

**BUILDING STANDARDS COMMISSION**

2525 Natomas Park Drive, Suite 130  
Sacramento, California 95833  
(916) 263-0916 FAX (916) 263-0959

**BUILDING STANDARDS BULLETIN 2004-01**

**DATE:** MARCH 11, 2004

**TO:** INTERESTED PARTIES

**SUBJECT:** CHANGES TO CALIFORNIA ACCESSIBILITY  
BUILDING STANDARDS – 2001 CALIFORNIA  
BUILDING CODE

The Division of the State Architect, Access Compliance section writes building standards for persons with disabilities. The application of those standards is for publicly funded buildings, structures, sidewalks, curbs and related facilities, and privately funded buildings, structures, sidewalks, curbs and related facilities used by the general public. The 2001 California Building Code (CBC), which became effective November 1, 2002, contains several changes in the state's accessibility standards from the 1998 edition. Those changes are indicated with double vertical lines located in the outside margins of the pages in the 2001 CBC.

This bulletin is being provided in an effort to address compliance concerns, and to assist designers, builders and code enforcers in identifying the changes, incorporating those changes into plans and construction, and in enforcing California accessibility regulations.

In order to highlight changes in these standards, we have listed the code sections that contain significant modifications in the 2001 edition of the CBC. This bulletin does not replace the standards in the CBC, but rather may be used as a reference to it.

**Chapter 1 - Administration**

**101.17.11 (1.2) Application:** The previous code (1998 CBC) indicated that publicly funded buildings that were (1) "occupied 50 percent or more" and (2) "for periods in excess of two years" shall be accessible to persons with disabilities. These two references were removed for the 2001 edition of the CBC due to the passage of Senate Bill 1242 which revised California Government Code Section 4451. This section now requires that all buildings, structures and facilities that are leased, rented, contracted, sublet or hired by any municipal county, state division of government, or by a special district, be accessible to and usable by persons with disabilities without regard to the percentage of the building that is occupied, or to the amount of time occupied.

## Chapter 10 – Means of Egress

**1003.2.8.6, 1003.2.8.6.1: Tactile Exit Signs:** Tactile (raised characters and Braille) exit signs are now required on the wall adjacent to the latch side at 60" above the finish floor to the centerline of the sign at:

- Each grade-level exterior exit door.
- Each exit door that leads directly to a grade-level exterior exit by means of a stairway or ramp.
- Each exit door that leads directly to a grade-level exterior exit by means of an exit enclosure or an exit passageway.
- Each exit access door from an interior room or area to a corridor or hallway that is required to have a visual exit sign and each exit door through a horizontal exit.

The previous code (1998 CBC) contained no provisions for tactile exit signs.

**1003.3.1.10 Special Egress-Control Devices:** A tactile sign (raised characters and Braille) is now required, in addition to the sign required on doors equipped with time-delayed egress hardware. The sign shall read: KEEP PUSHING. THIS DOOR WILL OPEN IN \_\_ SECONDS. ALARM WILL SOUND. The previous code (1998 CBC) contained no provisions for the tactile features for special egress control device signage.

**1003.3.3.13.1, 1133B.4.3 Tactile stair level identification sign:** Tactile (raised characters and Braille) stair level identification signs are now required at each floor level landing in all enclosed stairways in buildings two or more stories in height.

## Chapter 11B – Accessibility to Public Buildings, Public Accommodations, Commercial Buildings and Publicly-Funded Housing

**1103B.1 Building Accessibility, General:** An accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet of travel of each stairs and each escalator for buildings that exceed 10,000 square feet on any floor. The previous code (1998 CBC) contained no provisions addressing the distance between stairs and elevators/ramps.

**1104B.4.3 (4) Participation Areas (Swimming Pool Lifts):** Requirements for the lift device that assists persons entering a swimming pool have been expanded. New requirements include seat design with backrests, armrests, and restraints. In addition, the device shall be capable of unassisted operation from both the deck and the water, and be designed to support a weight of 300 pounds, etc.

**1111B.4.3 Access to beds:** A minimum clear space under beds for a personal lift device is now required. 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 from each end of the bed, vertically not less than 7 inches, and not less than 30 inches deep. The previous code (1998 CBC) contained no requirements for a minimum clear space under beds for a personal lift device.

**Table 11B-3 Additional accessibility required in guest rooms or suites (hotels, motels, inns, dormitories, resorts, homeless shelters, halfway houses, transient group homes and similar places of transient lodging):** A minimum of one fully accessible room with a roll-in shower is now required for 1 to 25 rooms. A minimum of one fully accessible room, plus one additional fully accessible room with a roll-in shower is now required for 26 to 50 rooms. The previous code (1998 CBC) required guest rooms with roll-in showers only when there were a total of 51 or more guest rooms.

**1115B.1 General:** Previous (1998 CBC) exception #2 which allowed equivalent facilitation for either a lateral or front-transfer toilet stall as shown in Figure 11B-1C was removed because such toilet stall designs are unusable by some persons with disabilities.

**1115B.2.1 through 1115B.2.1.6.2: Bathing and toilet facilities:** Accessibility requirements have been moved from the California Plumbing Code to the CBC Accessibility Chapter 11B in an ongoing effort to consolidate accessibility provisions into one location.

**1115B.6.2.4.1 Water controls:** A 5 lbs maximum force to operate water controls at showers is now required. This is consistent with other maximum force standards which require 5 lbs. The previous code (1998 CBC) contained no provisions addressing the maximum effort to operate shower controls.

**1115B.7.1 (3): Accessible water closet compartment:** Accessible toilet stalls are now required to be 60" wide minimum. The previous code (1998 CBC) contained no provisions addressing the overall width of the stall.

**Table 1115B-1: Suggested Dimensions for Children's Use:** The previous code (1998 CBC) contained an error which has been corrected. The 1998 CBC incorrectly listed 29" maximum for lavatory/sink knee clearances. This dimension has been corrected to 27" minimum.

**1116B Elevators:** Accessibility requirements have been moved from CBC Chapter 30 to CBC Chapter 11B Accessibility in an ongoing effort to consolidate accessibility provisions into one location.

**1116B.3. through 1116B.3.3 Wheelchair lifts:** Platform lifts determined to be a component in a means of egress system are now required to have back-up power. In addition, these sections regulate how lifts can be used to provide access to and from wheelchair seating spaces in assembly areas. The previous code (1998 CBC) contained no provisions specifically addressing wheelchair lifts used in a means of egress system.

**1117B.5 through 1117B.5.10 Signs and Identification:** General design clarifications such as spacing for Braille cells, and signage for assistive listening systems and volume control telephones have been added.

**1117B.5.11 through 1117B.5.11.3 Cleaner air symbol, Conditions of use:** New standards are now 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. Use of the cleaner-air symbol is voluntary. Use is strictly for publicly funded facilities or any facilities leased or rented by the State of California. The previous code (1998 CBC) contained no provisions for those who are adversely impacted by airborne chemicals or particulate(s) and/or the use of electrical fixtures and or devices.

**1127B.5 Item 8, 1131B.4, 1133B.8.3, 1133B.8.4, 1133B.8.5 Detectable Warnings:** The code now requires that detectable warnings and directional surfaces are to be evaluated, and only products approved by the Division of the State Architect shall be installed (due to the passage of Assembly Bill 685 which added California Government Code Section 4460).

*NOTE: DSA has issued an information bulletin regarding the evaluation of detectable warnings and directional surfaces. The bulletin is available at the following internet address:*

[http://www.documents.dgs.ca.gov/dsa/pubs/detectable\\_warning\\_approval\\_11-1-02.pdf](http://www.documents.dgs.ca.gov/dsa/pubs/detectable_warning_approval_11-1-02.pdf)

**1129B.4 Item 1, 2 & 3 Accessible Parking Required:**

- The words "NO PARKING" 12" high in white letters are now required to be painted on the ground within all accessible parking space loading and unloading access aisles. The previous code (1998 CBC) contained no provision indicating a visual deterrent to parking in the loading and unloading access aisle.
- Loading and unloading access aisles for accessible van parking spaces are now required to be placed on the passenger side of the vehicle as the vehicle is going forward into the parking space. The previous code (1998 CBC) contained no provisions indicating which side of the van the loading and unloading access aisle was to be located.
- No ramp may encroach into any portion of the required loading and unloading access aisle or the parking space. The previous code (1998 CBC) provided an exception allowing the ramp to encroach 5'-0", which has been eliminated (to comply with ADA).
- Accessible parking space loading and unloading access aisles shall not exceed 2% slope in any direction (to comply with ADA). The previous code (1998 CBC) did not address the maximum slope of the loading and unloading access aisle.

**1133B.2.4.5, 1133B.2.5.3 Recessed Doors:** Doors recessed 8" or more shall provide minimum strike edge clearances, see Figure 11B-33 (a). The previous code (1998 CBC) did not address where strike side clearances had to be provided in relationship to doors that were recessed.

**1133B.2.5 Closer-effort to operate doors:** The maximum effort to operate exterior doors is now 5 pounds. The previous code (1998 CBC) allowed 8½ pounds for exterior door effort, which was difficult for some users.

**1133B.2.5.1 Door Closer:** From the open position of 70 degrees to 3" from the latch, the sweep period shall be adjusted to be 3 seconds minimum (to comply with ADA). The previous code (1998 CBC) did not address a minimum sweep period.

**1133B.4.2.6.2 Handrail orientation:** At least one handrail shall be in the direction of stair run and perpendicular to the direction of the stair nosing. The previous code (1998 CBC) did not address handrail direction, or angle to the direction of the stair nosing.

**1133B.5.2.1 Ramp width:** This section clarifies that pedestrian ramps shall have a minimum width of 48". The previous code (1998 CBC) contained a 48" minimum ramp width requirement in an adjacent code section regarding only "entrances" and did not address exits.

**1133B.5.4.1 Landings:** Ramp landings shall now be level (to comply with ADA). The previous code (1998 CBC) did not address the slope of landings.

**1133B.5.7.1 Guardrails:** Guardrail requirements are now incorporated into the accessibility regulations. The previous code (1998 CBC) only referenced CBC Section 509 which contained the criteria for guardrails. This change incorporates Section 509's guardrail criteria.

**1133B.8.6.3 Free-standing signs:** Signs mounted on posts or pylons less than 80" above the finished floor must now contain rounded or eased edges and the corners shall have a radius of 0.125" minimum. The previous code (1998 CBC) did not address free-standing sign edges that were below 80" (subject to pedestrian impact).

**1134B.2.1:** Signs are now added to the items that must comply when alterations, structural repairs or additions are made to existing buildings or facilities. Signage for accessibility includes sanitary facility signage (1115B.5), room/space identification signage (1117B.5.1 Item 2), direction and informational signage (1117B.5 Item 3), tactile exit signage (1003.2.8.6), visual exit signage (1003.2.8.1) accessibility signage (1117B.5.1 Item 4), stair level identification signage (1133B.4.3 & 1003.3.3.13.1), cleaner air symbols (1117B.5.11), symbols of accessibility (1117B.5.8), special egress control device signage (1003.3.1.10), parking signage (1129B.5), text telephone signage (1117B.2.9.3), assistive listening device signage (1104B.2 Item 4), accessible seating signage (1104B.3.4 Item 1), accessible checkstand signage (1110B.1.3), evacuation assistance signage (1114B.2.2.5), volume control telephone signage (1117B.2.8), public entrance/ major junction signage (1127B.3), non-accessible exit warning signage (1133B.1.1.1.1 Exception 2), turnstiles/pedestrian control signage (1133B.2.3.4), free-standing signs (1133B.8.6.3). The previous code (1998 CBC) did not contain "signs" as one of the items that must comply when alterations, structural repairs or additions are made to existing buildings or facilities.

**1134B.3.1 General Accessibility for Entrances, Exits and Paths of Travel (existing buildings) Automatic Doors:** This section indicates that when an automatic door opener is utilized to operate a pair of doors, at least one door shall be 32" clear with the door positioned at an angle of 90 degrees from its closed position. The previous code (1998 CBC) did not address minimum clear door width specifically for existing buildings utilizing an automatic door opener.

As an added tool, DSA has developed, for state-funded projects under their jurisdiction, *Preliminary Plan Review Guidelines* and an *Access Plan Review Checklist* that may be useful to building code enforcement personnel. These documents are available on the internet for free download at:

[http://www.documents.dgs.ca.gov/dsa/pubs/official\\_comments.pdf](http://www.documents.dgs.ca.gov/dsa/pubs/official_comments.pdf)

Also, the CBC accessibility regulations with accompanying DSA notations of editorial or typographical errors (identified by asterisk with footnotes) are available on the internet for free download at:

<http://www.documents.dgs.ca.gov/dsa/pubs/regulations.pdf>

Questions regarding this bulletin should be directed to DSA at (916) 445-8100. Code interpretations should be referred to the local building officials.

## **Text Additions, Deletions, or Modifications to the 1998 CBC**

The following is a text description which indicates in detail, the above mentioned additions, deletions, or modifications to the 1998 CBC, that were incorporated for the 2001 CBC.

California amendments brought forward with modification: *All such language appears in Italics, modified language is underlined.*

New California amendment: *California language appears underlined and in Italics.*

Repealed Text: *Shown as ~~Strikeout~~.*

### ***101.17.11 DSA/AC-Access Compliance, Division of the State Architect.***

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

*NOTE: See Government Code commencing with Section 4450.*

*1.2 All buildings, structures and facilities, ~~occupied 50 percent or more, which that~~ are leased, rented, contracted, sublet or hired ~~for periods in excess of two years~~ by any municipal county, or state division of government, or by a special district. ~~The determination as to whether the building, structure or facility is occupied 50 percent or more shall be based on the usable floor area as defined in this code.~~*

*1003.2.8.6 [For SFM & DSA/AC] Tactile Exit Signage.* *For the purposes of Section 1003.2.8.6, the term “tactile exit signs” shall mean those required signs that comply with Section 1117B.5.1 – B.*

*1003.2.8.6.1 [For SFM & DSA/AC] Where Required.* *Tactile exit signs shall be required at the following locations:*

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

*A. “EXIT STAIR DOWN”*

*B. “EXIT RAMP DOWN”*

*C. “EXIT STAIR UP”*

*D. “EXIT RAMP UP”*

- 3. Each exit door which leads directly to a grade-level exterior exit by means of an exit enclosure or an exit passageway shall be identified by a tactile exit sign with the words, “EXIT ROUTE.”*

*4. Each exit access door from an interior room or area to a corridor or hallway which is required to have a visual exit sign, shall be identified by a tactile exit sign with the words, “EXIT ROUTE.”*

- 5. Each exit door through a horizontal exit shall be identified by a sign with the words, “TO EXIT.”*

1003.3.1.10 Special egress-control devices.

*[For SFM & DSA/AC] A tactile sign shall also be provided in Braille and raised characters, which complies with Section 1117B.5.1 – B.*

1003.3.3.13 Stairway identification.

1003.3.3.13.1 [For SFM & DSA/AC] Tactile Stair Level Identification Sign. Tactile stair level identification signs which comply with 1117B.5.1 – B 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.

## **SECTION 1103B - BUILDING ACCESSIBILITY**

### **1103B.1 General.**

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

EXCEPTIONS: 1. This section shall not apply with respect to stairs used solely for emergency egress.

### **1104B.4.3 Participation areas.**

4. Swimming pool deck areas must be accessible and an assisting device provided to assist persons with disabilities in gaining entry into the pool. and a mechanism to assist persons with disabilities in gaining entry into the pool and in exiting from the pool shall be provided. Such a mechanism may consist of a swimming pool lift device as long as the device meets all of the following criteria:

4.1 Have a seat that meets all of the following:

4.1.1 The seat must be rigid;

4.1.2 The seat must be not less than 17-inches ( mm) and no more than 19-inches ( mm), inclusive of any cushioned surface which might be provided, above the pool deck;

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

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

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

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

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

4.4 Be designed to have a live-load capacity of no less than 300 pounds.

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

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

**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 from each end of the bed, vertically not less than 7-inches, and not less than 30-inches deep.

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

<u>TOTAL NUMBER OF ROOMS</u>	<u>FULLY ACCESSIBLE ROOMS</u>	<u>PLUS ADDITIONAL ACCESSIBLE ROOMS WITH ROLL-IN SHOWERS</u>
1 to 25	<del>1</del> - <u>0</u>	<del>0</del> - <u>1</u>
26 to 50	<del>2</del> - <u>1</u>	<del>0</del> - <u>1</u>
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
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	

**1115B.7 Toilet Facilities.**

**1115B.7.1 Multiple-accommodation toilet facilities.** Multiple- accommodation toilet facilities shall have the following:

**3. Accessible water closet compartment.** A water closet fixture located in a compartment shall provide a minimum 28 inch- wide (711 mm) clear space from a fixture or a minimum 32 inch-wide (813 mm) clear space from a wall at one side of the water closet. The other side of the water closet shall provide 18 inches (457 mm) from the centerline of the water closet to the wall. The stall shall be a minimum of 60-inches (1524 mm) wide. A minimum 48-inch-long (1219 mm) clear space shall be provided in front of the water closet if the compartment has an end-opening door (facing the water closet). A minimum 60 inch- long (1524 mm) clear space shall be provided in a compartment with the door located at the side. Grab bars shall not project more than 3 inches (76 mm) into the clear spaces as specified above.

**1115B.1 General.** Sanitary 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 conform to the following requirements, except as specifically exempted in other portions of this code.

**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 shall 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. Equivalent facilitation would provide for either a lateral or front transfer toilet stall. See Figure 11B-1C.~~

3. 2. Equivalent facilitation would require doors to have a clear, unobstructed opening of at least 30 inches (762 mm).

**1115B.7.1 Multiple-accommodation toilet facilities.** Multiple- accommodation toilet facilities shall have the following:

3. **Accessible water closet compartment.** A water closet fixture located in a compartment shall provide a minimum 28 inch- wide (711 mm) clear space from a fixture or a minimum 32 inch-wide (813 mm) clear space from a wall at one side of the water closet. The other side of the water closet shall provide 18 inches (457 mm) from the centerline of the water closet to the wall. The stall shall be a minimum of 60-inches (1524 mm) wide. A minimum 48-inch-long (1219 mm) clear space shall be provided in front of the water closet if the compartment has an end-opening door (facing the water closet). A minimum 60 inch- long (1524 mm) clear space shall be provided in a compartment with the door located at the side. Grab bars shall not project more than 3 inches (76 mm) into the clear spaces as specified above.

**TABLE 1115B-1-SUGGESTED DIMENSIONS FOR CHILDREN’S USE  
MOUNTING HEIGHTS**

The Division of the State Architect, Office of Regulation Services 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:

A = Adult Dimensions (age 12 and over)  
E = Elementary Dimensions  
K = Kindergarten and Pre-school Dimensions

DIMENSION		SUGGESTED		
		A (Inches)	E (Inches)	K (Inches)
Lavatory/sink clearance	knee	<del>29 max.</del> <u>27 min.</u>	24 <del>max.</del> <u>min</u>	19 <del>max.</del> <u>min</u>

~~\*Deviates from code requirements and requires a written finding of unreasonable hardship.~~

**1116B.3 Special Access (wheelchair) Lifts.**

1116B.3.1 Platform lifts used, as a component in a means of egress system shall conform to the requirements of Section 1116B.3.

1116B.3.2 Platform lifts shall be provided with standby power or with self-rechargeable battery power that provides sufficient power to operate all platform lift functions for a minimum of five (5) upward and 5 (downward) trips.

1116B.3.3 When used to comply to Section 1116B.2.2 wheelchair viewing position line-of-sight and dispersion requirements of Chapter 11B and the maximum distance to a point where the occupant has a choice of two directions of travel to an exit shall not exceed 30-feet (9144 mm) from the point where the

wheelchair occupant is seated. Where a platform lift is used as the accessible means of egress, the maximum distance shall include the vertical travel distance of the platform lift.

#### **1117B.5.1 Signs and Identification**

**A. 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 1117B.5. The addition of or replacement of signs and/or identification devices shall not trigger any additional path of travel requirements.

**B. Identification signs.** When signs identify permanent rooms and spaces of a building or site, they shall comply with 1117B.5.2, 1117B.5.3, 1117B.5.5, 1117B.5.6, and 1117B.5.7.

**NOTE:** For other means of egress signs and identification provisions adopted by SFM & DSA/AC see, Chapter 10, Sections 1003.2.8.1 for Visual Exit Signs, 1003.2.8.2 for Where Required, 1003.2.8.3 for Graphics, 1003.2.8.4 for Illumination, 1003.2.8.5 for Power Source, 1003.2.8.6 for Tactile Exit Signage, 1003.2.8.6.1 for Where Required, 1003.3.3.13.1 for Tactile Stair Level Identification Sign, and 1003.3.1.10 for Special Egress-control Devices.

**C. Directional and informational signs.** When signs direct to or give information about permanent rooms and space of a building or site, they shall comply with 1117B.5.2, 1117B.5.3, and 1117B.5.4.

**D. Accessibility signs.** When signs identify, direct or give information about accessible elements and feature of a building or site, they shall include the appropriate symbol of accessibility and shall comply with 1117B.5.2 and, when applicable, 1117B.5.8.

~~**1117B.5.5**~~ **1117B.5.2 Finish and Contrast.** Characters, ~~and~~ symbols and their background shall have a non-glare finish. ~~of signs shall be eggshell, matte, or other non glare finish.~~ Characters and symbols shall contrast with their background, either light characters on a dark background or dark characters on a light background.

**1117B.5.3 Proportions.** Characters ~~Letters and numbers~~ on signs shall have a width-to-height ratio of between 3:5 and 1:1 and a stroke width to height ratio between 1:5 and 1:10.

**1117B.5.4 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 ~~1121B~~ 1133B.8.6, the minimum character height shall be 3-inches (76 mm).

~~**1117B.5.6**~~ **1117B.5.5 Raised characters and pictorial symbol signs.** When raised characters ~~or pictorial symbols~~ are ~~used~~ required, they shall conform to the following requirements. ~~When pictorial symbols (pictograms) are used on such signs, they shall conform to the following requirements.~~

**1. Character ~~Letter and Number~~ Type.** Characters, ~~letters, and numbers~~ on signs shall be raised 1/32-inch (0.794 mm) minimum and shall be sans-serif uppercase characters accompanied by Grade 2 Braille complying with 1117B.5.6.

**2. Raised Character size.** Raised characters shall be ~~at least a minimum of~~ 5/8-inch (15.9 mm) high, but no higher than 2-inches and a maximum of 2-inches (51 mm) high.

**3. Pictorial symbol signs (pictograms).** Pictorial symbol signs (pictograms) shall be accompanied by the ~~equivalent~~ verbal description placed directly below the pictogram. The ~~border~~ outside dimension of the pictogram field shall be a minimum of 6-inches (152 mm) in height.

~~1117B.5.2~~ **1117B.5.6 Braille symbols.** Contracted Grade 2 Braille shall be used wherever Braille symbols ~~are specifically~~ is required in other portions of these standards. Dots shall be 1/10-inch (2.54 mm) on centers in each cell with 2/10-inch (5.08 mm) space between cells, measured from the second column of dots in the first cell to the first column of dots in the second cell. Dots shall be raised a minimum of 1/40-inch (0.635 mm) above the background.

~~1117B.5.9~~ **1117B.5.7 Mounting location and height.** Where permanent identification is provided for rooms and spaces, ~~raised letters shall be provided and shall be accompanied by Braille in conformance with Section 1117B.5.6 Signs~~ signs shall be installed on the wall adjacent to the latch outside of the door. Where there is no wall space on the latch side, including at double leaf doors, signs shall be placed on the nearest adjacent wall, preferably on the right.

Mounting height shall be 60-inches (1524 mm) above the finish floor to the centerline 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.

**NOTE:** See also Section 1115B.5 for additional signage requirements applicable to sanitary facilities.

~~1117B.5.1~~ **1117B.8 International Symbols of Accessibility.**

~~1117B.5.1.1~~ **1117B.5.8.1 Design.** Symbols of accessibility. The International Symbol of Accessibility shall be the standard used to identify facilities that are accessible to and usable by physically disabled persons as set forth in these building standards and as specifically required in this section. See Figure 11B-6.

**EXCEPTION:** Signs need not be provided for facilities within an adaptable dwelling unit, or within an accessible patient or guest room.

~~1117B.5.1.2~~ **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 special signs and identification necessary to complement decor or unique design when it is determined that such signs and identification provide adequate direction to persons with disabilities.

~~1117B.5.7~~ **1117B.5.8.1.2 Entrance signs.** All building entrances that are accessible to and usable by persons with disabilities shall be identified with a minimum of at least one standard sign International Symbol of Accessibility and with additional directional signs, utilizing the symbol, at junctions, ~~as required,~~ to be visible to persons along approaching pedestrian ways

~~1117B.5.8~~ **1117B.5.8.1.3 Information posted.** Buildings that have been remodeled to 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.

**1117B.5.8.2 International Symbol of TTY.** Where the International Symbol of TTY 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 hand set 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.5.11 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.5.12 Cleaner-Air Sign. “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.5.12.1 Color and size of symbol. The symbol shall be used when the following minimum conditions are met. The symbol, which shall include the text “Cleaner Air” as shown, shall be displayed either as a negative or positive image within a square which is a minimum of 6-inches on each side. The symbol may be shown in black and white or in color. When color is used, it shall be Federal Blue (Color No. 15090 Federal Standard 595B) on white or white on Federal Blue, there shall be at least a 70% color contrast between the background of the sign from the surface that it is mounted on.

Strictly for publicly funded public facilities or any facilities leased or rented by State of California. Not concessionaires.

1117B.5.12.2 Conditions of Use. Use of the cleaner-air symbol is voluntary. The Clean 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, or 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 non-irritating, non-toxic products will be used in cleaning, maintenance, disinfection, pest management, or for any minimal touch-ups, which 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 non-toxic 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, which may impact the Cleaner-Air designation. The log shall also include the product label as well as the material Safety Data Sheets (MSDS).

1117B.5.12.3 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.

#### **1127B.5 Curb Ramps**

**1127B.5 (8) Detectable Warnings** [Editorial: Also shown at 1131B.4, 1133B.8.3, 1133B.8.4, 1133B.8.5]

NOTE: Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Service's, 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.

### **SECTION 1129B - ACCESSIBLE PARKING REQUIRED**

**1129B.4 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 outlined 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 minimum length of each parking space shall be 18 feet (5486 mm). The words NO PARKING shall be painted on the ground within each five-foot (1524 mm) loading and unloading access aisle. This notice shall be painted in white letters no less than 12-inches (154 mm) high and located so that it is visible to traffic enforcement officials. See Figure 11B-18A.

2. **Van space(s).** One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches (2438 mm) wide minimum placed on the side opposite the driver's side when the vehicle is going forward into the parking space and shall be designated van accessible as required by Section 1129B.5. All such spaces may be grouped on one level of a parking structure. The words NO PARKING shall be painted on the ground within eight-foot (2438 mm) loading and unloading access aisle. This notice shall be painted in white letters no less than 12-inches (154 mm) high and located so that it is visible to traffic enforcement officials. See Figure 11B-18B.

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. This maximum cross slope in any direction of an accessible parking space and adjacent access aisle shall not exceed 2%.

~~**EXCEPTIONS:** 1. Ramps located at the front of accessible parking spaces may encroach into the length of such spaces when such encroachment does not limit the capability of a person with a disability to leave or enter a vehicle, thus providing equivalent facilitation. See Figures 11B-18A through 11B-18C.~~

~~2- 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.~~

~~3- 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.~~

## **SECTION 1133B - GENERAL ACCESSIBILITY FOR ENTRANCES, EXITS AND PATHS OF TRAVEL**

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) as amended.*

**1133B.2.5 Closer-effort to operate doors.** *Maximum effort to operate doors shall not exceed ~~8 1/2~~ 5-pounds (38 N) for exterior doors and 5-pounds (22 N) for interior doors, such pull or push effort being applied at right angles to hinged doors and at the center plane of sliding or folding doors. Compensating devices or automatic door operators may be utilized to meet the above standards. When fire doors are required, the maximum effort to operate the door may be increased to the minimum allowable by the appropriate administrative authority, not to exceed 15 pounds (66.72 N).*

1133B.2.5.1 Door Closer. *If 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.2.5.3 Recessed Doors. *Where the plane of the doorway is offset 8 or more inches (205 mm) from any obstruction within 18-inches (455 mm) measure laterally on latch side, the door shall be provided with maneuvering clearance for front approach. See Figure 11B.33(a)*

**1133B.5.2 Width.** *The width of ramps shall be as required for stairways and exits. ~~All other~~ Pedestrian ramps shall have a minimum width of 48 inches (1219 mm).*

[Editorial: The "Pedestrian ramps shall have a minimum width of 48 inches" text was relocated from the last sentence in 1133B.5.2.2.]

### **1133B.4.2 Handrail Configuration.**

#### **1133B.4.2.6 Handgrips.**

1133B.4.2.6.2 *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.4.3 [For SFM & DSA/AC] Tactile Stair Level Identification Sign. *Tactile stair level identification signs which comply with 1117B.1-B, 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.

~~Stairway signage. Stairways in buildings that are of two or more stories in height must comply with the requirements of Section 1117B.5.2.~~

~~The information shall be presented using raised Arabic numerals and raised braille symbols which conform to Section 1117B.5.2. The sign shall be located 5 feet (1524 mm) above the finished floor. The sign shall be located immediately adjacent to the door on the strike side.~~

~~The sign is to be positioned in such a manner as to provide uninterrupted visibility when the door is in the open or closed position.~~

### **1133B.5 Ramps.**

**1133B.5.4.1 Location of landings.** Level ramp ~~Landings~~ shall be provided at the top and bottom of each ramp. Intermediate landings shall be provided at intervals not exceeding 30 inches (762 mm) of vertical rise and at each change of direction. Landings are not considered in determining the maximum horizontal distance of each ramp. Landing shall be level as specified in the definition of "level area" in Section 202.

**1133B.5.7.1 Guardrails.** Ramps and landings open on one or both sides shall have guardrails as required by ~~509~~ this Section.

~~509.1~~ **1133B.5.7.2 Where Required.** Unenclosed floor and roof openings, open and glazed sides of stairways, aisles, landings and ramps, balconies or porches, which are more than 30 inches (762 mm) above grade or floor below, and roofs used for other than service of the building shall be protected by a guardrail. Guardrails shall be provided at the ends of aisles where they terminate at a fascia of boxes, balconies and galleries.

**EXCEPTION:** Guardrails need not be provided at the following locations:

1. On the loading side of loading docks.
2. On the auditorium side of a stage, raised platforms and other raised floor areas such as runways, ramps and side stages used for entertainment or presentation. Along the side of an elevated-walking surface when used for the normal functioning of special lighting or for access and use of other special equipment. At vertical openings in the performance area of stages.
3. Along vehicle service pits not accessible to the public.

**1133B.5.7.3 Height.** The top of guardrails shall not be less than 42 inches (1067 mm) in height.

**EXCEPTIONS:** 1. The top of guardrails for Group R, Division 3 and Group U, Division 1 Occupancies and interior guardrails within individual dwelling units, Group R, Division 3 congregate residences and guest rooms of Group R, Division 1 Occupancies may be 36 inches (914 mm) in height.

2. The top of guardrails on a balcony immediately in front of the first row of fixed seats and that are not at the end of an aisle may be 26 inches (660 mm) in height.

3. The top of guardrails for stairways, exclusive of their landings, may have a height as specified in Sections 1120A.4.1 and 1133B.4.1.1 ~~1003.3.3.6 [For DSA/AC] 1003.3.3.6a~~ for handrails.

Where an elevation change of 30 inches (762 mm) or less occurs between an aisle parallel to the seats (cross aisle) and the adjacent floor or grade below, guardrails not less than 26 inches (660 mm) above the aisle floor shall be provided.

**EXCEPTION:** Where the backs of seats on the front of the cross aisle project 24 inches (610 mm) or more above the adjacent floor of the aisle, a guardrail need not be provided.

The top of guardrails at the ends of aisles terminating at the fascia of boxes, balconies and galleries shall extend for the width of the aisle and be no closer than 42 inches (1067 mm) to the closest surface of the aisle where there are steps and 36 inches (914 mm) otherwise.

~~509.3~~ **1133B.5.7.4 Openings.** Open guardrails shall have intermediate rails or an ornamental pattern such that a sphere 4 inches (102 mm) in diameter cannot pass through.

**EXCEPTIONS:** 1. The open space between the intermediate rails or ornamental pattern of guardrails in areas of commercial and industrial-type occupancies which are not accessible to the public may be such that a sphere 12 inches (305 mm) in diameter cannot pass through.

2. The triangular openings formed by the riser, tread and bottom element of a guardrail at the open side of a stairway may be of such size that a sphere 6 inches (152 mm) in diameter cannot pass through.

For guardrail requirements at grandstands, bleachers or other elevated seating facilities, see Section ~~1133B.5.7.5.4~~ ~~1008.5.7~~.

~~1008.5.7~~ **1133B.5.7.5 Perimeter Guardrails.** Perimeter guardrails, enclosing walls or fencing shall be provided for all portions of elevated seating facilities that are more than 30 inches (762 mm) above grade or the floor. Construction of guardrails shall comply with the requirements of Section 1133B.5.7 ~~509~~ and

Table 16-B. Guardrails shall be 42 inches (1067 mm) in height measured vertically above the leading edge of the tread adjacent walking surface, adjacent walking surface or adjacent seatboards.

**EXCEPTION:** Guardrails at the front of the front row of seats, which are not located at the end of an aisle and where there is no cross aisle, may have a height of 26 inches (660 mm) and need not meet the 4-inch-maximum (102 mm) spacing specified in Section 1133B.5.7 ~~509~~; however, a midrail shall be installed.

The open vertical space between footboards and seats shall not exceed 9 inches (229 mm) when footboards are more than 30 inches (762 mm) above grade.

#### **1133B.8.6 - Protruding Objects**

**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 below 80-inches 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.

### **SECTION 1134B - ACCESSIBILITY FOR EXISTING BUILDINGS**

**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.

**1134B.3 General Accessibility for Entrances, Exits and Paths of Travel.**

**1134B.3.1 Automatic doors.** *When an automatic door operator is utilized to operate a pair of doors, at least one of the doors shall provide a clear, unobstructed opening width of 32 inches (813 mm) with the door positioned at an angle of 90 degrees from its closed position.*

**EXCEPTIONS:** *1. In existing buildings the following shall apply:*

*1.1 Where the occupant load is less than 10, except Group I, Division 1 Occupancies, doorways may be 30 inches (762 mm) in clear width.*

*1.2 Where occupant load is greater than 10 and it is determined that compliance with Section 1120A.2.3 would create an unreasonable hardship, doorways may be 30 inches (762 mm) in clear width.*

*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 101.17.11, Item 4.*