

ACADEMY TRAINING MANUAL – ACCESS COMPLIANCE

PREFACE

The Division of the State Architect's *Academy Training Manual – Access Compliance* is the latest development in DSA's ongoing effort to promote consistency in the design and construction of projects under DSA's jurisdiction (primarily California public schools and state-funded construction).

The *Academy Training Manual – Access Compliance* is to serve as a companion document to the *2007 California Building Code* for training purposes and to provide editorial and explanatory remarks regarding accessibility regulations promulgated by DSA. With respect to each of the applicable building code sections, this manual may include: historical and technical background, statements of objective and intent, discussion of the meaning and implications, or suggestions on the most effective methods to apply the requirements.

The format of this manual provides the full text of specific accessibility code requirements followed immediately by associated remarks from DSA. These remarks are preceded by the DSA logo and distinguished from the code text by inclusion within a light turquoise box. For the benefit of individuals who use screen readers, the DSA logo is provided with identifying alternate text (alt tag) which states: "DSA Remark, Section XXXX."

It is important to note that the remarks in this manual are intended to be informative but they are not a substitute for the requirements of the code. Also, despite the informative nature of this manual, it is the appropriate jurisdictional code official who possesses the exclusive authority to enforce and interpret the requirements of the building code.

This manual provides informal assistance regarding California accessibility requirements only for DSA's jurisdiction. The information contained in this manual is not binding on the Division of the State Architect and is not intended or designed to give any legal advice on compliance with federal, state, or local laws and regulations. It should be noted that laws, regulations, and standards are subject to revisions, additions, or deletions, at any time.

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CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CALIFORNIA CHAPTER 1 – GENERAL CODE PROVISIONS

Adopting Agency		B S C	S F M	HCD			DSA		OSHPD				C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4								
Adopt entire Chapter as amended (amended sections listed below)																				
Adopt only those sections that are listed below							X													
Chapter / Section	Codes																			
101	CA						X													
109.1	CA						X													

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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 12 parts of the official compilation and publication of the adoption 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.*



The 2007 triennial edition of California Code of Regulations, Title 24 consists of 12 parts:

- Part 1 – California Building Standards Administrative Code
- Part 2 – California Building Code
- Part 3 – California Electrical Code
- Part 4 – California Mechanical Code
- Part 5 – California Plumbing Code
- Part 6 – California Energy Code
- Part 7 – California Elevator Safety Construction Code
- Part 8 – California Historical Building Code
- Part 9 – California Fire Code
- Part 10 – California Existing Building Code
- Part 11 – California Green Building Standards Code
- Part 12 – California Reference Standards Code

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.



The general purpose of this amended model code is for health, safety and welfare, but the CBSC is amended further by additional specificity to include not only access to buildings and facilities, but also “usability” by people with disabilities. Although “usability” is broad encompassing performance language, it serves to indicate the required functional aspect of DSA-AC adopted provisions and statutory use of this code per CA Gov. Code §4451(d).

CA H&S Code §19955 et al. requires public accommodations and facilities constructed in this state with private funds to adhere to the accessibility provisions of Chapter 7 (commencing with Section 4450) of Division 5 of Title 1 of the Government Code. Under CA H&S Code §19958, city and county building departments have the responsibility to enforce the statutory requirements of CA H&S Code §19955 et al. and CA Gov. Code §4450 et al.

CA Gov. Code §4450(a) requires buildings and facilities constructed in this state by the use of state, county, or municipal funds, or the funds of any political subdivision of the state shall conform to the building standards published in the California Building Standards Code relating to access for persons with disabilities and the other regulations adopted pursuant to Section 4450. CA Gov. Code §4453 vests enforcement authority to the Director of the Department of General Services (generally delegated to the Division of the State Architect) where state funds are utilized for any project or where funds of counties, municipalities, or other political subdivisions are

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utilized for the construction of elementary, secondary, or community college projects. Additionally, CA Gov. Code §4453 vests enforcement authority to the governing bodies thereof where funds of counties, municipalities, or other political subdivisions are utilized except as otherwise provided above.

For projects governed by CA H&S Code §19955 et al. and CA Gov. Code §4450 et al., Section 4451(d) requires compliance not only with the California Building Standards Code, but also with the minimum federal design requirements of the Americans with Disabilities Act of 1990. Within its enforcement jurisdiction, the Division of the State Architect confirms compliance with the *ADA Standards for Accessible Design*.

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.*



The California Building Code (CBC) accessibility provisions are applicable to new construction projects as well as alterations (as defined) of existing buildings and facilities. In alteration projects, these provisions apply to the area of new work, and include the path of travel requirements found in Section 1134B.2.1. The scope of work required by this code does not address all of the obligations required by civil rights laws.

101.3.1 Nonstate-regulated buildings, structures, and applications. *Except as modified by local ordinance pursuant to Section 101.8, the following 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 Corrections Standards Authority. 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.*

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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 108.2.1.1 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 108.2.1.2 for additional scope provisions.*
9. *Permanent buildings and permanent accessory buildings or structures constructed within mobile home parks and special occupancy parks regulated by the Department of Housing and Community Development. See Section 108.21.3 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:*
 - 14.1. *Buildings or structures used or intended for use as an:*
 - 14.1.1. *Asylum, jail.*
 - 14.1.2. *Mental hospital, hospital, home for the elderly, children’s nursery, children’s home or institution, school or any similar occupancy of any capacity.*
 - 14.1.3. *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.*
 - 14.1.4. *Small family day care homes, large family daycare homes, residential facilities and residential facilities for the elderly, residential care facilities.*
 - 14.1.5. *State institutions or other state-owned or state-occupied buildings.*
 - 14.1.6. *High rise structures.*

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- 14.1.7. *Motion picture production studios.*
- 14.1.8. *Organized camps.*
- 14.1.9. *Residential structures.*
- 14.2. *Tents, awnings or other fabric enclosures used in connection with any occupancy.*
- 14.3. *Fire alarm devices, equipment and systems in connection with any occupancy.*
- 14.4. *Hazardous materials, flammable and combustible liquids.*
- 14.5. *Public school automatic fire detection, alarm, and sprinkler systems.*
- 14.6. *Wild land 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 Nonbuilding 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 Health and Safety Code Section 18909, shall not be construed as part of the provisions of this code. For nonbuilding 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.*

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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 3rd 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.*

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While the purpose of this code is for “usable” barrier-free design, the purpose of the enabling legislation is to discontinue architectural discrimination – an essential first step in fostering liberty and equality for persons with disabilities.

One must not forget that the CBC is only written to the extent possible by ultimately achieving a broad consensus of diverse stakeholders. The resulting code is a combination of both prescriptive and performance regulations that must be used as a tool to devise equitable, integrated opportunities for people with disabilities as might be available to others without disabilities. See CA Gov. Code §4450.

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.



Temporary facilities and emergency construction are both required to comply with the CBC regulations for accessibility. See CA Gov. Code §4451(e).

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.



Per CA Gov. Code §4451(d): “Until building standards are published in the California Building Standards Code and other regulations are developed by the State Architect and adopted by the California Building Standards Commission pursuant to Section 4450, buildings, structures, sidewalks, curbs, and related facilities subject to the provisions of this chapter or Part 5.5 (commencing with Section 19955) of Division 13 of the Health and Safety Code shall meet or exceed the requirements of Title III of Subpart D of the federal Americans with Disabilities Act of 1990.”

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:



Not only does publicly funded mean state funds, but it also means county funds, municipal funds or the funds of any political subdivision of the state. When funds are provided by other sources and transferred to a state, county, municipality or other political subdivision of the state, the entity that collects and controls the distribution of the funds becomes the funding source, and subject to the requirements of this section.

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.*

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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.



Leases per se, unless alterations occur, do not directly “trigger” construction code requirements. The lessee of public accommodations should be aware that readily achievable barrier removal is an ongoing obligation under the ADA and may require physical alterations to the building or facility in compliance with the accessibility provisions in the building code. For public entities, leasing should be focused on selecting accessible sites, buildings and facilities. The Department of General Services requires newly leased facilities, and lease renewals, to be accessible by first surveying the facility for code compliance and then making necessary corrections where public programs are provided and employee common-use areas, restrooms, break rooms, parking, etc.

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.



Refer to the California Building Code, Chapter 11B, Section 1111B.5.

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.



Some construction such as parking lot resurfacing, re-stripping parking stalls, sidewalk repair and cabinet installations do not always require building permits. In such cases, the code in place on the date of any construction would be the effective code for such work. Refer to 2007 CBC, Appendix Chapter 1, Section 105.2 which may be adopted by the local jurisdiction.

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 follow:



Reference USDOJ Technical Assistance Letter #38 Date: 04/24/92 [DOJ File #: DJ 182-06-00043] Title III of the ADA establishes specific requirements for "places of public accommodation," which are facilities whose operations affect commerce and fall into one or more of twelve specified categories including restaurants, sales or rental establishments, and service establishments. "Commercial facilities" are facilities that are intended for nonresidential use and whose operations affect commerce. Commercial facilities that do not fall into one or more of the listed categories of places of public accommodation are only subject to the requirements of Title III for new construction and alterations (subpart D of the Department's regulation implementing Title III).

In existing facilities, the requirements for readily achievable barrier removal apply to "places of public accommodation" (including common areas serving a place of public accommodation), whether or not those facilities are also included in the definition of "commercial facility." Thus, those areas of an office building that are places of public accommodation are subject to the barrier removal requirement as well as the other requirements of Title III for places of public

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accommodation. Areas of an office building that are not places of public accommodation are only subject to the requirements for commercial facilities.

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.*



The term "used by the general public" is frequently misinterpreted to mean only facilities which are publicly owned. However, the term actually means facilities made available to the public, and often includes privately owned buildings and facilities.

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



In new construction all sanitary facilities must be accessible; refer to Section 1115B. In existing buildings, refer to Section 1134B.

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.*



When alterations, structural repairs or additions are made to existing buildings, the provisions of this code apply to the new work and path of travel requirements found in Section 1134B.2.1 which include sanitary facilities, telephones, drinking fountains and signs serving the altered area.

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.



State and local enforcement levels of government could have overlapping jurisdiction under Title 24. For accessibility, in State-funded tenant improvements to State-leased facilities, the local jurisdiction must be aware of DGS' jurisdictional authority and DSA's jurisdictional approvals necessary for State-funded construction. See commentary, Section 109.1.4.1.

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.*



CA Gov. Code §4453(a) vests enforcement authority to the Director of the Department of General Services (generally delegated to the Division of the State Architect) 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.*

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CA Gov. Code §4453(b) vests enforcement authority to the governing bodies thereof when funds of counties, municipalities or other political subdivisions are utilized.

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.*



California statutes and the CBSC regulations allow Equivalent Facilitation for public accommodations or facilities built with private funds whenever a determination of Unreasonable Hardship is granted by the local enforcing agency or building department. (Reference CA H&S C. §19957)

When buildings and facilities are constructed with state, county or municipal funds, or the funds of any political subdivision of the state, administrative authorities may grant exceptions from the literal requirements of the building standards only when it is clearly evident that equivalent facilitation and protection that meets or exceeds the requirements under federal law are secured. (Reference CA Gov. C. §4451(f))

California Health and Safety Code §19957.5 provides that every city, county, or city and county may appoint a local appeals board to hear written appeals regarding the action taken by the building department.

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.*

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CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 2 – DEFINITIONS

Adopting Agency	B S C	S F M	HCD			DSA		OSHPD				C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
			1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter			1	2	1/AC	AC	SS	1	2	3	4								
Adopt entire Chapter as amended (amended sections listed below)																			
Adopt only those sections that are listed below						X													
Chapter / Section	Codes																		
Access Aisle	CA					X													
Accessibility	CA					X													
Accessible	CA					X													
Accessible Element	CA					X													
Accessible Means of Egress	IBC					X													
Accessible Route	CA					X													
Accessible Route of Travel	CA					X													
Accessible Space	CA					X													
Adaptability	CA					X													
Adaptable Dwelling Unit	CA					X													
Addition	CA					X													
Administrative Authority	CA					X													
Aisle	CA					X													
Aisle, Employee Areas	CA					X													
Alteration (or Alter)	CA					X													
Alternate Card Reader	CA					X													
ANSI	CA					X													
Approved w/o Notes	CA					X													
Approved Testing Agency	CA					X													
Area of Refuge	IBC					X													
Assembly Area	CA					X													
Assistive Device	CA					X													
Automatic Door	CA					X													
Bathroom	CA					X													
Building	IBC					X													
Building Entrance on an Accessible Route	CA					X													
Building, Existing	CA					X													
Building Official	IBC					X													
CCR	CA					X													
Circulation Path	CA					X													
Clear	CA					X													
Clear Floor Space	CA					X													
Closed-Circuit Telephone	CA					X													
Commercial Facilities	CA					X													
Common Use Areas	CA					X													
Comply With	CA					X													
Covered Multifamily Dwellings	CA					X													
Cross Slope	CA					X													
Curb Cut	CA					X													
Curb Ramp	CA					X													
Detectable Warning	CA					X													

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CHAPTER 2 – DEFINITIONS

SECTION 202 DEFINITIONS



All terms defined in the California Building Code (CBC) are listed alphabetically in Chapter 2. The actual definitions of the terms are located as follows:

- 1) Where a term is used in more than one chapter, its definition appears in Chapter 2.
- 2) Where a term pertains to a single chapter, its definition appears within that chapter.
- 3) Where a term is unique to a single section or subsection of a chapter, its definition may appear within that section or subsection.

Model code definitions which have been both amended and adopted by DSA-AC are located immediately below the related model code definition. Definitions applicable only to Chapters 11A or 11B are located in those chapters and a reference to the location is included in Chapter 2.

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.

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.

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

ANSI. [DSA-AC] 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.

APPROVED TESTING AGENCY. [DSA-AC] 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.



The accessibility standards generally apply to buildings and facilities. Parking lots, play areas, patios, constructed trails, man-made outdoor areas are often not considered to be buildings. Rather, these elements are generally considered to be facilities. See the definition of "Facilities" in CBC Section 1102B.

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

BUILDING, EXISTING. [DSA-AC] 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] means the California Code of Regulations.



The CCR is divided into the following 28 titles, which are subdivided into divisions, parts, and sections:

No. Title	No. Title
1 General Provisions	15 Crime Prevention and Corrections
2 Administration	16 Professional and Vocational Regulations
3 Food and Agriculture	17 Public Health
4 Business Regulations	18 Public Revenues
5 Education	19 Public Safety
6 Governor [no regulations]	20 Public Utilities and Energy
7 Harbors and Navigation	21 Public Works
8 Industrial Relations	22 Social Security
9 Rehabilitative and Developmental Services	23 Waters
10 Investment	24 California Building Standards Code

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11 Law	25 Housing and Community Development
12 Military and Veterans Affairs	26 Toxics
13 Motor Vehicles	27 Environmental Protection
14 Natural Resources	28 Managed Health Care

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] 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).



This definition should not be confused with the definition of “Public Accommodation” in this chapter.

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

COMPLY WITH. [DSA-AC] See 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] is a publicly displayed notice which indicates by use of words or symbols a recommended direction or route of travel.



See commentary, Section 1117B.5.

DISABILITY [DSA-AC] 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.



This is the definition of disability used and defined in the Americans with Disabilities Act of 1990.

DISABLED. [DSA-AC] See “Disability”.

DORMITORY. See Section 308.4.6 and 310.2.

DWELLING UNIT. ...

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[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] is the designated department or agency as specified by statute or regulation.



See commentary, Section 109.1.4.

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] 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 (1524 mm) 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,” C.C.R., Title 24, Part 8.

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

INDEPENDENT ENTITY [DSA-AC] 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.

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.

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LIFT, PLATFORM (WHEELCHAIR). [DSA-AC] See “Platform (Wheelchair) Lift” Chapter 11A, Section 1107A.16-P, and Chapter 11B, Section 1102B.

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

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

MULTIPLE-ACCOMMODATION TOILET FACILITY [DSA-AC] 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.

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

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

NFPA [DSA-AC] 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] 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.



In State-funded construction, a letter following plan review which approves the plans and allows the release of funds could be regarded as a "permit."

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

PLATFORM. See Section 410.2.

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PLATFORM (WHEELCHAIR) LIFT. [DSA-AC] See Chapter 11A, Section 1107A.16-P and Chapter 11B, Section 1102B.

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

POWER-ASSISTED DOOR [DSA-AC] 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] includes, but is not limited to, any public use building or facility that may be classified into one or more of the following categories:



The twelve places of public accommodation closely relate to federal ADA language designed to establish the scope of the ADA and is used here to implement the same scope in California.

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:



The following are simply examples of each type of public accommodation. Accessibility to churches, office buildings, and public curbs and sidewalks was regulated by CBC prior to the passage of the ADA; these examples are indicated at the end of the list.

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.*

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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 rental 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] 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 C.C.R. Title 24, Part 8.

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 and Chapter 11B, Section 1102B.

REASONABLE PORTION [DSA-AC] 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.



The term is intended to mean that the size of space must be large enough to provide the same equitable opportunities, advantages, and ease of use for people with disabilities as is otherwise being made available to the general public. It is not intended to mean reasonable from a cost point of view.

RECOMMEND [DSA-AC] does not require mandatory acceptance, but identifies a suggested action that shall be

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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.

SERVICE ENTRANCE [DSA-AC] is an entrance intended primarily for the delivery of goods or services.

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

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

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

SIDEWALK [DSA-AC] 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.)



There is an important distinction between *sidewalk* and *walk* and they are treated differently under the CBC. As noted in this definition, a sidewalk is contiguous to a street while a walk is not.

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

SINGLE-ACCOMMODATION SANITARY FACILITY [DSA-AC] 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] is a parcel of land bounded by a property line or a designated portion of a public right-of-way.

SITE DEVELOPMENT [DSA-AC] 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-S, and Chapter 11B, Section 1102B.

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

SPACE [DSA-AC] is a definable area, e.g., a room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.



The word *Space*, as used in the term *clear floor space and maneuvering space*, can also refer to the space necessary for accessibility to fixtures and turning space needed for wheelchair users.

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

STAGE. See Section 410.2.

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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] 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.



This term is defined in the ADA and should be used in conjunction with the application of unreasonable hardship determinations – the most stringent requirements should be applied. See commentary, Section 1134B.2.2.

TEMPORARY [DSA-AC] 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.



Temporary buildings and facilities must be accessible to the same degree as permanent facilities per CA Gov. Code §4451(e).

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

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

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.

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

UNREASONABLE HARDSHIP [DSA-AC] 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.

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



If an element within a place of public accommodation or commercial facility is constructed pursuant to an unreasonable hardship exception, the use of the exception may not necessarily comply with the ADA Title III requirements.

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] 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.



The code-required spaces to accommodate wheelchairs were developed based on surveys conducted in the mid 1970s. Today, many wheelchairs are longer, lower, and can include scooters of considerable length. This fact should be considered when designing accessible spaces.

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

WORKSTATION....

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

ACADEMY TRAINING MANUAL – ACCESS COMPLIANCE

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 3 – USE AND OCCUPANCY CLASSIFICATION

Adopting Agency		B S C	S F M	HCD			DSA		OSHPD				C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt entire Chapter as Amended (amended sections listed below)																				
Adopt only those sections that are listed below							X													
Chapter / Section	Codes																			
302.1	IBC						X													
310.2 (Dormitory)	IBC						X													

ACADEMY TRAINING MANUAL – ACCESS COMPLIANCE

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. *[SFM] Organized Camps (see Section 440) Group C*
9. *Research Laboratories (see Section 443) Group L*
10. Residential (see Section 310): Groups R-1, R-2, R-3, R-3.1, and R-4
11. Storage (see Section 311): Groups S-1 and S-2
12. Utility and Miscellaneous (see Section 312): Group U

SECTION 310 RESIDENTIAL GROUP R

310.2 Definitions.

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.



Dormitories quite often allow long-term use (Chapter 11A) and transient (short-term) use (Chapter 11B). Also, providing dormitory housing could be considered an extension of Public Accommodations as “Places of Public Education” (see definition of Public Accommodation in Chapter 2). Compliance with the residential requirements in both chapters is advisable unless it can be demonstrated that particular type of stay is absent (such as the program never allows short-term stays). Although DSA/AC adopts this model code Section 310.2 definition for DORMITORY, this is not the only CBC definition for dormitory – see also the CBC definition for DORMITORY adopted by HCD/1A and the SFM in Chapter 2 which refers not only to this Section 310.2, but also Section 308.4.6 for dormitories in Group I Occupancies.

ACADEMY TRAINING MANUAL – ACCESS COMPLIANCE

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 4 – SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

Adopting Agency		B S C	S F M	HCD			DSA		OSHPD				C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt entire Chapter as Amended (amended sections listed below)																				
Adopt only those sections that are listed below								X												
Chapter / Section	Codes																			
406.2.2	CA							X												
410.2 Platform & Stages	IBC							X												
412.1.6	CA							X												

ACADEMY TRAINING MANUAL – ACCESS COMPLIANCE

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.*



While the minimum height is required to be 7'-0", greater vertical clearance is required at van-accessible parking, at accessible parking spaces within parking structures and the accessible routes to these spaces, and at passenger drop-off and loading zones. Refer to Chapters 11A and 11B for requirements in these areas.

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.*

ACADEMY TRAINING MANUAL – ACCESS COMPLIANCE

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 5 – GENERAL BUILDING HEIGHTS AND AREAS

Adopting Agency	B S C	S F M	HCD			DSA		OSHPD				C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
Adopt Entire Chapter			1	2	1/AC	A C	SS	1	2	3	4								
Adopt entire Chapter as amended (amended sections listed below)																			
Adopt only those sections that are listed below																			
Chapter / Section			Codes																

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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.



Group A Occupancy functions must be accessible to students, teachers, and parents where they serve assembly use in schools, regardless of whether such buildings are classified as Group E Occupancy.

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CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 9 – FIRE PROTECTION SYSTEMS

Adopting Agency		B S C	S F M	HCD			DSA		OSHPD				C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4								
Adopt entire Chapter as amended (amended sections listed below)																				
Adopt only those sections that are listed below							X													
Chapter / Section	Codes																			
907.3.2	CA						X													
907.9.1 w/ Exc. 1 & 2	CA						X													
907.9.1.1	CA						X													
907.9.1.2	IBC						X													
907.9.1.3	IBC						X													
Table 907.9.1.3	CA						X													
907.9.1.4	CA						X													
907.9.1.5	CA						X													
907.9.2	CA						X													
907.9.2.1	CA						X													

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CHAPTER 9 – FIRE PROTECTION SYSTEMS

SECTION 907 FIRE ALARM AND DETECTION SYSTEMS

[F] 907.3 Manual fire alarm boxes.

[F] 907.3.1 Location.

[F] 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 *highest point of the activating handle or lever of the box*. *Manual fire alarm boxes shall also comply with Section 1117B.6 Item 4.*



CBC Section 1117B.6, Item 4 requires controls and operating mechanisms to be operable with one hand without tight grasping, pinching or twisting of the wrist (must be operable by persons with limited manual dexterity). The maximum force to activate controls shall be no greater than 5 pounds-force.

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.*

[F] 907.9 Alarm notification appliances.

[F] 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.



In a new facility, *ADA Standards for Accessible Design* 4.1.3(14), 4.1.6 and 4.28 require that both audible and visual alarms be installed if emergency warning systems are provided.



[Reference: ADAAG 4.28.3 Visual Alarms and for more in-depth discussion visit <http://www.access-board.gov/adaag/about/bulletins/alarms.htm>] There are two major categories of fire alarms:

1. *Self-contained units*, as exemplified by the single-station residential smoke detector unit--battery-operated or hard-wired to building electrical power--which produces an alarm signal at the fixture itself when activated by an integral sensing device, and
2. *Building-wide systems*, integrated--often zoned--alarms whose local signals are remotely initiated, either automatically from detectors or manually from pull-stations spread throughout a facility.

ADA Standards for Accessible Design requires that when either type is installed, it must have a visual alarm component.

1. The lamp shall be a xenon strobe type or equivalent.
2. The color shall be clear or nominal white (i.e., unfiltered or clear filtered white light).
3. The maximum pulse duration shall be two-tenths of one second (0.2 sec) with a maximum duty cycle of 40 percent. The pulse duration is defined as the time interval between initial and final points of 10 percent of maximum signal.
4. The intensity shall be a minimum of 75 candela. With regard to light intensity in sleeping areas, ADAAG simply referred to 75 candela. However, in a later technical bulletin dated July 1992, the USDOJ specifically referenced the UL research calling for 110 candela or 177 candela to awaken the hearing impaired.
5. The flash rate shall be a minimum of 1 Hz and a maximum of 3 Hz.
6. The appliance shall be placed 80 in. above the highest floor level within the space or 6 in.

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below the ceiling, whichever is lower.

7. In general, no place in any room or space required to have a visual signal appliance shall be more than 50 ft. from the signal (in the horizontal plane). In large rooms and spaces exceeding 100 ft. across, without obstructions 6 ft. above the finish floor, such as auditoriums, devices may be placed around the perimeter, spaced a maximum 100 ft. apart, in lieu of suspending appliances from the ceiling.
8. No place in common corridors or hallways in which visual alarm signaling appliances are required shall be more than 50 ft. from the signal.

However, the technical provisions for visible alarms apply to normative conditions. Signal intensity and placement in very small and very large rooms and in spaces with high ceilings, irregular geometry, dark or non-reflective walls, or very high ambient lighting levels may best be determined by specialized consultants employing photometric calculation for system design rather than by a literal application of the requirements. For these reasons, Equivalent Facilitation permits alternative designs that achieve substantially equivalent or greater accessibility.

Lamp intensity (like sound) decreases in inverse relation to the square of its distance from the viewer. Thus, by varying lamp intensity and spacing, system designers can tailor an installation to the physical conditions of the space being served. It is impossible to provide specific guidance for the design of non-standard installations based upon the photometric calculations necessary to demonstrate equivalent facilitation. Such applications should generally be designed by experienced electrical engineers or fire alarm consultants under performance specifications for coverage and illumination levels derived from the technical requirements and ambient conditions in the space. For example, a 75 cd strobe at 50 feet raises the ambient light by 0.03 at 0 degrees in the horizontal plane. Equivalent design configurations should, therefore, result in approximately the same increase at all positions within the covered space.

Given concerns for economy (lower-candela lamps are less expensive to purchase and connect) and lamp standardization within a building (lower-candela lamps are more available and simplify inventorying), specifiers may be motivated to standardize on a minimum-candela fixture, achieving coverage in large rooms by close spacing of low-intensity lamps. Where a single lamp can provide the necessary intensity and coverage, multiple lamps should not be installed because of their potential effect on persons with photosensitive epilepsy, unless the multiple lamps in the same view are synchronized.

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.



The US Access Board has provided guidance which indicates visual alarms are required where an existing alarm system is upgraded or replaced. (See Guide to ADAAG Provisions, Bulletin #2-Visual Alarms, and Preamble to the ADA and ABA Accessibility Guidelines.)

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



In certain areas, it could be hazardous or distracting to install visual alarms.

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:*

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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.



This list is not exhaustive. In new construction, all public- and common-use areas shall have visible alarms if audible alarms are provided.

[F] 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.



Under the ADA, employees with disabilities are entitled to "reasonable accommodation" within the workplace. Initially designing employee work stations areas with the potential to add visible notification appliances in the future could avoid costly retrofits when current employees become temporarily or permanently disabled, or when new employees with disabilities are hired.

[F] 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.



See *ADA Standards for Accessible Design* 4.28.4 Auxiliary Alarms. Units and sleeping accommodations shall have a visual alarm connected to the building emergency alarm system or shall have a standard 110-volt electrical receptacle into which such an alarm can be connected and a means by which a signal from the building emergency alarm system can trigger such an auxiliary alarm. When visual alarms are in place, the signal shall be visible in all areas of the unit or room. Instructions for use of the auxiliary alarm or receptacle shall be provided. The referenced CBC sections under Table 907.9.1.3 direct the user to additional requirements in Chapter 11B Section 1111B.4.5 and Tables 11B-3 and 11B-4 for persons with hearing impairments.

**[F] TABLE 907.9.1.3
VISIBLE AND AUDIBLE ALARMS**

NUMBER OF SLEEPING UNITS	SLEEPING UNITS WITH VISIBLE AND AUDIBLE ALARMS
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

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501 to 1,000	5% of total
1,001 and over	50 plus 3 for each 100 over 1,000

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

[F] 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*.

[F] 907.9.1.5 Groups 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 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.

[F] 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.

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CALIFORNIA BUILDING CODE -- MATRIX ADOPTION TABLE CHAPTER 11B – ACCESSIBILITY TO PUBLIC BUILDINGS, PUBLIC ACCOMMODATIONS, COMMERCIAL BUILDINGS AND PUBLICLY FUNDED HOUSING

Adopting Agency	B S C	S F M	HCD			DSA		OSHPD				C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
			1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire California Chapter						X													
Adopt entire California Chapter as amended (amended sections listed below)																			
Adopt only those sections that are listed below		X																	
Chapter / Section	Codes																		
1114B.2 – 1114B.2.1	CA			X															

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

Note: For housing accessibility, see Chapter 11A.



Scoping for publicly funded housing is located in Section 1111B. Scoping for privately funded housing is located in Section 1101A.

Division I – NEW BUILDINGS



Accessibility requirements applicable to new buildings are included in Divisions I, II and III. Refer to Division IV, Section 1134B for accessibility requirements in existing buildings.

The scope and application of accessibility and the access compliance regulations are greatly affected by the determination whether a building is new or existing.

SECTION 1101B SCOPE

See Chapter 1, Section 109.1.



Chapter 11B accessibility regulations are applicable to: 1) publicly funded buildings, structures, sidewalks, curbs and related facilities; 2) privately funded public accommodations and commercial facilities; and 3) public housing and private housing available for public use. Refer to CBC Section 109 for additional information.

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.*



Accessible features, accommodations and elements must comply with the requirements of Chapter 11B. In some cases Chapter 11B requires compliance with requirements in other parts of the building code. When additional scoping or technical requirements are located in other parts of the building code, the features, accommodations and elements must comply with those regulations **and** Chapter 11B.

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.*



Features for accessibility must be permanently functional, unobstructed and may not be removed. It is not sufficient to provide features such as accessible routes, parking, elevators, ramps or signage if those features are not maintained in a manner that enables individuals with disabilities to use them. Inoperable elevators, locked accessible doors, or "accessible" routes that are obstructed by furniture, filing cabinets or potted plants are not accessible to nor usable by persons with disabilities.

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



This section clarifies that temporary obstructions or isolated instances of mechanical failure would not be considered code violations. However, allowing obstructions or "out of service" equipment to persist beyond a reasonable period of time would violate this section, as would repeated mechanical failure due to improper or inadequate maintenance.

1101B.4 Dimension conventions. *Dimensions that are not stated as "maximum" or "minimum" are absolute.*



This section clarifies the dimensioning conventions used in this chapter. Dimensions stated as a "maximum" or "minimum" provide a dimensional range for design purposes. Dimensions not stated as 'maximum' or 'minimum' are absolute values for design purposes.

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.*



Application of conventional industry tolerances must be on a case-by-case, project-by-project basis. Predetermined guidelines for construction tolerances could unnecessarily encourage contractors and others to deviate from the access regulations found in the CBC and may wrongfully be viewed by some to have the effect of law.

Conventional building industry tolerances include those for field conditions and those that may be a necessary consequence of a particular manufacturing process. Recognized tolerances are not intended to apply to design work.

Where accessibility provisions state a dimensional range, such as Section 1133B.4.2.1 which requires the top of stair handrails to be installed between 34 inches and 38 inches above the nosing, the range already provides an adequate tolerance, therefore, no tolerance outside the range at either end point is permitted.

An element designed to be constructed at either the maximum or minimum permitted dimensions puts the construction at risk if construction errors result in a violation of the standards. It is good practice to specify a dimension less than the required maximum (or more than the required minimum) by the amount of the expected field or manufacturing tolerance and not to state any tolerance in conjunction with the specified dimension.

In other words, dimensions noted in accessibility provisions as "maximum" or "minimum" should not be considered dimensions for design, as they represent the limits of a requirement. To be sure that field tolerances result in usable construction, notes and dimensions in construction documents should anticipate expected tolerances so that a required dimensional range is not exceeded by the addition of a finish or a variation in construction practice.

Specifying dimensions in design in the manner described above will better ensure that facilities and elements accomplish the level of accessibility intended by the provision. It will also more often produce an end result of strict and literal compliance with the stated requirements and eliminate enforcement difficulties and issues that might otherwise arise.

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*

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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.



The access aisle is the area adjacent to accessible parking spaces set aside for getting into or out of a van or automobile. Refer to Sections 1129B and 1131B for specific clearances.

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.



An **ACCESSIBLE ELEMENT** can include a room, area, route, feature or device which provides accessibility for persons with disabilities as specified in the adopted regulations.

ACCESSIBLE MEANS OF EGRESS. See Section 1002.1.



Per CBC Section 1002.1, an **accessible means of egress** is a continuous and unobstructed way of egress travel from any accessible point in a building or facility to a public way.

This definition is co-adopted by the State Fire Marshal and DSA-AC. This term means an egress route to a public way which could include accessible routes, stairways within vertical exit enclosures, exterior exit stairways, elevators, platform lifts, horizontal exits, ramps and areas of refuge. Refer to CBC Section 1007.2.

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

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Architect-Access Compliance.

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



This term means that the space can be modified or adjusted to accommodate the needs of the specific user. As part of the initial design and construction, for example, structural backing would be provided for the later installation of grab bars, base cabinets under kitchen sinks would be removable without the use of specialized tools or specialized knowledge, or countertops would be repositionable.

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 passageway, 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.



Per CBC Section 1002.1, an *area of refuge* is an area where persons unable to use stairways can remain temporarily to await instructions or assistance during emergency evacuation. Each area of refuge is separated from the rest of the building by a smoke barrier and provided with a two-way communication system with instructions. See CBC Section 1007.6.

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.



An assembly area may or may not be a Group A Occupancy. A large conference room in a Group B Occupancy or a multi-purpose area in a Group E Occupancy may be an assembly area.

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.



A "Circulation Path" is a pedestrian route provided within a building, facility or site and may or may not (in the case of stairs) include an accessible route of travel. Whenever the accessible route diverges from the regular circulation path signage may be required to identify the departure from the regular route if not obvious. See Section 1117B.5.8.1.2.

CLEAR means unobstructed.



In architecture, dimensions between objects are noted as clearances between obstructions, such as clear height, clear width, clear openings, et cetera.

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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 is 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).



As used in this definition, a group of people means two or more people.

Employees, tenants or staff and their guests may jointly utilize common use areas where the public is not permitted general access. Examples of common use areas within a homeless shelter may include a laundry room or community room. Examples of common use areas within an office building may include a break room, employee lounge, employee exercise facility or employee locker room.

COMPLY WITH means to meet one or more specifications of these regulations.

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 and a surface located above or below an adjacent curb face, as differentiated from a ramp.

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.



Curbs are cues for pedestrians with vision impairments to detect the boundary between a sidewalk and a vehicular way. Curb ramps remove the needed cues for persons with visual impairments; detectable warnings have been developed as a replacement cue and warning to indicate the presence of a vehicular way.

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.

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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.



In several locations in Chapter 11B, equivalent facilitation is indicated in exceptions for existing buildings or facilities, when the enforcing agency determines that compliance with certain accessibility requirements would create an unreasonable hardship. In those cases, an exception to the prescribed accessibility requirements may be granted when equivalent facilitation (alternate means of compliance) is provided.

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.



A grab bar provides support for a user transferring from a wheelchair onto a bench, seat or plumbing fixture.

GUARD (or GUARDRAIL). See Section 1002.1.

HANDRAIL. See Section 1002.1.

HEALTH CARE PROVIDER. See “Professional office of a health care provider.”

IF, IF...THEN denotes a specification that applies only when the conditions described are present.

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 11th World Congress for the purpose of indicating that buildings and facilities are accessible to persons with disabilities. See Figure 11B-6.



This is also known as the “ISA.” It is a graphic representation of the profile view of a wheelchair

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with occupant.

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



Although kick plates are not necessarily required by the code, they are often applied to areas of doors required to have a smooth surface and be free of abrupt surface changes. This provides a person in a wheelchair the option of opening a door by pushing with their feet or allows the front foot plates of a wheelchair to glide smoothly along the lower face of the door as a wheelchair user proceeds through a door.

LEVEL AREA is a specified surface that does not have a slope in any direction exceeding one unit vertical in 50 units horizontal (2-percent slope).



Level areas assist persons with disabilities by providing an area within which they can maintain greater control of their mobility device, such as wheelchairs or walkers, while at the same time operating accessible elements such as doors or gates. Level areas also provide greater stability at ramp landings or when loading and unloading at vehicular access aisles.

LIFT, PLATFORM (WHEELCHAIR). See “Platform (Wheelchair) Lift.”

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

MAY denotes an option or alternative.

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

NOSE, NOSING is that portion of a stair tread or landing at the top of a stairway flight projecting beyond the face of the riser immediately below.

OPEN RISER is the space between two adjacent stair treads not closed by a riser.

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.



PATH OF TRAVEL is an improved area which provides clear and unobstructed travel for pedestrians and/or wheelchair users. In addition, in an existing building undergoing alteration, a **PATH OF TRAVEL** includes sanitary facilities, telephones, drinking fountains, and signs serving the altered area. These elements may be subject to upgrade as part of the alteration to an existing building if they do not conform to current accessibility requirements per Section 1134B.

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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 WAY is a route by which a pedestrian may pass.

PLATFORM. See Section 410.2.

PLATFORM (WHEELCHAIR) 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.

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.



The term "Professional Office of a Health Care Provider" applies to the offices of doctors, psychologists, dentists, radiologists, and others certified or licensed by the State to provide physical or mental health care.

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.



Examples of public use areas may include a hotel lobby, movie theater, concert hall, public restroom, sales floor of a retail store, or dining room within a restaurant.

PUBLIC WAY. See Section 1002.1.

RAIL TRANSIT BOARDING PLATFORM. See "Transit boarding platform".

RAMP is a walking surface which has a running slope greater than one unit vertical in 20 units horizontal (5-percent slope) intended for pedestrian traffic and as differentiated from a curb ramp.

RISER is the upright member between two adjacent stair treads.

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

SHALL denotes a mandatory specification or requirement.

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.



The California definition for "Shopping Center" is quite different from the federal definition.

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Federal ADA Regulations defines a shopping center or shopping mall as a building housing five or more sales or rental establishments. However, California accessibility provisions define a shopping center as only one or more sales or rental establishments or stores.

SHOULD denotes an advisory specification or recommendation.

SIDEWALK. See Section 202.



There is an important distinction between *sidewalk* and *walk* and they are treated differently under the CBC. A sidewalk is contiguous to a street while a walk is not.

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

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 4 feet (1219 mm) below grade, for more than 50 percent of the total perimeter, or more than 8 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 text-based communications through the transmission of coded signals across the standard telephone network. Text telephones can include, for example, devices known as TTYs (teletypewriters) 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.



As a general rule, a stay of less than thirty days (short-term) is considered transient and is regulated in Chapter 11B as a public accommodation, as opposed to long-term living which is regulated in Chapter 11A.

Some transient lodging does not meet the code definition of public accommodation. For example, a bed-and-breakfast establishment with fewer than six rooms is transient lodging;

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however it may not be a public accommodation as defined by this code, if the owner lives there.

In some cases a facility may house both long-term living and transient lodging uses, such as at school dormitories that allow both short-term and long-term stays. In those cases, compliance with both Chapters 11A and 11B would be required.

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.

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.)



There is an important distinction between *sidewalk* and *walk* and they are treated differently under the CBC. A sidewalk is contiguous to a street while a walk is not.

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.



Chapter 11B accessibility regulations apply to those types of buildings or facilities identified in Chapter 1, Sections 109.1.1 through 109.1.3. The general requirements for public accommodations and commercial facilities listed in 1114B are all applicable unless specifically excepted, limited, or enhanced in the occupancy sections – 1104B through 1111B.



Where incidental uses (see Chapter 5, Section 508) occur within other occupancies, both the primary use area and the incidental use area are required to be accessible in compliance with their respective uses, regardless of whether the incidental use area is classified in accordance with the primary use occupancy.

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

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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 m²) per story.*



Elevators are the most common way to provide access in multistory office buildings. An exception is provided to the access requirement when office buildings are less than three stories in height or have fewer than 3000 square feet (sf) on any floor. For example, a 3-story office building with 4500 sf on the first floor, 2500 sf on the second floor and 1500 sf on the third floor would not qualify for the exception because one of the three floors is not less than 3000 sf.

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 m²) 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.*



What is a reasonable portion? Typically, one of each type of accommodation and functional space that is normally sought or used by the general public which is provided on inaccessible floors must be provided on the ground floor or an accessible floor; for example, equivalent meeting rooms, classrooms, etc.



In facilities that house a shopping center or shopping mall, or a professional office of a health care provider, the floors that are above or below an accessible ground floor and that do not house sales or rental establishments or a professional office of a health care provider, must meet the accessibility requirements of this code, except for elevator service.

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.



Exceptions 2.1 and 2.2 are only available to privately-funded buildings and do not include a waiver of all other access features required on upper or lower floors. In other words the exception is only for the elevator; everything else must comply. Many people with non-mobility (for example sight or hearing impairments) or semi-ambulatory conditions are served by the remaining access features required by this code. Many wheelchair users can get to upper floors through the use of crutches and other assistance, and can use their wheelchair brought to that floor where access to accessible restrooms, hallways, and accommodations are important.

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

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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 (929 m²) on any floor, an accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet (60 960 mm) of travel of each stair and each escalator. In existing buildings that exceed 10,000 square feet (929 m²) 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 (60 960 mm) of travel of each new stair 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.



As used in the CBC, occupancy groups were originally developed to classify fire and life safety conditions; they do not completely convey the application of relevant accessibility provisions required by the ADA. Under the ADA Standards for Accessible Design, federal accessibility requirements for assembly areas are applicable regardless of the occupancy classification of the area.

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.



Assistive listening systems are required in Group A Occupancies and other assembly uses regardless of occupancy classification.

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.



Usually, an assistive listening system (ALS) simply piggybacks on a standard public address (PA) or sound amplification system. In such instances, the sound sources (either from microphones or the audio track of a movie) are amplified and then broadcast through loudspeakers to the audience. Specialized equipment integrated into this system transmits the same signals to the ears of the person wearing an ALS receiver. There are three general types of systems, named for the method of signal transmission: induction loop (IL), FM (frequency modulation), as in FM radio, and infrared (IR).

INDUCTION LOOP (IL) SYSTEMS use a wire around the room to transmit an electromagnetic signal that is picked up by a small device – called a telecoil -- in the hearing aid. Users simply switch on this telecoil (the “T” setting) and adjust the volume of the hearing aid, if necessary. However, not all hearing aids – particularly the very small ones – have telecoils, which are mainly used for improved telephone access. For those people whose

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hearing aids do contain telecoils, an IL system is the most convenient one of all – the special “receiver” being their own hearing aids.

If your hearing aid doesn't have a telecoil, or if you don't wear a hearing aid, you can still use an IL system by wearing a receiver that has a telecoil in it. An earpiece or headset delivers the sound to your ears or through your hearing aid.

FM SYSTEMS are variations on the commercial FM radio. Radio signals are broadcast by an FM transmitter connected to the sound system used in the facility. These signals are received by individual “radios” – small pocket-size receivers tuned to the specific frequency used in the transmission. There are a number of alternative ways to make the receiver-to-ear connections; these will be fully discussed below.

INFRARED (IR) SYSTEMS operate on infrared light that is beamed from one or several IR transmitters to small, specialized receivers. There are several types of IR receivers: stethoscope-style that dangle from the ears, a headset type that fits over the ears, and a small pocket-size type similar to the FM receiver. With the first two, the receiver-to-ear connections are straightforward; they are placed directly in or on the ear. The alternative ways to make the receiver-to-ear connections with the third, pocket-style IR, is the same as with FM receivers and will be discussed below.

Each system has its advantages and disadvantages. A system that works well in a courtroom would not be appropriate for a multiplex theater; an outdoor facility needs a different system than an orchestra hall. Differences in confidentiality, interference, cost, installation requirements, and operability make it impossible to simply use one type of ALS in every place. Before choosing an ALS, an installer will consult with the location managers and do a site analysis to determine the most appropriate ALS type. Ref.: US Access Board – *ALS Bulletin for Consumers*.

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.*



Sitting in close proximity to the performing area benefits persons with hearing impairments by allowing them to lip-read and better see the facial expressions of performers.

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.”*



The term “prominent place” means a place that arriving persons would easily notice. It is helpful, though not required, to identify the location or person to contact for obtaining the system on the sign. Note that a tactile sign is not required by this item.

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.*



Hotels and conferencing centers may charge groups for use of their audiovisual equipment. These groups may generally pass this cost on to their attendees; however, these groups can not single out persons with disabilities for specific assessment of fees related to the cost of assistive listening systems.

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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.

DSA

The California Building Code (CBC) requires permanently installed assistive listening systems in those assembly areas where audible communication is integral to the use of a space (movie theaters, concert and lecture halls, playhouses, meeting rooms, etc.); where fixed seating is provided and where there may be an audio-amplification system. For other assembly areas, such as those without fixed seating, the CBC requires either a permanently installed system or electrical outlets and supplementary wiring for a portable system; this requirement, however, does not necessarily require the addition of electrical outlets.

Assembly Areas
(where audible communication is integral to the use of the space)

Room Occupancy	Audio-Amplification System Provided?	Fixed Seating Provided?	Required:
under 50	no	yes or no	outlets & wiring
	yes	no	outlets & wiring
	yes	yes or no	permanent system
50 or more	yes or no	yes or no	permanent system
	yes or no	no	outlets & wiring

1104B.3 Auditoriums, assembly halls, theaters and related facilities.

DSA

The term "related facilities" may include concert halls, gymnasiums, armories, open-air performance areas, arenas, etc.

DSA

Accessible Seating

Several different types of accessible seating are required in an assembly seating area.

Wheelchair seating areas, integrated into the general seating plan, are required so that people using wheelchairs are not isolated from other spectators or their friends and family. These seating areas must comply with Section 1104B.3.1 through 1104B.3.7.

Companion seats are required next to each wheelchair seating location. The companion seat is a conventional seat that accommodates a friend or companion. These seats must comply with Section 1104B.3.5.

Aisle seating is required to be provided in addition to the wheelchair seating areas. At least one percent of all fixed seats (but not less than one) are required to be aisle seats with no armrest, or with a removable or folding armrest, on the aisle side. These seats accommodate people who have a mobility disability but who wish to use a seat that is not a wheelchair seating location.

Semi-ambulant seating is required in addition to the spaces provided for wheelchair users. At least one percent of all fixed seats (but no fewer than two) are required to provide 24 inches clear leg room from the front edge of the seat to the nearest obstruction or to the seat immediately in

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front. These seats accommodate people who have a mobility disability but who wish to use a seat that is not a wheelchair seating location. These seats must comply with Section 1104B.3.8.

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.*



If the phrase “*where seating is provided*” is interpreted too narrowly, then barriers may be created which preclude equitable use of a facility by persons with disabilities.

In some designs, the term “*where seating is provided*” may go beyond chairs and benches and may include other types of seating such as within amphitheaters where people generally sit on the ground or at a plaza where a low seat wall is provided. In short, where seating is available or is created by construction, seating is provided; therefore accessible seating must also be provided.

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, 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.*



The intent of this section is to provide access to a variety of seating options, not to dictate or reduce the cost of seating available to persons with disabilities. Under the ADA Standards 4.33.3, wheelchair areas shall be an integral part of any fixed seating plan and shall be provided so as to provide people with physical disabilities a choice of admission prices and lines of sight comparable to those for 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**

SEATING CAPACITY	NO. OF WHEELCHAIR SEATING SPACES
4 to 25	1
26 to 50	2

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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 with the International Symbol of Accessibility (see Figure 11B.6). Signage notifying patrons of the availability of such seats shall be posted at the ticket office. Signs and markers shall comply with Section 1117B.5.1, Items 2 and 3, as applicable.



Signage notifying patrons of the availability of aisle seats shall be posted at the ticket office. If there is no ticket office, the functional equivalent would be in the lobby or at the entrance to the assembly area in a conspicuous location.

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.



Industry conventions for determining lines of sight may be adequate for facilities where the audience is not likely to stand during events or performances. However, sports arenas and other facilities where spectators may stand during events add a critical dimension to achieving lines of sight from wheelchair spaces. This can be accomplished by increasing the elevation of wheelchair seating or, in some cases, locating wheelchair seating at cross aisles.

Since the accessible seating is required to be integrated within the regular seating plan, the location for wheelchair seats must not be separated from general seating areas.

If the seating capacity exceeds 300, wheelchair spaces must be provided in more than one location. Locating all seating for persons with disabilities in one row or location may not be considered to be dispersed seating, depending on the seating configuration. Both the horizontal and vertical viewing angles should be considered for dispersed accessible seating. A variety of factors determine the quality of "vertical" sight lines, such as the distance from performance areas, row spacing, staggering of seats, and floor slope.

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 one unit vertical in 20 units horizontal (5-percent slope). 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

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ground space as shown in Figure 11B-15, and shall adjoin an egress aisle on at least one side.



A single wheelchair location space with side entry must functionally be usable as if it were within an alcove, requiring the user to maneuver back and forth to get into position, and thus 60 inches in length allows the added room to do that. A rear or front entry wheelchair space can have a shorter length (48 inches) of maneuvering area. Consideration should be given to the alignment of the wheelchair space and the adjacent companion seat which may require the rear tires of the wheelchair to project 12 inches behind the back of the companion seat.

Figure 11B-15 depicts paired wheelchair spaces requiring a total of 66 inches in width. Although Section 1104B.3.6 requires consistency with Figures 11B-15(a) and 11B-15(b), this does not mean that double spaces are required, but rather that each space needs to be minimally 33" X 48" for end entry to the wheelchair space or needs to be minimally 33" X 60" for side entry. It should be noted that although side access to the wheelchair space is allowed, fixed companion seating also must be provided adjacent to each wheelchair space.

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.*



Readily removable seats should be designed to facilitate easy, timely and frequent removal and installation.

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.*



Stages, platforms and orchestra pits are treated as raised or lowered areas within a given story and all are required to be accessible by ramp, elevator or, when allowed, by lift. In compliance with Section 1116B.2, wheelchair lifts may be used to access stages, platforms and orchestra pits used as performing areas. These areas are required to be accessible whether temporary or not. While they usually occur in A Occupancies, they also are required to be accessible in conformance with Section 1114B.1.1 in any occupancy regulated by Chapter 11B.

Generally, the accessible route to the stage shall coincide with the route for the general public per Section 1114B, to the maximum extent feasible. For example, requiring persons with disabilities to go outside the building and reenter the building to gain access the stage when others have a direct route would not be considered coinciding.

Exceptions:

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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 in 12 units horizontal (8.33 percent slope).*



This exception is typically applicable to existing buildings. For additional information related to the use of portable ramps in barrier removal projects, see the ADA regulations Section 36.304(e).

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.*



Designing spectator seating for accessibility can be more complicated when folding bleachers are utilized. The lower rows of bleacher seats in a bank of bleachers often are omitted to allow for wheelchair positions with companion seating provided on the end of the adjacent row or on portable chairs.

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:*



Under the CBC, sports facilities are required to be accessible but the code lacks specific (prescriptive) building regulations identifying relevant features required for accessible use. State and local public entities (i.e., schools, public buildings, parks and related facilities) must provide accessible programs and services, so most designers rely on nationally recognized standards and guidelines as a means of identifying necessary accessible features required by federal and California statutes. Additional information regarding accessibility at sports-related facilities can be found in the ADA and ABA Accessibility Guidelines for Buildings and Facilities (2004) available on the US Access Board website.

1. *Tennis, racquetball and handball courts.*
2. *Gymnasium floor areas and general exercise rooms.*



In exercise rooms, accessible machines and equipment should have a clear floor space positioned for transfer or for use by an individual seated in a wheelchair. Clear floor or ground spaces at exercise machines and equipment may overlap. For additional information, see the

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ADA and ABA Accessibility Guidelines for Buildings and Facilities (2004).

3. *Basketball, volleyball and badminton courts, and bowling lanes.*
4. *Swimming pool deck areas shall 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 that meets all of the following criteria:*
 - 4.1 *Have a seat that meets all of the following:*
 - 4.1.1. *The seat shall be rigid;*
 - 4.1.2. *The seat shall 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 shall 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 shall have a back support that is at least 12 inches (305 mm) tall;*
 - 4.1.5. *The seat shall have an occupant restraint for use by the occupant of the seat, and the restraint shall meet the standards for operable controls in compliance with Section 1117B.6, Items 1 through 4.*



This section of the CBC provides the mandatory technical criteria for the seat of a pool lift device.

In some cases, Title II entities under the Americans with Disabilities Act have sought to provide accessibility to individuals for whom the rigid pool lift seat was an unacceptable solution. In these cases, a sling-style seat was used to provide accessibility in addition to, and as an alternative to the required rigid seat.

- 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 (137 kg).*
 - 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 3 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.*



Lockers used in changing and dressing areas are different than lockers used to store equipment (see Section 1125B). At least one locker and no less than 1% of each type of locker must be accessible via a 36 inch clear route per Section 1115B.8.5. There must be an accessible route through the door and to all elements required to be accessible in the room. Operating mechanisms provided on accessible lockers must also meet CBC provisions for their operation

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and height. For lockers used in changing and dressing areas, refer to Section 1117B.8 for additional requirements.

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 area 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. All areas where each type of functional activity occurs shall be made accessible.*

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. **Raised or sunken areas.** *All raised or sunken areas, including dining areas, loggias and outdoor seating areas, shall be accessible. A raised platform where a head table or speaker's lectern is located shall be accessible. Open edges of raised or sunken areas shall be protected as required by Sections 1013 Guards, 1133B.8.1 Warning Curbs, or by other means as required by this code. 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*

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the main counter which is 60 inches (1525 mm) in length minimum shall be provided in compliance with Section 1122B.



In new construction and alterations (unless an Unreasonable Hardship is determined and Equivalent Facilitation is granted) accessible fixed tables (or counters) shall be distributed throughout the space or facility. In dining, banquet and bar facilities, this section requires 5% of all seating to be accessible, without regard to whether it is fixed or not. Accessible seating needs to meet the dimensional requirements for table height and the width, height, and depth of clear floor space, including the knee space underneath the table.

Where wheelchair seating areas are provided in public accommodations (including common-use employee-only areas), these seating locations must be available on an accessible route, 36 inches in clear width. Because wheelchairs extend approximately 29 inches measured from a table edge (with 19 inches of knee space under the table), an additional 36 inches needs to be provided to allow another wheelchair user to pass behind.

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 the 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.*



Religious facilities are exempt from federal ADA requirements, however no exception is provided for these types of facilities under the California Building Code due to pre-existing and more stringent state regulations. Religious practice may restrict general access to specific areas, for example a raised altar area; however access for persons with disabilities to these areas may be required. CBC requires raised areas of the facility to provide access by ramp, special access lift or elevator. Religious beliefs and practices notwithstanding, architectural barriers are not permitted at participation areas.

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.*

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Raised areas and mezzanines within a given story are required to be accessible and must comply with Section 1120B.

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.*



Assembly facilities such as meeting rooms, dining rooms, conference rooms, social and recreational rooms, etc. are required to meet the general accessibility requirements for assembly uses. Refer to related commentary at Section 1104B.3.11 for enclosed and unenclosed platforms and stages.

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



Entry doors shall comply with the requirements of Section 1133B.2. Required exits shall comply with the means of egress requirements of 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*

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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.

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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 rooms 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,*

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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.*
5. **Reading and study areas.** *At least 5 percent or a minimum of one of each element of fixed seating, tables, study carrels, computers or similar workstations shall be on an accessible route complying with Section 1114B.1.2, and shall comply with Section 1118B, "Space Allowance and Reach Ranges", Section 1122B, "Fixed or Built-in Seating, Tables, and Counters" and Section 1133B.6 "Aisles".*
6. **Check-out areas.** *At least one lane at each check-out area shall be on an accessible route complying with Section 1114B.1.2, and shall have a portion of the counter which is at least 36 inches (914 mm) in length with a maximum height of 34 inches (864 mm) above the finish floor with a 36 inch (914 mm) wide aisle on the customer side. Any traffic control or book security gates or turnstiles shall comply with Section 1133B.2.3.4.*

SECTION 1107B FACTORIES AND WAREHOUSES

Factories and warehouses shall conform to the provisions of this section, Section 1103B.1 and 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.*

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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-percent 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

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of the building at the first story.



The purpose of this requirement is to permit a person to disembark from a car and enter the building under cover. This section requires a covered entrance incorporating an accessible passenger loading zone which must also be covered. This requirement need not be met when the facility complies with all of the characteristics described in the exception.

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.

Exceptions:

1. In existing buildings, when patient bedrooms are being added or altered as part of a planned renovation of an entire wing, a department, or other discrete area of an existing medical facility, the accessible rooms provided shall comply with Section 1109B.4 and shall be consistent with the percentage of rooms required to be accessible by 1109B.3, until the number of accessible patient bedrooms in the facility equals the overall number that would be required if the facility were newly constructed. (For example, if 20 patient bedrooms are being altered in the obstetrics department of a hospital, 2 of the altered rooms must be made accessible. If, within the same hospital, 20 patient bedrooms are being altered in a unit that specializes in treating mobility impairments, all of the altered rooms must be made accessible.) Where toilet/bathrooms are part of patient bedrooms which are added or altered and required to be accessible, each such patient toilet/bathroom shall comply with Section 1109B.5.
2. In existing buildings, when patient bedrooms are being added or altered individually, and not as part of an alteration of the entire area, the altered patient bedrooms shall comply with Section 1109B.4, unless either: a) the number of accessible rooms provided in the department or area containing the altered patient bedroom equals the number of accessible patient bedrooms that would be required if the percentage requirements of Section 1109B.3 were applied to that department or area; or b) the number of accessible patient bedrooms in the facility equals the overall number that would be required if the facility were newly constructed. Where toilet/bathrooms are part of patient bedrooms which are added or altered and required to be accessible, each such toilet/bathroom shall comply with Section 1109B.5.

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.

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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 ACCESSIBILITY FOR GROUP M OCCUPANCIES

1110B.1 Sales.



By definition, a shopping center is one or more sales or rental establishments or stores. Refer to Section 1102B.

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 m²) 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 m²) 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
CHECK STANDS**

TOTAL NUMBER OF CHECK STANDS OF EACH DESIGN	NUMBER OF CHECK STANDS 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

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disabilities.”

In existing buildings, at least one checkout aisle shall be accessible in facilities with less than 5,000 square feet (465 m²) of selling space. In facilities of 5,000 square feet (465 m²) 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. A 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.*

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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.*

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 multibed 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.



Refer to the definition of *TRANSIENT LODGING* in Section 1102B.

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.*



In hotels, motels or other transient lodging facilities, Table 11B-3 indicates both the number of accessible rooms required and the number of additional accessible rooms required to have roll-in showers. All of these rooms are required to provide accessibility features identified in this

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section, including features for hearing impaired guests. Table 11B-4 indicates the number of additional rooms required to only have features for guests with hearing impairments. Features for hearing impaired guests include visual alarms and visual notification devices alerting guests of incoming telephone calls and a door knock or bell per Section 1111B.4.5.

For example, a new 150-room hotel must have a total of seven fully accessible guest rooms; a minimum of two of those seven must have roll-in showers per Table 11B-3. Those seven guest rooms must also provide the features for hearing impaired guests. In addition to those seven rooms, an additional five guest rooms need only provide features for hearing impaired guests per Table 11B-4.

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.*



An accessible clear opening width and height is required for doors and doorways to and within all guest rooms, including those not required to be accessible. This applies to all doors, including bathroom doors, which allow full user passage. Other requirements for accessible doors and doorways, for example maneuvering clearances, do not apply to guest rooms not required to be accessible.

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*

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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:

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.

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Hotel and motel bathrooms beyond those specified in Section 1111B.4 shall provide the following features:

1. All bathroom fixtures shall be 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 shall 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.

1111B.4.7 Storage areas. Fixed or built-in storage facilities located within accessible sleeping rooms or suites required by Table 11B-3 shall be accessible in the number and dimensions provided in Section 1125B.

1111B.4.8 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.

This section addresses long-term living (non-transient), publicly funded dwelling units.

In publicly funded housing projects, accessibility requirements of Chapter 11A are triggered when there are one or more units. In contrast, in privately funded housing projects, accessibility requirements of Chapter 11A are triggered when there are three or more apartments or four or more condominiums within a single building.

Additionally, the alteration or remodel requirements of Section 1134B apply to publicly funded housing projects.

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

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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

Reserved

SECTION 1113B

Reserved

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] Sections 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] Sections 1115A.6, 1123A; [for DSA-AC] Section 1133B.4

Ramps – [for HCD 1-AC] Sections 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] Sections 1116A, 1125A; [for DSA-AC] Section 1133B.8

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

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Platform (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 – [for DSA-AC] Sections 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 Sections 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 routes 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, Sections 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.

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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.

This section allows a designer to use alternative heights and clearances appropriate for small children when they are the exclusive users of a facility; Table 1115B-1 provides suggested alternative dimensions for Elementary School- and Kindergarten/Preschool-aged children. It is recommended that the application of these alternative dimensions is consistent within the selected age range.

It is important to confirm that facilities are to be used solely by children of the particular age group prior to designing to the alternative dimensions. For example, facilities that are to be used by both Elementary School-aged children and adults would not be eligible to employ the alternative heights for children; however, the designer may choose to provide additional fixtures, beyond the required number of accessible fixtures, sized to accommodate the needs of the younger users.

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

<i>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:</i>			
<p>A = Adult Dimensions (age 12 and over) E = Elementary Dimensions K = Kindergarten and Preschool Dimensions</p>			
	SUGGESTED		
DIMENSION	A (inches)	E (inches)	K (inches)
Toilet centering from wall	18	15	12

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<i>Toilet seat height/Dimensions to top of seat</i>	<i>17-19</i>	<i>15</i>	<i>10-12</i>
<i>Grab bar height (side)</i>	<i>33</i>	<i>27</i>	<i>20-22</i>
<i>Toilet paper in front of toilet</i>	<i>12 max</i>	<i>6 max</i>	<i>6 max</i>
<i>Napkin disposal in front of toilet</i>	<i>12 max</i>	<i>12 max</i>	<i>N/A</i>
<i>Dispenser or mirror height</i>	<i>40 max</i>	<i>36 max</i>	<i>32 max</i>
<i>Lavatory/sink top height</i>	<i>34 max</i>	<i>29 max</i>	<i>24 max</i>
<i>Lavatory/sink knee clearance</i>	<i>27 min</i>	<i>24 min</i>	<i>19 min</i>
<i>Urinal lip height</i>	<i>17 max</i>	<i>15 max</i>	<i>13 min</i>
<i>Urinal flush handle height</i>	<i>44 max</i>	<i>37 max</i>	<i>32 max</i>
<i>Drinking fountain bubbler height</i>	<i>36 max</i>	<i>32 max</i>	<i>30 max</i>
<i>Drinking fountain knee clearance</i>	<i>27 min</i>	<i>24 min</i>	<i>22 min</i>
<i>Ramp/stair handrail height</i>	<i>34-38</i>	<i>27</i>	<i>22</i>

For SI: 1 inch = 25.4 mm.

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).*



This item describes the requirements for wheelchair turn-around space within a multi-accommodation toilet facility. The turn-around space must be a minimum of 60 inches in diameter. The turn-around space may overlap the accessible route and clear floor spaces at fixtures and controls per Section 1115B.1.

The door to the accessible water closet compartment may swing over the turn-around space without limitation. Other doors may swing over the turn-around space up to 12 inches.

Note that the T-shaped maneuvering space is not an available design option for multi-accommodation toilet facilities.

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

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Clear floor space is specifically associated with fixtures and must remain unobstructed by doors to provide usability. Clear floor space is different from maneuvering space. Maneuvering space is associated with accessible route width and turning clearance both of which may overlap.

Exception: *An in-swinging, side-opening door to an accessible water closet compartment shall comply with Figure 11B-1B.*

3. **Accessible fixtures.** *Provide a minimum of one accessible water closet in compliance with Section 1115B.4.1. At least 5 percent of lavatories, but not less than one lavatory, shall be accessible in compliance with Section 1115B.4.3.*
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).*



This item begins by describing one of the floor spaces required within the accessible water closet compartment when the partition door is located at the end of the compartment. This floor space is required to be 48 inches in depth, measured from the front of the water closet, and 60 inches in width.

The second part of this item indicates the required location of the compartment door. By requiring the door to be diagonal to the water closet and the stile width to be a maximum of 4 inches wide, the door will be in front of the side clearance adjacent to the water closet, described in Section 1115B.4.1, Item 1. This allows a person using a wheelchair to enter the compartment and proceed directly to the side clearance area to transfer from the wheelchair to the water closet. If the compartment door is incorrectly placed in front of the water closet, a person in a wheelchair may not have enough space to maneuver to the wide side of the water closet.

- 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, and in no case shall the space immediately outside of the water closet compartment door be less than 48 inches (1219 mm) as measured perpendicular to the compartment door in its closed position.*



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This item describes several requirements pertaining to the accessible water closet compartment door and the route to the door.

First, the door is required to have a loop or U-shaped handle immediately below the latch on both sides of the door. This is to facilitate pulling the door open or closed by people with limited hand or finger dexterity.

Second, the door is required to have a latch which is flip-over style, sliding or which otherwise does not require the user to grasp or twist. This is to facilitate latching the door by people with limited hand or finger dexterity.

Third, an accessible route to the accessible water closet compartment is required to be a minimum of 44 inches wide.

The last part of this item addresses the required maneuvering space at the compartment door. This space is required to comply with general requirements for door maneuvering space except the space in front of the door shall be no less than 48 inches deep, measured perpendicular to the closed door. Section 1133B.2.4.2 requires compliance with the door maneuvering requirements illustrated in Figures 11B-26A and 11B-26B. Section 1133B.2.4.3 requires a pull-side, strike-side clearance of 18" for interior doors; these clearances are also applicable to accessible water closet compartment door. For example, the depth of maneuvering clearance on the pull side of each figure indicates 60 inches; hence 60 inches must be provided. However, where Figure 11B-26A(b) (push-side hinge approach) and Figure 11B-26B(c) (push-side latch approach) specifically allows a 44" minimum maneuvering space perpendicular to the door in the closed position, a minimum of 48" must be provided per Section 1115B.3.1, Item 4.5.

Note that in Figure 11B-26A(a) the front approach requires 12 inches of strike-side clearance on the push side where a door has both a latch and a closer. However, the US Department of Justice has indicated that a self-closing compartment door with a *gravity hinge* is not considered to be a door with a closer; hence the 12-inch clearance would not be required in this type of design.

- 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.*



This section specifies the width for an ambulatory accessible compartment, but a minimum depth for the compartment is not indicated. The minimum depth of the compartment will be affected by the installation of required grab bars on the side walls or other codes that regulate toilet compartments such as the California Plumbing Code. The side grab bars must be installed as indicated in Section 1115B.4.1.

Additionally, Federal ADA Standards 4.23.4 requires the water closet fixture in an ambulatory accessible compartment to comply with the height requirement for an accessible water closet fixture. In the CBC, the height of an accessible water closet fixture is indicated in Section 1115B.4.1, Item 4.

- 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*

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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.*



The 60-inch wheelchair turning circle and floor clearances at fixtures are allowed to overlap. The door may swing no more than 12 inches into the required wheelchair turnaround space.

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



Clear floor space is specifically associated with fixtures and must remain unobstructed by doors to provide usability. Clear floor space is different from maneuvering space. Maneuvering space is associated with accessible route width and turning clearance both of which may overlap.

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.



Fixtures required to be accessible by Sections 1115B.2 and 1115B.3 must comply with the technical requirements of this section.

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*

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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.



The 18-inch clearance requirement is an exact dimensional requirement for purposes of design. For conventional industry tolerances see Section 1101B.5.

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 extend 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 1½ 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 pounds-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.

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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-high (230 mm) 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.*



CBC Section 1115B.4.3, Items 2 & 3 provide dimensional requirements for lavatories and dimensional requirements for knee space, toe space and clear floor space for lavatories.

Item 2 –

An accessible lavatory is required to be a minimum of 17 inches in horizontal depth with the lavatory rim or counter height, whichever is higher, mounted at or below 34 inches above the finished floor. Where the lavatory is adjacent to a side wall or partition, the centerline of the lavatory must be no closer than 18 inches.

Knee clearance under the lavatory is required. The knee clearance must be at least 29 inches in height at the front edge of the lavatory or at the front, bottom edge of the countertop. This clearance may be reduced to 27 inches in height at a point 8 inches (or more) back from the front edge of the lavatory or countertop. This clearance may be further reduced to 9 inches in height at a point 11 inches (or more) back from the front edge of the lavatory or countertop as indicated in Figure 11B-1D, Knee Clearance. A straight-line interpolation may be used to determine the required heights between the specific points described above.

Toe clearance under the lavatory is required. The toe clearance must be a minimum of 9 inches in height and is measured from a point directly below the front edge of the lavatory or countertop. The toe clearance includes the entire depth of the knee clearance and may extend an additional 6 inches toward the back wall beyond the knee clearance; in total, the toe clearance must be at least 17 inches in depth. Space beyond the 6 inches may be provided, however the additional space is not considered toe space because it is not usable by a person in a wheelchair.

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.*

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Section 1115B.4.3, Items 2 & 3 provide dimensional requirements for lavatories and dimensional requirements for knee space, toe space and clear floor space for lavatories.

Item 3 –

So that a lavatory may be used by a person in a wheelchair, a 30-inch by 48-inch clear floor space arranged for forward approach must be provided at the lavatory and must adjoin or overlap an accessible route. The clear floor space may extend under the lavatory and include up to 19 inches of knee and toe space depth. Taken with the minimum required toe clearance depth of 17 inches per Item 2, the clear floor space must extend at least 17 inches and no more than 19 inches under the lavatory. Space beyond 19 inches may be provided, however the additional space is not considered clear floor space because it is not usable by a person in a wheelchair.

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 ½ 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 39 inches (991 mm) to 41 inches (1041 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.*

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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 one unit vertical in 50 units horizontal (2-percent slope) in any direction. Where drains are provided, grate openings shall be a maximum of ¼ 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 1½ 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.

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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 lbf (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 percent 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 (102 mm) 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

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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 6½ 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 6½ 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 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 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.

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Refer to Section 1115B.3.1, Item 4 for requirements at toilet compartment doors.

1115B.6 Identification symbols. Doorways leading to sanitary facilities shall be identified by a geometric symbol in compliance with this section. Geometric symbols shall be centered horizontally on the door at a height of 60 inches (1524 mm) above the finish floor or ground surface measured to the center of the symbol. Edges of signs shall be rounded, chamfered or eased. Corners of signs shall have a minimum radius of $\frac{1}{8}$ inch (3.2 mm). See Section 1117B.5.1, Item 1 for additional signage requirements applicable to sanitary facilities.

1115B.6.1 Men's sanitary facilities shall be identified by an equilateral triangle, $\frac{1}{4}$ inch (6.4 mm) thick with edges 12 inches (305 mm) long and a vertex pointing upward. The triangle symbol shall contrast with the door, either light on a dark background or dark on a light background.

1115B.6.2 Women's sanitary facilities shall be identified by a circle, $\frac{1}{4}$ inch (6.4 mm) thick and 12 inches (305 mm) in diameter. The circle symbol shall contrast with the door, either light on a dark background or dark on a light background.

1115B.6.3 Unisex sanitary facilities shall be identified by a circle, $\frac{1}{4}$ inch (6.4 mm) thick and 12 inches (305 mm) in diameter with a $\frac{1}{4}$ inch (6.4 mm) thick triangle superimposed on the circle and within the 12-inch (305 mm) diameter. The triangle symbol shall contrast with the circle symbol, either light on a dark background or dark on a light background. The circle symbol shall contrast with the door, either light on a dark background or dark on a light background.



There is no requirement for providing gender pictograms in combination with the geometric identification symbols required at doorways leading to men's, women's and unisex sanitary facilities.



When sanitary facilities have doorway openings instead of doors, such as at airports or stadiums, the geometric identification symbol should be located at the proper height adjacent to the opening or incorporated into the required tactile identification sign. For example, the geometric symbol may be used as the sign background with raised characters and Braille per 1117B.5.1, Item 1.

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 $1\frac{1}{4}$ inches to $1\frac{1}{2}$ 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 $1\frac{1}{2}$ 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.

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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.*



The distance between the grab bar and wall is an exact dimension. Many disabled people rely heavily upon grab bars to maintain balance and prevent serious falls. Many people brace their forearms between supports and walls to give them more leverage and stability in maintaining balance or for lifting. The grab bar clearance of 1½ inches required in this section is a safety clearance to prevent injuries resulting from arms slipping through the openings. It also provides adequate gripping room.

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 ⅛ inch (3.2 mm).*

1115B.8 Accessories.

1115B.8.1 Mirrors.

1115B.8.1.1 *All mirrors located above accessible lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches (1016 mm) maximum above the finish floor or ground.*

1115B.8.1.2 *When mirrors are provided at locations other than above lavatories or countertops, at least one shall be installed with the bottom edge of the reflecting surface 35 inches (890 mm) maximum above the finish floor or ground.*

1115B.8.1.3 *Mirrors in fitting and dressing areas shall comply with Section 1117B.8.*

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.*

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SECTION 1116B ELEVATORS AND PLATFORM (WHEELCHAIR) LIFTS



Elevator safety is regulated by the California Department of Occupational Safety and Health, Elevator Ride and Tramway Unit - see Title 8, California Code of Regulations for more information.

DSA regulates the usability of elevators and platform (wheelchair) lifts for persons with disabilities. Accessibility scoping requirements for elevators and lifts are located in Section 1103B; technical requirements are located in Section 1116B.

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 ½ 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 1¼ 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*

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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). Elevator floor surfaces shall comply with Section 1124B — Ground and Floor Surfaces.

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 $\frac{3}{4}$ inch (19.1 mm) and shall be raised $\frac{1}{8}$ inch (3.2 mm) plus or minus $\frac{1}{32}$ inch (0.8 mm) above the surrounding surface.

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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 $\frac{5}{8}$ 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. Contracted (Grade 2) Braille that conforms to Section 1117B.5.6 shall be located immediately below the character or symbol. A minimum clear space of $\frac{3}{8}$ 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 $\frac{1}{2}$ inch (13 mm) high. The audible signal shall be no less than 20 decibels with a frequency no higher than 1,500 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 $\frac{3}{4}$ inch (19.1 mm) in size and shall be raised $\frac{1}{8}$ inch (3.2 mm) [plus or minus $\frac{1}{32}$ 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 $1\frac{1}{2}$ 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) is required to reduce interference with car controls where the lowest button is centered at 35 inches (889 mm) above floor.



Handrails in elevator cabs are used in a different way than handrails along a walking surface such as a ramp or stairway. Handrails in elevator cabs are required to comply with the requirements of this section, not the requirements for handrails on walking surfaces.

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 lux).

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 $2\frac{1}{2}$ inches (64 mm) high by $2\frac{1}{2}$ 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.

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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 contracted 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 Platform (wheelchair) lifts. *Platform (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.



For lifts with a signed installation contract **before** May 1, 2008:

CCR, Title 8, Section 3094 provides safety regulations for Vertical Platform (Wheelchair) Lifts. This section includes requirements which address platform size and gate configurations for lifts with 90-degree egress, and additionally requires signs posted at the landings as follows:

- (1) International Symbol of Accessibility,
- (2) lift capacity,
- (3) the telephone number to call in case of emergency, and
- (4) the lift shall not be used to transport materials or equipment.

The lift capacity must not be exceeded by materials belonging to the person with disabilities, children who are the responsibility of the person with disabilities, or the attendants accompanying the person with disabilities.

Care should be taken in selecting lifts as they may be used both by people in wheelchairs and by people standing at the same time. If a lift does not provide 80 inch (2032 mm) vertical clearance, it cannot be considered part of an accessible route.



For lifts with a signed installation contract **on or after** May 1, 2008:

In addition to the accessibility requirements of the building code, Vertical Platform (Wheelchair) Lifts are required to comply with the applicable provisions of the Elevator Code, CCR, Title 8, Section 3142.1, which provides safety regulations for lifts. This section incorporates ASME A18.1-2003, sections 2 and 5 by reference, and requires compliance with CCR, Title 8, Sections 2094.2(d), 3094.2(e), 2094.2(g), and 3094.2(p).

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These regulations address technical requirements for lifts, including platform size, gate configurations for lifts with 90-degree egress, and required signage as follows:

- (1) lift capacity, and
- (2) “No Freight” prohibiting the transport of materials or equipment.

The lift capacity must not be exceeded by materials belonging to the person with disabilities, children who are the responsibility of the person with disabilities, or the attendants accompanying the person with disabilities.

Care should be taken in selecting lifts as they may be used both by people in wheelchairs and by people standing at the same time. If a lift does not provide 80 inch (2032 mm) vertical clearance, it cannot be considered part of an accessible route.

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.*



In new construction, lifts can only be used in the conditions described in Sections 1116B.2.1 through 1116B.2.4. In existing buildings, when a determination of unreasonable hardship is made by the authority having jurisdiction, a lift may be used to access another floor.

Variations are required from the Department of Occupational Safety and Health (DOSH) for wheelchair lifts over 12 feet in height.

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.*

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1116B.3 When provided as a means of egress. Platform (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, platform (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 upward and downward trips.

1116B.3.2 Platform (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 platform (wheelchair) lift does not serve more than four 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 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 percent 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

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alcoves or otherwise positioned so as to limit encroachment into pedestrian ways are permitted to project 4 inches (102 mm) 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.

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.2¹
1 or more single units	At least 50 percent of telephone units per floor but not less than one.
1 telephone bank	At least 50 percent of telephone units per bank but not less than one.
2 or more banks	At least 50 percent of telephone units per bank but not less than one. At least 1 telephone per floor shall meet the requirements for a forward reach telephone.

¹Additional public telephones may be installed at any height.

1117B.2.2 Clear floor or 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 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.

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.

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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. All telephones required to be accessible shall be equipped with a volume control. In addition, 25 percent, but never less than one, of all other public telephones provided shall be equipped with a volume control and shall be dispersed among all types of public telephones, including closed circuit telephones, throughout the building or facility. If banks of public telephones are provided, at least one in each bank 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:

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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.5.1 Items 2 and 3.*



Ensure that sufficient electrical service is available where TTYs are to be installed.

Seats are not required at TTYs, however, consideration should be given to providing seats at TTYs as reading and typing at a TTY is more suited to sitting than standing.

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.



For kitchens and break rooms in public accommodations and commercial buildings Chapter 11B requirements are applicable and direct the code user to Section 1133A.

1117B.4 Swimming pools. See Section 1104B.4.3.

1117B.5 Signs and Identification. *California's standards for signage are more stringent than Section 4.30 of the ADA Standards for Accessible Design.*

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.*

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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, Item 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.



People with visual impairments benefit from tactile signage – Braille and raised characters. They also benefit from an orderly scheme of consecutive room numbers for way-finding, though way-finding is not required by code. Tactile exit signs complying with Chapter 10 contribute to a safe environment for people with visual impairments.

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.



Directional signs are needed where the accessible route diverges from the route for the general public and should be located at decision points (for example where the path to the stairs diverges from the path to an elevator or ramp). Directional signs are not needed where paths are equal and/or readily apparent. The signage program should be designed to consider differing uses of a facility which occur at different times of the day. For example, portions of a facility may be closed in the evening; appropriate signage should be provided to give adequate direction during these hours of use in addition to the typical operational hours.

The sign program should be designed to provide the appropriate level of signage at points necessary for convenient navigation around the site. Too many signs can be confusing to everyone utilizing the site.

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, Item 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.

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1117B.5.2 Finish and contrast. Characters, symbols and their background shall have a nonglare finish. Characters and symbols shall contrast with their background, either light on a dark background or dark on a light background.



Signs are easier for persons with low vision to read when characters contrast as much as possible with their background. Other factors affecting legibility include background colors and textures, uniformity of text, shadows cast by lighting sources and surface glare.

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.



Character height is typically determined using the uppercase letter “X” (Note: the new ADA Accessibility Guidelines dated July 23, 2004 indicate an uppercase letter “I”). Character width is typically determined by measuring the width of the uppercase letter “O” at its widest point. The character width is required to be between 60 percent (3:5 ratio) minimum and 100 percent (1:1 ratio) maximum of the character height. Character stroke width is typically determined by measuring the width of the stem of the uppercase letter “I”. The character stroke width is required to be between 10 percent (1:10 ratio) minimum to 20 percent (1:5 ratio) maximum of the character height.

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).



The ADA Accessibility Guidelines dated July 23, 2004, Section 703.5.5 provides guidance for the minimum height of characters on signs based on both the height of the characters above the finish floor or ground surface and the horizontal viewing distance from which the characters are to be read.

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 $\frac{1}{32}$ inch (0.794 mm) minimum and shall be sans serif uppercase characters accompanied by contracted (Grade 2) Braille complying with Section 1117B.5.6.



Only upper case characters may be used on tactile signs (those with raised characters and Braille). The use of only uppercase characters is not required on visual signage (non-tactile).

2. **Character size.** Raised characters shall be a minimum of $\frac{5}{8}$ 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.



Pictograms include both a symbol and the field (or background) on which it is displayed. The 6-inch vertical dimension applies to the field, not the symbol. The symbol may be smaller than the

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field. The required equivalent verbal description must be placed below the pictogram, and may not intrude into the 6-inch field.



Pictograms and other symbols, such as the International Symbol of Accessibility (ISA), which are included on signs with raised characters and Braille are not required to be raised. The ISA, when included on a tactile sign, does not require any accompanying text, either visual or tactile.

- 4. Character placement.** Characters and Braille shall be in a horizontal format. Braille shall be placed a minimum of $\frac{3}{8}$ inch (9.5 mm) and a maximum of $\frac{1}{2}$ inch (12.7 mm) directly below the tactile characters; flush left or centered. When tactile text is multilined, all Braille shall be placed together below all lines of tactile text.



Signs with raised characters or symbols that are designed to be read by touch should not have sharp edges.

1117B.5.6 Braille. Contracted (Grade 2) Braille shall be used wherever Braille is required in other portions of these standards. Dots shall be $\frac{1}{10}$ inch (2.54 mm) on center in each cell with $\frac{2}{10}$ -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 $\frac{1}{40}$ inch (0.635 mm) above the background. Braille dots shall be domed or rounded.



Contracted Braille uses special characters called contractions to make words shorter. Standard English uses contractions like "don't" as a short way of writing two words, such as "do" and "not." In Braille there are many additional contractions. Some contractions stand for a whole word and other contractions stand for a group of letters within a word. In addition to contractions, the Braille code includes short-form words which are abbreviated spellings of common longer words. For example, "tomorrow" is spelled "tm", "friend" is spelled "fr", and "little" is spelled "ll" in Braille.

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.



Persons with visual impairments are trained to look in a consistent location for tactile signs. When a tactile sign is provided at a door, the sign must be located alongside the door, preferably at the latch side. When tactile signs are mounted inconsistently on surrounding wall surfaces, or mounted on the door itself, they are difficult to find and may create a safety hazard.

1117B.5.8 Symbols of accessibility.

1117B.5.8.1 International Symbol of Accessibility. The International Symbol of Accessibility shall be

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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. In existing buildings and facilities, 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.



For directional signs within the project site see Section 1127B.3.

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

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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-percent 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.*

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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.*

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.** *Controls and 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 located no more than 48 inches (1219 mm) measured from the top of the outlet box nor less than 15 inches (381 mm) measured from the bottom of the outlet box to the level of the finish floor or working platform.*

5.2 **Electrical receptacle outlets.** *Electrical receptacle outlets on branch circuits of 30 amperes or less and communication system receptacles shall be located no more than 48 inches (1219 mm) measured from the top of the receptacle outlet box or receptacle housing nor less than 15 inches (381 mm) measured from the bottom of the receptacle outlet box or receptacle housing to the level of the finish 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.

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.*

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.*

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.*

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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 ATMs 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 lbf (22.2 N).*

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 ATM 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.*

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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: ATMs unregulated as to height in Sections 1117B.7.4 through 1117B.7.4.3 above are also exempt from this section.

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.

**TABLE 11B-5
MAXIMUM REACH DEPTH FOR AUTOMATED TELLER MACHINES**

REACH DEPTH (X) (inches)	MAXIMUM HEIGHT (Y) (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

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23	46.5
24	46

See Figure 11B-5F (d).

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.

1117B.9 Accessible sinks. Sinks required to be accessible shall comply with this subsection.

1. 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).
2. Each accessible sink shall be a maximum of 6½ 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.
3. 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.

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. In addition, wheelchair passage widths shall comply with Figure 11B-5E(a) and (b) for circulation around obstructions.

1118B.2 Width for wheelchair passing. The minimum width for two wheelchairs to pass is 60 inches (1524

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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).



An accessible route is required to adjoin or overlap one full unobstructed side of a clear floor space rather than a corner.

3. **Surfaces for wheelchair spaces.** Clear floor or ground spaces for wheelchairs shall comply with Section 1124B Ground and Floor Surfaces.

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 platform (wheelchair) 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

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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.



Examples of “same services” include bar service, entertainment, carry-out, and buffet service. Examples of “same décor” include seating at or near windows and railings with views and areas designed with a certain theme.

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 one unit vertical in 50 units horizontal (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 inches 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, Chapters 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.

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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 percent 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.

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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, Chapters 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.*

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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, Chapters 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 1½ 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 2½-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.*

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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-diameter (1524 mm) 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.*

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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*

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(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.



The CBC requires limited accessibility within specific work stations. Specific work stations must provide minimum aisle widths of 36 inches if serving one side and 44 inches if serving both sides; the floor must be of a common level throughout or connected by ramp, elevator, or special access lift; and provided with a minimum 32-inch wide entrance opening.

Although not required, consideration should be given to designing work stations to include turning spaces and other accessible features whenever possible. Under the ADA, employees with disabilities are entitled to reasonable accommodations in the workplace; accommodations can include alterations to spaces within the facility. Designing employee work stations to be more accessible initially will avoid costly retrofits when current employees become temporarily or permanently disabled, or when new employees with disabilities are hired.

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.



A stable surface is one that remains unchanged by contaminants or applied force, so that when the contaminant or force is removed, the surface returns to its original condition. A firm surface

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resists deformation by either indentations or particles moving on its surface. A slip-resistant surface provides sufficient frictional counterforce to the forces exerted in walking to permit safe ambulation.

A research project sponsored by the Architectural and Transportation Barriers Compliance Board (Access Board) conducted tests with persons with disabilities and concluded that a higher coefficient of friction was needed by such persons. Although not required, a static coefficient of friction of 0.6 is recommended for accessible routes and 0.8 for ramps. Industry standard methods used to measure the static coefficient of friction include, but are not limited to, ASTM C1028 for quarry tile and ceramic tile; and ASTM D2047 (James Machine) for resilient flooring. This is applicable to indoor walking surfaces as well.

Outdoor walking surfaces are often constructed of concrete or asphalt. Where permeable surfaces such as compacted decomposed granite or similar material are part of the accessible route, stabilizing admixtures or binders can help to provide a firm, stable and slip-resistant surface. Such surfaces should be edged or otherwise contained to provide stability. Continued maintenance of these surfaces should be considered when selecting such materials.

1124B.2 Changes in level. *Changes in level up to ¼ inch (6.4 mm) may be vertical and without edge treatment [see Figure 11B-5E(c)]. Changes in level between ¼ inch (6.4 mm) and ½ inch (12.7 mm) shall be beveled with a slope no greater than one unit vertical in 2 units horizontal (50-percent slope) [see Figure 11B-5E(d)]. Changes in level greater than ½ inch (12.7 mm) shall be accomplished by means of a curb ramp, ramp, elevator or platform lift that complies with Sections 1127B.5, 1133B.5, 1116B.1 or 1116B.2, respectively.*



A change in level of ½ inch is permitted to be ¼ inch vertical plus ¼ inch beveled. However, in no case may the combined change in level exceed ½ inch unless it complies with ramp requirements.

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 ½ 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.*



The accessibility provisions of the California Building Code apply only to the design, alteration, and new construction of buildings and facilities, not to movable floor mats. However, if floor mats are built-in as part of new construction or alterations, and are part of an accessible route, they must comply with the accessibility provisions of this section and Section 1124B.1 which requires firm, stable and slip-resistant surfaces along accessible routes.

However, in addition to circumstances in which the California Building Code applies to built-in floor mats, there may also be circumstances in which ADA requirements apply to floor mats that are not built in. If movable floor mats impede access for people with disabilities, they may need to be moved or removed under Section 36.304 of the ADA Title III regulations. That section requires that a public accommodation remove barriers in existing facilities where removing them is "readily achievable," that is, easily accomplishable and able to be carried out without much difficulty or expense. Even though the requirements of the ADA Standards for Accessible Design would not apply to the mats themselves, the standards can provide helpful guidance in ensuring that mats do not constitute barriers.

1124B.4 Gratings. *If gratings are located in walking surfaces, then they shall have spaces no greater than ½ 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).*

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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.*



Self-service storage facilities are not mentioned in this section; however, they are considered to be a public accommodation requiring accessibility. The *ADA-ABA Guidelines*, Section 225.3 provides guidance for the design of self-service storage facilities, including the minimum number of units to be made accessible and the dispersion of those units within the facility. Accessible storage units must comply with accessibility requirements as applicable, including, but not limited to, requirements for accessible routes of travel, parking, entrances, clear floor space, controls and reach ranges. Where provided, public use or common use elements and facilities such as toilet rooms, drinking fountains and telephones must also comply with applicable accessibility requirements.

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.

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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.



Refer to commentary in Section 1117B.5.1.

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 one unit vertical in 12 units horizontal (8.33-percent 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 one unit vertical in 20 units horizontal (5-percent slope) within 4 feet (1219 mm) of the top and bottom of the curb ramp.

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The slope of the fanned or flared sides of curb ramps shall not exceed one unit vertical in 10 units horizontal (10-percent 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 one unit vertical in 12 units horizontal (8.33-percent slope).*



A level landing, 48" deep and at least as wide as the curb ramp, is required at the top of a curb ramp. The landing provides an area for users to exit the curb ramp and proceed along the walking surface at the top of the curb ramp.

Some designs have been proposed that reduce or omit the level top landing by providing a curb ramp with flared sides of 1:12 or less. This design is not compliant with the building code and may result in a condition where a wheelchair user can not safely turn and proceed along the intersecting walk. Per Section 1133B.7, walks and sidewalks are required to be 48" wide with a cross-slope of 2% or less. In this example, reducing or omitting the top landing of the curb ramp may result in a substandard walk width and/or a walk with a cross-slope in excess of 2%.

- 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 ¾ 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*

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least a 24 inch (610 mm) long 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 the distance from curb to back of sidewalk is too short to accommodate a ramp and a 4-foot (1219 mm) platform as in Figure 11B-20A, Case A, the sidewalk 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 the 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 a ramp is located in the center of a curb return, the crosswalk configuration must be similar to that shown on the plan to accommodate wheelchairs. See Figure 11B-22.
6. If the planting area width is equal to or greater than the ramp length, the 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 ¼-inch (6 mm) grooves approximately ¾ inch (19 mm) on center. See grooving detail, Figure 11B-20D, Case H.

SECTION 1128B PEDESTRIAN GRADE SEPARATION (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 one unit vertical in 50 units horizontal (2-percent slope). The slope of any appreciably warped walking surface shall not exceed one unit vertical in 12 units horizontal (8.33-percent 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.

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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.



The minimum number of accessible spaces required is determined by the total number of spaces provided in a specific parking lot. When multiple parking lots and/or parking structures are provided, for example at a college campus, the number of parking spaces required to be accessible is calculated separately for each parking lot or parking structure. The required number of accessible spaces is not based on the total number of parking spaces provided in all of the parking facilities provided on the site.

Accessible spaces can be provided in other lots or locations, or, in the case of parking garages, on one level only when equal or greater access is provided in terms of proximity to an accessible entrance, cost, and convenience. For example, accessible spaces required for outlying parking lots may be located in a parking lot closer to an accessible entrance. The minimum number of spaces must still be determined separately for each lot even if the spaces are to be provided in other lots or locations. Accessible spaces may be grouped on one level of a parking garage in order to achieve greater access. However, where parking levels serve different building entrances, accessible spaces should be dispersed so that access is provided to each entrance.

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:



The higher percentages required for outpatient facilities or those facilities specializing in treatment and services for persons with mobility impairments (indicated in Items 1 & 2 below) are intended primarily for visitor and patient parking. If there are separate lots for visitors or patients and employees, the 10% or 20% requirement shall be applied to the visitor/patient lot while accessible parking could be provided in the employee lot according to the general scoping requirement in Table 11B-6. If a lot serves both visitors or patients and employees, 10% or 20% of the spaces intended for use by visitors or patients must be accessible.

At medical care facilities where parking does not specifically serve an outpatient unit, only a portion of the lot would need to comply with the 10% scoping requirement. A local zoning code that requires a minimum number of parking spaces according to occupancy type and square footage may be an appropriate guide in assessing the number of spaces in the lot that "belong" to the outpatient unit. These spaces would be held to the 10% requirement while the rest of the lot would be subject to the general scoping requirement in the chart. Those accessible spaces required for the outpatient unit should be located at the accessible entrance serving the unit. This method may also be used in applying the 20% requirement to hospitals or other facilities where only a portion or unit provides specialized treatment or services for persons with mobility impairments.

- 1. Outpatient units and facilities.** Ten percent of the total number of parking spaces provided shall serve each such outpatient unit or facility.

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An outpatient facility is part of a medical care facility, such as a hospital's clinic or ambulatory care center that provides regular and continuing medical treatment to patients without overnight stay. As defined in the ADA Standards for Accessible Design, medical care facilities are facilities in which the period of stay may exceed 24 hours and physical or medical treatment or care is provided where persons may need assistance in responding to an emergency. Under these guidelines, the term "outpatient facility" does not include doctors' offices, independent clinics, or other facilities not located in medical care facilities. At outpatient facilities, 10% of the parking spaces must be accessible.

- Units and facilities that specialize in treatment or services for persons with mobility impairments.**
Twenty percent of the total number of parking spaces provided shall serve each such unit or facility.



A greater number of accessible parking spaces is required at facilities providing medical care and other services for persons with mobility impairments. The term "mobility impairments" is intended to include:

- conditions requiring the use or assistance of a brace, cane, crutch, prosthetic device, wheelchair, or powered mobility aid;
- arthritic, neurological, or orthopedic conditions that severely limit one's ability to walk;
- respiratory diseases and other conditions which may require the use of portable oxygen; or
- cardiac conditions that impose significant functional limitations.

Facilities or units that specialize in treatment or other services for persons with mobility impairments, including vocational rehabilitation and physical therapy, must have 20% of parking spaces accessible. These are facilities in which the treatment or service specifically serves persons with mobility impairments, such as spinal cord injury treatment centers, prosthetic and orthotic retail establishments, and vocational rehabilitation centers for persons with mobility impairments. This requirement does not apply to facilities providing, but not specializing in, services or treatment for persons with mobility impairments, such as general rehabilitative counseling or therapy centers. In determining whether a facility is subject to this requirement, both the nature of the services or treatment provided and the population they serve should be carefully considered.

Other facilities (including medical care facilities) that do not provide outpatient services or specialized service for persons with mobility impairments are subject only to the general scoping requirement in Table 11B-6.

**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.

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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. The loading and unloading access aisle shall be marked by a border painted blue. Within the blue border, hatched lines a maximum of 36 inches (914 mm) on center shall be painted a color contrasting with the parking surface, preferably blue or white. 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 5-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.



Width measurements of parking spaces and access aisles are made from the centerline of the stripe on one side to the centerline of the stripe on the other. See Figures 11B-18A, 11B-18B and 11B-18C.



The requirement that the hatching at the loading and unloading access aisle be a suitable contrasting color to the parking space is intended to ensure that the hatching is visually distinct from the background to which it is applied, and thus can be more easily seen. As hatching is generally recognized as a no-parking area, this difference in contrast assists drivers by providing a conspicuous visual deterrent to parking in the loading and unloading access aisle.

Asphalt is often the parking surface material used at accessible parking spaces. Asphalt is generally considered to be fairly dark in appearance. In order to provide a suitable contrasting color at the hatched area of the loading and unloading access aisle, a light color hatching must be used at locations where asphalt is the parking surface material. Although white paint is preferred (and traditionally the color most often used), its use is not mandatory under the CBC.

In order to provide a suitable contrast at the hatched area of the loading and unloading access aisle in locations where light concrete is used as the parking surface material (such as at concrete parking garages), a dark color hatching must be used. Although blue paint is preferred, its use is not mandatory under the CBC.

2. **Van space(s).** One in every eight accessible spaces, but not less than one, shall be served by a loading and unloading 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 loading and unloading access aisle shall be marked by a border painted blue. Within the blue border, hatched lines a maximum of 36 inches (914 mm) on center shall be painted a color contrasting with the parking surface, preferably blue or white. The words “NO PARKING” shall be painted on the ground within each 8-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.



When a single van accessible parking space is provided, the space must provide an 8 foot wide

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loading and unloading access aisle on the passenger side and must be identified as van accessible. When two accessible spaces are provided, they can share a single 8 foot wide loading and unloading access aisle, however, only the space with the 8 foot wide access aisle on the passenger side qualifies as a van accessible space.

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.*



Accessible parking spaces located so that the accessible route passes behind parked vehicles create a safety hazard, especially for wheelchair users. Wheelchair users traveling behind parked vehicles may be obscured from the view of drivers backing out of parking spaces, especially when passing behind high-profile vehicles. This section requires that persons with disabilities not be compelled to wheel or walk behind a vehicle other than his or her own. Where possible, it is preferable that the accessible route not be designed to pass behind any parked vehicles.

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 and access aisle.** *Surface slopes of accessible parking spaces and access aisles shall be the minimum possible and shall not exceed one unit vertical in 50 units horizontal (2-percent slope) in any direction.*



Accessible parking spaces and access aisles are required to be level (maximum 2% slope) in all directions to provide a surface for wheelchair transfer to and from vehicles. The access aisle needs to be adjacent to, and the same length as the accessible space it serves. Where two parking stalls share the same access aisle, a full depth aisle is required; in diagonal parking, the geometric layout will require additional access aisle depth to satisfy the loading area for both of the adjacent parking stalls as indicated in Figure 11B-18C.

A built-up curb ramp is not permitted in the required level area of a parking space or access aisle. However, a built-up curb ramp can be used when it does not project into the required dimensions of the access aisle or adjacent parking space. It is especially difficult to transfer from a vehicle to a wheelchair on a sloped surface.

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 a dark blue background. The sign shall not be smaller than 70 square inches (4516 mm²) 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. An additional sign or additional language below the symbol of accessibility shall state "Minimum Fine \$250."*

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Van accessible spaces complying with Section 1129B.3, Item 2 shall have an additional sign or additional language stating “Van Accessible” 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.



The required “van accessible” designation is intended to be informative, not restrictive, in identifying those parking spaces that are better suited for van use. This distinction is particularly important in parking lots where only one accessible space is required, since that space must be van accessible.



This section requires that an additional “van accessible” sign or additional text be posted below the International Symbol of Accessibility when designating an accessible parking space that will accommodate a van. A single parking sign incorporating both the International Symbol of Accessibility and the text “van accessible” may be used.

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 accessible stall or space. The sign shall not be less than 17 inches by 22 inches (432 mm by 559 mm) in size with 1 inch (25 mm) high minimum lettering which clearly and conspicuously states the following:

“Unauthorized vehicles parked in designated accessible spaces not displaying distinguishing placards or special license plates issued for persons with disabilities will be towed away at the 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.



The minimum vertical clearance of 8’-2” is applicable where required for vehicular access to and

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from standard-accessible as well as van-accessible parking stalls.

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 one unit vertical in 50 units horizontal (2-percent slope) 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 Section 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.



Even though the Code allows a curb transition between the vehicle space and loading zone, it may result in difficulty for some in transferring from wheelchair to vehicle due to difference in elevations.

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.



Where areas are specifically designed and/or designated for passenger drop-off and loading, an accessible passenger drop-off and loading zone is required and comply with the provisions of Section 1131B.2, Item 1.

Section 1131B.2, Item 2 indicates that the minimum vertical clearance at passenger drop-off and loading zones, and along at least one vehicle access route to the area from site entrances and exits, is 114 inches. This differs from the 98 inch vertical clearance requirement for accessible parking spaces. Commercial vans used for accessible transit and Paratransit may be taller than passenger vans.

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.



Valet parking does not eliminate the requirement to provide accessible parking spaces. Some vehicles may be adapted with hand controls or lack a driver's seat, and may not be operable by a valet parking attendant. The parking space requirements of Sections 1129B through 1130B apply to facilities with valet parking, including the requirement for an accessible route of travel to the entrance of the facility. In addition, when valet parking is provided, a passenger loading zone complying with Section 1132B shall be located on an accessible route of travel to the entrance of the facility.

1131B.4 Bus stop pads and shelters. See Section 1121B.2.1.

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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.*



Additional information regarding accessibility at outdoor occupancies can be found in the ADA and ABA Accessibility Guidelines for Buildings and Facilities (2004) available on the US Access Board website and the California State Parks Accessibility Guidelines (2009) available on the California State Parks website.

1132B.2 Parks and recreational areas. *The following parks and recreational areas shall comply with these regulations.*

Exceptions:

- 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.*
- 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.*
- 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.*
- Campsites.** *Campsites, a minimum of two and no fewer than three for each 100 campsites provided, shall be accessible by a level path or ramp and shall have travel routes with slopes not exceeding one unit vertical in 12 units horizontal (8.33-percent slope) to sanitary facilities. Permanent sanitary facilities serving campgrounds shall be accessible to wheelchair occupants.*
- Beaches, picnic areas.** *Beaches, picnic areas, day-use areas, vista points and similar areas shall be accessible.*
- 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.*
- Boat docks.** *Boat docks, fishing piers, etc., shall be accessible.*
- Parking lots.** *Parking lots shall be provided with accessible parking spaces and with curb cuts leading to all adjacent walks, paths or trails.*
- 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.*
- 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*

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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.*

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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.1.1.1.5 Service Entrances. In existing buildings and facilities, a service entrance shall not be the sole accessible entrance unless it is the only entrance to a building or facility (for example, in a factory or garage).

1133B.2 Doors.

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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.



This section contains provisions for hinged doors required to be accessible, however, sliding or folding doors are not specifically mentioned. Chapter 11B contains no provisions prohibiting the use of sliding or folding doors as part of an accessible route of travel. Figure 11B-33 illustrates clear opening width requirements at sliding and folding doors. Sliding or folding doors used as a component of an accessible route of travel must comply with Section 1133B.2 including provisions for height, width, hardware, floor level, thresholds and effort to operate. Refer to the ADA Standards for Accessible Design, Figure 25 for required maneuvering clearances at sliding or folding doors.

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.



An automatic door is often used by designers to provide accessibility when door closer pressure exceeds the allowed opening force limit permitted for interior or exterior doors. Heavy doors are difficult to open for persons using wheelchairs because holding the door open with one hand requires the user to let go of one wheel – not enough control remains to prevent the chair from twisting out of the intended direction. Automatic doors also are used as Equivalent Facilitation when an Unreasonable Hardship is granted due to insufficient strike-side clearance for code compliance.

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.

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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.*



Where push plates, vertical actuation bars or other similar operating devices are provided, they shall be placed in a conspicuous location. A level and clear floor or ground space for forward or parallel approach complying with Sections 1118B.4 and 1124B.1 should be provided, centered on the operating device. Doors should not swing into the required clear floor or ground space for the operating device.

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 one unit vertical in 2 units horizontal (50-percent 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.*



Manual swinging doors and gates must have maneuvering clearances complying with the following table.

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Maneuvering Clearances at Manual Swinging Doors and Gates			
Type of Use		Minimum Maneuvering Clearance	
Approach Direction	Door or Gate Side	Perpendicular to Doorway	Parallel to Doorway (beyond strike edge unless noted)
From front	Pull	60 inches (1524 mm)	18 inches (457 mm) at interior doors 24 inches (610 mm) at exterior doors
From front	Push	48 inches (1219 mm)	0 inches (0 mm) (Add 12 inches (305 mm) if both closer and latch are provided)
From hinge side	Pull	60 inches (1524 mm)	36 inches (914 mm)
From hinge side	Push	44 inches (1118 mm) (Add 4 inches (102 mm) if both closer and latch are provided)	54 inches (1372 mm) from the strike edge of the door jamb past the hinge side of the door
From latch side	Pull	60 inches (1524 mm)	24 inches (610 mm)
From latch side	Push	44 inches (1118 mm) (Add 4 inches (102 mm) if closer is provided)	24 inches (610 mm)

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 Door Opening Force. *The maximum force required to push or pull open a door shall comply with this section. Push or pull force for a hinged door shall be measured perpendicular to the door face at the door opening hardware or 30 inches (762 mm) from the hinged side, whichever is farther from the hinge. Push or pull force for a sliding or folding door shall be measured parallel to the door at the door pull or latch. Compensating devices or automatic door operators complying with Section 1133B.2.3.2 may be used to meet the maximum force limits.*

1. *Required fire doors shall have the minimum opening force allowable by the appropriate administrative authority, not to exceed 15 lbf (66.7 N).*

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2. *Other than required fire doors, interior doors shall have a maximum opening force of 5 lbf (22.2 N).*
3. *Other than required fire doors, exterior doors shall have a maximum opening force of 5 lbf (22.2 N).*

Exceptions:

1. *Exterior doors to machinery spaces including, but not limited to, elevator pits or elevator penthouses; mechanical, electrical or communications equipment rooms; piping or equipment catwalks; electric substations and transformer vaults; and highway and tunnel utility facilities.*
2. *When, at a single location, one of every 8 exterior door leafs, or fraction of 8, is a powered door, other exterior doors at the same location, serving the same interior space, may have a maximum opening force of 8.5 lbf (37.8 N). The powered leaf(s) shall be located closest to the accessible route.*
 - a. *Powered doors shall comply with Section 1133B.2.3.2. Powered doors shall be fully automatic doors complying with Builders Hardware Manufacturers' Association (BHMA) A156.10 or low energy operated doors complying with BHMA A156.19.*
 - b. *Powered doors serving a building or facility with an occupancy of 150 or more shall be provided with a back-up battery or back-up generator. The back-up power source shall be able to cycle the door a minimum of 100 cycles.*
 - c. *Powered doors shall be controlled on both the interior and exterior sides of the doors by sensing devices, push plates, vertical actuation bars or other similar operating devices complying with Section 1117B.6.*

At each location where push plates are provided there shall be two push plates; the centerline of one push plate shall be 7 inches (178 mm) minimum and 8 inches (203 mm) maximum above the floor or ground surface and the centerline of the second push plate shall be 30 inches (762 mm) minimum and 44 inches (1219 mm) maximum above the floor or ground surface. Each push plate shall be a minimum of 4 inches (102 mm) diameter or a minimum of 4 inches by 4 inches (102 mm by 102 mm) square and shall display the International Symbol of Accessibility complying with Section 1117B.5.8.1.

At each location where vertical actuation bars are provided the operable portion shall be located so the bottom is 5 inches (127 mm) maximum above the floor or ground surface and the top is 35 inches (889 mm) minimum above the floor or ground surface. The operable portion of each vertical actuation bar shall be a minimum of 2 inches (51 mm) wide and shall display the International Symbol of Accessibility complying with Section 1117B.5.8.1.

Where push plates, vertical actuation bars or other similar operating devices are provided, they shall be placed in a conspicuous location. A level and clear floor or ground space for forward or parallel approach complying with Sections 1118B.4 and 1124B.1 shall be provided, centered on the operating device. Doors shall not swing into the required clear floor or ground space.

- d. *Signage identifying the accessible entrance required by Section 1127B.3 shall be placed on, or immediately adjacent to, each powered door. Signage shall be provided in compliance with BHMA A156.10 or BHMA 156.19, as applicable.*
- e. *In addition to the requirements of Item d, where a powered door is provided in buildings or facilities containing assembly occupancies of 300 or more, a sign displaying the International Symbol of Accessibility measuring 6 inches by 6 inches (152 mm by 152 mm), complying with Section 1117B.5.8.1, shall be provided above the door on both*

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the interior and exterior sides of each powered door.

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.



In addition to the requirements of this section, designers should be aware of the Part 12, Section 12-10-202(f) requirement for lever hardware as adopted by the State Fire Marshal. The lever of lever actuated latches or locks must be curved with a return to within ½ inch of the door to prevent catching on the clothing of persons during egress.

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). If an accessible route has less than 60 inches (1524 mm) clear width, then passing spaces at least 60 inches by 60 inches (1524 mm by 1524 mm) shall be located at intervals of 200 feet (60 960 mm) maximum. 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. Handrails shall be continuous along both sides of a stairway. Intermediate handrails shall be provided as required in Section*

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1012.8.

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.



Turning handrail extensions is not permitted in new construction. In existing buildings, where handrail extensions are needed to upgrade stairs to current requirements and such an addition would create a hazardous condition, many designers turn the extension 90 degrees to eliminate this hazardous condition.

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.



The distance between the handrail and wall is an exact dimension. Many disabled people rely heavily upon handrails to maintain balance and prevent serious falls. Many people brace their forearms between supports and walls to give them more leverage and stability in maintaining balance or for lifting. The handrail clearance of 1½ inches required in this section is a safety clearance to prevent injuries resulting from arms slipping through the openings. It also provides adequate gripping room.

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 ¼ inch (3.2 mm).



Industry standard round steel pipe nominally dimensioned as 1¼" and 1½" may be used for

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handrails. A nominal pipe size of 1½” would allow for a handrail with an actual outside diameter of approximately 1⅞” maximum.

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. *Interior stairs shall have the upper approach and lower tread marked by a stripe providing clear visual contrast. Exterior stairs shall have the upper approach and all treads marked by a stripe providing clear visual contrast.*

The stripe shall be a minimum of 2 inches (50.8 mm) wide to a maximum of 4 inches (101.6 mm) wide placed parallel to, and not more than 1 inch (25.4 mm) from, the nose of the step or upper approach. The stripe shall extend the full width of the step or upper approach and shall be of a material that is at least as slip resistant as the other treads of the stair. A painted stripe shall be acceptable.



Some designers propose to provide a group of tooled grooves in lieu of the contrasting color. While grooves do provide shadow lines in some lighting conditions, these shadows can not be relied upon under all lighting conditions. In addition, the spaces between the grooves do not provide any contrast.

1133B.4.5 Stair treads, risers and nosing. *Stair treads shall be no less than 11 inches (279 mm) deep, measured from riser to riser. Stair riser heights shall be 7 inches (187 mm) maximum and 4 inches (102 mm) minimum. On any given flight of stairs, all steps shall have uniform riser height and uniform tread widths.*



While Chapter 10 may allow smaller tread depths, such as at curved stairways or where winder treads are used, the minimum tread depth required for accessibility is 11 inches.

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 beveled exposed edges.*

1133B.4.5.2 Risers. *Risers shall be solid and shall be vertical [see Figure 11B-35(a)] or sloped from the underside of the leading edge of the tread above at an angle not more than 30 degrees (0.52 rad) from the vertical [see Figure 11B-35(b)]. Open risers are not permitted.*

1133B.4.5.3 Nosing. *The radius of curvature at the leading edge (nosing) of the tread shall be no greater than ½ inch (12.7 mm). Beveling of nosings shall not exceed ½ inch (12.7 mm). Nosings shall not project more than 1¼ inches (31.8 mm) past the face of the riser below. Nosings that project beyond risers shall have the underside of the leading edge beveled at an angle not more than 30 degrees (0.52 rad) from the vertical (see Figure 11B-35(c)). The transition from the nosing to the riser shall be free of abrupt edges. All projections shall be of uniform size, including nosings at landings.*

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Because it is possible to catch the top of one's shoe on the underside of stair nosings, access compliance regulations require the underside of nosings to be free of abrupt changes – a beveled slope or non-square underside.

Exceptions:

1. In existing buildings there is no requirement to retroactively alter existing nosing projections of 1½ inches (38.1 mm) which were constructed in compliance with the building code in effect at the time of original construction.
2. 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.
3. 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 shall conform to the provisions of this section. Any accessible route of travel shall be considered a ramp if its slope is greater than one unit vertical in 20 units horizontal (5-percent slope).

1133B.5.2 Width. Ramps shall have a minimum clear width of 48 inches (1219 mm), unless required to be wider by some other provision of this code. 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 shall be one unit vertical in 12 units horizontal (8.33-percent slope). The maximum rise for any run shall be 30 inches (762 mm). Examples of ramp dimensions are as follows:

SLOPE	MAXIMUM RISE	MAXIMUM LENGTH
1:12	30 inches (762 mm)	30 feet (9144 mm)
1:13	30 inches (762 mm)	32.5 feet (9906 mm)
1:14	30 inches (762 mm)	35 feet (10668 mm)
1:15	30 inches (762 mm)	37.5 feet (11430 mm)
1:16	30 inches (762 mm)	40 feet (12192 mm)
1:17	30 inches (762 mm)	42.5 feet (12954 mm)
1:18	30 inches (762 mm)	45 feet (13716 mm)
1:19	30 inches (762 mm)	47.5 feet (14478 mm)

1133B.5.3.1 The cross slope of ramp surfaces shall be no greater than 1 unit vertical in 50 units horizontal (2-percent slope).



Curved ramps are not prohibited by Chapter 11B; however, requirements for maximum slope and cross-slope can not be exceeded.

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

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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 one unit vertical in 20 units horizontal (5-percent slope), 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 1¼ inches (32 mm) nor more than 1½ 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 ¼ inch (3 mm).



Although stairs are not required to provide a handrail extension at the inside handrail on a dogleg or switchback stair, handrail extensions are required on both sides at the top and bottom landing of each ramp segment.

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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. In addition, aisles shall comply with Figure 11B-5E(a) and (b) for circulation around obstructions.

1133B.7 Walks and Sidewalks.



There is an important distinction between a *sidewalk* and a *walk* and they are treated differently under the CBC. A sidewalk is contiguous to a street while a walk is not.

When the running slope of a walk exceeds 5%, the walk must comply with the accessibility requirements for ramps.

Sloping sidewalks in excess of 5% are excluded from ramp requirements for landings and handrails but they must comply with cross-slope and width requirements.

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 ½ 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:

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

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create an unreasonable hardship, the clear width may be reduced to 36 inches (914 mm).

1133B.7.1.1 Slopes less than 6 percent. Surfaces with a slope of less than 6-percent slope 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 slope shall be slip-resistant.



This section requires walk and sidewalk surfaces to be slip resistant; however, a specific coefficient of friction is not provided. ADA Standards Appendix Section A4.5.1 contains suggested coefficient of friction values for accessible routes and ramps.

Refer to commentary in Section 1124B.1 for additional information.

1133B.7.1.3 Surface cross slopes. Surface cross slopes shall not exceed one unit vertical in 50 units horizontal (2-percent slope).

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 ½ 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 in 20 units horizontal (5-percent slope), it shall comply with the provisions of Section 1133B.5.

1133B.7.4 Changes in level. Changes in level shall comply with Section 1124B.2.

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 400 feet (121 920 mm) maximum.

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.

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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).



Detectable warnings are provided for the benefit of persons with visual impairments where a raised curb is not available to indicate the transition from a walk to a hazardous vehicular 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.

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.

1133B.8.7 Detectable warnings at reflecting pools. The edges of reflecting pools shall be protected by railings, walls, warning curbs or detectable warnings complying with Section 1121B.3.1, Item 8(a).

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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.*

No renovation, structural repair, alteration or addition shall be undertaken which decreases or has the effect of decreasing accessibility or usability of a building or facility below the requirements for new construction at the time of renovation, structural repair, alteration or addition.

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:*



In Legal Opinion No. 94-1109, dated May 10, 1995, the Attorney General for the State of California concluded that seismic strengthening work in an existing building constitutes a “building alteration, structural repair or addition” for purposes of providing access to the building for persons with disabilities.

In existing buildings or facilities, if seismic strengthening or upgrade work does not alter the primary use or function of the building or facility and/or does not alter the design of specific rooms or spaces, then the requirement for an accessible path of travel to the area of specific alteration does not apply. However, the requirement to provide an accessible primary entrance, sanitary facilities, drinking fountains, signs and public telephones, as well as an accessible path of travel connecting these elements must be met.

In existing buildings or facilities, when the primary use or function of the building or facility and/or design of specific rooms or spaces are altered, the seismic strengthening or upgrade work must comply with all applicable accessibility regulations for new construction. In addition, the obligation to provide an accessible primary entrance to the building or facility and primary path of travel to the specific area of alteration, including sanitary facilities, drinking fountains, signs, and public telephones serving the area must be met.



US Department of Justice technical assistance letter #772, dated August 26, 1998, indicates reconstruction after a fire is considered an alteration. Section 202 defines *alteration* as “...any change, addition or modification in construction or occupancy or structural repair or change in primary function to an existing structure...” Reroofing, painting or wallpapering, or changes to mechanical and electrical systems are generally not considered to be alterations.

When the damage caused by a fire is minor and can be corrected by cleaning, re-painting or re-wallpapering, accessibility provisions based on alterations are not triggered. The accessibility requirements of Section 1134B would apply where alterations are made in the fire damaged area, for example, if wall or roof structures are being reconstructed or repaired. These requirements include: (1) reconstruction work in the specific area of fire damage that complies with all applicable accessibility provisions for new construction and (2) the obligation to provide an accessible primary entrance to the building or facility and primary path of travel to the specific area of alteration, including sanitary facilities, drinking fountains, signs, and public telephones that serve the area.

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An addition to a site, such as a new patio or playground, may require an accessible path of travel from the site arrival point to and throughout supporting restrooms (a pair of each type available to and serving the new addition), drinking fountains, signs, public telephones (if available), to the area of new work.



Code changes to the CBC do not generally “trigger” non-compliance with the code in existing buildings unless the building or facility is undergoing alteration.

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.*



When a building or facility undergoes a change of occupancy, the entire building or facility (or portion thereof) is considered the area of alteration. The entire building or facility (or portion thereof) must be upgraded to comply with current accessibility requirements for new construction.

When a building or facility undergoes an addition or alteration, whether limited or broad in scope, the specific area of addition or alteration must comply with all applicable accessibility regulations for new construction. The obligation to provide an accessible primary entrance to the building or facility and primary path of travel to the specific area of alteration, including sanitary facilities, drinking fountains, signs, and public telephones serving the area must be met subject to the exceptions below.

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 2008 amount is \$119,958.65.) 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.*

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The valuation threshold is adjusted each year in January using the Engineering News Record 20 Cities Construction Cost Index. Valuation thresholds for the current year and recent years dating back to 2000 are made available on the Division of the State Architect web site at: http://www.dsa.dgs.ca.gov/Access/ud_threshold.htm.

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 (279m²) 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 m²) 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:*



New access regulations made effective after the date of last construction may require owners to upgrade their facility to comply with the current regulations during alterations, structural repair or additions.

- 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.*

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- 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*

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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.*