13 mm).

**1133B.4.5.2 Nosing.** Nosing shall not project more than 1-½ inch (38 mm) past the face of the riser below.

**1133B.4.5.3 Open risers are not permitted.** On any given flight of stairs, all steps shall have uniform riser height and uniform tread widths consistent with Section 1133B.4. Stair treads shall be no less than 11 inches (279 mm) deep, measured from riser to riser. See Figure 11B-35. Risers shall be sloped or the underside of the nosing shall have an angle not less than 60 degrees from the horizontal.

**Exceptions:**

1. In existing buildings, when the enforcing agency determines that compliance with any requirement under this section would create an unreasonable hardship, an exception to persons with disabilities requirements may be granted when equivalent facilitation is provided.

2. These regulations shall not apply to existing buildings when legal or physical constraints will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

**1133B.5 Ramps.**

**1133B.5.1 General.** Ramps used as exits shall conform to the provisions of this section. Any accessible route of travel shall be considered a ramp if its slope is greater than 1 foot (305 mm) rise in 20 feet (6096 mm) of horizontal run (5% gradient).

**1133B.5.2 Width.** Pedestrian ramps shall have a minimum clear width of 48 inches (1219 mm), unless required to be wider by some other provision of this code. Pedestrian ramps serving entrances to buildings where the ramp is the only exit discharge path and serves an occupant load of 300 or more shall have a minimum clear width of 60 inches (1524 mm). Ramps serving Group R Occupancies may be 36 inches (914 mm) clear width when the occupant load is 50 or less.

**1133B.5.3 Slope.** The least possible slope shall be used for any ramp. The maximum slope of a ramp that serves any exit way, provides access for persons with physical disabilities or is in the accessible route of travel shall be 1-foot (305 mm) rise in 12 feet (3658 mm) of horizontal run (8.3% gradient). The maximum rise for any run shall be 30 inches (762 mm). Examples of ramp dimensions are as follows:

| SLOPE          | MAXIMUM RISE |     | MAXIMUM HORIZONTAL PROJECTION |    |
|----------------|--------------|-----|-------------------------------|----|
|                | inches       | mm  | feet                          | m  |
| 1:12 to < 1:16 | 30           | 760 | 30                            | 9  |
| 1:16 to < 1:20 | 30           | 760 | 40                            | 12 |

**1133B.5.3.1** The cross slope of ramp surfaces shall be no greater than 1 unit vertical in 50 units horizontal (2% slope).

**1133B.5.4 Landings.** Level ramp landings shall be installed as follows:

**1133B.5.4.1 Location of landings.** Level ramp landings shall be provided at the top and bottom of each ramp. Intermediate landings shall be provided at intervals not exceeding 30 inches (762 mm) of vertical rise and at each change of direction. Landings are not considered in determining the maximum horizontal distance of each ramp. Landings shall be level as specified in the definition of "level area" in Section 1102B.

**1133B.5.4.2 Size of top and bottom landings.** Top landings shall be not less than 60 inches (1524 mm) wide and shall have a length of not less than 60 inches (1524 mm) in the direction of ramp run. Landings at the bottom of ramps shall have a dimension in the direction of ramp run of not less than 72 inches (1829 mm).

**1133B.5.4.3 Encroachment of doors.** Doors in any position shall not reduce the minimum dimension of the landing to less than 42 inches (1067 mm) and shall not reduce the required width by more than 3 inches (76 mm) when fully open. See Figure 11B-39(b).

**1133B.5.4.4 Strike edge extension.** The width of the landing shall extend 24 inches (610 mm) past the strike edge of any door or gate for exterior ramps and 18 inches (457 mm) past the strike edge for interior ramps.

**1133B.5.4.5 Landing width.** At bottom and intermediate landings, the width shall be at least the same as required for the ramps.

**1133B.5.4.6 Change of direction.** Intermediate and bottom landings at a change of direction in excess of 30 degrees shall have a dimension in the direction of ramp run of not less than 72 inches (1829 mm) to accommodate the handrail extension.

**1133B.5.4.7 Other intermediate landings.** Other intermediate landings shall have a dimension in the direction of ramp run of not less than 60 inches (1524 mm).

**1133B.5.4.8** For existing ramps or ramps not covered by Section 1133B.5.4.1, landings shall be provided as set forth in Section 1133B.5.4.1.

**1133B.5.4.9 Hazards.** Required ramps shall have a curb at least 2 inches (51 mm) high, or a wheel guide rail 2 to 4 inches (51 to 102 mm) high on each side of the ramp landing that has a vertical drop exceeding 4 inches (102 mm) and that is not bounded by a wall or fence.

#### **1133B.5.5 Handrails for ramps.**

**1133B.5.5.1 Handrails** are required on ramps that provide access if slope exceeds 1 foot (305 mm) rise in 20 feet (6096 mm) of horizontal run (5% gradient), except that at exterior door landings, handrails are not required on ramps less than 6 inches (152 mm) rise or 72 inches (1829 mm) in length. Handrails shall be placed on each side of each ramp, shall be continuous the full length of the ramp, shall be 34 to 38 inches (864 to 965 mm) above the ramp surface to the top of the handrails, shall extend a minimum of 1 foot (305 mm) beyond the top and bottom of the ramp and shall be parallel with the floor or ground surface. The inside handrail on switchback or dogleg ramps shall always be continuous. The ends of handrails shall be either rounded or returned smoothly to floor, wall or post. Handrails projecting from a wall shall have a space of 1-½ inches (38 mm) between the wall and the handrail. Handrails may be located in a recess if the recess is a maximum of 3 inches (76 mm) deep and extends at least 18 inches (457 mm) above the top of the rail. The grip portion shall not be less than 1-¼ inches (32 mm) nor more than 1-½ inches (38 mm) in cross-sectional nominal dimension 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. 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 (3 mm).

#### **Exceptions:**

1. Handrails at ramps immediately adjacent to fixed seating in assembly areas are not required.
2. Curb ramps do not require handrails.

**1133B.5.5.1.1 Ramp handrails.** In existing buildings or facilities, where the extension of the handrail in the direction of the ramp run would create a hazard, the extension on the handrail may be turned 90 degrees to the run of the ramp.

**1133B.5.6 Wheel guides.** Where the ramp surface is not bounded by a wall, the ramp shall comply with Section 1133B.5.6.1 or 1133B.5.6.2.

**1133B.5.6.1** A guide curb a minimum of 2 inches (51 mm) in height shall be provided at each side of the ramp; or

**1133B.5.6.2** A wheel guide rail shall be provided, centered 3 inches (76 mm) plus or minus 1 inch (25 mm) above the surface of the ramp.

**1133B.5.7 Guards.** Ramps more than 30 inches (762 mm) above the adjacent ground shall be provided with guards that comply with Section 1013. Such guards shall be continuous from the top of the ramp to the bottom of the ramp.

**1133B.5.8 Outdoor ramps.** Outdoor ramps and their approaches shall be designed so that water will not accumulate on walking surfaces.

### **1133B.6 Aisles.**

**1133B.6.1 General.** 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.6.2 Width.** Every aisle shall not be less than 36 inches (914 mm) wide if serving only one side, and not less than 44 inches (1118 mm) wide if serving both sides.

### **1133B.7 Walks and Sidewalks.**

**1133B.7.1 Continuous surface.** Walks and sidewalks subject to these regulations shall have a continuous common surface, not interrupted by steps or by abrupt changes in level exceeding 1/2 inch (12.7 mm) (see Section 1133B.7.4), and shall be a minimum of 48 inches (1219 mm) in width. If a walk or sidewalk has less than 60 inch (1525 mm) clear width, then passing spaces at least 60 inches by 60 inches (1525 mm by 1525 mm) shall be located at reasonable intervals not to exceed 200 feet (61 m). A T-intersection is an acceptable passing place. Surfaces shall be slip-resistant as follows:

**1133B.7.1.1 Slopes less than 6 percent.** Surfaces with a slope of less than 6 percent gradient shall be at least as slip-resistant as that described as a medium salted finish.

**1133B.7.1.2 Slopes 6 percent or greater.** Surfaces with a slope of 6 percent gradient shall be slip-resistant.

**1133B.7.1.3 Surface cross slopes.** Surface cross slopes shall not exceed 1/4 inch (6 mm) per foot.

**Exception:** When, because of right-of-way restrictions, natural barriers or other existing conditions, the enforcing agency determines that compliance with the 48-inch (1219 mm) clear sidewalk width would create an unreasonable hardship, the clear width may be reduced to 36 inches (914 mm).

**1133B.7.2 Gratings.** 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 1/2 inch (12.7 mm) in the direction of traffic flow.

#### **Exceptions:**

1. Where the enforcing agency determines that compliance with this section would create an unreasonable hardship, an exception may be granted when equivalent facilitation is provided.

2. This section shall not apply in those conditions where, due to legal or physical constraints, the site of the project will not allow compliance with these building standards or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

**1133B.7.3 Five percent gradient.** When the slope in the direction of travel of any walk exceeds 1 unit vertical to 20 units horizontal (5% gradient), it shall comply with the provisions of Section 1133B.5.

**1133B.7.4 Changes in level.** Abrupt changes in level along any accessible route shall not exceed 1/2 inch (12.7 mm). When changes in level do occur, they shall be beveled with a slope no greater than 1 unit vertical to 2 units horizontal (50%), except that level changes not exceeding 1/4 inch (6 mm) may be vertical.

When changes in levels greater than 1/2 inch (12.7 mm) are necessary, they shall comply with the requirements for curb ramps. See Section 1127B.5.

**1133B.7.5 Level areas.** Walks shall be provided with a level area not less than 60 inches by 60 inches (1524 mm by 1524 mm) at a door or gate that swings toward the walk, and not less than 48 inches wide by 44 inches (1219 mm by 1118 mm) deep at a door or gate that swings away from the walk. Such walks shall extend 24 inches (610 mm) to the side of the strike edge of a door or gate that swings toward the walk. (For example, see Figure 11B-26B.)

**1133B.7.6 Walks with continuous gradients.** All walks with continuous gradients shall have level areas at least 5 feet (1524 mm) in length at intervals of at least every 400 feet (121 920 mm).

#### **1133B.8 Hazards.**

**1133B.8.1 Warning curbs.** Abrupt changes in level, except between a walk or sidewalk and an adjacent street or driveway, exceeding 4 inches (102 mm) 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 curbs projecting at least 6 inches (152 mm) in height above the walk or sidewalk surface to warn the blind of a potential drop off.

When a guard or handrail is provided, no curb is required when a guide rail is provided centered 3 inches (76 mm) plus or minus 1 inch (25 mm) above the surface of the walk or sidewalk, the walk is 5 percent or less gradient or no adjacent hazard exists.

**1133B.8.2 Overhanging obstructions.** Any obstruction that overhangs a pedestrian's way shall be a minimum of 80 inches (2032 mm) above the walking surface as measured from the bottom of the obstruction. 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 (see Figure 11B-28).

Hazards such as drop-offs adjacent to walk ways or overhanging obstructions can be dangerous to persons with sight problems. This section addresses these situations.

**1133B.8.3 Detectable warnings at transit boarding platforms.** See Section 1121B.3.1, Item 8(a).

**1133B.8.4 Detectable directional texture at boarding platforms.** See Section 1121B.3.1, Item 8(b).

**1133B.8.5 Detectable warnings at hazardous vehicular areas.** 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 inches (914 mm) wide, complying with Section 1121B.3.1 Item 8(a).

Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

#### **1133B.8.6 Protruding objects.**

**1133B.8.6.1 General.** Objects projecting from walls (for example, telephones) with their leading edges between 27 inches (686 mm) and 80 inches (2032 mm) above the finished floor shall protrude no more than 4 inches (102 mm) into walks, halls, corridors, passageways or aisles. Objects mounted with their leading edges at or below 27 inches (686 mm) above the finished floor may protrude any amount. Free-standing objects mounted on posts or pylons may overhang 12 inches (305 mm) maximum from 27 inches (686 mm) to 80 inches (2032 mm) above the ground or finished floor. Protruding objects shall not reduce the clear width of an accessible route or maneuvering space. See Figure 11B-7A.

**1133B.8.6.2 Head room.** Walks, halls, corridors, passageways, aisles or other circulation spaces shall have 80 inches (2032 mm) minimum clear head room. If vertical clearance of an area adjoining an accessible route is reduced

to less than 80 inches (nominal dimension), a barrier to warn blind or visually-impaired persons shall be provided. See Figures 11B-7A and 11B-7C.

**1133B.8.6.3 Free-standing signs.** *Wherever signs mounted on posts or pylons protrude from the posts or pylons and the bottom edge of the sign is at less than 80 inches (2032 mm) above the finished floor or ground level, the edges of such signs shall be rounded or eased and the corners shall have a minimum radius of 0.125 inches.*

## **Division IV – ACCESSIBILITY FOR EXISTING BUILDINGS**

### **SECTION 1134B ACCESSIBILITY FOR EXISTING BUILDINGS**

**1134B.1 Scope.** *The provisions of this division apply to renovation, structural repair, alteration and additions to existing buildings, including those identified as historic buildings. This division identifies minimum standards for removing architectural barriers, and providing and maintaining accessibility to existing buildings and their related facilities.*

**1134B.2 General.** *All existing buildings and facilities, when alterations, structural repairs or additions are made to such buildings or facilities, shall comply with all provisions of Division I, New Buildings, except as modified by this division. These requirements shall apply only to the area of specific alteration, structural repair or addition and shall include those areas listed below:*

**1134B.2.1** *A primary entrance to the building or facility and the primary path of travel to the specific area of alteration, structural repair or addition, and sanitary facilities, drinking fountains, signs and public telephones serving the area.*

#### **Exceptions:**

**1.** *When the total construction cost of alterations, structural repairs or additions does not exceed a valuation threshold of \$50,000, based on January 1981, "ENR US20 Cities" Average construction cost index of 3372.02 (Engineering News Record, McGraw Hill Publishing Company), and the enforcing agency finds that compliance with this code creates an unreasonable hardship, compliance shall be limited to the actual work of the project. The enforcing agency shall annually update the valuation threshold to a current amount based on the increase in the index since the last figure used. (For example, the January 2006 amount is \$113,586.07.) For purposes of this exception, an unreasonable hardship exists where the cost of providing an accessible entrance, path of travel, sanitary facilities, public phones and drinking fountains, is disproportionate to the cost of the project; that is, where it exceeds 20 percent of the cost of the project without these features. Where the cost of alterations necessary to make these features fully accessible is disproportionate, access shall be provided to the extent that it can be without incurring disproportionate cost. In choosing which accessible elements to provide, priority should be given to those elements that will provide the greatest access in the following order:*

- 1.1 An accessible entrance,*
- 1.2 An accessible route to the altered area,*
- 1.3 At least one accessible restroom for each sex,*
- 1.4 Accessible telephones,*
- 1.5 Accessible drinking fountains, and*
- 1.6 When possible, additional accessible elements such as parking, storage and alarms.*

*The obligation to provide access may not be evaded by performing a series of small alterations to the area served by a single path of travel if those alterations could have been performed as a single undertaking. If an area has been altered without providing an accessible path of travel to that area, and subsequent alterations of that area or a different area on the same path of travel are undertaken within three years of the original alteration, the total cost of alterations to the areas on that path of travel during the preceding three-year period shall be considered in determining whether the cost of making that path of travel accessible is disproportionate. Only alterations undertaken after January 26, 1992, shall be considered in determining if the cost of providing an accessible path of travel is disproportionate to the overall cost of the alterations.*

**2.** *Certain types of privately funded, multistory buildings and facilities were formerly exempt from accessibility requirements above and below the first floor under this code, but as of the effective date of this regulation are no longer exempt due to more restrictive provisions in the federal Americans with Disabilities Act. In alteration projects involving buildings and facilities previously approved and built without elevators, areas above and below the ground floor are subject to the 20 percent disproportionality provisions described in Exception 1, above, even if the value of the project exceeds the valuation threshold in Exception 1. The types of buildings and facilities are:*

2.1 Office buildings and passenger vehicle service stations of three stories or more and 3,000 or more square feet (279m<sup>2</sup>) per floor.

2.2 Offices of physicians and surgeons.

2.3 Shopping centers.

2.4 Other buildings and facilities three stories or more and 3,000 or more square feet (279 m<sup>2</sup>) per floor if a reasonable portion of services sought and used by the public is available on the accessible level.

*For the general privately funded multistory building exception applicable to new construction and alterations, see Section 1103B.1, Exception 2.*

*The elevator exception set forth in this section does not obviate or limit in any way the obligation to comply with the other accessibility requirements in this code. For example, floors above or below the accessible ground floor must meet the requirements of this section except for elevator service. If toilet or bathing facilities are provided on a level not served by an elevator, then toilet or bathing facilities must be provided on the accessible ground floor.*

**3. Alterations, structural repairs or additions consisting of one or more of the following shall be limited to the actual work of the project:**

**3.1 Altering one building entrance to meet accessibility requirements.**

**3.2 Altering one existing toilet facility to meet accessibility requirements.**

**3.3 Altering existing elevators to meet accessibility requirements.**

**3.4 Altering existing steps to meet accessibility requirements.**

**3.5 Altering existing handrails to meet accessibility requirements.**

**3.6 Alteration solely for the purpose of removing barriers undertaken pursuant to the requirements of Sections 36.402 and 36.404 through 36.406 of Title III of the Department of Justice regulations promulgated pursuant to the Americans with Disabilities Act (Public Law 101-336, 28 C.F.R. Section 36.402, 28 C.F.R. Section 36.404, 28 C.F.R. Section 36.405, and 28 C.F.R. 36.406) or the accessibility requirements of this code as those requirements or regulations now exist or are hereafter amended, including the following:**

**3.6.1 Installing ramps**

**3.6.2 Making curb cuts in sidewalks and entrance**

**3.6.3 Repositioning shelves**

**3.6.4 Rearranging tables, chairs, vending machines, display racks, and other furniture**

**3.6.5 Repositioning telephones**

**3.6.6 Adding raised markings on elevator control buttons**

**3.6.7 Installing flashing alarm lights**

**3.6.8 Widening doors**

**3.6.9 Installing offset hinges to widen doorways**

**3.6.10 Eliminating a turnstile or providing an alternative accessible path**

- 3.6.11 Installing accessible door hardware*
- 3.6.12 Installing grab bars in toilet stalls*
- 3.6.13 Rearranging toilet partitions to increase maneuvering space*
- 3.6.14 Insulating lavatory pipes under sinks to prevent burns*
- 3.6.15 Installing a raised toilet seat*
- 3.6.16 Installing a full-length bathroom mirror*
- 3.6.17 Repositioning the paper towel dispenser in a bathroom*
- 3.6.18 Creating designated accessible parking spaces*
- 3.6.19 Installing an accessible paper cup dispenser at an existing inaccessible water fountain*
- 3.6.20 Removing high-pile, low-density carpeting*
- 3.6.21 Installing vehicle hand controls.*

*3.7 Altering existing parking lots by resurfacing and/or restriping.*

**4.** *Projects which consist only of heating, ventilation, air conditioning, reroofing, electrical work not involving placement of switches and receptacles, cosmetic work that does not affect items regulated by this code, such as painting, equipment not considered to be a part of the architecture of the building or area, such as computer terminals, office equipment, etc., are not considered alteration projects for the purposes of accessibility for persons with disabilities and shall not be subject to this code unless they affect the usability of the building or facility. For the purposes of this section, the term "construction cost" does not include building permit fees or discretionary permit fees.*

*The only purpose of this exception is to exclude projects from activating the provisions of this section. The exceptions are not intended to relieve projects from complying with other applicable provisions of this code (e.g., replacement of carpet does not activate the provisions of this section; however, it still must comply with Section 1124B.3).*

**1134B.2.2** *Where it is technically infeasible in the area of an alteration to make existing toilet facilities code compliant and to install separate toilet facilities for each sex, then the installation of at least one unisex toilet facility per floor being altered, located in the same area as existing toilet facilities, will be permitted. Such a facility shall meet the requirements of Section 1115B.3.2.*

**SECTION 1135B  
HISTORIC PRESERVATION – SPECIAL STANDARDS OF ACCESSIBILITY  
FOR BUILDINGS WITH HISTORICAL SIGNIFICANCE**

**1135B.1 General.** *Qualified historical buildings shall comply with the State Historical Building Code, Part 8, Title 24, of the California Code of Regulations.*

**CHAPTER 11C  
STANDARDS FOR CARD READERS AT  
GASOLINE FUEL DISPENSING FACILITIES**

**SECTION 1101C  
CARD-READER DEVICES AT FUEL DISPENSING EQUIPMENT**

**1101C.1 General.** Notwithstanding other requirements in the California Building Code (CBC), only the requirements and additional definitions in this section shall apply to card-reading devices in motor vehicle fuel facilities, except that administrative requirements which are found in Chapter 1 still apply.

For purposes of this section, the following additional definitions shall apply:

**ACCESSIBLE.** See Chapter 11A, Section 1107A.1-A and Chapter 11B, Section 1102B.

**ACCESSIBLE ELEMENT.** See Chapter 11B, Section 1102B.

**ALTERNATE CARD READER** shall be defined in this section as functionally equal card reader and control directly attached to or an integral part of the fuel dispenser in addition to the primary card reader which is an integral part of the dispenser.

**FREE-STANDING PEDESTAL** is a card-reading device which controls one or more remote fuel dispensers that have no card reader as an integral part of the fuel dispenser.

**GRADE (Adjacent Ground Elevation).** See Chapter 2, Section 202.

**INTERNATIONAL SYMBOL OF ACCESSIBILITY.** See Chapter 11A, Section 1107A.9-I and Chapter 11B, Section 1102B.

**LEVEL ACCESSIBLE AREA,** for the purposes of this section, shall mean a slope of not more than 2 percent in front of the dispensing device; however, the slope may extend to 5 percent where the enforcing authority determines that, due to unusual site conditions, the 2 percent gradient is not obtainable.

**LEVEL AREA.** See Chapter 11A, Section 1107A.12-L and Chapter 11B, Section 1102B.

**PATH OF TRAVEL** shall include the clearance requirements stated in Chapter 11B for Wheelchair Passage Width, and Relationship of Maneuvering Clearances to Wheelchair Spaces, except that pump nozzles and hoses may overlap required clearances.

**RECOMMEND.** See Chapter 2, Section 202.

**TYPE OF MOTOR FUEL** shall mean gasoline, diesel, compressed natural gas, methanol, electricity or ethanol.

**SECTION 1102C  
APPLICATION**

This section shall apply to equipment located at the following facilities:

1. New motor vehicle fuel facilities.
2. Existing motor vehicle fuel facilities built before the effective date of this section when:
  - 2.1 Remodeling or reconstruction includes removal and replacement of one or more islands and associated piping and tank(s); or
  - 2.2 Remodeling includes reconstruction or removal and replacement of fuel islands at facilities that provide free-standing pedestal card readers.

**SECTION 1103C  
NUMBER OF ACCESSIBLE CARD-READING DEVICES REQUIRED**

Where only one card-reading device is installed for use with any type of motor fuel, it shall meet the required features of this section. When more than one card-reading location is available for a specific type of motor fuel, a minimum of two for that type shall have the accessible features of this section.

#### **SECTION 1104C REQUIRED FEATURES**

Card-reading devices at motor vehicle fuel facilities shall be accessible by complying with only the following:

1. The highest operable part of each primary or alternate card reader shall be no more than 54 inches (1372 mm) measured from the base of the fuel dispenser. Where card readers are located on free-standing pedestals, the card-reading control function shall be no more than 54 inches (1372 mm) above an accessible level area which is served by an accessible path of travel.

**Exception:** If an enforcing agency requires that fuel dispensers or card-reading devices be placed in a manner where the card-reading device exceeds the requirements described herein, the provisions of Section 1104C do not apply. Any enforcing agency having jurisdiction over retail fueling facilities may not require islands or impose other regulations which conflict with this section, unless the agency documents and justifies the specific necessity for such a rule or ordinance and complies with the requirements of Health and Safety Code Section 18941.

2. An accessible path of travel shall be provided to the base of all fuel dispensers required to meet the provisions of this section. Such fuel dispensers shall be mounted on the accessible level area.

3. An accessible level area shall be provided which is minimally 30 inches by 48 inches (762 mm by 1219 mm) level and clear. This area shall be provided within 10 inches (254 mm) in plan view of the face of the controls and shall be unobstructed by any features, except pump nozzles and hoses, with the long side of this space parallel to and centered [plus or minus 9 inches (229 mm)] with the face of the card-reader controls. See Figures 11C-1 and 11C-2.

#### **SECTION 1105C PROTECTION OF DISPENSERS MOUNTED AT GRADE**

Dispensers mounted at grade shall be protected from vehicular damage as required by Part 9, Title 24 (California Fire Code).

**CHAPTER 16  
STRUCTURAL DESIGN**

**SECTION 1607  
LIVE LOADS**

**1607.7 Loads on handrails, guards, grab bars and vehicle barriers.** Handrails, guards, grab bars and vehicle barriers shall be designed and constructed to the structural loading conditions set forth in this section.

**1607.7.2 Grab bars, shower seats and dressing room bench seats.** Grab bars, shower seats and dressing room bench seat systems shall be designed to resist a single concentrated load of 250 pounds (1.11 kN) applied in any direction at any point. [DSA-AC] See Chapter 11A, Section 1127A.4 and Chapter 11B Sections 1115B.7.2 and 1117B.8 for grab bars, shower seats and dressing room bench seats, as applicable.

**CHAPTER 27  
ELECTRICAL**

**SECTION 2701  
GENERAL**

**2701.1 Scope.** This chapter governs the electrical components, equipment and systems used in buildings and structures covered by this code. Electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of the *California* Electrical Code.

**2702.2.5 Accessible means of egress elevators.** Standby power shall be provided for elevators that are part of an accessible means of egress in accordance with Section 1007.4.

**2702.2.6 Accessible means of egress platform lifts.** Standby power in accordance with this section or ASME A18.1 shall be provided for platform lifts that are part of an accessible means of egress in accordance with Section 1007.5

**CHAPTER 29  
PLUMBING SYSTEMS**

**SECTION 2901  
GENERAL**

**2901.1 Scope.** The provisions of the *California* Plumbing Code shall govern the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing equipment and systems. Plumbing systems and equipment shall be constructed, installed and maintained in accordance with the *California* Plumbing Code. Private sewage disposal systems shall conform to the *California Plumbing* Code.

**SECTION 2902  
MINIMUM PLUMBING FACILITIES**

**2902.1.1 Unisex toilet and bath fixtures.** Fixtures located within unisex toilet bathing rooms complying with *this code* and the *California Plumbing Code* are permitted to be included in determining the minimum required number of fixtures for assembly and mercantile occupancies. [P]

**CHAPTER 30  
ELEVATORS AND CONVEYING SYSTEMS**

**SECTION 3001  
GENERAL**

**3001.1 Scope.** This chapter governs the design, construction, installation, alteration and repair of elevators and conveying systems and their components.

**Exception:** [DSA-AC] For accessibility requirements for special access lifts and elevators, see California Code of Regulations, Title 8 and Title 24, Part 2, Sections 1124A and 1116B.

**3001.3 Accessibility.** Passenger elevators and special access lifts required to be accessible by Chapters 11A or 11B shall conform to Chapter 11A for applications listed in Section 108.2.1.2 regulated by the Department of Housing and Community Development or Chapter 11B for applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance.

## CHAPTER 31 SPECIAL CONSTRUCTION

### SECTION 3104 PEDESTRIAN WALKWAYS AND TUNNELS

**3104.2 Separate structures.** Connected buildings shall be considered to be separate structures.

**Exceptions:**

1. . . .
2. For purposes of accessibility as required by Chapter 11A, structurally connected buildings, buildings connected by stairs, walkways, or roofs, and buildings with multiple wings shall be considered one structure.

## CHAPTER 31B PUBLIC SWIMMING POOLS

### SECTION 3113B POOL DECKS

**3113B.1 General.** A minimum continuous and unobstructed 4-foot wide (1219 mm) slip-resistant, nonabrasive deck area of concrete or like material shall be provided flush with the top of the pool shell wall extending completely around the pool and the deck area shall further extend 4 feet (1219 mm) on both sides and rear of any diving board or slide and their appurtenances. The deck width shall be measured from the poolside edge of the coping lip.

**Exceptions:**

1. A deck at least 4 feet (1219 mm) in width shall extend around 50 percent or more of the perimeter of a spa pool. For spa pools that have their walls extending above the ground or floor level, the deck area requirement shall apply at the ground or floor level unless otherwise specified by the enforcing agency.
2. The deck width separating a spa pool from an adjacent pool shall not be less than 6 feet (1829 mm) wide.
3. The deck may be omitted from around a temporary training pool.
4. Any mechanism provided to assist persons with disabilities in gaining entry into the pool and in exiting from the pool shall comply with Chapter 11B, Section 1104B.4.3 Participation Areas.

## CHAPTER 33 SAFEGUARDS DURING CONSTRUCTION

### SECTION 3306 PROTECTION OF PEDESTRIANS

**3306.2 Walkways.** A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the authority having jurisdiction authorizes the sidewalk to be fenced or closed. Walkways shall be of sufficient width to accommodate the pedestrian traffic, but in no case shall they be less than 4 feet (1219 mm) in width. Walkways shall be provided with a durable walking surface. Walkways shall be accessible in accordance with Chapters 11A or 11B and shall be designed to support all imposed loads and in no case shall the design live load be less than 150 pounds per square foot (psf) (7.2 kN/m<sup>2</sup>).

**CHAPTER 34  
EXISTING STRUCTURES**

**SECTION 3401  
GENERAL**

**3401.1 Scope.** The provisions of this chapter shall control the alteration, repair, addition and change of occupancy of existing structures.

**Exception:** Existing bleachers, grandstands and folding and telescopic seating shall comply with ICC 300-02.

*[DSA-AC] For applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance for accessibility requirements see Chapter 11B, Section 1134B.*

**SECTION 3407  
HISTORIC BUILDINGS**

*For applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance for Qualified Historical Buildings, see California Code of Regulations, Title 24, Part 8 (California Historical Building Code).*

**CHAPTER 35  
REFERENCED STANDARDS**

|                           |   |
|---------------------------|---|
| <b>ANSI</b>               | American National Standards Institute<br>25 West 43 <sup>rd</sup> Street, Fourth Floor<br>New York, NY 10036  |
| Standard reference number | Referenced in code section number   |
|                           | Title   |
| S3.41-96                  | <i>American National Standard Audible Evacuation Signal.....907.9.2.1</i>   |
| Z97.1-84 (R 1994)         | Safety Glazing Materials Used in Buildings – Safety Performance Specifications and Methods of Test (Reaffirmed 1994).....2306.1.2, 2406.1.2, 2409.1, 7-3094.2 |

|                           |  |
|---------------------------|--|
| <b>ASME</b>               | American Society of Mechanical Engineers<br>Three Park Avenue<br>New York, NY 10016-5990   |
| Standard reference number | Referenced in code section number  |
|                           | Title  |
| A17.1-04                  | Safety Code for Elevators and Escalators with A17.1a-2004 addenda and A17.1S Supplement .....1007.4, 1124A.9, 1116B.1, 1116B.1.5, 1116B.1.8, 1116B.2, 1607.8.1, 3001.2, 3001.4, 3002.5, 3003.2, 3409.8.2, 7-3094.2, 7-3094.3, 7-3094.4 |
| A18.1-03                  | Safety Standard for Platform Lifts and Stairway Chairlifts.....2702.2.6, 3409.8.3  |

|                           |   |
|---------------------------|---|
| <b>BHMA</b>               | Builders Hardware Manufacturers' Association<br>355 Lexington Avenue, 17 <sup>th</sup> Floor<br>New York, NY 10017-6603 |
| Standard reference number | Referenced in code section number   |
|                           | Title   |
| A 156.10-99               | American National Standard for Power Operated Pedestrian Doors.....1008.1.3.2, 1133B.2.3.2                              |
| A 156.19-02               | Standard for Power Assist and Low Energy Operated Doors.....1008.1.3.2, 1133B.2.3.2, 7-3093.4                           |

|                           |   |
|---------------------------|---|
| <b>CPSC</b>               | Consumer Product Safety Commission<br>4330 East West Highway<br>Bethesda, MD 20814-4408   |
| Standard reference number | Title <span style="float: right;">Referenced in code section number</span>  |
| 16 CFR Part 1201 (1977)   | Safety Standard for Architectural Glazing Material.....2406.1.1, 2406.2.1, 2407.1, 2408.2.1, 2408.3   |
| <b>NFPA</b>               | National Fire Protection Association<br>1 Batterymarch Park<br>Quincy, MA 02269-9101  |
| Standard reference number | Title <span style="float: right;">Referenced in code section number</span>  |
| 72-02                     | National Fire Alarm Code, <i>as amended</i> .....901.6, 903.4.1, 904.3.5, 907.2, 907.2.1.1, 907.2.10, 907.2.10.4, 907.2.11.2, 907.2.11.3, 907.2.12.2.3, 907.2.12.3, 907.4, 907.5, 907.9.1.4, 907.9.2, 907.9.2.1, 907.10, 907.14, 907.16, 907.17, 911.1, 1007.9, 1114B.2.2, 3006.5 |
|                           | <b>5.12.4</b> The operable part of each manual fire alarm box shall not be less than 1.1 m (3 ½ ft) and not more than 1.22 m (4 ft) above floor level.  |
|                           | <b>7.4.1.2</b> The total sound pressure level produced by combining the ambient sound pressure level with all audible notification appliances operating shall not exceed 110 dBA anywhere in the occupiable area.   |
|                           | <b>7.4.3.1</b> Audible notification appliances intended for operation in the private mode shall have a sound level of not less than 45 dBA at 3 m (10 ft) or more than 110 dBA at the minimum hearing distance from the audible appliance.  |