

# **REVISION RECORD FOR THE STATE OF CALIFORNIA**

## **ERRATA**

**January 1, 2014**

### **2013 Title 24, Part 2, Vol. 1, California Code of Regulations**

#### **General Information:**

1. The date of this erratum is for identification purposes only. See the History Note Appendix on the back side or accompanying page.
2. This erratum is issued by the California Building Standards Commission in order to correct nonsubstantive printing errors or omissions in California Code of Regulations, Title 24, Part 2, Vol. 1, of the 2013 *California Building Code*. Instructions are provided below.
3. Health and Safety Code Section 18938.5 establishes that only building standards in effect at the time of the application for a building permit may be applied to the project plans and construction. This rule applies to both adoptions of building standards for Title 24 by the California Building Standards Commission, and local adoptions and ordinances imposing building standards. An erratum to Title 24 is a nonregulatory correction because of a printing error or omission that does not differ substantively from the official adoption by the California Building Standards Commission. Accordingly, the corrected code text provided by this erratum may be applied on and after the stated effective date.
4. You may wish to retain the superseded material with this revision record so that the prior wording of any section can be easily ascertained.

#### **Title 24, Part 2, Vol. 1**

<b>Remove Existing Pages</b>	<b>Insert Buff Colored Pages</b>
iii and iv	iii and iv
5 and 6	5 and 6
15 and 16	15 and 16
23 and 24	23 and 24
55 and 56	55 and 56
63 through 72	63 through 72
81 and 82	81 and 82
89 through 92	89 through 92
117 and 118	117 and 118
157 and 158	157 and 158
189 and 190	189 and 190
309 and 310	309 and 310
339 and 340	339 and 340
373 through 376	373 through 376
397 through 400	397 through 400
461 and 462	461 and 462
467 through 472	467 through 472
475 through 478	475 through 478
487 and 488	487 and 488
493 and 494	493 and 494
497 and 498	497 and 498
507 and 508	507 and 508
511 and 512	511 and 512
531 through 534	531 through 534
537 and 538	537 and 538
569 through 572	569 through 572

575 and 576	575 and 576
623 and 624	623 and 624
635 and 636	635 and 636
639 through 642	639 through 642
647 and 648	647 and 648
665 through 668	665 through 668
677 and 678	677 and 678
681 through 684	681 through 684

## PREFACE

This document is Part 2 of 12 parts of the official triennial compilation and publication of the adoptions, amendments and repeal of administrative regulations to *California Code of Regulations, Title 24*, also referred to as the *California Building Standards Code*. This part is known as the *California Building Code*.

The *California Building Standards Code* is published in its entirety every three years by order of the California legislature, with supplements published in intervening years. The California legislature delegated authority to various state agencies, boards, commissions and departments to create building regulations to implement the state's statutes. These building regulations, or standards, have the same force of law, and take effect 180 days after their publication unless otherwise stipulated. The *California Building Standards Code* applies to occupancies in the State of California as annotated.

A city, county, or city and county may establish more restrictive building standards reasonably necessary because of local climatic, geological or topographical conditions. Findings of the local condition(s) and the adopted local building standard(s) must be filed with the California Building Standards Commission to become effective and may not be effective sooner than the effective date of this edition of the *California Building Standards Code*. Local building standards that were adopted and applicable to previous editions of the *California Building Standards Code* do not apply to this edition without appropriate adoption and the required filing.

Should you find publication (e.g., typographical) errors or inconsistencies in this code or wish to offer comments toward improving its format, please address your comments to:

California Building Standards Commission  
2525 Natomas Park Drive, Suite 130  
Sacramento, CA 95833-2936  
  
Phone: (916) 263-0916  
Fax: (916) 263-0959  
  
Web Page: [www.bsc.ca.gov](http://www.bsc.ca.gov)

## ACKNOWLEDGEMENTS

The 2013 *California Building Standards Code* (Code) was developed through the outstanding collaborative efforts of the Department of Housing and Community Development, the Division of State Architect, the Office of the State Fire Marshal, the Office of Statewide Health Planning and Development, the California Energy Commission, the California Department of Public Health, the California State Lands Commission, the Board of State and Community Corrections, and the California Building Standards Commission (Commission).

This collaborative effort included the assistance of the Commission's Code Advisory Committees and many other volunteers who worked tirelessly to assist the Commission in the production of this Code.

*Governor Edmund G. Brown Jr.*

*Members of the California Building Standards Commission*

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For questions on California state agency amendments, please refer to the contact list on the following page.

# CALIFORNIA CODE OF REGULATIONS, TITLE 24

## California Agency Information Contact List

### Board of State and Community Corrections

www.bscc.ca.gov .....(916) 445-5073  
Local Adult Jail Standards  
Local Juvenile Facility Standards

### California Building Standards Commission

www.bsc.ca.gov .....(916) 263-0916

### California Energy Commission

www.energy.ca.gov .....**Energy Hotline** (800) 772-3300  
Building Efficiency Standards  
Appliance Efficiency Standards  
Compliance Manual/Forms

### California State Lands Commission

www.slc.ca.gov .....(562) 499-6312  
Marine Oil Terminals

### California State Library

www.library.ca.gov .....(916) 654-0266

### Department of Consumer Affairs:

**Acupuncture Board**  
www.acupuncture.ca.gov .....(916) 515-5200  
Office Standards

**Board of Pharmacy**  
www.pharmacy.ca.gov .....(916) 574-7900  
Pharmacy Standards

**Bureau of Barbering and Cosmetology**  
www.barbercosmo.ca.gov .....(916) 952-5210  
Barber and Beauty Shop,  
and College Standards

**Bureau of Electronic and Appliance Repair,  
Home Furnishings and Thermal Insulation**  
www.bearhfti.ca.gov .....(916) 999-2041  
Insulation Testing Standards

**Structural Pest Control Board**  
www.pestboard.ca.gov .....(800) 737-8188  
Structural Standards

**Veterinary Medical Board**  
www.vmb.ca.gov .....(916) 263-2610  
Veterinary Hospital Standards

### Department of Food and Agriculture

www.cdfa.ca.gov  
Meat & Poultry Packing Plant Standards (916) 654-0509  
Dairy Standards (916) 654-0773

### Department of Housing and Community Development

www.hcd.ca.gov .....(916) 445-9471  
Residential- Hotels, Motels, Apartments,  
Single-Family Dwellings; and  
Permanent Structures in Mobilehome &  
Special Occupancy Parks

(916) 445-3338  
Factory-Built Housing, Manufactured Housing &  
Commercial Modular

Mobilehome- Permits & Inspections  
Northern Region-(916) 255-2501  
Southern Region-(951) 782-4420

(916) 445-9471  
Employee Housing Standards

### Department of Public Health

www.dph.ca.gov .....(916) 449-5661  
Organized Camps Standards  
Public Swimming Pools Standards

### Division of the State Architect

www.dgs.ca.gov/dsa .....(916) 445-8100

### Access Compliance

**Structural Safety**  
Public Schools Standards  
Essential Services Building Standards  
Community College Standards

### State Historical Building Safety Board

Alternative Building Standards

### Office of Statewide Health Planning and Development

www.oshpd.ca.gov .....(916) 440-8356  
Hospital Standards  
Skilled Nursing Facility Standards &  
Clinic Standards  
Permits

### Office of the State Fire Marshal

osfm.fire.ca.gov .....(916) 445-8200  
Code Development and Analysis  
Fire Safety Standards

ence documents, the text of these building standards shall govern.

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

**1.1.7.3 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 requirements shall prevail.

**1.1.8 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 1.1.8.1. The effective date of amendments, additions or deletions to this code by a city, county, or city and county filed pursuant to Section 1.1.8.1 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 18941.5 for Building Standards Law, Health and Safety Code Section 17958 for State Housing Law or Health and Safety Code Section 13869.7 for Fire Protection Districts.

#### **1.1.8.1 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, Division of Codes and Standards, P.O. Box 1407, Sacramento, CA 95812-1407 or 1800 3rd Street, Room 260, Sacramento, CA 95811.

**1.1.9 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.

**1.1.10 Availability of codes.** At least one complete 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. Each state department concerned and each city, county, or city and county shall have an up-to-date copy of the code available for public inspection. See Health and Safety Code Section 18942(d)(1) and (2).

**1.1.11 Format.** This part fundamentally adopts the International Building Code by reference on a chapter-by-chapter basis. When a specific chapter of the International Building Code is not printed in the code and is marked "Reserved", such chapter of the International Building Code is not adopted as a portion of this code. When a specific chapter of the International Building Code is marked "Not adopted by the State of California" but appears in the code, it may be available for adoption by local ordinance.

**Note:** Matrix Adoption Tables at the front of each chapter may aid the code user in determining which chapter or sections within a chapter are applicable to buildings under the authority of a specific state agency, but they are not to be considered regulatory.

**1.1.12 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 1.2 BUILDING STANDARDS COMMISSION**

**1.2.1 Specific scope of application of the agency responsible for enforcement, the enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.**

### **1. State buildings for all occupancies.**

**Application**—State buildings (all occupancies), including buildings constructed by the Trustees of the California State University and the Regents of the University of California where no state agency has the authority to adopt building standards applicable to such buildings.

**Enforcing agency**—State or local agency specified by the applicable provisions of law.

**Authority cited**—Health and Safety Code Section 18934.5.

**Reference**—Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

### **2. University of California, California State Universities and California Community Colleges.**

**Application**—Standards for lighting for parking lots and primary campus walkways at the University of California, California State Universities and California Community Colleges.

**Enforcing agency**—State or local agency specified by the applicable provisions of law.

**Authority cited**—Government Code Section 14617.

**Reference**—Government Code Section 14617.

**3. Existing state-owned buildings, including those owned by the University of California and by the California State University.**

**Application**—Building seismic retrofit standards including abating falling hazards of structural and nonstructural components and strengthening of building structures. See also Division of the State Architect.

**Enforcing agency**—State or local agency specified by the applicable provisions of law.

**Authority cited**—Health and Safety Code Section 16600.

**Reference**—Health and Safety Code Sections 16600 through 16604.

**4. Unreinforced masonry-bearing wall buildings.**

**Application**—Minimum seismic strengthening standards for buildings specified in Appendix Chapter A1 of the California Existing Building Code, except for buildings subject to building standards adopted pursuant to Health and Safety Code (commencing) with Section 17910.

**Enforcing agency**—State or local agency specified by the applicable provisions of law.

**Authority cited**—Health and Safety Code Section 18934.6.

**Reference**—Health and Safety Code Sections 18901 through 18949.

**1.2.1.1 State building.** For purposes of this code, a “state building” is a structure for which a state agency or state entity has authority to construct, alter, enlarge, replace, repair or demolish.

**1.2.1.2 Enforcement.** [CSU, UC, Judicial Council and CDCR] State agencies or state entities authorized to construct state buildings may appoint a building official who is responsible to the agency for enforcement of the provisions of the California Building Standards Code.

**Exception:** State buildings regulated by other sections of this code remain the enforcement responsibility of the designated entities.

**1.2.1.3 Enforcement. Reserved for DGS.**

**1.2.2 Alternative materials, design and methods of construction and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and

that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

**1.2.2.1 Research reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

**1.2.2.2 Tests.** Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.

**1.2.3 Adopting agency identification.** The provisions of this code applicable to buildings identified in this section will be identified in the Matrix Adoption Tables under the acronym BSC.

### SECTION 1.3 BOARD OF STATE AND COMMUNITY CORRECTIONS

**1.3.1 Specific scope of application of the agency responsible for enforcement, the enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.**

**Application**—Local detention facilities.

**Enforcing agency**—Board of State and Community Corrections.

**Authority cited**—Penal Code Section 6030; Welfare and Institutions Code Sections 207.1, 210 and 885.

**Reference**—Penal Code Section 6030; Welfare and Institutions Code Sections 207.1, 210 and 885.

**1.3.2 Adopting agency identification.** The provisions of this code applicable to buildings identified in this section will be identified in the Matrix Adoption Tables under the acronym BSAC.

### SECTION 1.4 DEPARTMENT OF CONSUMER AFFAIRS

**1.4.1 Specific scope of application of the agency responsible for enforcement, the enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.**

**1. Board of Barbering and Cosmetology.**

alternative building standards as provided in this section.

**Authority cited**—Education Code Section 81053.

**Reference**—Education Code Sections 81052, 81053, and 81130 through 81147.

#### 1.9.2.2.1 Applicable administrative standards.

##### 1. Title 24, Part 1, California Code of Regulations:

- 1.1. Sections 4-301 through 4-355, Group 1, Chapter 4.

##### 2. Title 24, Part 2, California Code of Regulations:

- 2.1. Sections 1.1 and 1.9.2 of Chapter 1, Division I.
- 2.2. Sections 102.1, 102.2, 102.3, 102.4, 102.5, 104.9, 104.10, 104.11, and 106.1 of Chapter 1, Division II.

**1.9.2.2.2 Applicable building standards.** California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 11, and 12, California Code of Regulations.

The Division of the State Architect-Structural Safety/Community Colleges [DSA-SS/CC] adopts the following building standards in Title 24, Part 2:

Chapters 2 through 10, 12, 14, 15, 16, 17A, 18A, 19, 20, 21, 22, 23, 24, 25, 26, 30, 31, 32, 33, 34, 35, and Appendix J.

**1.9.2.2.3 Amendments.** Division of the State Architect-Structural Safety/Community Colleges amendments in this code appear preceded with the acronym [DSA-SS/CC].

#### Exceptions:

1. Chapters 17A, and 18A—Amendments appearing in these chapters without an acronym have been co-adopted by DSA-SS, DSA-SS/CC, and OSHPD.
2. Chapter 34, Sections 3417-3423—DSA-SS/CC adopts these sections without the use of the DSA-SS/CC acronym.

**1.9.2.2.4 Reference to other chapters.** Where reference is made within this code to sections in Chapters 17 and 18, the respective sections in Chapters 17A and 18A shall apply instead.

## SECTION 1.10 OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

**1.10.1 OSHPD 1.** Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

**Application**—General acute care hospitals and acute psychiatric hospitals, excluding distinct part units or distinct part freestanding buildings providing skilled nursing or intermediate care services. For structural regulations: Skilled nursing facilities and/or intermediate care facil-

ties except those skilled nursing facilities and intermediate care facilities of single-story, Type V, wood or light steel-frame construction.

**Enforcing agency**—Office of Statewide Health Planning and Development (OSHPD). The office shall enforce the Division of the State Architect-Access Compliance regulations and the regulations of the Office of the State Fire Marshal for the above stated facility types.

#### 1.10.1.1 Applicable administrative standards.

1. Title 24, Part 1, California Code of Regulations: Chapters 6 and 7.

2. Title 24, Part 2, California Code of Regulations: Sections 1.1 and 1.10, Chapter 1, Division I, and Sections 101–105.1.2, portions of Section 105.2 as indicated in the adoption matrix and Sections 105.3–116, Chapter 1, Division II.

**1.10.1.2 Applicable building standards.** California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 9 and 11.

The provisions of Title 24, Part 2, as adopted and amended by OSHPD, shall apply to the applications listed in Section 1.10.1.

OSHPD 1 adopts the following building standards in Title 24, Part 2:

Chapters 2 through 10, 12, 14, 15, 16A, 17A, 18A, 19A, 20, 21A, 22A, 23, 24, 25, 26, 30, 31, 32, 33, 34A, 35, Appendix J and Appendix L.

**1.10.1.3 Identification of amendments.** For applications listed in Section 1.10.1, amendments appear in this code preceded with the acronym [OSHPD 1], unless the entire chapter is applicable.

**1.10.1.4 Reference to other chapters.** Where reference is made within this code to sections in Chapters 16, 17, 18, 19, 21, 22 and 34, the respective sections in Chapters 16A, 17A, 18A, 19A, 21A, 22A and 34A shall apply instead.

**Authority**—Health and Safety Code Sections 127010, 127015, 1275 and 129850.

**References**—Health and Safety Code Sections 19958, 127010, 127015, 129680, 1275 and 129675 through 130070.

**1.10.2 OSHPD 2.** Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

**Application**—Skilled nursing facilities and intermediate care facilities, including distinct part skilled nursing and intermediate care services on a general acute care or acute psychiatric hospital license, provided either are in a separate unit or a freestanding building. For structural regulations: Single-story, Type V skilled nursing facility and/or intermediate care facilities utilizing wood or light steel-frame construction.

**Enforcing agency**—Office of Statewide Health Planning and Development (OSHPD). The office shall also enforce the Division of the State Architect-Access Compliance

*regulations and the regulations of the Office of the State Fire Marshal for the above-stated facility type.*

#### **1.10.2.1 Applicable administrative standards.**

1. Title 24, Part 1, California Code of Regulations: Chapter 7.
2. Title 24, Part 2, California Code of Regulations: Sections 1.1 and 1.10, Chapter 1, Division I, and Sections 101–103, portions of Section 104 and 105 as indicated in the adoption matrix and Sections 106–116, Chapter 1, Division II.

#### **1.10.2.2 Applicable building standards.** California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 9, and 11.

The provisions of Title 24, Part 2, as adopted and amended by OSHPD, shall apply to the applications listed in Section 1.10.2.

OSHPD 2 adopts the following building standards in Title 24, Part 2:

Chapters 2 through 10, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 30, 31, 32, 33, 34, 35, Appendices J and L.

#### **1.10.2.3 Identification of amendments.** For applications listed in Section 1.10.2, amendments appear in this code preceded with the acronym [OSHPD 2].

**Authority**—Health and Safety Code Sections 127010, 127015, 1275 and 129850.

**References**—Health and Safety Code Sections 127010, 127015, 1275 and 129680.

#### **1.10.3 OSHPD 3.** Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

**Application**—Licensed clinics and any freestanding building under a hospital license where outpatient clinical services are provided.

**Enforcing agency**—Local building department.

#### **1.10.3.1 Applicable administrative standards.**

1. Title 24, Part 1, California Code of Regulations: Chapter 7.
2. Title 24, Part 2, California Code of Regulations: Sections 1.1 and 1.10, Chapter 1, Division I, and portions of Section 101 as adopted, Sections 102–103, portions of Sections 104–107 as indicated in the adoption matrix, and Sections 108–116, Chapter 1, Division II.

#### **1.10.3.2 Applicable building standards.** California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, and 11.

The provisions of Title 24, Part 2, as adopted and amended by OSHPD, shall apply to the applications listed in Section 1.10.3.

OSHPD 3 adopts the following building standards in Title 24, Part 2:

Chapter 12.

**1.10.3.3 Identification of amendments.** For applications listed in Section 1.10.3, amendments appear in this code without the acronym [OSHPD 3]. Adoptions are shown in the adoption matrix.

**Authority**—Health and Safety Code Sections 127010, 127015 and 1226.

**References**—Health and Safety Code Sections 127010, 127015, 129885 and 1226, Government Code Section 54350 and State Constitution Article 11, Section 7.

#### **1.10.4 OSHPD 4.** Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

**Application**—Correctional treatment centers.

**Enforcing agency**—Office of Statewide Health Planning and Development (OSHPD). The office shall also enforce the Division of the State Architect—Access Compliance regulations and the regulations of the Office of the State Fire Marshal for the above-stated facility types.

#### **1.10.4.1 Applicable administrative standards.**

1. Title 24, Part 1, California Code of Regulations: Chapter 7.
2. Title 24, Part 2, California Code of Regulations: Sections 1.1 and 1.10, Chapter 1, Division I, and Sections 101–105.1.2, portions of Section 105.2 as indicated in the adoption matrix and Sections 105.3–116, Chapter 1, Division II.

#### **1.10.4.2 Applicable building standards.** California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 9, and 11.

The provisions of Title 24, Part 2, as adopted and amended by OSHPD, shall apply to the applications listed in Section 1.10.4.

OSHPD 4 adopts the following building standards in Title 24, Part 2:

Chapters 2 through 10, 12, 14, 15, 16A, 17A, 18A, 19A, 20, 21A, 22A, 23, 24, 25, 26, 30, 31, 32, 33, 34A, 35 and Appendices J and L.

**1.10.4.3 Identification of amendments.** For applications listed in Section 1.10.4, amendments appear in this code preceded with the acronym [OSHPD 4], unless the entire chapter is applicable.

**1.10.4.4 Reference to other chapters.** Where reference is made within this code to sections in Chapters 16, 17, 18, 19, 21, 22 and 34, the respective sections in Chapters 16A, 17A, 18A, 19A, 21A, 22A and 34A shall apply instead.

**Authority**—Health and Safety Code Sections 127010, 127015 and 129790.

**References**—Health and Safety Code Sections 127010, 127015, 1275 and 129675 through 130070.

## DIVISION II

# SCOPE AND ADMINISTRATION

*Note:* Sections adopted or amended by state agencies are specifically indicated by an agency banner or indicated in the Matrix Adoption Table.

### PART 1—SCOPE AND APPLICATION

#### SECTION 101 GENERAL

**[A] 101.1 Title.** These regulations shall be known as the Building Code of **[NAME OF JURISDICTION]**, hereinafter referred to as "this code."

**[A] 101.2 Scope.** The provisions of this code shall apply to the construction, alteration, relocation, 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.

**Exception:** Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the *California Residential Code*.

**[A] 101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted.

**[A] 101.3 Intent.** 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, sanitation, adequate light and ventilation, energy conservation, and 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.

**[A] 101.4 Referenced codes.** The other codes listed in Sections 101.4.1 through 101.4.6 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

**[A] 101.4.1 Gas.** The provisions of the *California Mechanical Code* shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in this code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

**[A] 101.4.2 Mechanical.** The provisions of the *California Mechanical Code* shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

**[A] 101.4.3 Plumbing.** The provisions of the *California Plumbing Code* shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system. The provisions of the *International Private Sewage Disposal Code* shall apply to private sewage disposal systems.

**[A] 101.4.4 Property maintenance.** The provisions of the *International Property Maintenance Code* shall apply to existing structures and premises; equipment and facilities; light, ventilation, space heating, sanitation, life and fire safety hazards; responsibilities of owners, operators and occupants; and occupancy of existing premises and structures.

**[A] 101.4.5 Fire prevention.** The provisions of the *California Fire Code* shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression, automatic sprinkler systems and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

**[A] 101.4.6 Energy.** The provisions of the *California Energy Code* shall apply to all matters governing the design and construction of buildings for energy efficiency.

**Exception:** [OSHPD 1, 2, & 4] Not required by OSHPD.

#### SECTION 102 APPLICABILITY

**[A] 102.1 General.** Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

**[A] 102.2 Other laws.** The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

**[A] 102.3 Application of references.** References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

**[A] 102.4 Referenced codes and standards.** The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.4.1 through 102.4.4.

**[A] 102.4.1 Conflicts.** Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

**[A] 102.4.2 Provisions in referenced codes and standards.** Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code or the California Codes listed in Section 101.4, the provisions of this code or the California Codes listed in Section 101.4, as applicable, shall take precedence over the provisions in the referenced code or standard.

**102.4.3 Code References.** *[OSHPD 1, 2, 3 & 4, DSA-SS & DSA-SS/CC]* All reference to International Codes or other similar codes in referenced standards shall be replaced by equivalent provisions in the California Building Standards Codes.

**102.4.4 Reference in Standards.** *[OSHPD 1, 2, 3 & 4, DSA-SS & DSA-SS/CC]* All references listed in reference standards shall be replaced by referenced standards listed in Chapter 35 of this code, where applicable, and shall include all amendments to the reference standards in this code.

**[A] 102.5 Partial invalidity.** In the event that any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

**[A] 102.6 Existing structures.** The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *California Building Code* or the *California Fire Code*, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

## PART 2—ADMINISTRATION AND ENFORCEMENT

### SECTION 103 DEPARTMENT OF BUILDING SAFETY

**[A] 103.1 Creation of enforcement agency.** The Department of Building Safety is hereby created and the official in charge thereof shall be known as the building official.

**[A] 103.2 Appointment.** The building official shall be appointed by the chief appointing authority of the jurisdiction.

**[A] 103.3 Deputies.** In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint a deputy building official, the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated

by the building official. For the maintenance of existing properties, see the *California Property Maintenance Code*.

### SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL

**[A] 104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code. The building official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

**[A] 104.2 Applications and permits.** The building official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

**[A] 104.3 Notices and orders.** The building official shall issue all necessary notices or orders to ensure compliance with this code.

**[A] 104.4 Inspections.** The building official shall make all of the required inspections, or the building official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The building official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.

**[A] 104.5 Identification.** The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**[A] 104.6 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the building official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this code which makes the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this code, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the building official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to the remedies provided by law to secure entry.

**[A] 104.7 Department records.** The building official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.

**DAY ROOM.** A room which is adjacent to a cell, or cell tier, or dormitory and which is used as a dining, exercise or other activity room for inmates.

**DEAD LOAD.** The weight of materials of construction incorporated into the building, including but not limited to walls, floors, roofs, ceilings, stairways, built-in partitions, finishes, cladding and other similarly incorporated architectural and structural items, and the weight of fixed service equipment, such as cranes, plumbing stacks and risers, electrical feeders, heating, ventilating and air-conditioning systems and automatic sprinkler systems.

**DECK.** Is an area surrounding a pool which is specifically constructed or installed for use by bathers.

**DECORATIVE GLASS.** A carved, leaded or Dalle glass or glazing material whose purpose is decorative or artistic, not functional; whose coloring, texture or other design qualities or components cannot be removed without destroying the glazing material and whose surface, or assembly into which it is incorporated, is divided into segments.

**[F] DECORATIVE MATERIALS.** All materials applied over the building interior finish for decorative, acoustical or other effect (such as curtains, draperies, fabrics, streamers and surface coverings), and all other materials utilized for decorative effect (such as batting, cloth, cotton, hay, stalks, straw, vines, leaves, trees, moss and similar items), including foam plastics and materials containing foam plastics. Decorative materials do not include floor coverings, ordinary window shades, interior finish and materials 0.025 inch (0.64 mm) or less in thickness applied directly to and adhering tightly to a substrate.

**DEEP FOUNDATION.** A deep foundation is a foundation element that does not satisfy the definition of a shallow foundation.

**[F] DEFLAGRATION.** An exothermic reaction, such as the extremely rapid oxidation of a flammable dust or vapor in air, in which the reaction progresses through the unburned material at a rate less than the velocity of sound. A deflagration can have an explosive effect.

**[F] DELUGE SYSTEM.** A sprinkler system employing open sprinklers attached to a piping system connected to a water supply through a valve that is opened by the operation of a detection system installed in the same areas as the sprinklers. When this valve opens, water flows into the piping system and discharges from all sprinklers attached thereto.

**DEPARTMENT. [HCD 1 & HCD 2]** The Department of Housing and Community Development.

**DESIGN DISPLACEMENT.** See Section 1905.1.1.

**DESIGN EARTHQUAKE GROUND MOTION.** The earthquake ground motion that buildings and structures are specifically proportioned to resist in Section 1613.

**DESIGN FLOOD.** The flood associated with the greater of the following two areas:

1. Area with a flood plain subject to a 1-percent or greater chance of flooding in any year; or

2. Area designated as a flood hazard area on a community's flood hazard map, or otherwise legally designated.

**DESIGN FLOOD ELEVATION.** The elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the design flood elevation shall be the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where a depth number is not specified on the map, the depth number shall be taken as being equal to 2 feet (610 mm).

**DESIGN PROFESSIONAL, REGISTERED.** See "Registered design professional."

**DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, REGISTERED.** See "Registered design professional in responsible charge."

**DESIGN STRENGTH.** The product of the nominal strength and a resistance factor (or strength reduction factor).

**DESIGNATED SEISMIC SYSTEM.** Those nonstructural components that require design in accordance with Chapter 13 of ASCE 7 and for which the component importance factor,  $I_p$ , is greater than 1 in accordance with Section 13.1.3 of ASCE 7.

**[F] DETACHED BUILDING.** A separate single-story building, without a basement or crawl space, used for the storage or use of hazardous materials and located an approved distance from all structures.

**DETACHED SINGLE-FAMILY DWELLING. [HCD 1 & HCD 2]** Any single-family dwelling which is separated (detached) from adjacent buildings.

**DETAILED PLAIN CONCRETE STRUCTURAL WALL.** See Section 1905.1.1

**DETECTABLE WARNING.** A standardized surface feature built in or applied to walking surfaces or other elements to warn of hazards on a circulation path.

**[F] DETECTOR, HEAT.** A fire detector that senses heat—either abnormally high temperature or rate of rise, or both.

**DETENTION ELEVATOR [SFM].** Detention elevator shall mean an elevator which moves in-custody individuals within a secure and restrained environment.

**DETENTION TREATMENT ROOM. [SFM].** Detention treatment room shall mean a lockable room or rooms within Group I-3 occupancies used for recreational therapy, group rooms, interdisciplinary treatment team rooms, and interview rooms not classified solely as a Group I-2 occupancy.

**[F] DETONATION.** An exothermic reaction characterized by the presence of a shock wave in the material which establishes and maintains the reaction. The reaction zone progresses through the material at a rate greater than the velocity of sound. The principal heating mechanism is one of shock compression. Detonations have an explosive effect.

**DETOXIFICATION FACILITIES.** Facilities that provide treatment for substance abuse, serving care recipients who are incapable of self-preservation or who are harmful to themselves or others.

## DEFINITIONS

**DIAPHRAGM.** A horizontal or sloped system acting to transmit lateral forces to the vertical-resisting elements. When the term “diaphragm” is used, it shall include horizontal bracing systems.

**Diaphragm, blocked.** In light-frame construction, a diaphragm in which all sheathing edges not occurring on a framing member are supported on and fastened to blocking.

**Diaphragm boundary.** In light-frame construction, a location where shear is transferred into or out of the diaphragm sheathing. Transfer is either to a boundary element or to another force-resisting element.

**Diaphragm chord.** A diaphragm boundary element perpendicular to the applied load that is assumed to take axial stresses due to the diaphragm moment.

**Diaphragm flexible.** A diaphragm is flexible for the purpose of distribution of story shear and torsional moment where so indicated in Section 12.3.1 of ASCE 7.

**Diaphragm, rigid.** [DSA-SS, DSA-SS/CC & OSHPD 1 & 4] A diaphragm is rigid for the purpose of distribution of story shear and torsional moment where so indicated in Section 12.3.1 of ASCE 7.

**Diaphragm, rigid.** A diaphragm is rigid for the purpose of distribution of story shear and torsional moment when the lateral deformation of the diaphragm is less than or equal to two times the average story drift.

**Diaphragm, unblocked.** A diaphragm that has edge nailing at supporting members only. Blocking between supporting structural members at panel edges is not included. Diaphragm panels are field nailed to supporting members.

## DIMENSIONS.

**Nominal.** The specified dimension plus an allowance for the joints with which the units are to be laid. Nominal dimensions are usually stated in whole numbers. Thickness is given first, followed by height and then length.

**Specified.** Dimensions specified for the manufacture or construction of a unit, joint element.

**DIRECT ACCESS.** A path of travel from a space to an immediately adjacent space through an opening in the common wall between the two spaces.

**DIRECTIONAL SIGN.** [DSA-AC, HCD 1 & HCD 2] A publicly displayed notice which indicates by use of words or symbols a recommended direction or route of travel.

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

**[F] DISPENSING.** The pouring or transferring of any material from a container, tank or similar vessel, whereby vapors, dusts, fumes, mists or gases are liberated to the atmosphere.

**DOOR, BALANCED.** A door equipped with double-pivoted hardware so designed as to cause a semicounterclockwise swing action when opening.

**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. [SFM] For Group I-3 occupancies “Dormitory” is an area occupied by no less than three inmates.

**DRAFTSTOP.** A material, device or construction installed to restrict the movement of air within open spaces of concealed areas of building components such as crawl spaces, floor/ceiling assemblies, roof/ceiling assemblies and attics.

**DRAG STRUT.** See “Collector.”

**DRAIN.** A fitting or fixture, usually at or near the bottom of a pool, through which water leaves the pool normally to the recirculation pump.

**DRILLED SHAFT.** A drilled shaft is a cast-in-place deep foundation element constructed by drilling a hole (with or without permanent casing) into soil or rock and filling it with fluid concrete.

**Socketed drilled shaft.** A socketed drilled shaft is a drilled shaft with a permanent pipe or tube casing that extends down to bedrock and an uncased socket drilled into the bedrock.

**[F] DRY-CHEMICAL EXTINGUISHING AGENT.** A powder composed of small particles, usually of sodium bicarbonate, potassium bicarbonate, urea-potassium-based bicarbonate, potassium chloride or monoammonium phosphate, with added particulate material supplemented by special treatment to provide resistance to packing, resistance to moisture absorption (caking) and the proper flow capabilities.

**DRY FLOODPROOFING.** A combination of design modifications that results in a building or structure, including the attendant utility and sanitary facilities, being water tight with walls substantially impermeable to the passage of water and with structural components having the capacity to resist loads as identified in ASCE 7.

**DURATION OF LOAD.** The period of continuous application of a given load, or the aggregate of periods of intermittent applications of the same load.

**DWELLING.** A building that contains one or two dwelling units used, intended or designed to be used, rented, leased, let or hired out to be occupied for living purposes.

**DWELLING UNIT.** A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. [HCD 1-AC] For the purposes of Chapter 11A, a single unit of residence for a family of one or more persons. Examples of dwelling units covered by Chapter 11A 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.

**DWELLING UNIT OR SLEEPING UNIT, MULTISTORY.** See definition for “Multistory unit.”

**EFFICIENCY DWELLING UNIT.** [HCD 1] A dwelling unit containing only one habitable room and includes an effi-

**[F] GAS ROOM.** A separately ventilated, fully enclosed room in which only compressed gases and associated equipment and supplies are stored or used.

**[F] GASEOUS HYDROGEN SYSTEM.** An assembly of piping, devices and apparatus designed to generate, store, contain, distribute or transport a nontoxic, gaseous hydrogen-containing mixture having at least 95-percent hydrogen gas by volume and not more than 1-percent oxygen by volume. Gaseous hydrogen systems consist of items such as compressed gas containers, reactors and appurtenances, including pressure regulators, pressure relief devices, manifolds, pumps, compressors and interconnecting piping and tubing and controls.

**GLASS FIBERBOARD.** Fibrous glass roof insulation consisting of inorganic glass fibers formed into rigid boards using a binder. The board has a top surface faced with asphalt and kraft reinforced with glass fiber.

**GLUED BUILT-UP MEMBER.** A structural element, the section of which is composed of built-up lumber, wood structural panels or wood structural panels in combination with lumber, all parts bonded together with structural adhesives.

**GOLF CAR PASSAGE. [DSA-AC]** A continuous passage on which a motorized golf car can operate.

**GRAB BAR. [DSA-AC & HCD 1-AC]** A bar for the purpose of being grasped by the hand for support.

**GRADE (Adjacent Ground Elevation) [DSA-AC & HCD 1-AC]** 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).

**GRADE BREAK. [DSA-AC]** The line where two surface planes with different slopes meet.

**GRADE FLOOR OPENING.** A window or other opening located such that the sill height of the opening is not more than 44 inches (1118 mm) above or below the finished ground level adjacent to the opening.

**GRADE (LUMBER).** The classification of lumber in regard to strength and utility in accordance with American Softwood Lumber Standard DOC PS 20 and the grading rules of an approved lumber rules-writing agency.

**GRADE PLANE.** A reference plane representing the average of finished ground level adjoining the building at exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line or, where the lot line is more than 6 feet (1829 mm) from the building, between the building and a point 6 feet (1829 mm) from the building.

**GRADE PLANE, STORY ABOVE.** See "Story above grade plane."

**GRANDSTAND.** Tiered seating supported on a dedicated structural system and two or more rows high and is not a building element (see "Bleachers").

**GROSS LEASABLE AREA.** The total floor area designed for tenant occupancy and exclusive use. The area of tenant occupancy is measured from the centerlines of joint partitions to the outside of the tenant walls. All tenant areas, including areas used for storage, shall be included in calculating gross leasable area.

**GROUND FLOOR.** *The floor of a building with a building entrance on an accessible route. A building may have one or more ground floors.*

**GROUND LEVEL PLAY COMPONENT. [DSA-AC]** A play component that is approached and exited at the ground level.

**GROUP HOME.** A facility that provides 24-hour care and supervision to children, provides services specified in this chapter to a specific client group, and maintains a structured environment, with such services provided at least in part by staff employed by the licensee. The care and supervision provided by a group home shall be nonmedical except as permitted by Welfare and Institutions Code Section 17736(b). Since small-family and foster family homes, by definition, care for six or fewer children only, any facility providing 24-hour care for seven or more children must be licensed as a group home.

**GUARD [DSA-AC, HCD 1 & HCD 2] OR GUARDRAIL.** A building component or a system of building components located at or near the open sides of elevated walking surfaces that minimizes the possibility of a fall from the walking surface to a lower level.

**GUIDEWAY. [SFM]** (See Chapter 4, Section 433 for definition of term.)

**GYPSUM BOARD.** Gypsum wallboard, gypsum sheathing, gypsum base for gypsum veneer plaster, exterior gypsum soffit board, predecorated gypsum board or water-resistant gypsum backing board complying with the standards listed in Tables 2506.2, 2507.2 and Chapter 35.

**GYPSUM PLASTER.** A mixture of calcined gypsum or calcined gypsum and lime and aggregate and other approved materials as specified in this code.

**GYPSUM VENEER PLASTER.** Gypsum plaster applied to an approved base in one or more coats normally not exceeding  $\frac{1}{4}$  inch (6.4 mm) in total thickness.

**HABITABLE SPACE.** A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

**[F] HALOGENATED EXTINGUISHING SYSTEM.** A fire-extinguishing system using one or more atoms of an element from the halogen chemical series: fluorine, chlorine, bromine and iodine.

**[F] HANDLING.** The deliberate transport by any means to a point of storage or use.

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

## DEFINITIONS

**HANDWASHING FIXTURE.** Refer to the California Plumbing Code, Section 210.0.

**HARDBOARD.** A fibrous-felted, homogeneous panel made from lignocellulosic fibers consolidated under heat and pressure in a hot press to a density not less than 31pcf (497 kg/m<sup>3</sup>).

**[F] HAZARDOUS MATERIALS.** Those chemicals or substances that are physical hazards or health hazards as classified in Section 307 and the *California Fire Code*, whether the materials are in usable or waste condition.

**[F] HAZARDOUS PRODUCTION MATERIAL (HPM).** A solid, liquid or gas associated with semiconductor manufacturing that has a degree-of-hazard rating in health, flammability or instability of Class 3 or 4 as ranked by NFPA 704 and which is used directly in research, laboratory or production processes which have as their end product materials that are not hazardous.

**HAZARDOUS SUBSTANCE. [SFM]** Hazardous Substance is a substance which, by reason of being explosive, flammable, toxic, poisonous, corrosive, oxidizing, irritant or otherwise harmful, is likely to cause injury.

**HEAD JOINT.** Vertical mortar joint placed between masonry units within the wythe at the time the masonry units are laid.

**HEALTH CARE PROVIDER. [DSA-AC]** See "Professional Office of a Health Care Provider"

**[F] HEALTH HAZARD.** A classification of a chemical for which there is statistically significant evidence that acute or chronic health effects are capable of occurring in exposed persons. The term "health hazard" includes chemicals that are toxic or highly toxic, and corrosive.

**HEAT DETECTOR.** See "Detector, heat."

**HEAVY TIMBER. [SFM]** (See Chapter 7A, Section 702A for defined term.)

**HEIGHT, BUILDING.** The vertical distance from grade plane to the average height of the highest roof surface.

**HELICAL PILE.** Manufactured steel deep foundation element consisting of a central shaft and one or more helical bearing plates. A helical pile is installed by rotating it into the ground. Each helical bearing plate is formed into a screw thread with a uniform defined pitch.

**HELIPAD.** A structural surface that is used for the landing, taking off, taxiing and parking of helicopters.

**HELIPORT.** An area of land or water or a structural surface that is used, or intended for the use, for the landing and taking off of helicopters, and any appurtenant areas that are used, or intended for use, for heliport buildings or other heliport facilities.

**HELISTOP.** The same as "heliport," except that no fueling, defueling, maintenance, repairs or storage of helicopters is permitted.

**HIGH-PRESSURE DECORATIVE EXTERIOR-GRADE COMPACT LAMINATE (HPL).** Panels consisting of layers of cellulose fibrous material impregnated with thermosetting

resins and bonded together by a high-pressure process to form a homogeneous nonporous core suitable for exterior use.

**HIGH-PRESSURE DECORATIVE EXTERIOR-GRADE COMPACT LAMINATE (HPL) SYSTEM.** An exterior wall covering fabricated using HPL in a specific assembly including joints, seams, attachments, substrate, framing and other details as appropriate to a particular design.

**HIGH-RISE BUILDING.** In other than Group I-2 occupancies "high-rise buildings" as used in this code:

**Existing high-rise structure.** A high-rise structure, the construction of which is commenced or completed prior to July 1, 1974.

**High-rise structure.** Every building of any type of construction or occupancy having floors used for human occupancy located more than 75 feet above the lowest floor level having building access (see Section 403.1.2), except buildings used as hospitals as defined in Health and Safety Code Section 1250.

**New High-rise Building.** A high-rise structure, the construction of which is commenced on or after July 1, 1974. For the purpose of this section, construction shall be deemed to have commenced when plans and specifications are more than 50 percent complete and have been presented to the local jurisdiction prior to July 1, 1974. Unless all provisions of this section have been met, the construction of such buildings shall commence on or before January 1, 1976.

**New high-rise structure.** A high-rise structure, the construction of which is commenced on or after July 1, 1974.

**HIGH-RISE BUILDING ACCESS.** An exterior door opening conforming to all of the following:

1. Suitable and available for fire department use.
2. Located not more than 2 feet (610 mm) above the adjacent ground level.
3. Leading to a space, room or area having foot traffic communication capabilities with the remainder of the building.
4. Designed to permit penetration through the use of fire department forcible-entry tools and equipment unless other approved arrangements have been made with the fire authority having jurisdiction.

**[F] HIGHLY TOXIC.** A material which produces a lethal dose or lethal concentration that falls within any of the following categories:

1. A chemical that has a median lethal dose ( $LD_{50}$ ) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.
2. A chemical that has a median lethal dose ( $LD_{50}$ ) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between 2 and 3 kilograms each.

3. A chemical that has a median lethal concentration ( $LC_{50}$ ) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume or dust, when administered by continuous inhalation for 1 hour (or less if death occurs within 1 hour) to albino rats weighing between 200 and 300 grams each.

Mixtures of these materials with ordinary materials, such as water, might not warrant classification as highly toxic. While this system is basically simple in application, any hazard evaluation that is required for the precise categorization of this type of material shall be performed by experienced, technically competent persons.

**HISTORIC BUILDINGS.** Buildings that are listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate state or local law (see Sections 3409 and 3411.9). *[DSA-AC]* See “Qualified historical building or property,” C.C.R., Title 24, Part 8.

**HOLDING FACILITY.** A detention or correctional facility or area where inmates, staff and public are not housed but are restrained.

**HORIZONTAL ASSEMBLY.** A fire-resistance-rated floor or roof assembly of materials designed to restrict the spread of fire in which continuity is maintained.

**HORIZONTAL EXIT.** See “Exit, horizontal.”

**HOSPITALS AND PSYCHIATRIC HOSPITALS.** Facilities that provide care or treatment for the medical, psychiatric, obstetrical, or surgical treatment of care recipients that are incapable of self-preservation.

**HOTEL OR MOTEL. [HCD 1 & HCD 2]** Any building containing six or more guest rooms intended or designed to be used, or which are used, rented or hired out to be occupied, or which are occupied for sleeping purposes by guests.

**HOUSING AT A PLACE OF EDUCATION.** Housing operated by or on behalf of an elementary, secondary, undergraduate, or postgraduate school, or other place of education, including dormitories, suites, apartments, or other places of residence.

**HOUSING UNIT.** An area intended to lodge inmates on a 24-hour basis where accommodations are provided for sleeping.

**[F] HPM FLAMMABLE LIQUID.** An HPM liquid that is defined as either a Class I flammable liquid or a Class II or Class IIIA combustible liquid.

**[F] HPM ROOM.** A room used in conjunction with or serving a Group H-5 occupancy, where HPM is stored or used and which is classified as a Group H-2, H-3 or H-4 occupancy.

**HURRICANE-PRONE REGIONS.** Areas vulnerable to hurricanes defined as:

1. The U.S. Atlantic Ocean and Gulf of Mexico coasts where the ultimate design wind speed,  $V_{ult}$ , for Risk Category II buildings is greater than 115 mph (51.4 m/s); and
2. Hawaii, Puerto Rico, Guam, Virgin Islands and American Samoa.

**[F] HYDROGEN CUTOFF ROOM.** A room or space that is intended exclusively to house a gaseous hydrogen system.

**ICE-SENSITIVE STRUCTURE.** A structure for which the effect of an atmospheric ice load governs the design of a structure or portion thereof. This includes, but is not limited to, lattice structures, guyed masts, overhead lines, light suspension and cable-stayed bridges, aerial cable systems (e.g., for ski lifts or logging operations), amusement rides, open catwalks and platforms, flagpoles and signs.

**IF, IF . . . THEN. [DSA-AC]** The terms “if” and “if . . . then” denotes a specification that applies only when the conditions described are present.

**IGNITION-RESISTANT MATERIAL. [SFM]** (See Chapter 7A, Section 702A for defined term.)

**[F] IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH).** The concentration of air-borne contaminants which poses a threat of death, immediate or delayed permanent adverse health effects, or effects that could prevent escape from such an environment. This contaminant concentration level is established by the National Institute of Occupational Safety and Health (NIOSH) based on both toxicity and flammability. It generally is expressed in parts per million by volume (ppmv/v) or milligrams per cubic meter (mg/m<sup>3</sup>). If adequate data do not exist for precise establishment of IDLH concentrations, an independent certified industrial hygienist, industrial toxicologist, appropriate regulatory agency or other source approved by the building official shall make such determination.

**IMPACT LOAD.** The load resulting from moving machinery, elevators, craneways, vehicles and other similar forces and kinetic loads, pressure and possible surcharge from fixed or moving loads.

**INCIDENTAL STRUCTURAL ALTERATIONS, ADDITIONS, OR REPAIRS. [OSHPD 1, 2 & 4]** Alterations, additions or repairs which would not reduce the story lateral shear force-resisting capacity by more than 5 percent or increase the story shear by more than 5 percent in any existing story.

**INCAPABLE OF SELF-PRESERVATION.** Persons because of age, physical limitations, mental limitations, chemical dependency, or medical treatment who cannot respond as an individual to an emergency situation.

**[F] INCOMPATIBLE MATERIALS.** Materials that, when mixed, have the potential to react in a manner that generates heat, fumes, gases or byproducts which are hazardous to life or property.

**[F] INERT GAS.** A gas that is capable of reacting with other materials only under abnormal conditions such as high temperatures, pressures and similar extrinsic physical forces. Within the context of the code, inert gases do not exhibit either physical or health hazard properties as defined (other than acting as a simple asphyxiant) or hazard properties other than those of a compressed gas. Some of the more common inert gases include argon, helium, krypton, neon, nitrogen and xenon.

**INFANT.** Any child who because of age only, is unable to walk and requires the aid of another person to evacuate the

## DEFINITIONS

*building. In no case shall the term “infant” mean a child 2 years of age or older.*

**[F] INITIATING DEVICE.** A system component that originates transmission of a change-of-state condition, such as in a smoke detector, manual fire alarm box or supervisory switch.

**INLET.** A fitting or fixture through which circulation water enters the pool.

**INSPECTION CERTIFICATE.** An identification applied on a product by an approved agency containing the name of the manufacturer, the function and performance characteristics, and the name and identification of an approved agency that indicates that the product or material has been inspected and evaluated by an approved agency (see Section 1703.5 and “Label,” “Manufacturer’s designation” and “Mark”).

**INTERIOR EXIT RAMP.** An exit component that serves to meet one or more means of egress design requirements, such as required number of exits or exit access travel distance, and provides for a protected path of egress travel to the exit discharge or public way.

**INTERIOR EXIT STAIRWAY.** An exit component that serves to meet one or more means of egress design requirements, such as required number of exits or exit access travel distance, and provides for a protected path of egress travel to the exit discharge or public way.

**INTERIOR FINISH.** Interior finish includes interior wall and ceiling finish and interior floor finish.

**INTERIOR FLOOR FINISH.** The exposed floor surfaces of buildings including coverings applied over a finished floor or stair, including risers.

**INTERIOR FLOOR-WALL BASE.** Interior floor finish trim used to provide a functional or decorative border at the intersection of walls and floors.

**INTERIOR SURFACES.** Surfaces other than weather exposed surfaces.

**INTERIOR WALL AND CEILING FINISH.** The exposed interior surfaces of buildings, including but not limited to: fixed or movable walls and partitions; toilet room privacy partitions; columns; ceilings; and interior wainscoting, paneling or other finish applied structurally or for decoration, acoustical correction, surface insulation, structural fire resistance or similar purposes, but not including trim.

**INTERLAYMENT.** A layer of felt or nonbituminous saturated felt not less than 18 inches (457 mm) wide, shingled between each course of a wood-shake roof covering.

**INTERNATIONAL SYMBOL OF ACCESSIBILITY.** The symbol adopted by Rehabilitation International’s 11th World Congress for the purpose of indicating that buildings and facilities are accessible to persons with disabilities.

**INTUMESCENT FIRE-RESISTANT COATINGS.** Thin film liquid mixture applied to substrates by brush, roller, spray or trowel which expands into a protective foamed layer to provide fire-resistant protection of the substrates when exposed to flame or intense heat.

**JOINT.** The opening in or between adjacent assemblies that is created due to building tolerances, or is designed to allow independent movement of the building in any plane caused by thermal, seismic, wind or any other loading.

**[A] JURISDICTION.** The governmental unit that has adopted this code under due legislative authority.

**KEY STATION. [DSA-AC]** Certain rapid and light rail stations, and commuter rail stations, as defined under criteria established by the Department of Transportation in 49 CFR 37.47 and 49 CFR 37.51, respectively.

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

**KITCHEN OR KITCHENETTE. [DSA-AC]** A room, space or area with equipment for the preparation and cooking of food.

**L RATING.** The air leakage rating of a through penetration firestop system or a fire-resistant joint system when tested in accordance with UL 1479 or UL 2079, respectively.

**[A] LABEL.** An identification applied on a product by the manufacturer that contains the name of the manufacturer, the function and performance characteristics of the product or material, and the name and identification of an approved agency and that indicates that the representative sample of the product or material has been tested and evaluated by an approved agency (see Section 1703.5 and “Inspection certificate,” “Manufacturer’s designation” and “Mark”).

**[A] LABELED.** Equipment, materials or products to which has been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose. *[HCD 1 & HCD 2j “Labeled” means equipment or materials to which has been attached a label, symbol or other identifying mark of an organization, approved by the Department, that maintains a periodic inspection program of production of labeled products, installations, equipment, or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.*

**LABORATORY. [SFM]** A room, building or area where the use and storage of hazardous materials are utilized for testing, analysis, instruction, research or developmental activities.

**LABORATORY SUITE. [SFM]** A laboratory suite is a space within a building or structure, which may include multiple laboratories, offices, storage, equipment rooms or similar support functions, where the aggregate quantities of hazardous materials stored and used do not exceed the quantities set forth in Table 443.7.3.1.

**LADDER.** A series of vertically separate treads or rungs either connected by vertical rail members or independently fastened to an adjacent vertical pool wall.

**LAVATORY.** A fixed bowl or basin with running water and drainpipe, as in a toilet or bathing facility, for washing or bathing purposes. (As differentiated from the definition of "Sink".)

**LEVEL AREA.** [HCD 1-AC] A specified surface that does not have a slope in any direction exceeding  $\frac{1}{4}$  inch (6.4 mm) in 1 foot (305 mm) from the horizontal (2.083-percent gradient).

**LEVEL OF EXIT DISCHARGE.** See "Exit discharge, level of."

**LICENSING AGENCY.** [OSHPD 1] (See Chapter 12, Section 1224.3 for defined term.)

**LIFT, PLATFORM (WHEELCHAIR).** [HCD 1-AC] See "Platform (Wheelchair) Lift".

**LIGHT-DIFFUSING SYSTEM.** Construction consisting in whole or in part of lenses, panels, grids or baffles made with light-transmitting plastics positioned below independently mounted electrical light sources, skylights or light-transmitting plastic roof panels. Lenses, panels, grids and baffles that are part of an electrical fixture shall not be considered as a light-diffusing system.

**LIGHT-FRAME CONSTRUCTION.** A type of construction whose vertical and horizontal structural elements are primarily formed by a system of repetitive wood or cold-formed steel framing members.

**LIGHT-TRANSMITTING PLASTIC ROOF PANELS.** Structural plastic panels other than skylights that are fastened to structural members, or panels or sheathing and that are used as light-transmitting media in the plane of the roof.

**LIGHT-TRANSMITTING PLASTIC WALL PANELS.** Plastic materials that are fastened to structural members, or to structural panels or sheathing, and that are used as light-transmitting media in exterior walls.

**LIMIT STATE.** A condition beyond which a structure or member becomes unfit for service and is judged to be no longer useful for its intended function (serviceability limit state) or to be unsafe (strength limit state).

**[F] LIQUID.** A material that has a melting point that is equal to or less than 68°F (20°C) and a boiling point that is greater than 68°F (20°C) at 14.7 pounds per square inch absolute (psia) (101 kPa). When not otherwise identified, the term "liquid" includes both flammable and combustible liquids.

**[F] LIQUID STORAGE ROOM.** A room classified as a Group H-3 occupancy used for the storage of flammable or combustible liquids in a closed condition.

**[F] LIQUID USE, DISPENSING AND MIXING ROOM.** A room in which Class I, II and IIIA flammable or combustible liquids are used, dispensed or mixed in open containers.

**[A] LISTED.** Equipment, materials, products or services included in a list published by an organization acceptable to the building official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.

**[HCD 1 & HCD 2]** "Listed" means all products that appear in a list published by an approved testing or listing agency. For additional information, see Health and Safety Code Section 17920(h).

For applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, "listed" shall also mean equipment or materials accepted by the state fire marshal as conforming to the provisions of the State Fire Marshal's regulations and which are included in a list published by the State Fire Marshal.

**LISTING AGENCY.** [HCD 1 & HCD 2] An agency approved by the department that is in the business of listing and labeling products, materials, equipment and installations tested by an approved testing agency, and that maintains a periodic inspection program on current production of listed products, equipment and installations, and that, at least annually, makes available a published report of these listings. For additional information, see Health and Safety Code Section 17920(i).

**LIQUID TIGHT FLOOR.** [SFM] A nonpermeable barrier capable of containing hazardous material liquids without degradation.

**LIVE/WORK UNIT.** A dwelling unit or sleeping unit in which a significant portion of the space includes a nonresidential use that is operated by the tenant.

**LIVE LOAD.** A load produced by the use and occupancy of the building or other structure that does not include construction or environmental loads such as wind load, snow load, rain load, earthquake load, flood load or dead load.

**LIVE LOAD, ROOF.** A load on a roof produced:

1. During maintenance by workers, equipment and materials;
2. During the life of the structure by movable objects such as planters or other similar small decorative appurtenances that are not occupancy related; or
3. By the use and occupancy of the roof such as for roof gardens or assembly areas.

**LOAD AND RESISTANCE FACTOR DESIGN (LRFD).** A method of proportioning structural members and their connections using load and resistance factors such that no applicable limit state is reached when the structure is subjected to appropriate load combinations. The term "LRFD" is used in the design of steel and wood structures.

**LOAD EFFECTS.** Forces and deformations produced in structural members by the applied loads.

**LOAD FACTOR.** A factor that accounts for deviations of the actual load from the nominal load, for uncertainties in the analysis that transforms the load into a load effect, and for the probability that more than one extreme load will occur simultaneously.

**LOADS.** Forces or other actions that result from the weight of building materials, occupants and their possessions, environmental effects, differential movement and restrained dimensional changes. Permanent loads are those loads in which variations over time are rare or of small magnitude,

## DEFINITIONS

such as dead loads. All other loads are variable loads (see also “Nominal loads”).

**LOBBY.** [SFM, HCD 1 & HCD 2] An area not defined as a waiting room at the entrance of a building through which persons must pass.

**LOCAL AGENCY VERY HIGH FIRE HAZARD SEVERITY ZONE.** [SFM] (See Chapter 7A, Section 702A for defined term.)

**LODGING HOUSE.** [HCD 1] Any building or portion thereof containing not more than five guest rooms where rent is paid in money, goods, labor or otherwise.

**LOG WALL CONSTRUCTION.** [SFM] (See Chapter 7A, Section 702A for defined term.)

**[A] LOT.** A portion or parcel of land considered as a unit.

**[A] LOT LINE.** A line dividing one lot from another, or from a street or any public place.

**[F] LOWER FLAMMABLE LIMIT (LFL).** The minimum concentration of vapor in air at which propagation of flame will occur in the presence of an ignition source. The LFL is sometimes referred to as “LEL” or “lower explosive limit.”

**LOWEST FLOOR.** The floor of the lowest enclosed area, including basement, but excluding any unfinished or flood-resistant enclosure, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of Section 1612.

**MAIL BOXES.** [DSA-AC] Receptacles for the receipt of documents, packages or other deliverable matter. Mail boxes include, but are not limited to, post office boxes and receptacles provided by commercial mail-receiving agencies, apartment facilities or schools.

**MAIN WINDFORCE-RESISTING SYSTEM.** An assemblage of structural elements assigned to provide support and stability for the overall structure. The system generally receives wind loading from more than one surface

**MAJOR STRUCTURAL ALTERATIONS, ADDITIONS, OR REPAIRS.** [OSHPD 1, 2 & 4] Alterations, additions or repairs of greater extent than minor structural alterations, additions, or repairs.

**MALL BUILDING, COVERED and MALL BUILDING, OPEN.** See “Covered mall building.”

**[F] MANUAL FIRE ALARM BOX.** A manually operated device used to initiate an alarm signal.

**[A] MANUFACTURER’S DESIGNATION.** An identification applied on a product by the manufacturer indicating that a product or material complies with a specified standard or set of rules (see also “Inspection certificate,” “Label” and “Mark”).

**[A] MARK.** An identification applied on a product by the manufacturer indicating the name of the manufacturer and the function of a product or material (see also “Inspection certificate,” “Label” and “Manufacturer’s designation”).

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

**MARQUEE.** A canopy that has a top surface which is sloped less than 25 degrees from the horizontal and is located less than 10 feet (3.05 m) from operable openings above or adjacent to the level of the marquee.

**MASONRY.** A built-up construction or combination of building units or materials of clay, shale, concrete, glass, gypsum, stone or other approved units bonded together with or without mortar or grout or other accepted methods of joining.

**Ashlar masonry.** Masonry composed of various-sized rectangular units having sawed, dressed or squared bed surfaces, properly bonded and laid in mortar.

**Coursed ashlar.** Ashlar masonry laid in courses of stone of equal height for each course, although different courses shall be permitted to be of varying height.

**Glass unit masonry.** Masonry composed of glass units bonded by mortar.

**Plain masonry.** Masonry in which the tensile resistance of the masonry is taken into consideration and the effects of stresses in reinforcement are neglected.

**Random ashlar.** Ashlar masonry laid in courses of stone set without continuous joints and laid up without drawn patterns. When composed of material cut into modular heights, discontinuous but aligned horizontal joints are discernible.

**Reinforced masonry.** Masonry construction in which reinforcement acting in conjunction with the masonry is used to resist forces.

**Solid masonry.** Masonry consisting of solid masonry units laid contiguously with the joints between the units filled with mortar.

**Unreinforced (plain) masonry.** Masonry in which the tensile resistance of masonry is taken into consideration and the resistance of the reinforcing steel, if present, is neglected.

**MASONRY UNIT.** Brick, tile, stone, glass block or concrete block conforming to the requirements specified in Section 2103.

**Hollow.** A masonry unit whose net cross-sectional area in any plane parallel to the load-bearing surface is less than 75 percent of its gross cross-sectional area measured in the same plane.

**Solid.** A masonry unit whose net cross-sectional area in every plane parallel to the load-bearing surface is 75 percent or more of its gross cross-sectional area measured in the same plane.

**MASTIC FIRE-RESISTANT COATINGS.** Liquid mixture applied to a substrate by brush, roller, spray or trowel that provides fire-resistant protection of a substrate when exposed to flame or intense heat.

**MAY.** [DSA-AC] May denotes an option or alternative.

**MEANS OF EGRESS.** A continuous and unobstructed path of vertical and horizontal egress travel from any occupied portion of a building or structure to a public way. A means of egress consists of three separate and distinct parts: the exit access, the exit and the exit discharge.

**MECHANICAL-ACCESS OPEN PARKING GARAGES.** Open parking garages employing parking machines, lifts, elevators or other mechanical devices for vehicles moving from and to street level and in which public occupancy is prohibited above the street level.

**MECHANICAL EQUIPMENT SCREEN.** A rooftop structure, not covered by a roof, used to aesthetically conceal plumbing, electrical or mechanical equipment from view.

**MECHANICAL SYSTEMS.** For the purposes of determining seismic loads in ASCE 7, mechanical systems shall include plumbing systems as specified therein.

**MEDICAL CARE.** Care involving medical or surgical procedures, nursing or for psychiatric purposes.

**MEDICAL POOL.** *A special-purpose pool used by a state-recognized medical institution engaged in the healing arts under the direct supervision of licensed medical personnel for treatment of the infirm.*

**MEMBRANE-COVERED CABLE STRUCTURE.** A nonpressurized structure in which a mast and cable system provides support and tension to the membrane weather barrier and the membrane imparts stability to the structure.

**MEMBRANE-COVERED FRAME STRUCTURE.** A nonpressurized building wherein the structure is composed of a rigid framework to support a tensioned membrane which provides the weather barrier.

**MEMBRANE PENETRATION.** A breach in one side of a floor-ceiling, roof-ceiling or wall assembly to accommodate an item installed into or passing through the breach.

**MEMBRANE-PENETRATION FIRESTOP.** A material, device or construction installed to resist for a prescribed time period the passage of flame and heat through openings in a protective membrane in order to accommodate cables, cable trays, conduit, tubing, pipes or similar items.

**MEMBRANE-PENETRATION FIRESTOP SYSTEM.** An assemblage consisting of a fire-resistance-rated floor-ceiling, roof-ceiling or wall assembly, one or more penetrating items installed into or passing through the breach in one side of the assembly and the materials or devices, or both, installed to resist the spread of fire into the assembly for a prescribed period of time.

**MENTALLY RETARDED PERSONS, PROFOUNDLY OR SEVERELY.** Shall mean any retarded person who is unable to evacuate a building unassisted during emergency conditions.

*Note:* The determination as to such incapacity shall be made by the Director of the State Department of Public Health or his or her designated representative pursuant to Health and Safety Code Section 13131.3.

**MERCHANDISE PAD.** A merchandise pad is an area for display of merchandise surrounded by aisles, permanent fixtures or walls. Merchandise pads contain elements such as

nonfixed and moveable fixtures, cases, racks, counters and partitions as indicated in Section 105.2 from which customers browse or shop.

**METAL COMPOSITE MATERIAL (MCM).** A factory-manufactured panel consisting of metal skins bonded to both faces of a plastic core.

**METAL COMPOSITE MATERIAL (MCM) SYSTEM.** An exterior wall covering fabricated using MCM in a specific assembly including joints, seams, attachments, substrate, framing and other details as appropriate to a particular design.

**METAL ROOF PANEL.** An interlocking metal sheet having a minimum installed weather exposure of 3 square feet ( $0.279 \text{ m}^2$ ) per sheet.

**METAL ROOF SHINGLE.** An interlocking metal sheet having an installed weather exposure less than 3 square feet ( $0.279 \text{ m}^2$ ) per sheet.

**MEZZANINE.** An intermediate level or levels between the floor and ceiling of any story and in accordance with Section 505. *[DSA-AC] An intermediate level or levels between the floor and ceiling of any story with an aggregate floor area of not more than one-third of the area of the room or space in which the level or levels are located. Mezzanines have sufficient elevation that space for human occupancy can be provided on the floor below.*

**MICROPILE.** A micropile is a bored, grouted-in-place deep foundation element that develops its load-carrying capacity by means of a bond zone in soil, bedrock or a combination of soil and bedrock.

**MINERAL BOARD.** A rigid felted thermal insulation board consisting of either felted mineral fiber or cellular beads of expanded aggregate formed into flat rectangular units.

**MINERAL FIBER.** Insulation composed principally of fibers manufactured from rock, slag or glass, with or without binders.

**MINERAL WOOL.** Synthetic vitreous fiber insulation made by melting predominately igneous rock or furnace slag, and other inorganic materials, and then physically forming the melt into fibers.

**MINOR STRUCTURAL ALTERATIONS, ADDITIONS, OR REPAIRS.** *[OSHPD 1, 2 & 4] Alterations, additions or repairs of greater extent than incidental structural additions or alterations which would not reduce the story shear lateral-force-resisting capacity by more than 10 percent or increase base shear by more than 10 percent.*

**MODIFIED BITUMEN ROOF COVERING.** One or more layers of polymer-modified asphalt sheets. The sheet materials shall be fully adhered or mechanically attached to the substrate or held in place with an approved ballast layer.

**MONOLITHIC.** *[OSHPD 1]* (See Chapter 12, Section 1224.3 for defined term.)

**MONOLITHIC CEILING.** *[OSHPD 1]* (See Chapter 12, Section 1224.3 for defined term.)

**MORTAR.** A mixture consisting of cementitious materials, fine aggregates, water, with or without admixtures, that is used to construct unit masonry assemblies.

## DEFINITIONS

**MORTAR, SURFACE-BONDING.** A mixture to bond concrete masonry units that contains hydraulic cement, glass fiber reinforcement with or without inorganic fillers or organic modifiers and water.

**MOTEL.** [HCD 1 & HCD 2] See "Hotel" or "Motel."

**MOTION PICTURE AND TELEVISION PRODUCTION STUDIO SOUND STAGES, APPROVED PRODUCTION FACILITIES AND PRODUCTION LOCATIONS.** See Chapter 46, California Fire Code.

**[F] MULTIPLE-STATION ALARM DEVICE.** Two or more single-station alarm devices that can be interconnected such that actuation of one causes all integral or separate audible alarms to operate. It also can consist of one single-station alarm device having connections to other detectors or to a manual fire alarm box.

**[F] MULTIPLE-STATION SMOKE ALARM.** Two or more single-station alarm devices that are capable of interconnection such that actuation of one causes the appropriate alarm signal to operate in all interconnected alarms.

**MULTISTORY DWELLING UNIT.** [HCD 1-AC] A dwelling unit with finished living space located on one floor and the floor or floors immediately above or below it.

**NAILING, BOUNDARY.** A special nailing pattern required by design at the boundaries of diaphragms.

**NAILING, EDGE.** A special nailing pattern required by design at the edges of each panel within the assembly of a diaphragm or shear wall.

**NAILING, FIELD.** Nailing required between the sheathing panels and framing members at locations other than boundary nailing and edge nailing.

**NATURALLY DURABLE WOOD.** The heartwood of the following species except for the occasional piece with corner sapwood, provided 90 percent or more of the width of each side on which it occurs is heartwood.

**Decay resistant.** Redwood, cedar, black locust and black walnut.

**Termite resistant.** Redwood, Alaska yellow cedar, Eastern red cedar and both heartwood and all sapwood of Western red cedar.

**NEWLY CONSTRUCTED.** [HCD 1-AC] A building that has never before been used or occupied for any purpose.

**NEXT GENERATION ATTENUATION (NGA).** [DSA-SS, DSA-SS/CC & OSHPD 1 & 4] Attenuation relations used for the 2008 United States Geological Survey (USGS) seismic hazards maps (for the Western United States) or their equivalent as determined by the enforcement agency.

**NFPA** [DSA-AC] The National Fire Protection Association.

**NOMINAL LOADS.** The magnitudes of the loads specified in Chapter 16 (dead, live, soil, wind, snow, rain, flood and earthquake).

**NOMINAL SIZE (LUMBER).** The commercial size designation of width and depth, in standard sawn lumber and glued-laminated lumber grades; somewhat larger than the standard net size of dressed lumber, in accordance with

DOCPS 20 for sawn lumber and with the AF&PA NDS for glued-laminated lumber.

**NONAMBULATORY PERSONS.** Persons unable to leave a building unassisted under emergency conditions. It includes, but is not limited to, persons who depend on mechanical aids such as crutches, walkers and wheelchairs and any person who is unable to physically and mentally respond to a sensory signal approved by the state fire marshal or an oral instruction relating to fire danger.

*The determination of ambulatory or nonambulatory status of persons with developmental disabilities shall be made by the Director of Social Services or his or her designated representative, in consultation with the director of Developmental Services or his or her designated representative. The determination of ambulatory or nonambulatory status of all other disabled persons placed after January 1, 1984, who are not developmentally disabled shall be made by the Director of Social Services or his or her designated representative.*

**NONCOMBUSTIBLE.** [SFM] Noncombustible as applied to building construction material means a material which, in the form in which it is used, is either one of the following:

1. Material of which no part will ignite and burn when subjected to fire. Any material passing ASTM E 136 shall be considered noncombustible.
2. Material having a structural base of noncombustible material as defined in Item 1 above, with a surfacing material not over 1/8 inch (3.2 mm) thick which has a flame-spread index of 50 or less.

*"Noncombustible" does not apply to surface finish materials. Material required to be noncombustible for reduced clearances to flues, heating appliances or other sources of high temperature shall refer to material conforming to Item 1. No material shall be classed as noncombustible which is subject to increase in combustibility or flame-spread index, beyond the limits herein established, through the effects of age, moisture or other atmospheric condition.*

**NONCOMBUSTIBLE MEMBRANE STRUCTURE.** A membrane structure in which the membrane and all component parts of the structure are noncombustible.

**NORMAL.** [HCD 1 & HCD 2] Conforming to a pattern or standard regarded as usual or typical.

**[F] NORMAL TEMPERATURE AND PRESSURE (NTP).** A temperature of 70°F (21°C) and a pressure of 1 atmosphere [14.7 psia (101 kPa)].

**NOSING.** The leading edge of treads of stairs and of landings at the top of stairway flights.

**[F] NOTIFICATION ZONE.** See "Zone, notification."

**NPC 1, NPC 2, NPC 3/NPC 3R, NPC 4, and NPC 5** are the building nonstructural performance categories for Hospital Buildings defined in Table 11.1 of California Administrative Code (Part 1, Title 24 CCR), Chapter 6.

**[F] NUISANCE ALARM.** An alarm caused by mechanical failure, malfunction, improper installation or lack of proper maintenance, or an alarm activated by a cause that cannot be determined.

**NURSING HOMES.** Facilities that provide care, including both intermediate care facilities and skilled nursing facilities where any of the persons are incapable of self-preservation or classified as nonambulatory or bedridden..

**OCCUPANT LOAD.** The number of persons for which the means of egress of a building or portion thereof is designed.

**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 PARKING GARAGE.** A structure or portion of a structure with the openings as described in Section 406.5.2 on two or more sides that is used for the parking or storage of private motor vehicles as described in Section 406.5.3.

**OPEN RISER.** *The space between two adjacent stair treads not closed by a riser.*

**OPEN STATION. [SFM]** (See Chapter 4, Section 433 for definition of term.)

**[F] OPEN SYSTEM.** The use of a solid or liquid hazardous material involving a vessel or system that is continuously open to the atmosphere during normal operations and where vapors are liberated, or the product is exposed to the atmosphere during normal operations. Examples of open systems for solids and liquids include dispensing from or into open beakers or containers, dip tank and plating tank operations.

**OPERATIONS CONTROL CENTER (OCC) (CENTRAL CONTROL). [SFM]** (See Chapter 4, Section 433 for definition of term)

**OPERABLE PART.** *A component of an element used to insert or withdraw objects, or to activate, deactivate, or adjust the element.*

**[F] OPERATING BUILDING.** A building occupied in conjunction with the manufacture, transportation or use of explosive materials. Operating buildings are separated from one another with the use of intraplant or intraline distances

**ORDINARY PRECAST STRUCTURAL WALL.** See Section 1905.1.1.

**ORDINARY REINFORCED CONCRETE STRUCTURAL WALL.** See Section 1905.1.1.

**ORDINARY STRUCTURAL PLAIN CONCRETE WALL.** See Section 1905.1.1.

**[F] ORGANIC PEROXIDE.** An organic compound that contains the bivalent -O-O- structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms have been replaced by an organic radical. Organic peroxides can pose an explosion hazard (detonation or deflagration) or they can be shock sensitive. They can also decompose into various unstable compounds over an extended period of time.

**Class I.** Those formulations that are capable of deflagration but not detonation.

**Class II.** Those formulations that burn very rapidly and that pose a moderate reactivity hazard.

**Class III.** Those formulations that burn rapidly and that pose a moderate reactivity hazard.

**Class IV.** Those formulations that burn in the same manner as ordinary combustibles and that pose a minimal reactivity hazard.

**Class V.** Those formulations that burn with less intensity than ordinary combustibles or do not sustain combustion and that pose no reactivity hazard.

**Unclassified detonable.** Organic peroxides that are capable of detonation. These peroxides pose an extremely high explosion hazard through rapid explosive decomposition.

**ORGANIZED CAMPS.** See Section 440.

**ORTHOGONAL.** To be in two horizontal directions, at 90 degrees (1.57 rad) to each other.

**OTHER STRUCTURES.** Structures, other than buildings, for which loads are specified in Chapter 16.

**OUTPATIENT CLINIC.** See "Clinic, outpatient."

**[A] OWNER.** Any person, agent, firm or corporation having a legal or equitable interest in the property.

**OVERFLOW SYSTEM.** *The system which includes perimeter-type overflow gutters, surface skimmers, surge or collector tanks, other surface water collective system components and their interconnecting piping.*

**[F] OXIDIZER.** A material that readily yields oxygen or other oxidizing gas, or that readily reacts to promote or initiate combustion of combustible materials and, if heated or contaminated, can result in vigorous self-sustained decomposition.

**Class 4.** An oxidizer that can undergo an explosive reaction due to contamination or exposure to thermal or physical shock and that causes a severe increase in the burning rate of combustible materials with which it comes into contact. Additionally, the oxidizer causes a severe increase in the burning rate and can cause spontaneous ignition of combustibles.

**Class 3.** An oxidizer that causes a severe increase in the burning rate of combustible materials with which it comes into contact.

**Class 2.** An oxidizer that will cause a moderate increase in the burning rate of combustible materials with which it comes into contact.

**Class 1.** An oxidizer that does not moderately increase the burning rate of combustible materials.

**[F] OXIDIZING GAS.** A gas that can support and accelerate combustion of other materials more than air does.

**PANEL (PART OF A STRUCTURE).** The section of a floor, wall or roof comprised between the supporting frame of two adjacent rows of columns and girders or column bands of floor or roof construction.

**PANIC HARDWARE.** A door-latching assembly incorporating a device that releases the latch upon the application of a force in the direction of egress travel. See also "Fire exit hardware."

## DEFINITIONS

**PARTICLEBOARD.** A generic term for a panel primarily composed of cellulosic materials (usually wood), generally in the form of discrete pieces or particles, as distinguished from fibers. The cellulosic material is combined with synthetic resin or other suitable bonding system by a process in which the interparticle bond is created by the bonding system under heat and pressure.

**PASSAGE DOOR.** [HCD 1-AC] A door other than an exit door through which persons may traverse.

**PASSENGER ELEVATOR.** [DSA-AC] See "Elevator, Passenger"

[HCD 1 & HCD 2] "Passenger Elevator" is an elevator used primarily to carry persons. For additional information, see California Code of Regulations, Title 8, Division 1, Chapter 4.

**PASSIVE SOLAR ENERGY COLLECTOR.** [HCD 1 & HCD 2] Uses architectural components, rather than mechanical components, to provide heating or cooling for a building interior.

**PATH OF TRAVEL.** [DSA-AC] An identifiable accessible route within an existing site, building or facility 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. When alterations, structural repairs or additions are made to existing buildings or facilities, the term "path of travel" also includes the toilet and bathing facilities, telephones, drinking fountains and signs serving the area of work.

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

**PENETRATION FIRESTOP.** A through-penetration firestop or a membrane-penetration firestop.

**PENTHOUSE.** An enclosed, unoccupied rooftop structure used for sheltering mechanical and electrical equipment, tanks, elevators and related machinery, and vertical shaft openings.

**PERFORMANCE CATEGORY.** A designation of wood structural panels as related to the panel performance used in Chapter 23.

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

**PERMANENT PORTABLE BUILDING.** [SFM] A portable building that is used to serve or house students and is certified as a permanent building on a new public school campus by the public school administration shall comply with the requirements of new campus buildings.

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

**[A] PERSON.** An individual, heirs, executors, administrators or assigns, and also includes a firm, partnership or corporation, its or their successors or assigns, or the agent of any of the aforesaid.

**PERSONS WITH DISABILITIES.** [HCD 1-AC] For purposes of Chapter 11A, "Persons with disabilities" includes, but is not limited to, any physical or mental disability as defined in Government Code Section 12926.

**PHOTOLUMINESCENT.** Having the property of emitting light that continues for a length of time after excitation by visible or invisible light has been removed.

**PHOTOVOLTAIC MODULES/SHINGLES.** A roof covering composed of flat-plate photovoltaic modules fabricated in sheets that resemble three-tab composite shingles.

**[F] PHYSICAL HAZARD.** A chemical for which there is evidence that it is a combustible liquid, cryogenic fluid, explosive, flammable (solid, liquid or gas), organic peroxide (solid or liquid), oxidizer (solid or liquid), oxidizing gas, pyrophoric (solid, liquid or gas), unstable (reactive) material (solid, liquid or gas) or water-reactive material (solid or liquid).

**[F] PHYSIOLOGICAL WARNING THRESHOLD LEVEL.** A concentration of air-borne contaminants, normally expressed in parts per million (ppm) or milligrams per cubic meter ( $\text{mg}/\text{m}^3$ ), that represents the concentration at which persons can sense the presence of the contaminant due to odor, irritation or other quick-acting physiological response. When used in conjunction with the permissible exposure limit (PEL) the physiological warning threshold levels are those consistent with the classification system used to establish the PEL. See the definition of "Permissible exposure limit (PEL)" in the *California Fire Code*.

**PICTOGRAM.** A pictorial symbol that represents activities, facilities, or concepts.

**PLACE OF PUBLIC ACCOMMODATION.** A facility operated by a private entity whose operations affect commerce and fall within at least one of the following categories:

- (1) Place of lodging, except for an establishment located within a facility that contains not more than five rooms for rent or hire and that actually is occupied by the proprietor of the establishment as the residence of the proprietor. For purposes of this code, a facility is a "place of lodging" if it is
  - (i) An inn, hotel or motel; or
  - (ii) A facility that
    - (A) Provides guest rooms for sleeping for stays that primarily are short-term in nature (generally 30 days or less) where the occupant does not have the right to return to a specific room or unit after the conclusion of his or her stay; and
    - (B) Provides guest rooms under conditions and with amenities similar to a hotel, motel, or inn, including the following:
      - (1) On- or off-site management and reservations service;

**STATION. [SFM]** (See Chapter 4, Section 433 for definition of term.)

**STATION PLATFORM. [SFM]** (See Chapter 4, Section 433 for definition of term.)

**STEEL CONSTRUCTION, COLD-FORMED.** That type of construction made up entirely or in part of steel structural members cold formed to shape from sheet or strip steel such as roof deck, floor and wall panels, studs, floor joists, roof joists and other structural elements.

**STEEL JOIST.** Any steel structural member of a building or structure made of hot-rolled or cold-formed solid or open-web sections, or riveted or welded bars, strip or sheet steel members, or slotted and expanded, or otherwise deformed rolled sections.

**STEEL MEMBER, STRUCTURAL.** Any steel structural member of a building or structure consisting of a rolled steel structural shape other than cold-formed steel, or steel joist members.

**STEEP SLOPE.** A roof slope greater than two units vertical in 12 units horizontal (17-percent slope).

**STEPS, RECESSED STEPS, LADDERS AND RECESSED TREADS.** Those means of entry and exit to and from the pool which may be used in conjunction with each other.

**STEP.** A riser and tread.

**STONE MASONRY.** Masonry composed of field, quarried or cast stone units bonded by mortar.

**Ashlar stone masonry.** Stone masonry composed of rectangular units having sawed, dressed or squared bed surfaces and bonded by mortar.

**Rubble stone masonry.** Stone masonry composed of irregular-shaped units bonded by mortar.

**[F] STORAGE, HAZARDOUS MATERIALS.** The keeping, retention or leaving of hazardous materials in closed containers, tanks, cylinders, or similar vessels; or vessels supplying operations through closed connections to the vessel.

**STORM SHELTER.** A building, structure or portions thereof, constructed in accordance with ICC 500 and designated for use during a severe wind storm event, such as a hurricane or tornado.

**Community storm shelter.** A storm shelter not defined as a "Residential Storm Shelter."

**Residential storm shelter.** A storm shelter serving occupants of dwelling units and having an occupant load not exceeding 16 persons.

**STORY.** That portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above (also see "Basement," "Building height," "Grade plane" and "Mezzanine"). It is measured as the vertical distance from top to top of two successive tiers of beams or finished floor surfaces and, for the topmost story, from the top of the floor finish to the top of the ceiling joists or, where there is not a ceiling, to the top of the roof rafters.

**[DSA-AC]** *That portion of a building or facility designed for human occupancy included between the upper surface of a floor and upper surface of the floor or roof next above. A story containing one or more mezzanines has more than one floor level. If the finished floor level directly above a base-*

*ment 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.*

**STORY ABOVE GRADE PLANE.** Any story having its finished floor surface entirely above grade plane, or in which the finished surface of the floor next above is:

1. More than 6 feet (1829 mm) above grade plane; or
2. More than 12 feet (3658 mm) above the finished ground level at any point.

#### STRENGTH (For Chapter 21).

**Design strength.** Nominal strength multiplied by a strength reduction factor.

**Nominal strength.** Strength of a member or cross section calculated in accordance with these provisions before application of any strength-reduction factors.

**Required strength.** Strength of a member or cross section required to resist factored loads.

#### STRENGTH (For Chapter 16).

**Nominal strength.** The capacity of a structure or member to resist the effects of loads, as determined by computations using specified material strengths and dimensions and equations derived from accepted principles of structural mechanics or by field tests or laboratory tests of scaled models, allowing for modeling effects and differences between laboratory and field conditions.

**Required strength.** Strength of a member, cross section or connection required to resist factored loads or related internal moments and forces in such combinations as stipulated by these provisions.

**Strength Design.** A method of proportioning structural members such that the computed forces produced in the members by factored loads do not exceed the member design strength [also called "load and resistance factor design" (LRFD)]. The term "strength design" is used in the design of concrete and masonry structural elements.

**STRUCTURAL COMPOSITE LUMBER.** Structural member manufactured using wood elements bonded together with exterior adhesives. Examples of structural composite lumber are:

**Laminated strand lumber (LSL).** A composite of wood strand elements with wood fibers primarily oriented along the length of the member, where the least dimension of the wood strand elements is 0.10 inches (2.54 mm) or less and their average lengths are a minimum of 150 times the least dimension of the wood strand elements.

**Laminated veneer lumber (LVL).** A composite of wood veneer sheet elements with wood fibers primarily oriented along the length of the member, where the veneer element thicknesses are 0.25 inches (6.4 mm) or less.

**Oriented strand lumber (OSL).** A composite of wood strand elements with wood fibers primarily oriented along the length of the member, where the least dimension of the wood strand elements is 0.10 inches (2.54 mm) or less and their average lengths are a minimum of 75 times and less than 150 times the least dimension of the wood strand elements.

## DEFINITIONS

**Parallel strand lumber (PSL).** A composite of wood strand elements with wood fibers primarily oriented along the length of the member where the least dimension of the wood strand elements is 0.25 inches (6.4 mm) or less and their average lengths are a minimum of 300 times the least dimension of the wood strand elements.

**STRUCTURAL FRAME. [DSA-AC]** *The columns and the girders, beams and trusses having direct connections to the columns and all other members that are essential to the stability of the building or facility as a whole.*

**STRUCTURAL GLUED-LAMINATED TIMBER.** An engineered, stress-rated product of a timber laminating plant, comprised of assemblies of specially selected and prepared wood laminations in which the grain of all laminations is approximately parallel longitudinally and the laminations are bonded with adhesives.

**STRUCTURAL OBSERVATION.** The visual observation of the structural system by a registered design professional for general conformance to the approved construction documents. Structural observation does not include or waive the responsibility for the inspection required by Section 110, 1705 or other sections of this code.

**[A] STRUCTURE.** That which is built or constructed.

**SUBDIAPHRAGM.** A portion of a larger wood diaphragm designed to anchor and transfer local forces to primary diaphragm struts and the main diaphragm.

**SUBSTANTIAL DAMAGE.** Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**SUBSTANTIAL IMPROVEMENT.** Any repair, reconstruction, rehabilitation, addition or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.
2. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

**SUBSTANTIAL STRUCTURAL DAMAGE. [OSHPD 1 & 4]** A condition where:

1. In any story, the vertical elements of the lateral force-resisting system have suffered damage such that the lateral load-carrying capacity of the structure in any horizontal direction has been reduced by more than 10 percent from its predamage condition; or
2. The capacity of any vertical gravity load-carrying component, or any group of such components, that supports more than 30 percent of the total area of the structure's floors and roofs has been reduced more than 10 percent from its predamage condition and the remaining capacity of such

affected elements, with respect to all dead and live loads, is less than 75 percent of that required by this code for new buildings of similar structure, purpose and location.

**SUBSTANTIAL STRUCTURAL DAMAGE.** A condition where:

1. In any story, the vertical elements of the lateral force-resisting system have suffered damage such that the lateral load-carrying capacity of the structure in any horizontal direction has been reduced by more than 33 percent from its predamage condition; or
2. The capacity of any vertical gravity load-carrying component, or any group of such components, that supports more than 30 percent of the total area of the structure's floors and roofs has been reduced more than 20 percent from its predamage condition and the remaining capacity of such affected elements, with respect to all dead and *live loads*, is less than 75 percent of that required by this code for new buildings of similar structure, purpose and location.

**[E] SUNROOM.** A one-story structure attached to a building with a glazing area in excess of 40 percent of the gross area of the structure's exterior walls and roof.

**[F] SUPERVISING STATION.** A facility that receives signals and at which personnel are in attendance at all times to respond to these signals.

**[F] SUPERVISORY SERVICE.** The service required to monitor performance of guard tours and the operative condition of fixed suppression systems or other systems for the protection of life and property.

**[F] SUPERVISORY SIGNAL.** A signal indicating the need of action in connection with the supervision of guard tours, the fire suppression systems or equipment or the maintenance features of related systems.

**[F] SUPERVISORY SIGNAL-INITIATING DEVICE.** An initiation device, such as a valve supervisory switch, water-level indicator or low-air pressure switch on a dry-pipe sprinkler system, whose change of state signals an off-normal condition and its restoration to normal of a fire protection or life safety system, or a need for action in connection with guard tours, fire suppression systems or equipment or maintenance features of related systems.

**SUSCEPTIBLE BAY.** A roof or portion thereof with:

1. A slope less than  $\frac{1}{4}$ -inch per foot (0.0208 rad); or
2. On which water is impounded upon it, in whole or in part, and the secondary drainage system is functional but the primary drainage system is blocked.

A roof surface with a slope of  $\frac{1}{4}$ -inch per foot (0.0208 rad) or greater towards points of free drainage is not a susceptible bay.

**SWIMMING POOL.** Any structure intended for swimming, recreational bathing or wading that contains water over 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground pools; hot tubs; spas and fixed-in-place wading pools.

**T RATING.** The time period that the penetration firestop system, including the penetrating item, limits the maximum temperature rise to 325°F (163°C) above its initial temperature through the penetration on the nonfire side when tested in accordance with ASTM E 814 or UL 1479.

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

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user.  
 See Chapter 1 for state agency authority and building applications.)

Adopting agency	BSC	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
			1	2	1/AC	AC	SS	SS/CC	1	2	3	4								
Adopt entire chapter	X						X	X	X	X		X								
Adopt entire chapter as amended (amended sections listed below)		X	X	X																
Adopt only those sections that are listed below														X			X			
<i>Chapter / Section</i>																				
302.1		X																		
302.1.3																		X		
303.1		X																		
303.1.1		X																		
303.1.2		X																		
303.1.3		X																		
303.1.4		X																		
303.2		X																		
303.7		X	X	X																
303.8		X																		
304.1		X																		
304.2 Clinic, Outpatient		X																		
305.1 w/ Exception		X																		
305.2 w/ Exception		X																		
306.2		X																		
306.4-306.4.4		X																		
307.1		X																		
Table 307.1(1) Footnote d		X																		
Table 307.1(2) Footnote e		X																		
307.1.1		X																		
308.1		X																		
308.2 Detoxification facilities		X																		
308.2 Hospitals and Mental hospitals		X																		
308.2 Nursing Homes		X																		
308.3		X	X	X																
308.4		X											X	X		X				
308.4.2		X											X	X		X				
308.5		X	X	X																
308.5.1		X																		
308.5.2		X																		
308.5.6		X																		
308.5.7		X																		
308.5.8		X																		
308.6		X																		
308.6.1		X																		
308.6.2.1		X																		
310.1		X	X	X																
310.2		X																		

(continued)

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

Adopting agency	BSC	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
			1	2	1/AC	AC	SS	SS/CC	1	2	3	4								
Adopt entire chapter	X						X	X	X	X		X								
Adopt entire chapter as amended (amended sections listed below)		X	X	X																
Adopt only those sections that are listed below															X			X		
<i>Chapter / Section</i>																				
310.3		X																		
310.4		X																		
310.4.1		X																		
310.5		X																		
310.5.1		X																		
310.6		X																		
313		X																		
313.1		X																		

*The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.*

# CHAPTER 3

## USE AND OCCUPANCY CLASSIFICATION

### SECTION 301 GENERAL

**301.1 Scope.** The provisions of this chapter shall control the classification of all buildings and structures as to use and occupancy.

### 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 in this section. 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. *Laboratory (see Section 202): Group B, unless classified as Group L (see Section 443) or Group H (see Section 307).*
8. Mercantile (see Section 309): Group M
9. *[SFM] Organized Camps (see Section 440): Group C10.*
10. *[SFM] Research Laboratories (see Section 443): Group L*
11. *Residential (see Section 310): Groups R-1, R-2, R-3 and R-4*
12. Storage (see Section 311): Groups S-1 and S-2
13. Utility and Miscellaneous (see Section 312): Group U  
*[SFM] Existing buildings housing existing protective social care homes or facilities established prior to 1972 (see Section 3413).*

#### **302.1.1 Reserved**

#### **302.1.2 Reserved**

**302.1.3 Pharmacies; veterinary facilities; bartering, cosmetology or electrolysis establishments; and acupuncture offices.** See Chapter 12.

### SECTION 303 ASSEMBLY GROUP A

**303.1 Assembly Group A.** Assembly Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering of persons for purposes such as civic, social or religious functions; recreation, food or drink consumption or awaiting transportation *or motion picture and television production studio sound stages, approved production facilities and production locations.*

**303.1.1 Small buildings and tenant spaces.** A building or tenant space used for assembly purposes with an occupant load of less than 50 persons shall be classified as a Group B occupancy.

**303.1.2 Small assembly spaces.** The following rooms and spaces shall not be classified as Assembly occupancies:

1. A room or space used for assembly purposes with an occupant load of less than 50 persons and accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy.
2. A room or space used for assembly purposes that is less than 750 square feet ( $70\text{ m}^2$ ) in area and accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy.

**303.1.3 Associated with Group E occupancies.** A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy.

**303.1.4 Accessory to places of religious worship.** Accessory religious educational rooms and religious auditoriums with occupant loads of less than 100 are not considered separate occupancies.

**303.2 Assembly Group A-1.** Assembly uses, usually with fixed seating, intended for the production and viewing of the performing arts or motion pictures including, but not limited to:

*Motion picture and television production studio sound stages, approved production facilities and production locations. (with live audiences).*

Motion picture theaters

Symphony and concert halls

Television and radio studios admitting an audience

Theaters

**303.3 Assembly Group A-2.** Assembly uses intended for food and/or drink consumption including, but not limited to:

Banquet halls

Casinos (gaming areas)

Nightclubs

Restaurants, cafeterias and similar dining facilities  
(including associated commercial kitchens)

Taverns and bars

**303.4 Assembly Group A-3.** Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A including, but not limited to:

- Amusement arcades
- Art galleries
- Bowling alleys
- Community halls
- Courtrooms
- Dance halls (not including food or drink consumption)
- Exhibition halls
- Funeral parlors
- Gymnasiums (without spectator seating)
- Indoor swimming pools (without spectator seating)
- Indoor tennis courts (without spectator seating)
- Lecture halls
- Libraries
- Museums
- Places of religious worship
- Pool and billiard parlors
- Waiting areas in transportation terminals

**303.5 Assembly Group A-4.** Assembly uses intended for viewing of indoor sporting events and activities with spectator seating including, but not limited to:

- Arenas
- Skating rinks
- Swimming pools
- Tennis courts

**303.6 Assembly Group A-5.** Assembly uses intended for participation in or viewing outdoor activities including, but not limited to:

- Amusement park structures
- Bleachers
- Grandstands
- Stadiums

**303.7 Fixed guideway transit systems.** [SFM] Fixed guideway transit system buildings shall conform to the requirements of this code for their occupancy classification in addition to the provisions set forth in Section 433.

**303.8 Subterranean spaces for winery facilities in natural or manmade caves.** [SFM] For fire and life safety requirements, see Section 436.

## SECTION 304 BUSINESS GROUP B

**304.1 Business Group B.** Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

- Airport traffic control towers
- Ambulatory care facilities *serving five or fewer patients*  
*(see Section 308.4.2 for facilities serving more than five patients)*
- Animal hospitals, kennels and pounds

- Banks
- Barber and beauty shops
- Car wash
- Civic administration
- Clinic, outpatient [SFM] (*not classified as Group I-2.1*)
- Dry cleaning and laundries: pick-up and delivery stations and self-service
- Educational occupancies for students above the 12th grade
- Electronic data processing
- Laboratories: testing, research *and [SFM] instruction*
- Motor vehicle showrooms
- Post offices
- Print shops
- Professional services (architects, attorneys, dentists, physicians, engineers, etc.)
- Radio and television stations
- Telephone exchanges
- Training and skill development not within a school or academic program

**304.2 Definitions.** The following terms are defined in Chapter 2:

**AMBULATORY CARE FACILITY.**

**CLINIC, OUTPATIENT.**

## SECTION 305 EDUCATIONAL GROUP E

**305.1 Educational Group E.** Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by more *than six* persons at any one time for educational purposes through the 12th grade.

*Exception: [SFM] A residence used as a home school for the children who normally reside at the residence. Such residences shall remain classified as Group R-2, or Group R-3 occupancies.*

**305.1.1 Accessory to places of religious worship.** Religious educational rooms and religious auditoriums, which are accessory to places of religious worship in accordance with Section 303.1.4 and have occupant loads of less than 100, shall be classified as Group A-3 occupancies.

**305.2 Group E, day care facilities.** This group includes buildings and structures or portions thereof occupied by more than *six* children 2 years of age *and older* who receive educational, supervision or personal care services for fewer than 24 hours per day.

*Exception: [SFM] A Day-care facility not otherwise classified as an R-3 occupancy, where occupants are not capable of responding to an emergency situation without physical assistance from the staff shall be classified as Group I-4.*

## SECTION 306 FACTORY GROUP F

**306.1 Factory Industrial Group F.** Factory Industrial Group F occupancy includes, among others, the use of a building or structure, or a portion thereof, for assembling, disassembling,

4. Grandstands, bleachers, stadiums, arenas and similar facilities.
5. Where the lowest story is the only story that would qualify the building as an underground building and has an area not greater than 1,500 square feet (139 m<sup>2</sup>) and has an occupant load less than 10.
6. Pumping stations and other similar mechanical spaces intended only for limited periodic use by service or maintenance personnel.

**405.2 Construction requirements.** The underground portion of the building shall be of Type I construction.

**[F] 405.3 Automatic sprinkler system.** The highest level of exit discharge serving the underground portions of the building and all levels below shall be equipped with an automatic sprinkler system installed in accordance with Section 903.3.1.1. Water-flow switches and control valves shall be supervised in accordance with Section 903.4.

**405.4 Compartmentation.** Compartmentation shall be in accordance with Sections 405.4.1 through 405.4.3.

**405.4.1 Number of compartments.** A building having a floor level more than 60 feet (18 288 mm) below the finished floor of the lowest level of exit discharge shall be divided into no fewer than two compartments of approximately equal size. Such compartmentation shall extend through the highest level of exit discharge serving the underground portions of the building and all levels below.

**Exception:** The lowest story need not be compartmented where the area is not greater than 1,500 square feet (139 m<sup>2</sup>) and has an occupant load of less than 10.

**405.4.2 Smoke barrier penetration.** The compartments shall be separated from each other by a smoke barrier in accordance with Section 709. Penetrations between the two compartments shall be limited to plumbing and electrical piping and conduit that are firestopped in accordance with Section 714. Doorways shall be protected by fire door assemblies that are automatic-closing by smoke detection in accordance with Section 716.5.9.3 and are installed in accordance with NFPA 105 and Section 716.5.3. Where provided, each compartment shall have an air supply and an exhaust system independent of the other compartments.

**405.4.3 Elevators.** Where elevators are provided, each compartment shall have direct access to an elevator. Where an elevator serves more than one compartment, an elevator lobby shall be provided and shall be separated from each compartment by a smoke barrier in accordance with Section 709. Doors shall be gasketed, have a drop sill and be automatic-closing by smoke detection in accordance with Section 716.5.9.3.

**405.5 Smoke control system.** A smoke control system shall be provided in accordance with Sections 405.5.1 and 405.5.2.

**405.5.1 Control system.** A smoke control system is required to control the migration of products of combustion in accordance with Section 909 and the provisions of this section. Smoke control shall restrict movement of

smoke to the general area of fire origin and maintain means of egress in a usable condition.

**405.5.2 Compartment smoke control system.** Where compartmentation is required, each compartment shall have an independent smoke control system. The system shall be automatically activated and capable of manual operation in accordance with Sections 907.2.18 and 907.2.19.

**[F] 405.6 Fire alarm systems.** A fire alarm system shall be provided where required by Sections 907.2.18 and 907.2.19.

**405.7 Means of egress.** Means of egress shall be in accordance with Sections 405.7.1 and 405.7.2.

**405.7.1 Number of exits.** Each floor level shall be provided with no fewer than two exits. Where compartmentation is required by Section 405.4, each compartment shall have no fewer than one exit and shall also have no fewer than one exit access doorway into the adjoining compartment.

**405.7.2 Smokeproof enclosure.** Every required stairway serving floor levels more than 30 feet (9144 mm) below the finished floor of its level of exit discharge shall comply with the requirements for a smokeproof enclosure as provided in Section 1022.10.

**[F] 405.8 Standby power.** A standby power system complying with Chapter 27 shall be provided standby power loads specified in Section 405.8.1.

**[F] 405.8.1 Standby power loads.** The following loads are classified as standby power loads:

1. Smoke control system.
2. Ventilation and automatic fire detection equipment for smokeproof enclosures.
3. Fire pumps.

Standby power shall be provided for elevators in accordance with Section 3003.

**[F] 405.8.2 Pick-up time.** The standby power system shall pick up its connected loads within 60 seconds of failure of the normal power supply.

**[F] 405.9 Emergency power.** An emergency power system complying with Chapter 27 shall be provided for emergency power loads specified in Section 405.9.1.

**[F] 405.9.1 Emergency power loads.** The following loads are classified as emergency power loads:

1. Emergency voice/alarm communications systems.
2. Fire alarm systems.
3. Automatic fire detection systems.
4. Elevator car lighting.
5. Means of egress and exit sign illumination as required by Chapter 10.

**[F] 405.10 Standpipe system.** The underground building shall be equipped throughout with a standpipe system in accordance with Section 905.

## SECTION 406 MOTOR-VEHICLE-RELATED OCCUPANCIES

*Section 406 has been completely reorganized from the 2009 code; therefore, the \* and \*\* margin indicators have not been included for clarity.*

**406.1 General.** Motor-vehicle-related occupancies shall comply with Sections 406.1 through 406.8.

**406.2 Definitions.** The following terms are defined in Chapter 2:

### MECHANICAL-ACCESS OPEN PARKING GARAGES.

### OPEN PARKING GARAGE.

### RAMP-ACCESS OPEN PARKING GARAGES.

**406.3 Private garages and carports.** Private garages and carports shall comply with Sections 406.3.1 through 406.3.5.

**406.3.1 Classification.** Buildings or parts of buildings classified as Group U occupancies because of the use or character of the occupancy shall be not greater than 1,000 square feet ( $93\text{ m}^2$ ) in area or one story in height except as provided in Section 406.3.2. Any building or portion thereof that exceeds the limitations specified in this section shall be classified in the occupancy group other than Group U that it most nearly resembles.

**406.3.2 Area increase.** Group U occupancies used for the storage of private or pleasure-type motor vehicles where no repair work is completed or fuel is dispensed are permitted to be 3,000 square feet ( $279\text{ m}^2$ ) where the following provisions are met:

1. For a mixed occupancy building, the exterior wall and opening protection for the Group U portion of the building shall be as required for the major occupancy of the building. For such a mixed occupancy building, the allowable floor area of the building shall be as permitted for the major occupancy contained therein.
2. For a building containing only a Group U occupancy, the exterior wall shall not be required to have a fire-resistance rating and the area of openings shall not be limited where the fire separation distance is 5 feet (1524 mm) or more.

More than one 3,000-square-foot ( $279\text{ m}^2$ ) Group U occupancy shall be permitted to be in the same structure, provided each 3,000-square-foot ( $279\text{ m}^2$ ) area is separated by fire walls complying with Section 706.

**406.3.3 Garages and carports.** Carports shall be open on no fewer than two sides. Carport floor surfaces shall be of approved noncombustible material. Carports not open on at least two sides shall be considered a garage and shall comply with the provisions of this section for garages.

**Exception:** Asphalt surfaces shall be permitted at ground level in carports.

The area of floor used for parking of automobiles or other vehicles shall be sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway.

**406.3.4 Separation.** Separations shall comply with the following:

1. The private garage shall be separated from the dwelling unit and its attic area by means of gypsum board, not less than  $\frac{1}{2}$  inch (12.7 mm) in thickness, applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than a  $\frac{5}{8}$ -inch (15.9 mm) Type X gypsum board or equivalent and  $\frac{1}{2}$ -inch (12.7 mm) gypsum board applied to structures supporting the separation from habitable rooms above the garage. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors or solid or honeycomb core steel doors not less than  $1\frac{3}{8}$  inches (34.9 mm) in thickness, or doors in compliance with Section 716.5.3 with a fire protection rating of not less than 20 minutes. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Doors shall be self-closing and self-latching.
2. Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit, including its attic area, from the garage shall be constructed of sheet steel of not less than 0.019 inches (0.48 mm), in thickness, and shall have no openings into the garage.
3. A separation is not required between a Group R-3 and U carport, provided the carport is entirely open on two or more sides and there are not enclosed areas above.

**406.3.5 Automatic garage door openers.** Automatic garage door openers, if provided, shall be listed in accordance with UL 325. See *Health and Safety Code Sections 19890 and 19891* for additional provisions for residential garage door openers.

**406.4 Public parking garages.** Parking garages other than private parking garages, shall be classified as public parking garages and shall comply with the provisions of Sections 406.4.2 through 406.4.8 and shall be classified as either an open parking garage or an enclosed parking garage. Open parking garages shall also comply with Section 406.5. Enclosed parking garages shall also comply with Section 406.6. See Section 510 for special provisions for parking garages.

**406.4.1 Clear height.** The clear height of each floor level in vehicle and pedestrian traffic areas shall be not less than 7 feet (2134 mm).

**406.4.2 Guards.** Guards shall be provided in accordance with Section 1013. Guards serving as vehicle barriers shall comply with Sections 406.4.3 and 1013.

**406.4.3 Vehicle barriers.** Vehicle barriers not less than 2 feet 9 inches (835 mm) in height shall be placed at the ends

county may pursuant to Health and Safety Code Section 13143.5, or a fire protection district may pursuant to Health and Safety Code Section 13869.7, adopt standards more stringent than those adopted by the state fire marshal that are reasonably necessary to accommodate local climate, geological or topographical conditions relating to roof coverings for Residential Care Facilities for the Elderly.

**Exception:** Local regulations relating to roof coverings in facilities licensed as a residential care facility for the elderly (RCFE) per Health and Safety Code Section 13133.

#### 425.3 Building height and area provisions.

**425.3.1** Group R-2.1, R-3.1 and R-4 shall be constructed in accordance with Table 503.

**425.3.2 Limitations six or less clients.** Group R-3.1 occupancies where nonambulatory clients are housed above the first story, having more than two stories in height or having more than 3,000 square feet ( $279 \text{ m}^2$ ) of floor area above the first story shall not be of less than one-hour fire-resistance-rated construction throughout.

In Group R3.1 occupancies housing a bedridden client, the client sleeping room shall not be located above or below the first story.

**Exception:** Clients who become bedridden as a result of a temporary illness as defined in Health and Safety Code Sections 1566.45, 1568.0832 and 1569.72. A temporary illness is an illness, which persists for 14 days or less. A bedridden client may be retained in excess of the 14 days upon approval by the Department of Social Services and may continue to be housed on any story in a Group R-3.1 occupancy classified as a licensed residential facility.

Every licensee admitting or retaining a bedridden resident shall, within 48 hours of the resident's admission or retention in the facility, notify the local fire authority with jurisdiction of the estimated length of time the resident will retain his or her bedridden status in the facility.

**425.3.3 Limitations seven or more clients.** Group R-4 occupancies where nonambulatory clients are housed above the first story and there is more than 3,000 square feet ( $279 \text{ m}^2$ ) of floor area above the first story or housing more than 16 clients above the first story shall be constructed of not less than one-hour fire-resistance-rated construction throughout.

**425.3.4 Nonambulatory elderly clients.** Group R-4 occupancies housing nonambulatory elderly clients shall be of not less than one-hour fire-resistance-rated construction throughout.

#### 425.4 Type of construction provisions.

**425.4.1** Group R-2.1, occupancies are not permitted in nonfire-resistance-rated construction, see Health and Safety Code Section 13131.5.

#### 425.5 Fire-resistance-rated construction provisions.

**425.5.1 Smoke barriers required.** Group R-2.1 and R-4 occupancies licensed as a Residential Care Facility (RCF) with individual floor areas over 6,000 square feet ( $557 \text{ m}^2$ ) per floor, shall be provided with smoke barriers, constructed in accordance with Section 709.

Group R-2.1 occupancies housing bedridden clients shall be provided with smoke barriers constructed in accordance with Section 709 regardless of the number of clients.

When smoke barriers are required, the area within a smoke compartment shall not exceed 22,500 square feet ( $2090 \text{ m}^2$ ) nor shall its travel distance exceed 200 feet (60 960 mm). Such smoke barriers shall divide the floor as equally as possible.

**425.5.2 Smoke partitions.** Group R-2.1 occupancies where smoke partitions are required, framing shall be covered with noncombustible materials having an approved thermal barrier with an index of not less than 15 in accordance with FM 4880, UL 1040, NFPA 286 or UL 1715.

**425.5.3 Independent egress.** At least two means of egress shall be provided from each smoke compartment created by smoke barriers. Means of egress may pass through adjacent compartments provided it does not return through the smoke compartment from which means of egress originated.

#### 425.6 Interior finish provisions.

**425.6.1 Interior wall and ceiling finish.** Group R-3.1 occupancies housing a bedridden client shall comply with interior wall and ceiling finish requirements specified for Group I-2 occupancies in Table 803.9.

**425.6.2 Safety padding.** Padding material used on walls, floors and ceilings in Group I and R-2.1 occupancies shall be of an approved type tested in accordance with the procedures established by State Fire Marshal Standard 12-8-100, Room Fire Test for Wall and Ceiling Materials, California Code of Regulations, Title 24, Part 12.

#### 425.7 Fire protection system provisions.

**425.7.1 Automatic sprinkler systems in Group R-2.1, R-3.1 and R-4 occupancies.** An automatic sprinkler system shall be installed where required in Section 903.

**425.7.2 Fire alarm systems in Group R-2.1 and R-4 occupancies.** An approved fire alarm system shall be installed where required in Section 907.

**425.7.3 Smoke alarms in Groups R-2.1, R-3.1 and R-4 occupancies.** Smoke alarms shall be installed where required in Section 907.2.11.1.

**425.7.4 Hearing impaired.** See Section 907.5.2.3.

#### 425.8 Means of egress provisions.

**425.8.1 General.** In addition to the general means of egress requirements of Chapter 10, this section shall apply to Group R-2.1, R-3.1 and R-4 occupancies.

**425.8.2 Number of exits.**

**425.8.2.1** Group R-2.1, R-3.1 and R-4 occupancies shall have a minimum of two exits.

**Exception:** Ancillary use areas or occupancies shall have egress as required by Section 1021.

#### 425.8.3 Egress arrangements.

**425.8.3.1** Egress through adjoining dwelling units shall not be permitted.

**425.8.3.2 Group R-3.1 occupancies housing nonambulatory clients.** In a Group R-3.1 occupancy, bedrooms used by nonambulatory clients shall have access to at least one of the required exits which shall conform to one of the following:

1. Egress through a hallway or area into a bedroom in the immediate area which has an exit directly to the exterior and the corridor/hallway is constructed consistent with the dwelling unit interior walls. The hallway shall be separated from common areas by a solid wood door not less than 1<sup>3</sup>/<sub>8</sub> inch (35 mm) in thickness, maintained self-closing or shall be automatic closing by actuation of a smoke detector installed in accordance with Section 715.4.8.
2. Egress through a hallway which has an exit directly to the exterior. The hallway shall be separated from the rest of the house by a wall constructed consistent with the dwelling unit interior walls and opening protected by a solid wood door not less than 1<sup>3</sup>/<sub>8</sub> inch (35 mm) in thickness, maintained self-closing or shall be automatic closing by actuation of a smoke detector installed in accordance with Section 715.4.8.
3. Direct exit from the bedroom to the exterior 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, doors shall be capable of opening at least 90 degrees and shall be so mounted that the clear width of the exit way is not less than 32 inches (813 mm).
4. Egress through an adjoining bedroom which exits to the exterior.

**425.8.3.3 Group R-3.1 occupancies housing only one bedridden client.** In Group R-3.1 occupancies housing a bedridden client and not provided with an approved automatic sprinkler system, all of the following shall apply:

1. In Group R-3.1 occupancies housing a bedridden client, a direct exit to the exterior of the residence shall be provided from the client sleeping room.
2. Doors to a bedridden client's sleeping room shall be of a self-closing, positive latching 1<sup>3</sup>/<sub>8</sub> inch solid wood door. Such doors shall be provided with a gasket so installed as to provide a seal where the door meets the jam on both sides and across the top. Doors shall be maintained self-closing or shall be automatic closing by actua-

tion of a smoke alarm in accordance with Section 715.4.8.

3. Group R-3.1 occupancies housing a bedridden client, shall not have a night latch, dead bolt, security chain or any similar locking device installed on any interior door leading from a bedridden client's sleeping room to any interior area such as a corridor, hallway and or general use areas of the residence in accordance with Chapter 10.
4. The exterior exit door to a bedridden client's sleeping room shall be operable from both the interior and exterior of the residence.
5. Every required exit doorway from a bedridden client sleeping room 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 exit way is not less than 32 inches (813 mm).

**Note:** A sliding glass door can be used as an exterior exit doorway as long as it is operable from the inside and outside and the clear width of the exit way is not less than 32 inches (813 mm).

**425.8.3.4 Intervening rooms.** A means of exit shall not pass through more than one intervening room. A means of egress shall not pass through kitchens, storerooms, closets, garages or spaces used for similar purposes.

**Exception:** Kitchens which do not form separate rooms by construction.

#### 425.8.4 Corridors.

**425.8.4.1** Unless specified by Section 425.8.4, corridors serving Group R-2.1 and Group R-4 occupancies shall comply with Section 1018.1.

**425.8.4.2** The minimum clear width of a corridor shall be as follows:

1. Group R-2.1 occupancies shall have 60 inches (1524 mm) on floors housing nonambulatory clients and 44 inches (1118 mm) on floors housing only ambulatory clients.
2. Group R-4 occupancies shall have 44 inches (1118 mm) on floors housing clients.

#### Exceptions:

1. Corridors serving an occupant load of 10 or less shall not be less than 36 inches (914 mm) in width.
2. Corridors serving ambulatory persons only and having an occupant load of 49 or less shall not be less than 36 inches (914 mm) in width.
3. Group R-4 occupancies shall have 36 inches (914 mm) on floors housing clients.

**TABLE 509**  
**INCIDENTAL USES**

ROOM OR AREA	SEPARATION AND/OR PROTECTION
Furnace room where any piece of equipment is over 400,000 Btu per hour input	1 hour or provide automatic sprinkler system <sup>a</sup>
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	1 hour or provide automatic sprinkler system <sup>a</sup>
Refrigerant machinery room	1 hour or provide automatic sprinkler system <sup>a</sup>
Hydrogen cutoff rooms, not classified as Group H	1 hour in Group B, F, M, S and U occupancies; 2 hours in Group A, E, I and R occupancies.
Incinerator rooms	2 hours and provide automatic sprinkler system
Paint shops, not classified as Group H, located in occupancies other than Group F	2 hours; or 1 hour and provide automatic sprinkler system
Laboratories and vocational shops, not classified as Group H, located in Group I-2 and I-2.1 occupancies	1 hour or provide automatic fire-extinguishing system <sup>a</sup>
<i>[SFM] Rooms or areas with special hazards such as laboratories, vocational shops and other such areas not classified as Group H, located in Group E occupancies where hazardous materials in quantities not exceeding the maximum allowable quantity are used or stored.</i>	<i>1 hour</i>
Laundry rooms over 100 square feet	1 hour or provide automatic sprinkler system <sup>a</sup>
Waste and linen collection rooms located in either Group I-2 occupancies or ambulatory care facilities	1 hour
Waste and linen collection rooms over 100 square feet	1 hour or provide automatic sprinkler system <sup>a</sup>
Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons for flooded lead-acid, nickel cadmium or VRLA, or more than 1,000 pounds for lithium-ion and lithium metal polymer used for facility standby power, emergency power or uninterrupted power supplies	1 hour in Group B, F, M, S and U occupancies; 2 hours in Group A, E, I and R occupancies <sup>a</sup>

For SI: 1 square foot = 0.0929 m<sup>2</sup>, 1 pound per square inch (psi) = 6.9 kPa, 1 British thermal unit (Btu) per hour = 0.293 watts, 1 horsepower = 746 watts, 1 gallon = 3.785 L.

a. [SFM] Fire barrier protection and automatic sprinkler protection required throughout the fire area in I-2 and I-2.1 occupancies as indicated.

walls, limitation of number of stories and type of construction where all of the following conditions are met:

1. The buildings are separated with a horizontal assembly having a fire-resistance rating of not less than 3 hours.
2. The building below the horizontal assembly is not greater than one story above grade plane.
3. The building below the horizontal assembly is of Type IA construction.
4. Shaft, stairway, ramp and escalator enclosures through the horizontal assembly shall have not less than a 2-hour fire-resistance rating with opening protectives in accordance with Section 716.5.

**Exception:** Where the enclosure walls below the horizontal assembly have not less than a 3-hour fire-resistance rating with opening protectives in accordance with Section 716.5, the enclosure walls extending above the horizontal assembly shall be permitted to have a 1-hour fire-resistance rating, provided:

1. The building above the horizontal assembly is not required to be of Type I construction;
2. The enclosure connects fewer than four stories; and
3. The enclosure opening protectives above the horizontal assembly have a fire protection rating of not less than 1 hour.
4. The building or buildings above the horizontal assembly shall be permitted to have multiple Group A occupancies, each with an occupant load of less than 300, or Group B, M, R or S occupancies.
5. The building below the horizontal assembly shall be protected throughout by an approved automatic sprinkler system in accordance with Section 903.3.1.1, and shall be permitted to be any of the following occupancies:
  - 6.1. Group S-2 parking garage used for the parking and storage of private motor vehicles;
  - 6.2. Multiple Group A, each with an occupant load of less than 300;

- 6.3. Group B;
  - 6.4. Group M;
  - 6.5. Group R; and
  - 6.6. Uses incidental to the operation of the building (including entry lobbies, mechanical rooms, storage areas and similar uses).
7. The maximum building height in feet (mm) shall not exceed the limits set forth in Section 503 for the building having the smaller allowable height as measured from the grade plane.

**510.3 Group S-2 enclosed parking garage with Group S-2 open parking garage above.** A Group S-2 enclosed parking garage with not more than one story above grade plane and located below a Group S-2 open parking garage shall be classified as a separate and distinct building for the purpose of determining the type of construction where all of the following conditions are met:

1. The allowable area of the building shall be such that the sum of the ratios of the actual area divided by the allowable area for each separate occupancy shall not exceed 1.
2. The Group S-2 enclosed parking garage is of Type I or II construction and is at least equal to the fire-resistance requirements of the Group S-2 open parking garage.
3. The height and the number of tiers of the Group S-2 open parking garage shall be limited as specified in Table 406.5.4.
4. The floor assembly separating the Group S-2 enclosed parking garage and Group S-2 open parking garage shall be protected as required for the floor assembly of the Group S-2 enclosed parking garage. Openings between the Group S-2 enclosed parking garage and Group S-2 open parking garage, except exit openings, shall not be required to be protected.
5. The Group S-2 enclosed parking garage is used exclusively for the parking or storage of private motor vehicles, but shall be permitted to contain an office, waiting room and toilet room having a total area of not more than 1,000 square feet (93 m<sup>2</sup>), and mechanical equipment rooms incidental to the operation of the building.

**510.4 Parking beneath Group R.** Where a maximum one story above grade plane Group S-2 parking garage, enclosed or open, or combination thereof, of Type I construction or open of Type IV construction, with grade entrance, is provided under a building of Group R, the number of stories to be used in determining the minimum type of construction shall be measured from the floor above such a parking area. The floor assembly between the parking garage and the Group R above shall comply with the type of construction required for the parking garage and shall also provide a fire-resistance rating not less than the mixed occupancy separation required in Section 508.4.

**510.5 Group R-1 and R-2 buildings of Type IIIA construction.** The height limitation for buildings of Type IIIA construction in Groups R-1 and R-2 shall be increased to six stories and 75 feet (22 860 mm) where the first floor assem-

bly above the basement has a fire-resistance rating of not less than 3 hours and the floor area is subdivided by 2-hour fire-resistance-rated fire walls into areas of not more than 3,000 square feet (279 m<sup>2</sup>).

**510.6 Group R-1 and R-2 buildings of Type II A construction.** The height limitation for buildings of Type II A construction in Groups R-1 and R-2 shall be increased to nine stories and 100 feet (30 480 mm) where the building is separated by not less than 50 feet (15 240 mm) from any other building on the lot and from lot lines, the exits are segregated in an area enclosed by a 2-hour fire-resistance-rated fire wall and the first floor assembly has a fire-resistance rating of not less than 1½ hours.

**510.7 Open parking garage beneath Groups A, I, B, M and R.** Open parking garages constructed under Groups A, I, B, M and R shall not exceed the height and area limitations permitted under Section 406.5. The height and area of the portion of the building above the open parking garage shall not exceed the limitations in Section 503 for the upper occupancy. The height, in both feet and stories, of the portion of the building above the open parking garage shall be measured from grade plane and shall include both the open parking garage and the portion of the building above the parking garage.

**510.7.1 Fire separation.** Fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711 between the parking occupancy and the upper occupancy shall correspond to the required fire-resistance rating prescribed in Table 508.4 for the uses involved. The type of construction shall apply to each occupancy individually, except that structural members, including main bracing within the open parking structure, which is necessary to support the upper occupancy, shall be protected with the more restrictive fire-resistance-rated assemblies of the groups involved as shown in Table 601. Means of egress for the upper occupancy shall conform to Chapter 10 and shall be separated from the parking occupancy by fire barriers having not less than a 2-hour fire-resistance rating as required by Section 707 with self-closing doors complying with Section 716 or horizontal assemblies having not less than a 2-hour fire-resistance rating as required by Section 711, with self-closing doors complying with Section 716. *Means of egress from the open parking garage shall comply with Section 406.5.*

**510.8 Group B or M with Group S-2 open parking garage.** Group B or M occupancies located not higher than the first story above grade plane shall be considered as a separate and distinct building for the purpose of determining the type of construction where all of the following conditions are met:

1. The buildings are separated with a horizontal assembly having a fire-resistance rating of not less than 2 hours.
2. The occupancies in the building below the horizontal assembly are limited to Groups B and M.
3. The occupancy above the horizontal assembly is limited to a Group S-2 open parking garage.

## CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE

### CHAPTER 9 – FIRE PROTECTION SYSTEMS

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user.  
See Chapter 1 for state agency authority and building applications.)

Adopting agency	BSC	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
			1	2	1/AC	AC	SS	SS/CC	1	2	3	4								
Adopt entire chapter	X						X	X	X	X		X								
Adopt entire chapter as amended (amended sections listed below)		X	X	X																
Adopt only those sections that are listed below						X												X		
Chapter / Section																				
901.2			X																	
901.3			X																	
901.5			X																	
901.6.2			X																	
902.1			X																	
Fire Appliance			X																	
Sprinkler Alarm			X															X		
Sprinkler System			X															X		
Standpipe System, Classes of.			X															X		
903.2.1.2			X																	
903.2.1.3			X																	
903.2.3			X																	
903.2.4.1			X																	
903.2.5.4			X																	
903.2.6			X																	
903.2.6.1			X																	
903.2.6.2			X																	
903.2.6.3			X																	
903.2.7			X																	
903.2.7.1			X																	
903.2.8			X																	
903.2.10			X																	
Table 903.2.11.6			X																	
903.2.14			X																	
903.2.14.1			X																	
903.2.14.2			X																	
903.2.15			X																	
903.2.15.1			X																	
903.2.16			X																	
903.2.16.1			X																	
903.2.17			X																	
903.2.17.1			X																	
903.2.17.2			X																	
903.2.17.2.1			X																	
903.2.17.2.2			X																	
903.2.17.2.3			X																	
903.2.17.2.4			X																	
903.2.17.2.5			X																	
903.2.17.2.6			X																	
903.2.18			X																	
903.2.19			X																	

*(continued)*

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

Adopting agency	BSC	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
			1	2	1/AC	AC	SS	SS/CC	1	2	3	4								
> Adopt entire chapter	X						X	X	X	X		X								
Adopt entire chapter as amended (amended sections listed below)		X	X	X																
Adopt only those sections that are listed below						X													X	
Chapter / Section																				
903.1.3		X																		
903.2		X																		
903.2.7		X																		
903.2.7.1		X																		
903.2.8		X																		
903.2.8.1		X																		
903.2.10		X																		
903.2.11.4		X																		
Table 903.2.11.6		X																		
903.2.12		X																		
903.2.14		X																		
903.2.14.1		X																		
903.2.14.2		X																		
903.2.15		X																		
903.2.15.1		X																		
903.2.16		X																		
903.2.16.1		X																		
903.2.17		X																		
903.2.18		X																		
903.2.19		X																		
903.2.19.1		X																		
903.2.19.1.1		X																		
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903.3.1.1		X																		
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903.3.2		X																		
903.3.5		X																		
903.3.5.2		X																		
903.3.7		X																		
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903.4.2		X																		
903.4.3		X																		
903.5		X																		
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904.3.1		X																		
904.5		X																		
904.6		X																		
904.7		X																		
904.8		X																		
904.9		X																		
904.10		X																		

(continued)

ing with UL 217 shall be installed in accordance with Sections 907.2.11.1 through 907.2.11.4 and NFPA 72.

**Exception:** For Group R occupancies. A fire alarm system with smoke detectors located in accordance with this section may be installed in lieu of smoke alarms. Upon actuation of the detector, only those notification appliances in the dwelling unit or guest room where the detector is actuated shall activate.

**[F] 907.2.11.1 Group R-1.** Single- or multiple-station smoke alarms shall be installed in all of the following locations in Group R-1:

1. In sleeping areas.
2. In every room in the path of the means of egress from the sleeping area to the door leading from the sleeping unit.
3. In each story within the sleeping unit, including basements. For sleeping units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

See Section 907.2.11.5 for specific location requirements.

**[F] 907.2.11.2 Groups R-2, R-2.1, R-3, R-3.1 and R-4 and I-1.** Single- or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-2.1, R-3, R-3.1 and R-4 regardless of occupant load at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
2. In each room used for sleeping purposes.

**Exception:** Single- or multiple-station smoke alarms in Group I-1 shall not be required where smoke detectors are provided in the sleeping rooms as part of an automatic smoke detection system.

3. In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
4. In a Group R-3.1 occupancies, in addition to the above, smoke alarms shall be provided throughout the habitable areas of the dwelling unit except kitchens.

See Section 907.2.11.5 for specific location requirements.

**907.2.11.2.1 Group I-4 occupancies.** Large family day-care homes shall be equipped with State Fire Marshal approved and listed single station residential type smoke alarms.

**907.2.11.2.2 Group R-3.1.** In all facilities housing a bedridden client, smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall be electrically interconnected so as to cause all smoke alarms to sound a distinctive alarm signal upon actuation of any single smoke alarm. Such alarm signal shall be audible throughout the facility at a minimal level of 15 db above ambient noise level. These devices need not be interconnected to any other fire alarm device, have a control panel, or be electrically supervised or provided with emergency power.

**907.2.11.2.3 Smoke alarms.** Smoke alarms shall be tested and maintained in accordance with the manufacturer's instructions. Smoke alarms that no longer function shall be replaced. Smoke alarms installed in one- and two-family dwellings shall be replaced after 10 years from the date of manufacture marked on the unit, or if the date of manufacture cannot be determined.

**907.2.11.2.4 Conventional ionization smoke alarms.** Conventional ionization smoke alarms that are solely battery powered shall be equipped with a ten-year battery and have a silence feature.

Conventional ionization smoke alarm for the purposes of this section is a smoke alarm, listed as complying with ANSI/UL 217, in which the only sensing element is an ionization sensor. The output signal from the ionization sensor must exceed a factory set alarm threshold, without the use discriminating algorithms, to determine when an alarm signal is warranted.

#### 907.2.11.5 Specific location requirements.

Extract from NFPA 72 Section 29.8.3.4 Specific Location Requirements\*.

This extract has been provided by NFPA as amended by the Office of the State Fire Marshal and adopted by reference as follows:

**29.8.3.4 Specific location requirements.** The installation of smoke alarms and smoke detectors shall comply with the following requirements:

- (1) Smoke alarms and smoke detectors shall not be located where ambient conditions, including humidity and temperature, are outside the limits specified by the manufacturer's published instructions.
- (2) Smoke alarms and smoke detectors shall not be located within unfinished attics or garages or

- in other spaces where temperatures can fall below 40°F (4°C) or exceed 100°F (38°C).*
- (3) *Where the mounting surface could become considerably warmer or cooler than the room, such as a poorly insulated ceiling below an unfinished attic or an exterior wall, smoke alarms and smoke detectors shall be mounted on an inside wall.*
  - (4) *Smoke alarms or smoke detectors shall be installed a minimum of 20 feet horizontal distance from a permanently installed cooking appliance.*

**Exceptions:**

- (1) *Ionization smoke alarms with an alarm-silencing switch or photoelectric smoke alarms shall be permitted to be installed 10 feet (3 m) or greater from a permanently installed cooking appliance.*
- (2) *Photoelectric smoke alarms shall be permitted to be installed greater than 6 feet (1.8 m) from a permanently installed cooking appliance where the kitchen or cooking area and adjacent spaces have no clear interior partitions and the 10 ft distances would prohibit the placement of a smoke alarm or smoke detector required by other sections of the code.*
- (3) *Smoke alarms listed for use in close proximity to a permanently installed cooking appliance.*
- (5) *Installation near bathrooms. Smoke alarms shall be installed not less than a 3-foot (0.91 m) horizontal distance from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by other sections of the code.*
- (6) *Smoke alarms and smoke detectors shall not be installed within a 36 in. (910 mm) horizontal path from the supply registers of a forced air heating or cooling system and shall be installed outside of the direct airflow from those registers.*
- (7) *Smoke alarms and smoke detectors shall not be installed within a 36 in. (910 mm) horizontal path from the tip of the blade of a ceiling-suspended (paddle) fan.*
- (8) *Where stairs lead to other occupied levels, a smoke alarm or smoke detector shall be located so that smoke rising in the stairway cannot be prevented from reaching the smoke alarm or smoke detector by an intervening door or obstruction.*
- (9) *For stairways leading up from a basement, smoke alarms or smoke detectors shall be located on the basement ceiling near the entry to the stairs.*

- (10) *For tray-shaped ceilings (coffered ceilings), smoke alarms and smoke detectors shall be installed on the highest portion of the ceiling or on the sloped portion of the ceiling within 12 in. (300 mm) vertically down from the highest point.*
- (11) *Smoke alarms and detectors installed in rooms with joists or beams shall comply with the requirements of 17.7.3.2.4.*
- (12) *Heat alarms and detectors installed in rooms with joists or beams shall comply with the requirements of 17.6.3.*

*\*For additional requirements or clarification see NFPA 72.*

**[F] 907.2.11.3 Interconnection.** Where more than one smoke alarm is required to be installed within an individual dwelling unit or sleeping unit in Group R occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

**[F] 907.2.11.4 Power source.** In new construction, and in newly classified Group R-3.1 occupancies, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

**Exception:** Smoke alarms are not required to be equipped with battery backup where they are connected to an emergency electrical system.

**907.2.11.6 Existing Group R Occupancies.** See the California Residential Code for existing Group R-3 occupancies or Chapter 46 of the California Fire Code for all other existing Group R occupancies.

**[F] 907.2.12 Special amusement buildings.** An automatic smoke detection system shall be provided in special amusement buildings in accordance with Sections 907.2.12.1 through 907.2.12.3.

**[F] 907.2.12.1 Alarm.** Activation of any single smoke detector, the automatic sprinkler system or any other automatic fire detection device shall immediately activate an audible and visible alarm at the building at a constantly attended location from which emergency action can be initiated, including the capability of manual initiation of requirements in Section 907.2.12.2.

**[F] 907.2.12.2 System response.** The activation of two or more smoke detectors, a single smoke detector equipped with an alarm verification feature, the auto-

voice/alarm communication system in accordance with Section 907.5.2.2.

2. For Group H-1, H-2, H-3 and H-4 occupancies the total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by 0.7 inches (7.62 mm) per occupant.
3. Means of egress complying with Section 1028.

**1005.3.2 Other egress components.** The capacity, in inches (mm), of means of egress components other than stairways shall be calculated by multiplying the occupant load served by such component by a means of egress capacity factor of 0.2 inch (5.1 mm) per occupant.

**Exceptions:**

1. For other than Group H and I-2 occupancies, the capacity, in inches (mm), of means of egress components other than stairways shall be calculated by multiplying the occupant load served by such component by a means of egress capacity factor of 0.15 inch (3.8 mm) per occupant in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.
2. For Group H-1, H-2, H-3 and H-4 occupancies the total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by 0.4 inches (5.08 mm) per occupant.
3. Means of egress complying with Section 1028.

**1005.4 Continuity.** The capacity of the means of egress required from any story of a building shall not be reduced along the path of egress travel until arrival at the public way.

**1005.5. Distribution of egress capacity.** Where more than one exit, or access to more than one exit, is required, the means of egress shall be configured such that the loss of any one exit, or access to one exit, shall not reduce the available capacity to less than 50 percent of the required capacity.

**1005.6 Egress convergence.** Where the means of egress from stories above and below converge at an intermediate level, the capacity of the means of egress from the point of convergence shall not be less than the sum of the required capacities for the two adjacent stories.

**1005.7 Encroachment.** Encroachments into the required means of egress width shall be in accordance with the provisions of this section.

**1005.7.1 Doors.** Doors, when fully opened, shall not reduce the required width by more than 7 inches (178 mm). Doors in any position shall not reduce the required width by more than one-half.

**Exceptions:**

1. In other than Group I-2 occupancies, surface-mounted latch release hardware shall be exempt

from inclusion in the 7-inch maximum (178 mm) encroachment where:

- 1.1. The hardware is mounted to the side of the door facing away from the adjacent wall where the door is in the open position; and
- 1.2. The hardware is mounted not less than 34 inches (865 mm) nor more than 48 inches (1219 mm) above the finished floor.
2. The restrictions on door swing shall not apply to doors within individual dwelling units and sleeping units of Group R-2 occupancies and dwelling units of Group R-3 occupancies.

**1005.7.2 Other projections.** Handrail projections shall be in accordance with the provisions of Section 1012.8. Other nonstructural projections such as trim and similar decorative features shall be permitted to project into the required width a maximum of 1½ inches (38 mm) on each side.

**1005.7.3 Protruding objects.** Protruding objects shall comply with the applicable requirements of Section 1003.3.

## SECTION 1006

### MEANS OF EGRESS ILLUMINATION

**1006.1 Illumination required.** The means of egress, including the exit discharge, shall be illuminated at all times the building space served by the means of egress is occupied.

**Exceptions:**

1. Occupancies in Group U.
2. Aisle accessways in Group A.
3. Dwelling units and sleeping units in Groups R-1, R-2 and R-3.
4. Sleeping units of Group I, R-2.1 and R-4 occupancies.

**1006.2 Illumination level.** The means of egress illumination level shall not be less than 1 footcandle (11 lux) at the walking surface.

**Exception:** For auditoriums, theaters, concert or opera halls and similar assembly occupancies, the illumination at the walking surface is permitted to be reduced during performances to not less than 0.2 footcandle (2.15 lux), provided that the required illumination is automatically restored upon activation of a premises' fire alarm system where such system is provided.

**1006.3 Emergency power for illumination.** The power supply for means of egress illumination shall normally be provided by the premises' electrical supply.

In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

1. Aisles and unenclosed egress stairways in rooms and spaces that require two or more means of egress.

2. Corridors, interior exit stairways and ramps and exit passageways in buildings required to have two or more exits.
3. Exterior egress components at other than their levels of exit discharge until exit discharge is accomplished for buildings required to have two or more exits.
4. Interior exit discharge elements, as permitted in Section 1027.1, in buildings required to have two or more exits.
5. Exterior landings as required by Section 1008.1.6 for exit discharge doorways in buildings required to have two or more exits.

The emergency power system shall provide power for a duration of not less than 90 minutes and shall consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 2702.

**1006.3.1 Illumination level under emergency power.** Emergency lighting facilities shall be arranged to provide initial illumination that is at least an average of 1 footcandle (11 lux) and a minimum at any point of 0.1 footcandle (1 lux) measured along the path of egress at floor level. Illumination levels shall be permitted to decline to 0.6 footcandle (6 lux) average and a minimum at any point of 0.06 footcandle (0.6 lux) at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded.

## SECTION 1007 ACCESSIBLE MEANS OF EGRESS

**1007.1 Accessible means of egress required.** Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress are required by Section 1015.1 or 1021.1 from any accessible space, each accessible portion of the space shall be served by accessible means of egress *in at least the same number as required by Section 1015.1 or 1021.1. In addition to the requirements of this chapter, means of egress, which provide access to, or egress from, buildings for persons with disabilities, shall also comply with the requirements of Chapter 11A or 11B as applicable.*

### Exceptions:

1. Accessible means of egress are not required in alterations to existing buildings.
2. One accessible means of egress is required from an accessible mezzanine level in accordance with Section 1007.3, 1007.4 or 1007.5, and Chapter 11A or 11B, as applicable.
3. In assembly areas with sloped or stepped aisles, one accessible means of egress is permitted where the common path of travel is accessible and meets the requirements in Section 1028.8, and Chapter 11A or 11B, as applicable.

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

1. Accessible routes complying with *Chapter 11A, Sections 1110A.1 and 1120A, or Chapter 11B, Sections 11B-206 and 11B-402, as applicable.*
2. Interior exit stairways complying with *Sections 1007.3 and 1022, and Chapter 11A, Section 1123A, or Chapter 11B, Sections 11B-210 and 11B-504, as applicable.*
3. Interior exit access stairways complying with *Sections 1007.3 and 1009.3, Chapter 11A, Section 1123A, or Chapter 11B, Sections 11B-210 and 11B-504, as applicable.*
4. Exterior exit stairways complying with *Sections 1007.3 and 1026 and serving levels other than the level of exit discharge, and Chapter 11A, Section 1115A, or Chapter 11B, Sections 11B-210 and 11B-504, as applicable.*
5. Elevators complying with *Section 1007.4, and Chapter 11A, Section 1124A, or Chapter 11B, Sections 11B-206.6 and 11B-407, as applicable.*
6. Platform lifts complying with *Section 1007.5 and Chapter 11A, Section 1124A, or Chapter 11B, Sections 11B-206.7, 11B-207.2 and 11B-410 as applicable.*
7. Horizontal exits complying with Section 1025.
8. Ramps complying with *Section 1010, and Chapter 11A, Sections 1114A and 1122A, or Chapter 11B, 11B-405, as applicable.*
9. Areas of refuge complying with Section 1007.6.
10. Exterior area for assisted rescue complying with Section 1007.7.

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

### Exceptions:

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

**1007.3 Stairways.** In order to be considered part of an accessible means of egress, a stairway between stories shall have a clear width of 48 inches (1219 mm) minimum between hand-

rails and shall either incorporate an area of refuge within an enlarged floor-level landing or shall be accessed from either an area of refuge complying with Section 1007.6 or a horizontal exit. Exit access stairways that connect levels in the same story are not permitted as part of an accessible means of egress. **[DSA-AC & HCD I-AC]** In addition, exit stairways shall comply with Chapter 11A, Sections 1115A and 1123A, or Chapter 11B, Sections 11B-210 and 11B-504, as applicable.

**Exceptions:**

1. The clear width of 48 inches (1219 mm) between handrails is not required in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
2. Areas of refuge are not required at stairways in buildings equipped throughout by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
3. The clear width of 48 inches (1219 mm) between handrails is not required for stairways accessed from a horizontal exit.
4. Areas of refuge are not required at stairways serving open parking garages.
5. Areas of refuge are not required for smoke protected seating areas complying with Section 1028.6.2.
6. The areas of refuge are not required in Group R-2 occupancies.

**1007.4 Elevators.** In order to be considered part of an accessible means of egress, an elevator shall comply with the emergency operation and signaling device requirements of *California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders*. Standby power shall be provided in accordance with Chapter 27 and Section 3003. The elevator shall be accessed from either an area of refuge complying with Section 1007.6 or a horizontal exit.

**Exceptions:**

1. Elevators are not required to be accessed from an area of refuge or horizontal exit in open parking garages.
2. Elevators are not required to be accessed from an area of refuge or horizontal exit in buildings and facilities equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
3. Elevators not required to be located in a shaft in accordance with Section 712 are not required to be accessed from an area of refuge or horizontal exit.
4. Elevators are not required to be accessed from an area of refuge or horizontal exit for smoke protected seating areas complying with Section 1028.6.2.

**1007.5 Platform lifts.** Platform (wheelchair) lifts shall not serve as part of an accessible means of egress, except where allowed as part of a required accessible route in *Chapter 11A, Sections 1121A and 1124A.11, or Chapter 11B, Sections*

*11B-206.7.1 through 11B-206.7.10, as applicable*. Standby power shall be provided in accordance with Chapter 27 for platform lifts permitted to serve as part of a means of egress.

**[DSA-AC]** See Chapter 11B, Section 11B-207.2 for additional accessible means of egress requirements at platform lifts.

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

**1007.6 Areas of refuge.** Every required area of refuge shall be accessible from the space it serves by an accessible means of egress. The maximum travel distance from any accessible space to an area of refuge shall not exceed the travel distance permitted for the occupancy in accordance with Section 1016.1. Every required area of refuge shall have direct access to a stairway complying with Sections 1007.3 or an elevator complying with Section 1007.4. Where an elevator lobby is used as an area of refuge, the shaft and lobby shall comply with Section 1022.10 for smokeproof enclosures except where the elevators are in an area of refuge formed by a horizontal exit or smoke barrier. **[DSA-AC]** Areas of refuge shall comply with the requirements of this code and shall adjoin an accessible route complying with Sections 11B-206 and 11B-402.

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

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

**1007.6.2 Separation.** Each area of refuge shall be separated from the remainder of the story by a smoke barrier complying with Section 709 or a horizontal exit complying with Section 1025. Each area of refuge shall be designed to minimize the intrusion of smoke.

**Exception:** Areas of refuge located within an enclosure for exit access stairways or interior exit stairways.

**1007.6.3 Two-way communication.** Areas of refuge shall be provided with a two-way communication system complying with Sections 1007.8.1 and 1007.8.2.

**1007.7 Exterior area for assisted rescue.** Exterior areas for assisted rescue shall be accessed by an accessible route from the area served. Exterior areas for assisted rescue shall be permitted in accordance with Section 1007.7.1 or 1007.7.2.

**1007.7.1 Level of exit discharge.** Where the exit discharge does not include an accessible route from an exit located on a level of exit discharge to a public way, an exterior area of assisted rescue shall be provided on the

exterior landing in accordance with Sections 1007.7.3 through 1007.7.6.

**1007.7.2 Outdoor facilities.** Where exit access from the area serving outdoor facilities is essentially open to the outside, an exterior area of assisted rescue is permitted as an alternative to an area of refuge. Every required exterior area of assisted rescue shall have direct access to an interior exit stairway, exterior stairway, or elevator serving as an accessible means of egress component. The exterior area of assisted rescue shall comply with Sections 1007.7.3 through 1007.7.6 and shall be provided with a two-way communication system complying with Sections 1007.8.1 and 1007.8.2.

**1007.7.3 Size.** Each exterior area for assisted rescue shall be sized to accommodate wheelchair spaces in accordance with Section 1007.6.1.

**1007.7.4 Separation.** Exterior walls separating the exterior area of assisted rescue from the interior of the building shall have a minimum fire-resistance rating of 1 hour, rated for exposure to fire from the inside. The fire-resistance-rated exterior wall construction shall extend horizontally 10 feet (3048 mm) beyond the landing on either side of the landing or equivalent fire-resistance-rated construction is permitted to extend out perpendicular to the exterior wall 4 feet (1219 mm) minimum on the side of the landing. The fire-resistance-rated construction shall extend vertically from the ground to a point 10 feet (3048 mm) above the floor level of the area for assisted rescue or to the roof line, whichever is lower. Openings within such fire-resistance-rated exterior walls shall be protected in accordance with Section 716.

**1007.7.5 Openness.** The exterior area for assisted rescue shall be open to the outside air. The sides other than the separation walls shall be at least 50 percent open, and the open area shall be distributed so as to minimize the accumulation of smoke or toxic gases.

**1007.7.6 Stairway.** Stairways that are part of the means of egress for the exterior area for assisted rescue shall provide a clear width of 48 inches (1219 mm) between handrails.

**Exception:** The clear width of 48 inches (1219 mm) between handrails is not required at stairways serving buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

**1007.8 Two-way communication.** A two-way communication system shall be provided at the elevator landing on each accessible floor that is one or more stories above or below the story of exit discharge complying with Sections 1007.8.1 and 1007.8.2.

#### Exceptions:

1. Two-way communication systems are not required at the elevator landing where the two-way communication system is provided within areas of refuge in accordance with Section 1007.6.3.

2. Two-way communication systems are not required on floors provided with ramps conforming to the provisions of Section 1010.

**1007.8.1 System requirements.** Two-way communication systems shall provide communication between each required location and a central control point location approved by the fire department. Where the central control point is not constantly attended, a two-way communication system shall have a timed automatic telephone dial-out capability to an approved monitoring location. The two-way communication system shall include both audible and visible signals.

**1007.8.1.1 Visible communication method. [DSA-AC and HCD 1-AC]** A button complying with Section 1138A.4 or Sections 11B-205 and 11B-309 in the area of refuge shall activate both a light in the area of refuge indicating that rescue has been requested and a light at the central control point indicating that rescue is being requested. A button at the central control point shall activate both a light at the central control point and a light in the area of refuge indicating that the request has been received.

**1007.8.2 Directions.** Directions for the use of the two-way communication system, instructions for summoning assistance via the two-way communication system and written identification of the specific story, floor location and building address or other building identifier shall be posted adjacent to the two-way communication system.

**1007.9 Signage.** Signage indicating special accessibility provisions shall be provided as shown:

1. Each door providing access to an area of refuge from an adjacent floor area shall be identified by a sign stating: AREA OF REFUGE.
2. Each door providing access to an exterior area for assisted rescue shall be identified by a sign stating: EXTERIOR AREA FOR ASSISTED RESCUE.

Signage shall comply with Chapter 11A, Section 1143A and Chapter 11B, Section 11B-703.5 as applicable, requirements for visual characters and include the International Symbol of Accessibility complying with Chapter 11B, Section 11B-703.7.2.1. Where exit sign illumination is required by Section 1011.3, the signs shall be illuminated. Additionally, raised character and Braille signage complying with Chapter 11A, Section 1143A and Chapter 11B, Sections 11B-703.1, 11B-703.2, 11B-703.3 and 11B-703.5, and the International Symbol of Accessibility complying with Chapter 11B, Section 11B-703.7.2.1, shall be located at each door to an area of refuge and exterior area for assisted rescue in accordance with Section 1011.4.

**1007.10 Directional signage.** Direction signage complying with Chapter 11B, Section 11B-703.5 indicating the location of the other means of egress and which are accessible means of egress shall be provided at the following:

1. At exits serving a required accessible space but not providing an approved accessible means of egress.

**1016.3 Measurement.** Exit access travel distance shall be measured from the most remote point within a story along the natural and unobstructed path of horizontal and vertical egress travel to the entrance to an exit.

**Exceptions:**

1. In open parking garages, exit access travel distance is permitted to be measured to the closest riser of an exit access stairway or the closest slope of an exit access ramp.
2. In outdoor facilities with open exit access components, exit access travel distance is permitted to be measured to the closest riser of an exit access stairway or the closest slope of an exit access ramp.

**1016.3.1 Exit access stairways and ramps.** Travel distance on exit access stairways or ramps shall be included in the exit access travel distance measurement. The measurement along stairways shall be made on a plane parallel and tangent to the stair tread nosings in the center of the stair and landings. The measurement along ramps shall be made on the walking surface in the center of the ramp and landings.

## SECTION 1017 AISLES

*[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 1.9.1 regulated by the Division of the State Architect-Access Compliance, shall also comply with Chapter 11A or Chapter 11B, Section 11B-403, as applicable.*

**1017.1 General.** Aisles and aisle accessways serving as a portion of the exit access in the means of egress system shall comply with the requirements of this section. Aisles or aisle accessways shall be provided from all occupied portions of the exit access which contain seats, tables, furnishings, displays and similar fixtures or equipment. The required width of aisles shall be unobstructed.

**Exception:** Encroachments complying with Section 1005.7.

**1017.2 Aisles in assembly spaces.** Aisles and aisle accessways serving a room or space used for assembly purposes shall comply with Section 1028.

**1017.3 Aisles in Groups B and M.** In Group B and M occupancies, the minimum clear aisle width shall be determined by Section 1005.1 for the occupant load served, but shall not be less than 36 inches (914 mm).

**Exception:** Nonpublic aisles serving less than 50 people and not required to be accessible by Chapter 11B, (see Section 11B-403) need not exceed 28 inches (711 mm) in width.

**1017.4 Aisle accessways in Group M.** An aisle accessway shall be provided on at least one side of each element within

the merchandise pad. The minimum clear width for an aisle accessway not required to be accessible shall be 30 inches (762 mm). The required clear width of the aisle accessway shall be measured perpendicular to the elements and merchandise within the merchandise pad. The 30-inch (762 mm) minimum clear width shall be maintained to provide a path to an adjacent aisle or aisle accessway. The common path of egress travel shall not exceed 30 feet (9144 mm) from any point in the merchandise pad.

**Exception:** For areas serving not more than 50 occupants, the common path of egress travel shall not exceed 75 feet (22 860 mm).

**1017.5 Aisles in other than assembly spaces and Groups B and M.** In other than rooms or spaces used for assembly purposes and Group B and M occupancies, the minimum clear aisle width shall be determined by Section 1005.1 for the occupant load served, but shall not be less than 36 inches (914 mm).

## SECTION 1018 CORRIDORS

**1018.1 Construction.** Corridors shall be fire-resistance rated in accordance with Table 1018.1. The corridor walls required to be fire-resistance rated shall comply with Section 708 for fire partitions.

**Exceptions:**

1. A fire-resistance rating is not required for corridors in an occupancy in Group E where each room that is used for instruction has at least one door opening directly to the exterior and rooms for assembly purposes have at least one-half of the required means of egress doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
2. A fire-resistance rating is not required for corridors contained within a dwelling or sleeping unit in an occupancy in Group R.
3. A fire-resistance rating is not required for corridors in open parking garages.
4. A fire-resistance rating is not required for corridors in an occupancy in Group B which is a space requiring only a single means of egress complying with Section 1015.1.
5. Corridors adjacent to the exterior walls of buildings shall be permitted to have unprotected openings on unrated exterior walls where unrated walls are permitted by Table 602 and unprotected openings are permitted by Table 705.8.
6. A fire-resistance rating is not required for corridors within suites in a Group I-2 occupancy provided with an automatic sprinkler system throughout and constructed in accordance with Section 407.4.3.5 or 407.4.3.6.

**TABLE 1018.1  
CORRIDOR FIRE-RESISTANCE RATING**

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)	
		Without sprinkler system	With sprinkler system <sup>c</sup>
H-1, H-2, H-3, L	All	Not Permitted	1
H-4, H-5, L	Greater than 30	Not Permitted	1
A <sup>d</sup> , B, F, M, S, U	Greater than 30	1	0
R-1, R-2, R-3, R-3.1, R-4	Greater than 10	Not Permitted	1
I-2 <sup>a</sup> , I-2.1, I-4	Greater than 6	Not Permitted	1
I-3, R-2.1	Greater than 6	Not Permitted	1 <sup>b</sup>
E	Greater than 10	1	1

- a. For requirements for occupancies in Group I-2, see Sections 407.2 and 407.3.
- b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Sections 408.1.2 and 408.8.
- c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.
- d. [SFM] See Section 1028.

**1018.2 Width.** The minimum width of corridors specified in Table 1018.2 shall be as determined in Section 1005.1.

**TABLE 1018.2  
MINIMUM CORRIDOR WIDTH**

OCCUPANCY	WIDTH (minimum)
Any facilities not listed below	44 inches
Access to and utilization of mechanical, plumbing or electrical systems or equipment	24 inches
With a required occupancy capacity less than 50	36 inches
Within a dwelling unit	36 inches
In Group E with a corridor having a required capacity of 100 or more	72 inches
In corridors and areas serving gurney traffic in occupancies where patients receive outpatient medical care, which causes the patient to be incapable of self-preservation	72 inches
Group I-2 in areas where required for bed movement	96 inches
Corridors in Group I-2 and I-3 occupancies serving any area caring for one or more nonambulatory persons.	96 inches

For SI: 1 inch = 25.4 mm.

**1018.3 Obstruction.** The required width of corridors shall be unobstructed.

**Exception:** Encroachments complying with Section 1005.7.

**1018.4 Dead ends.** Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in corridors more than 20 feet (6096 mm) in length.

**Exceptions:**

1. In occupancies in Group I-3 of Occupancy Condition 2, 3 or 4 (see Section 308.5), the dead end in a corridor shall not exceed 50 feet (15 240 mm).

2. In occupancies in Groups B, E, F, I-1, M, R-1, R-2, R-4, S and U, where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the length of the dead-end corridors shall not exceed 50 feet (15 240 mm).

3. A dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the least width of the dead-end corridor.

**1018.5 Air movement in corridors.** Corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts.

**Exceptions:**

1. Use of a corridor as a source of makeup air for exhaust systems in rooms that open directly onto such corridors, including toilet rooms, bathrooms, dressing rooms, and janitor closets, shall be permitted, provided that each such corridor is directly supplied with outdoor air at a rate greater than the rate of makeup air taken from the corridor.
2. Where located within a dwelling unit, the use of corridors for conveying return air shall not be prohibited.
3. Where located within tenant spaces of 1,000 square feet (93 m<sup>2</sup>) or less in area, utilization of corridors for conveying return air is permitted.
4. Incidental air movement from pressurized rooms within health care facilities, provided that the corridor is not the primary source of supply or return to the room.
5. *For health care facilities under the jurisdiction of the Office of Statewide Health Planning and Development (OSHPD), see the California Mechanical Code.*

**1018.5.1 Corridor ceiling.** Use of the space between the corridor ceiling and the floor or roof structure above as a return air plenum is permitted for one or more of the following conditions:

1. The corridor is not required to be of fire-resistance-rated construction;
2. The corridor is separated from the plenum by fire-resistance-rated construction;
3. The air-handling system serving the corridor is shut down upon activation of the air-handling unit smoke detectors required by the *California Mechanical Code*;
4. The air-handling system serving the corridor is shut down upon detection of sprinkler waterflow where the building is equipped throughout with an automatic sprinkler system; or
5. The space between the corridor ceiling and the floor or roof structure above the corridor is used as a component of an approved engineered smoke control system.

**1018.6 Corridor continuity.** Fire-resistance-rated corridors shall be continuous from the point of entry to an exit, and shall not be interrupted by intervening rooms. Where the path of egress travel within a fire-resistance-rated corridor to the exit includes travel along unenclosed exit access stairways or ramps, the fire resistance-rating shall be continuous for the length of the stairway or ramp and for the length of the connecting corridor on the adjacent floor leading to the exit.

**Exceptions:**

1. Foyers, lobbies or reception rooms constructed as required for corridors shall not be construed as intervening rooms.
2. *[SFM] In fully sprinklered office buildings, corridors may lead through enclosed elevator lobbies if all areas of the building have access to at least one required exit without passing through the elevator lobby.*

## SECTION 1019 EGRESS BALCONIES

**1019.1 General.** Balconies used for egress purposes shall conform to the same requirements as corridors for width, headroom, dead ends and projections.

**1019.2 Wall separation.** Exterior egress balconies shall be separated from the interior of the building by walls and opening protectives as required for corridors.

**Exception:** Separation is not required where the exterior egress balcony is served by at least two stairs and a dead-end travel condition does not require travel past an unprotected opening to reach a stair.

**1019.3 Openness.** The long side of an egress balcony shall be at least 50 percent open, and the open area above the guards shall be so distributed as to minimize the accumulation of smoke or toxic gases.

**1019.4 Location.** Exterior egress balconies shall have a minimum fire separation distance of 10 feet (3048 mm) measured from the exterior edge of the egress balcony to adjacent lot lines and from other buildings on the same lot unless the adjacent building exterior walls and openings are protected in accordance with Section 705 based on fire separation distance.

## SECTION 1020 EXITS

**1020.1 General.** Exits shall comply with Sections 1020 through 1026 and the applicable requirements of Sections 1003 through 1013. An exit shall not be used for any purpose that interferes with its function as a means of egress. Once a given level of exit protection is achieved, such level of protection shall not be reduced until arrival at the exit discharge.

**1020.2 Exterior exit doors.** Buildings or structures used for human occupancy shall have at least one exterior door that meets the requirements of Section 1008.1.1.

**1020.2.1 Detailed requirements.** Exterior exit doors shall comply with the applicable requirements of Section 1008.1.

**1020.2.2 Arrangement.** Exterior exit doors shall lead directly to the exit discharge or the public way.

## SECTION 1021 NUMBER OF EXITS

**1021.1 General.** Each story and occupied roof shall have the minimum number of *independent exits*, or access to exits, as specified in Table 1021.1. A single exit or access to a single exit shall be permitted in accordance with Section 1021.2. The required number of exits, or exit access stairways or ramps providing access to exits, from any story shall be maintained until arrival at grade or a public way.

**1021.2 Single Exits.** A single exit or access to a single exit shall be permitted from any story or occupied roof, provided one of the following conditions exists:

1. The occupant load, number of dwelling units and exit access travel distance does not exceed the values in Table 1021.2(1) or 1021.2(2).
2. Rooms, areas and spaces complying with Section 1015.1 with exits that discharge directly to the exterior at the level of exit discharge, are permitted to have one exit or access to a single exit.
3. Group R-3 occupancy buildings shall be permitted to have one exit where each individual story complies with Table 1021.2(1).
4. Parking garages where vehicles are mechanically parked shall be permitted to have one exit or access to a single exit.
5. Group R-3 and R-4 congregate residences shall be permitted to have one exit where each individual story complies with Table 1021.2(1).
6. Individual single-story or multistory dwelling units shall be permitted to have a single exit or access to a single exit from the dwelling unit provided that all of the following criteria are met:
  - 6.1. The dwelling unit complies with Section 1015.1 as a space with one means of egress and
  - 6.2. Either the exit from the dwelling unit discharges directly to the exterior at the level of exit discharge, or the exit access outside the dwelling unit's entrance door provides access to not less than two approved independent exits.

**1021.2.1 Mixed occupancies.** Where one exit, or exit access stairway or ramp providing access to exits at other stories, is permitted to serve individual stories, mixed occupancies shall be permitted to be served by single exits provided each individual occupancy complies with the applicable requirements of Table 1021.2(1) or Table 1021.2(2) for that occupancy. Where applicable, cumulative occupant loads from adjacent occupancies shall be considered in accordance with the provisions of Section 1004.1.

In each story of a mixed occupancy building, the maximum number of occupants served by a single exit shall be such that the sum of the ratios of the calculated number of occupants of the space divided by the allowable number of occupants for each occupancy does not exceed one. *Where dwelling units are located on a story with other occupancies, the actual number of dwelling units divided by four plus the ratio from the other occupancy does not exceed one.*

**1021.2.2 Exits from specific space.** Exits serving specific spaces or areas need not be accessed by the remainder of the story when all of the following are met:

1. The number of exits from the entire story complies with Section 1021.1 and 1021.4.1; and
2. The access to exits from each individual space in the story complies with Section 1015.1; and
3. All spaces within each portion of a story shall have access to the minimum number of approved independent exits based on the occupant load of that portion of the story but not less than two exits.

**1021.3 Vehicular ramps.** Vehicular ramps shall not be considered as an exit access ramp unless pedestrian facilities are provided.

**TABLE 1021.3(1)**  
**MINIMUM NUMBER OF EXITS**  
**OR ACCESS TO EXITS PER STORY**

OCCUPANT LOAD PER STORY	MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS FROM STORY
1-500	2
501-1,000	3
More than 1,000	4

## SECTION 1022 INTERIOR EXIT STAIRWAYS AND RAMPS

**1022.1 General.** Interior exit stairways and interior exit ramps serving as an exit component in a means of egress system shall comply with the requirements of this section. Interior exit stairways and ramps shall lead directly to the exterior of the building or shall be extended to the exterior of the building with an exit passageway conforming to the requirements of Section 1023, except as permitted in Section 1027.1. An interior exit stairway or ramp shall not be used for any purpose other than as a means of egress.

**1022.2 Construction.** Enclosures for interior exit stairways and ramps shall be constructed as fire barriers in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both. Interior exit stairway and ramp enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more and not less than 1 hour where connecting less than four stories. The number of stories connected by the interior exit stairways or ramps shall include any basements, but not any mezzanines. Interior exit stairways and ramps shall have a fire-resistance rating not less than the floor assembly penetrated, but need not exceed 2 hours.

### Exceptions:

1. Interior exit stairways and ramps in Group I-3 occupancies in accordance with the provisions of Section 408.3.8.
2. Fixed guideway transit stations, constructed in accordance with Section 433.

**1022.3 Termination.** Interior exit stairways and ramps shall terminate at an exit discharge or a public way.

**Exception:** Interior exit stairways and ramps shall be permitted to terminate at an exit passageway complying with Section 1023, provided the exit passageway terminates at an exit discharge or a public way.

**1022.3.1 Extension.** Where interior exit stairways and ramps are extended to an exit discharge or a public way by an exit passageway, the interior exit stairway and ramp shall be separated from the exit passageway by a fire barrier constructed in accordance with Section 707 or a horizontal assembly constructed in accordance with Section 711, or both. The fire-resistance rating shall be at least equal to that required for the interior exit stairway and ramp. A fire door assembly complying with Section 716.5 shall be installed in the fire barrier to provide a means of egress from the interior exit stairway and ramp to the exit passageway. Openings in the fire barrier other than the fire door assembly are prohibited. Penetrations of the fire barrier are prohibited.

**Exception:** Penetrations of the fire barrier in accordance with Section 1022.5 shall be permitted.

**1022.4 Openings.** Interior exit stairway and ramp opening protectives shall be in accordance with the requirements of Section 716.

Openings in interior exit stairways and ramps other than unprotected exterior openings shall be limited to those necessary for exit access to the enclosure from normally occupied spaces and for egress from the enclosure.

Elevators shall not open into interior exit stairways and ramps.

**1022.5 Penetrations.** Penetrations into and openings through interior exit stairways and ramps are prohibited except for required exit doors, equipment and ductwork necessary for independent ventilation or pressurization, sprinkler piping, standpipes, electrical raceway for fire department communication systems and electrical raceway serving the interior exit stairway and ramp and terminating at a steel box not exceeding 16 square inches ( $0.010\text{ m}^2$ ). Such penetrations shall be protected in accordance with Section 714. There shall be no penetrations or communicating openings, whether protected or not, between adjacent interior exit stairways and ramps.

**Exception:** Membrane penetrations shall be permitted on the outside of the interior exit stairway and ramp. Such penetrations shall be protected in accordance with Section 714.3.2.

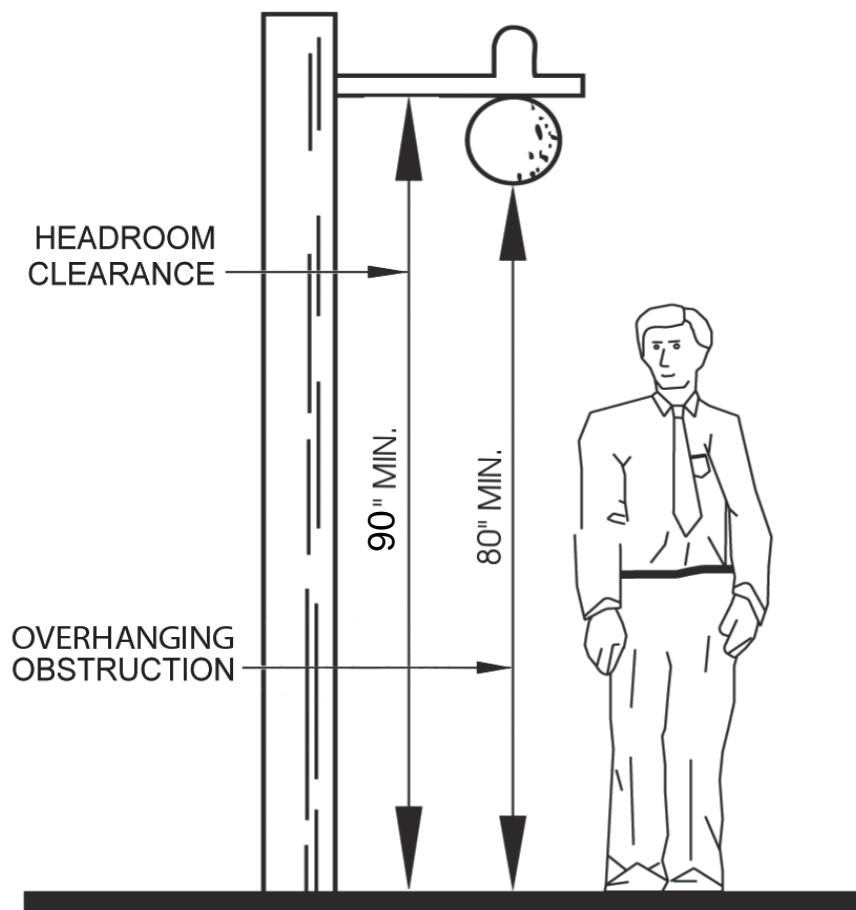
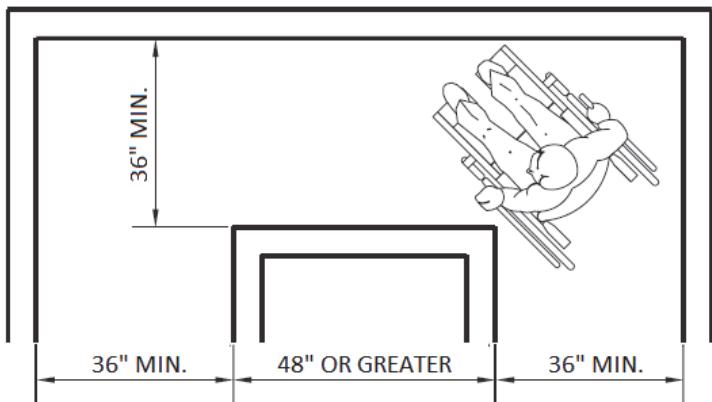
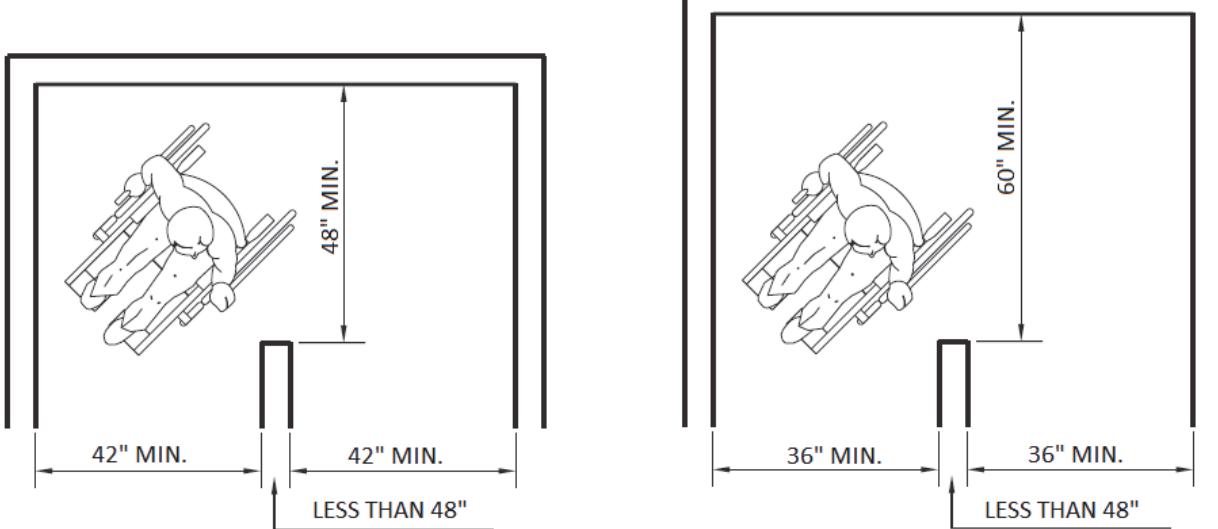


FIGURE 11A-1B  
HEADROOM CLEARANCE AND OVERHANGING OBSTRUCTION

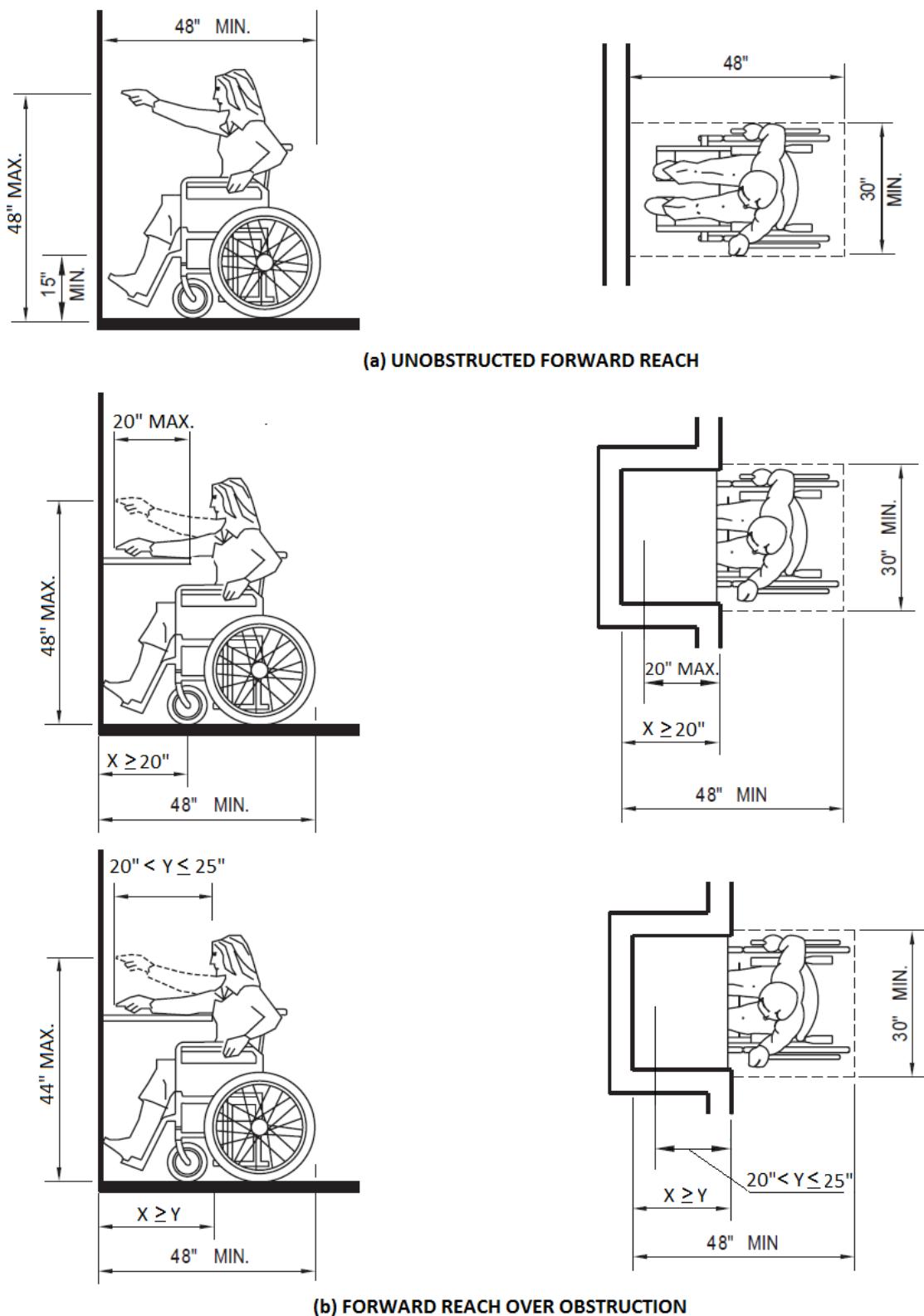


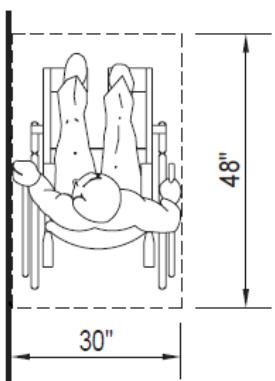
(a) 90° TURN AROUND OBSTRUCTION



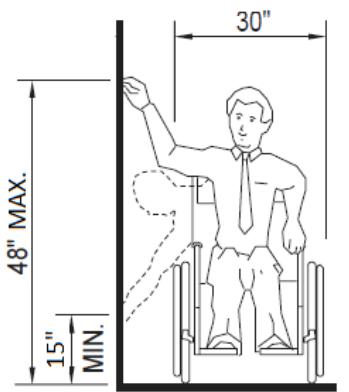
(b) 180° TURN AROUND OBSTRUCTION

FIGURE 11A-1C  
WIDTH OF ACCESSIBLE ROUTE AT TURNS

FIGURE 11A-11  
FORWARD REACH

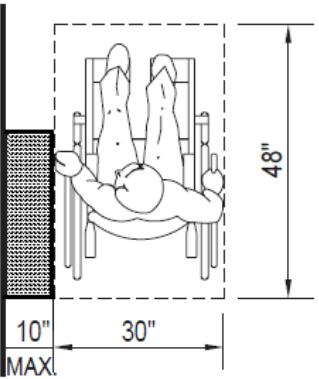


CLEAR FLOOR SPACE FOR PARALLEL APPROACH

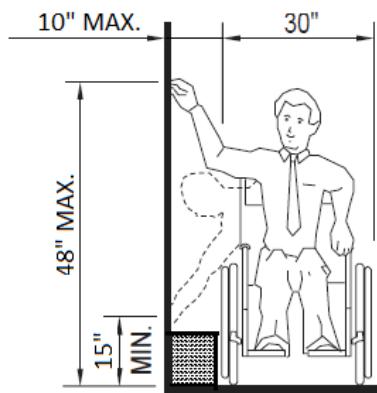


HIGH AND LOW SIDE REACH LIMITS

**(a) UNOBSTRUCTED SIDE REACH**

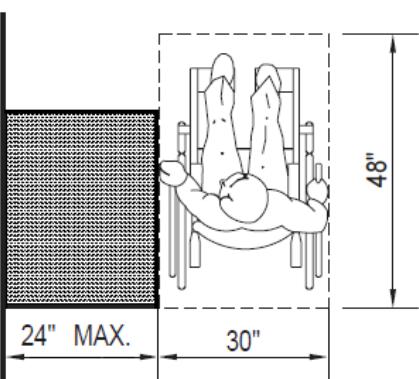


CLEAR FLOOR SPACE FOR PARALLEL APPROACH

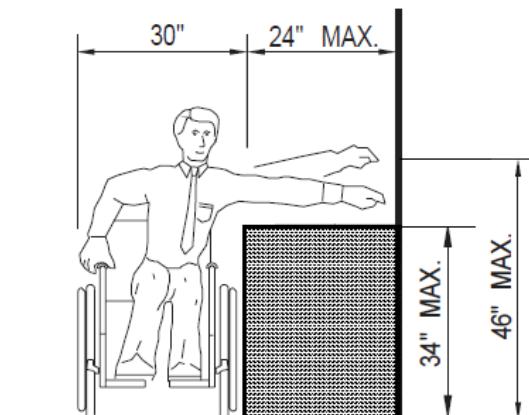


HIGH AND LOW SIDE REACH LIMITS

**(b) SIDE REACH OVER OBSTRUCTION 10" MAXIMUM**



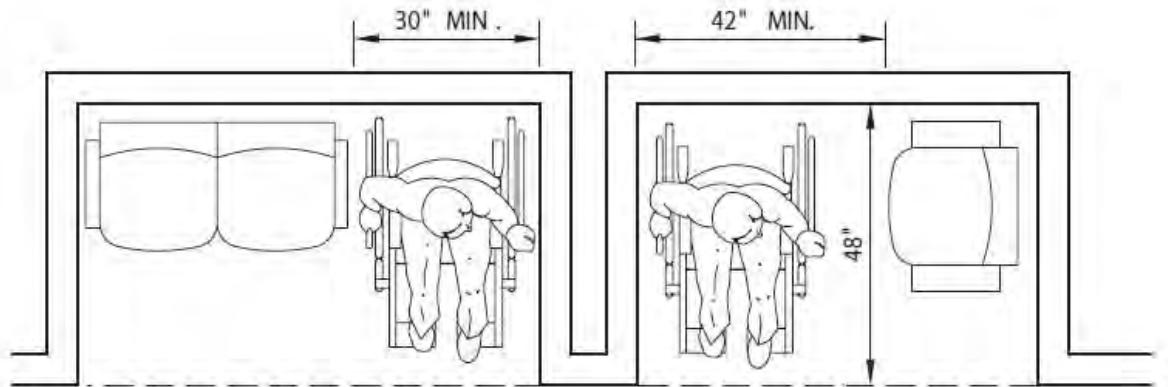
CLEAR FLOOR SPACE FOR PARALLEL APPROACH



MAXIMUM SIDE REACH OVER OBSTRUCTION

**(c) SIDE REACH OVER OBSTRUCTION > 10" AND 24" MAXIMUM**

**FIGURE 11A-1J  
SIDE REACH**



◀ ACCESSIBLE PATH OF TRAVEL ▶

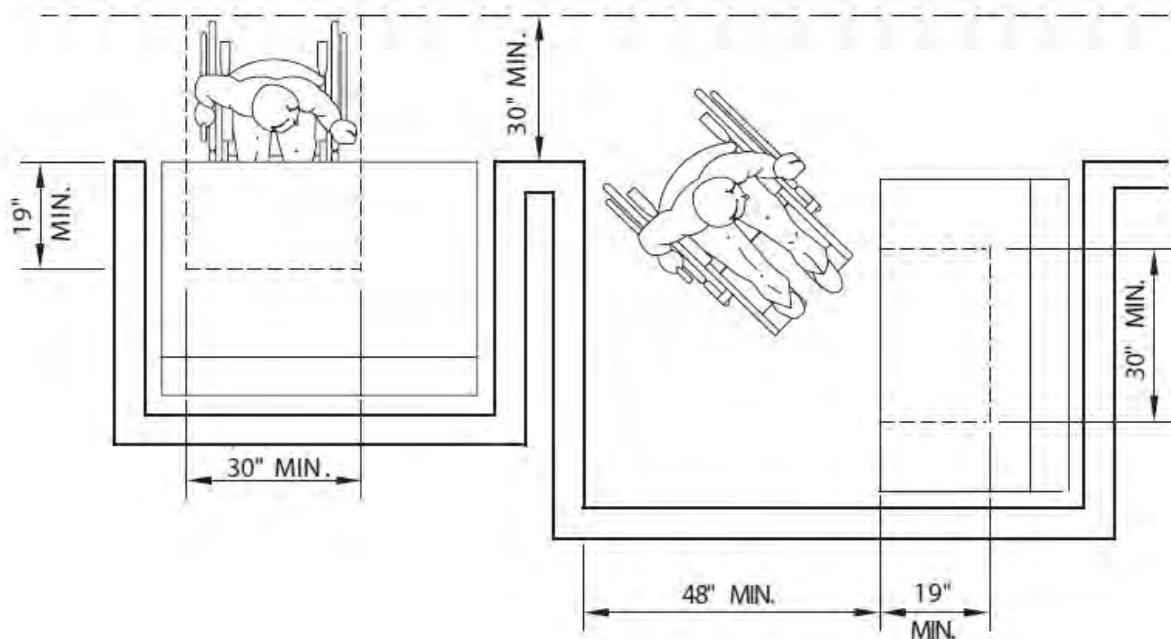
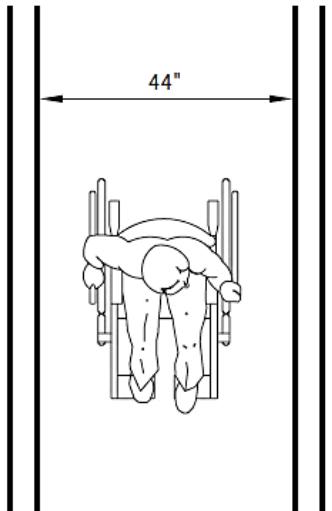
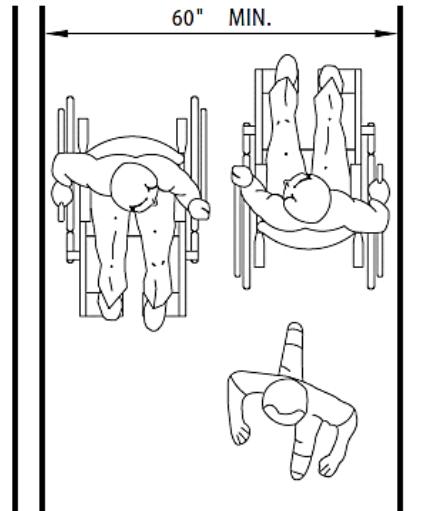


FIGURE 11A-1K  
MINIMUM CLEARANCES FOR SEATING AND TABLE

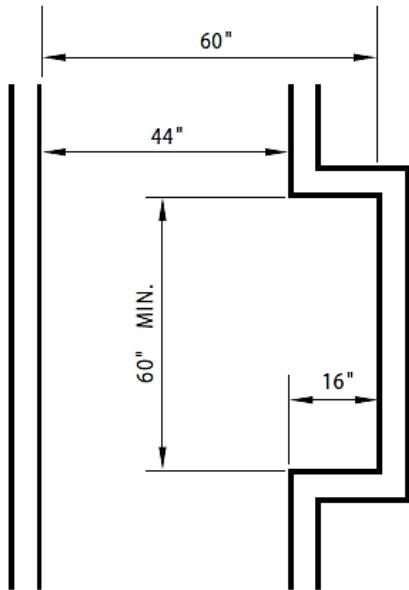
||



(a) MINIMUM WIDTH FOR CORRIDORS



(b) MINIMUM WIDTH FOR CORRIDORS OVER 200 FEET



(c) PASSING METHODS FOR CORRIDORS WITH LENGTH OVER 200 FEET AND WIDTH LESS THAN 60"

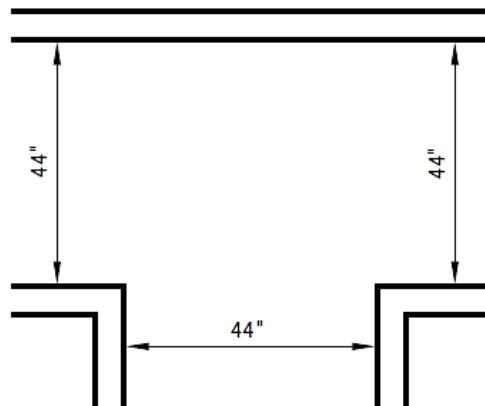
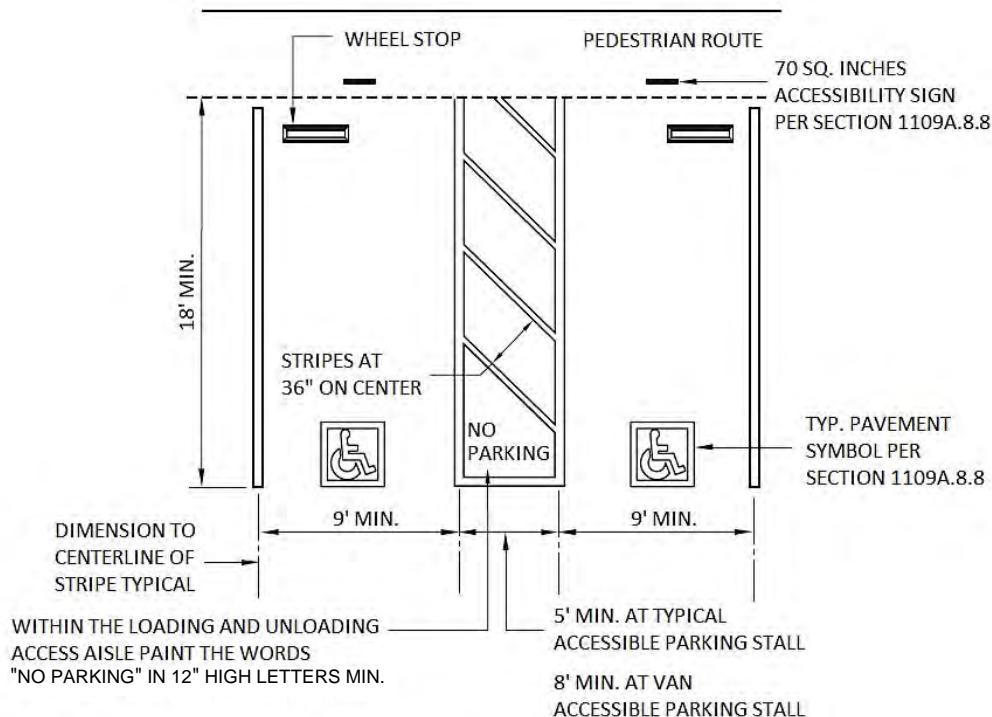
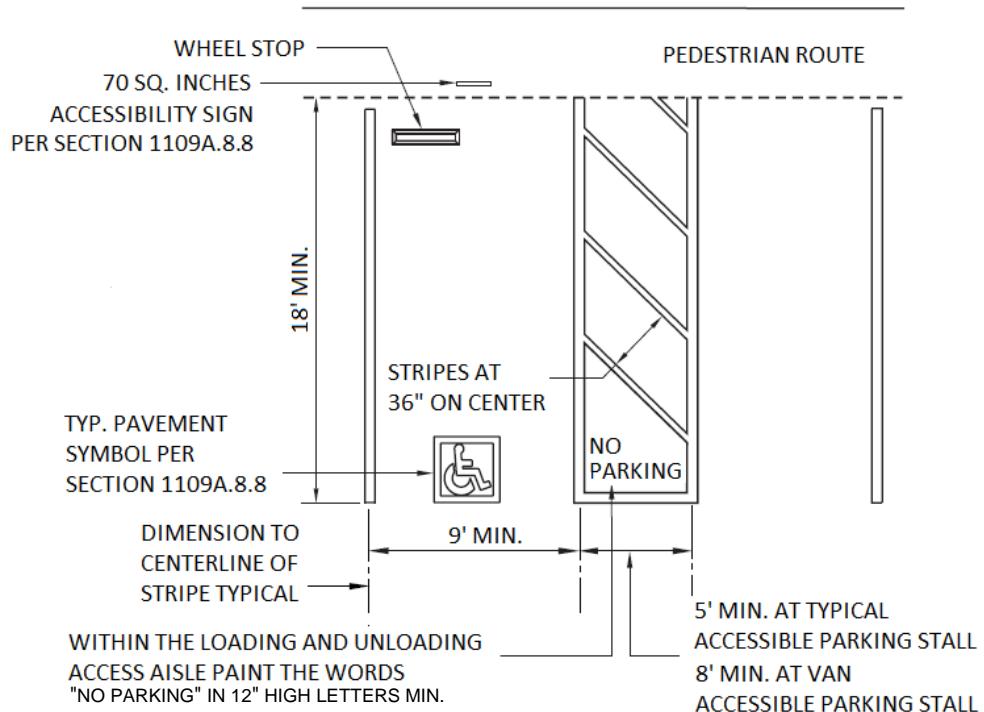


FIGURE 11A-1L  
INTERIOR ACCESSIBLE ROUTE (CORRIDOR) OVER 200 FEET; OCCUPANT LOAD 10 OR MORE



**FIGURE 11A-2A  
DOUBLE PARKING STALLS**



**FIGURE 11A-2B  
SINGLE AND VAN ACCESSIBLE PARKING STALLS**

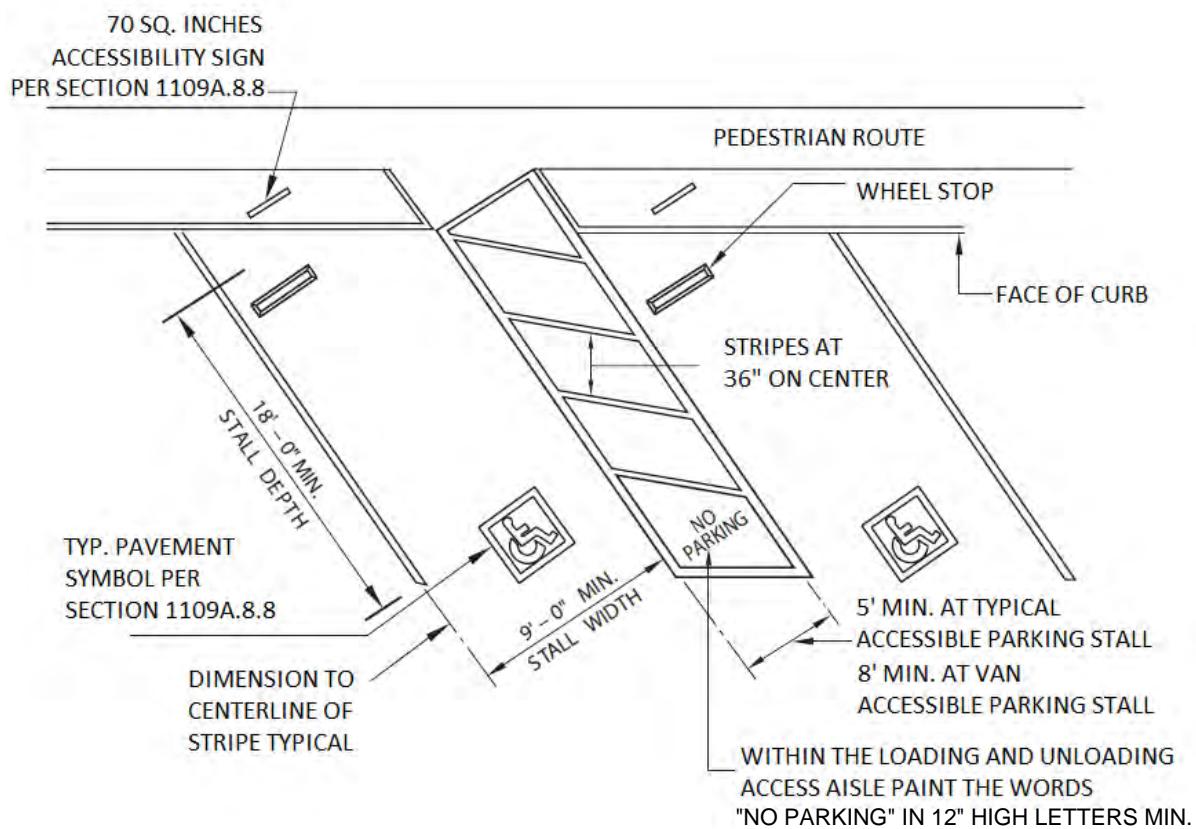
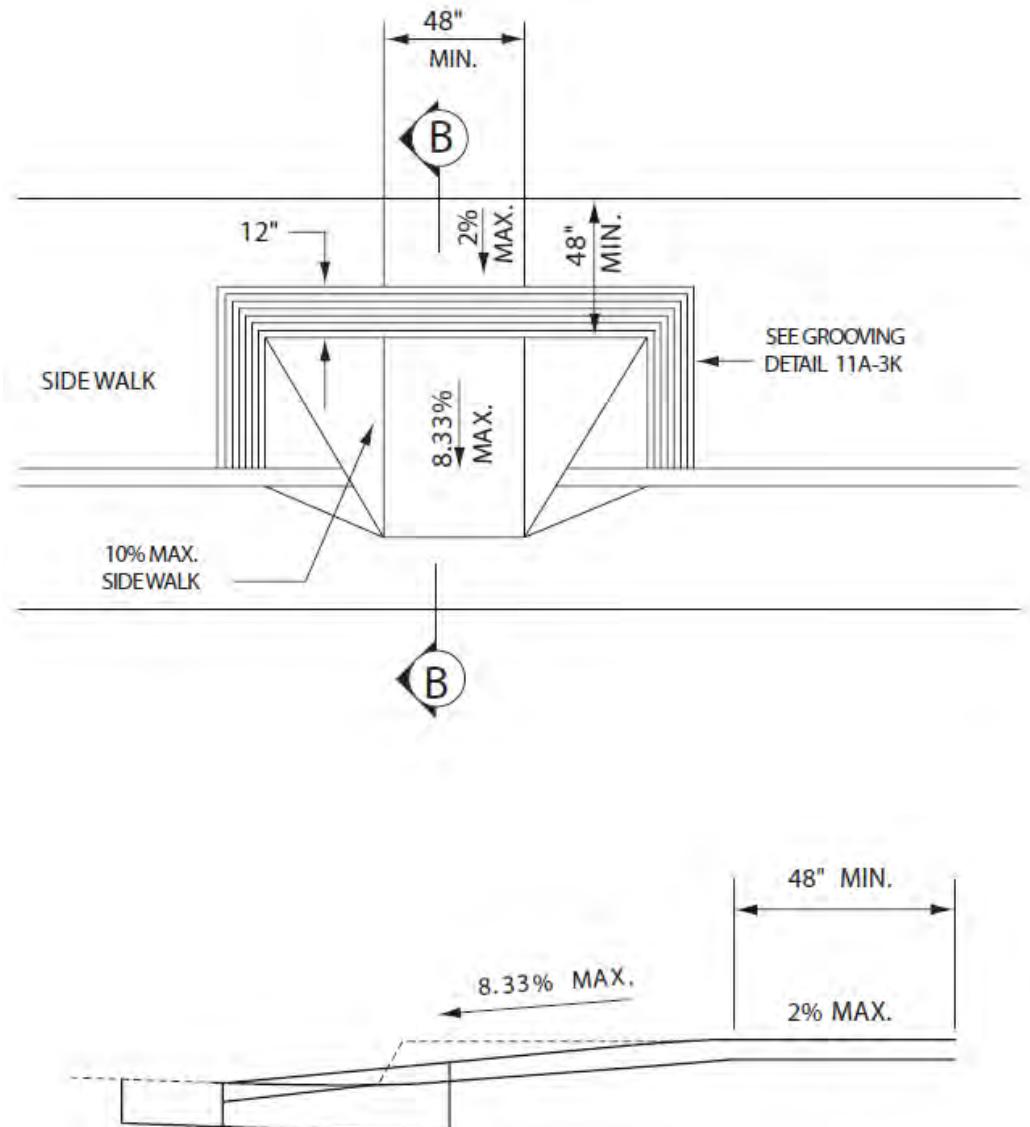


FIGURE 11A-2C  
DIAGONAL PARKING STALLS



SECTION B-B

FIGURE 11A-3C  
CURB DETAIL

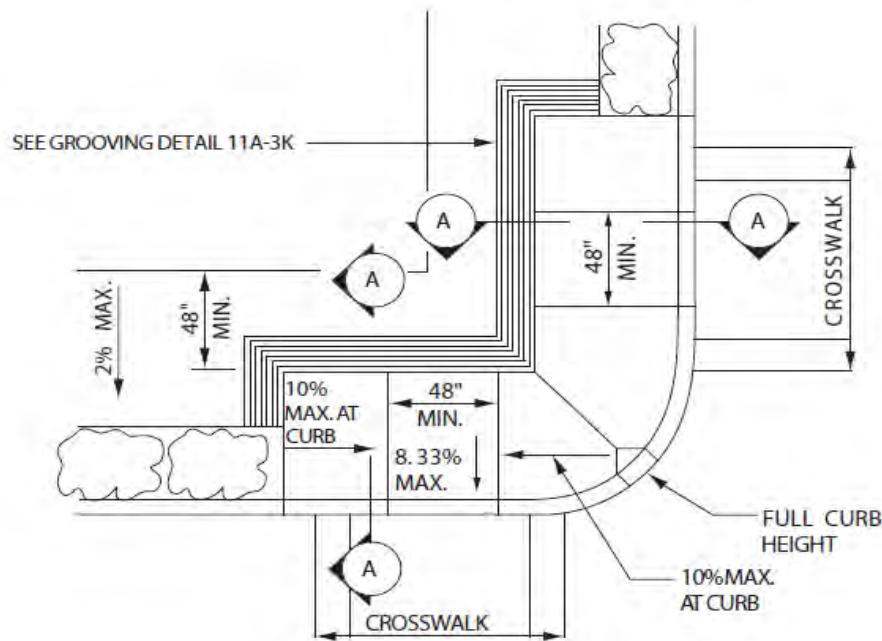


FIGURE 11A-3D  
CURB DETAIL

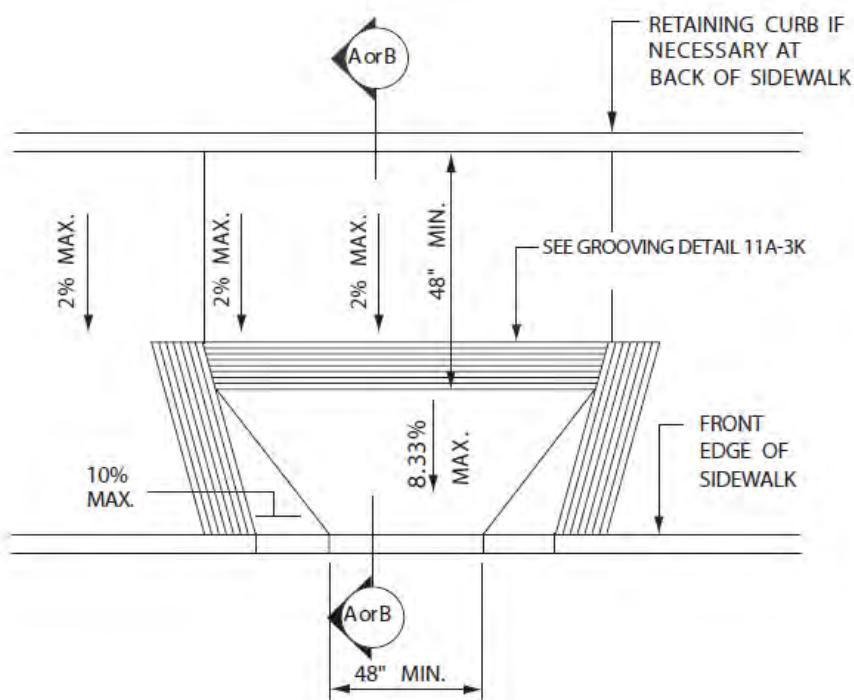


FIGURE 11A-3E  
CURB DETAIL

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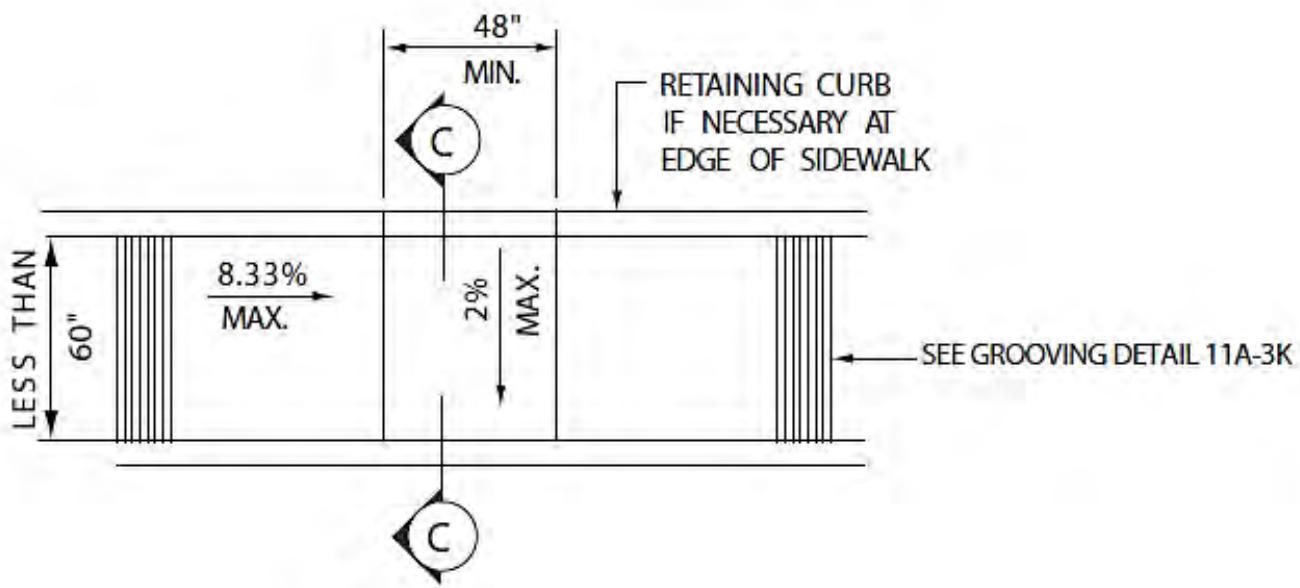


FIGURE 11A-3F  
CURB DETAIL - SIDEWALK LESS THAN 60" WIDE

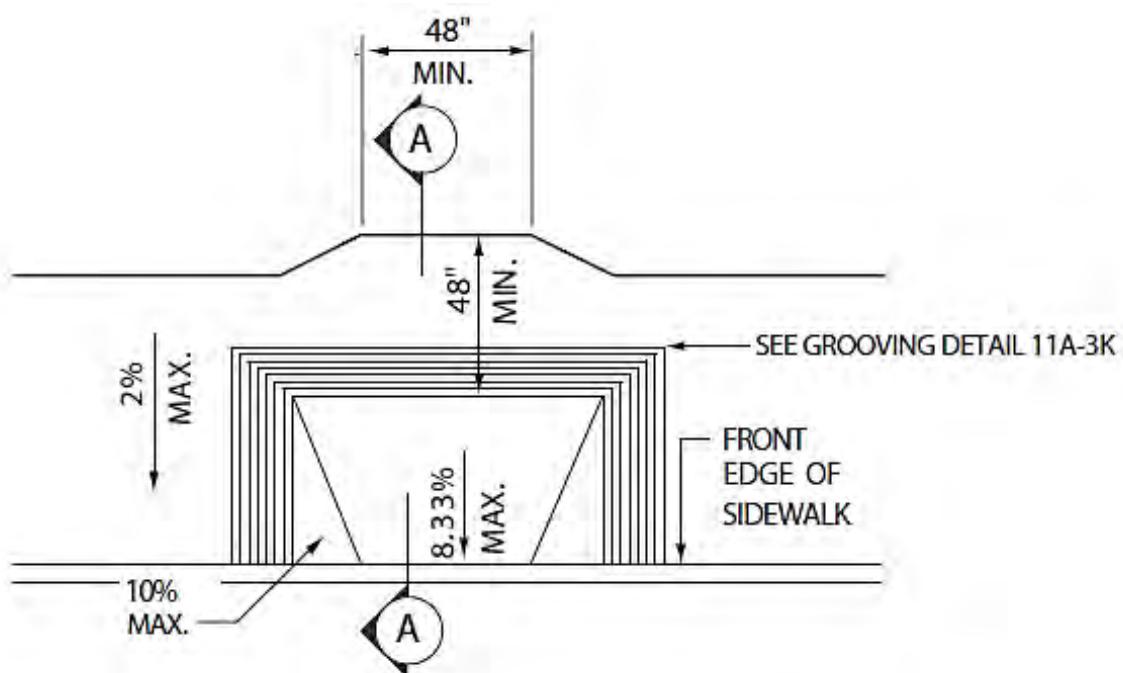
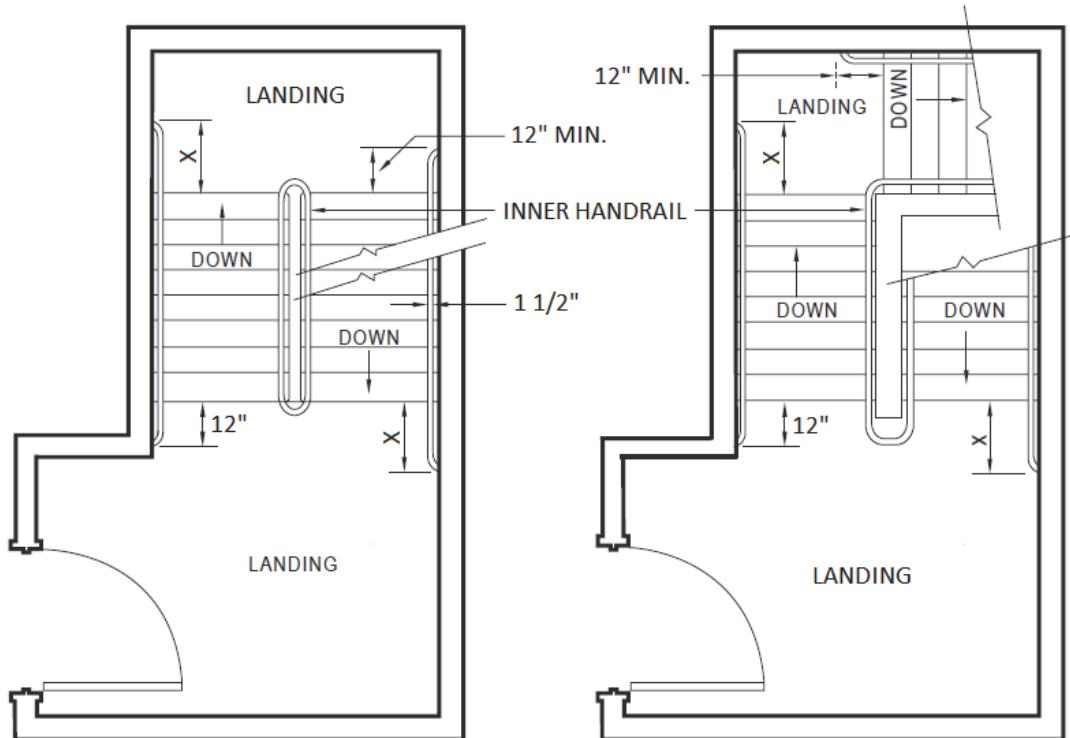


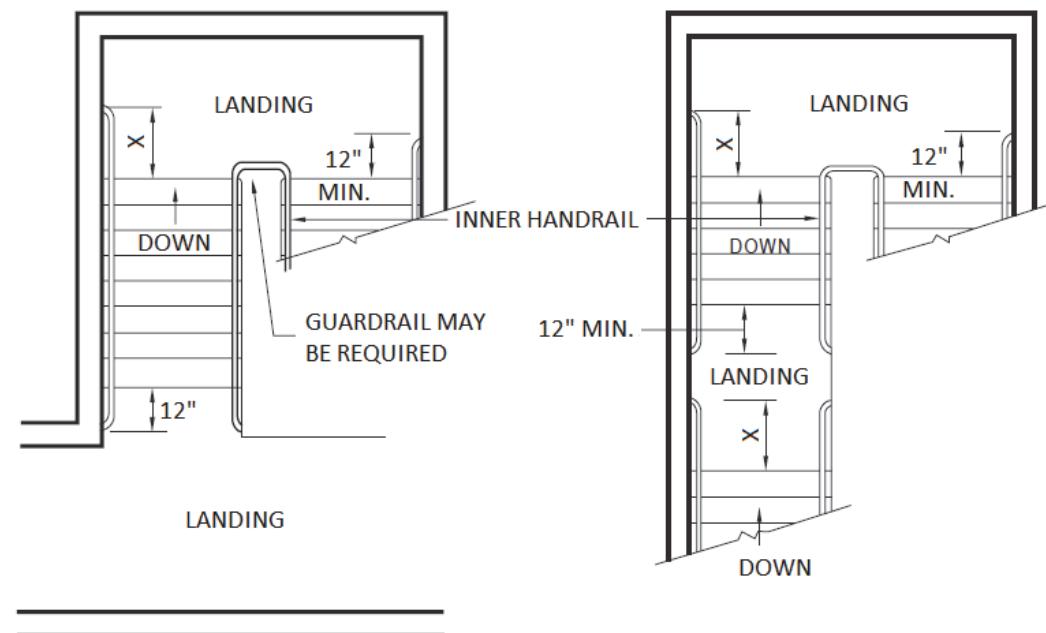
FIGURE 11A-3G  
CURB DETAIL

Text and Figures continue on page 488



**NOTE:** INNER HANDRAIL AT LANDINGS OF STAIRS THAT DOUBLE BACK OR IMMEDIATELY TURN SHALL BE CONTINUOUS AND SHALL NOT EXTEND INTO LANDING OR PATH OF TRAVEL.

**X:** EXTENSION OF HANDRAIL SHALL BE EQUAL TO THE TREAD WIDTH PLUS 12".



**FIGURE 11A-6E  
STAIR HANDRAILS**

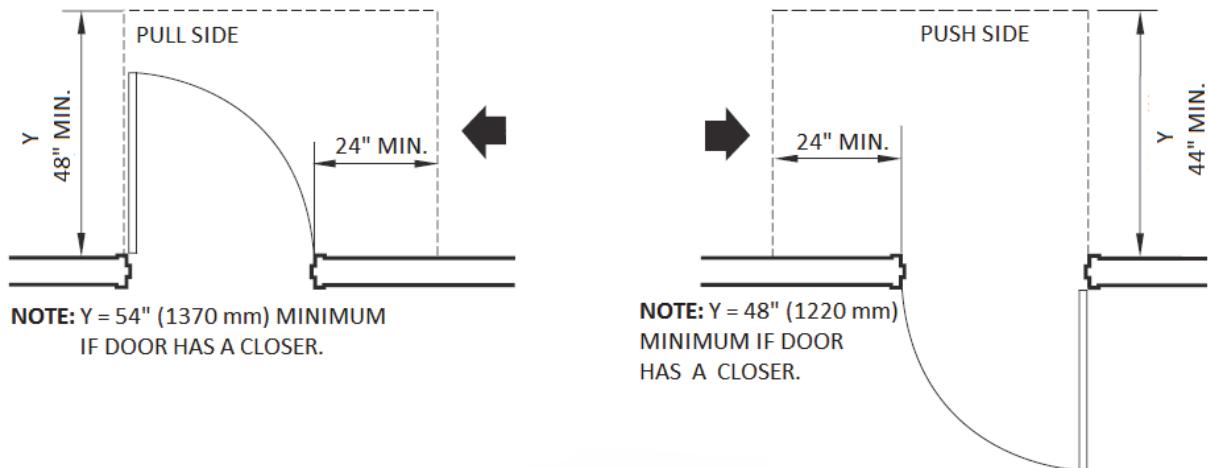


FIGURE 11A-8C  
LATCH SIDE APPROACHES—SWINGING DOORS

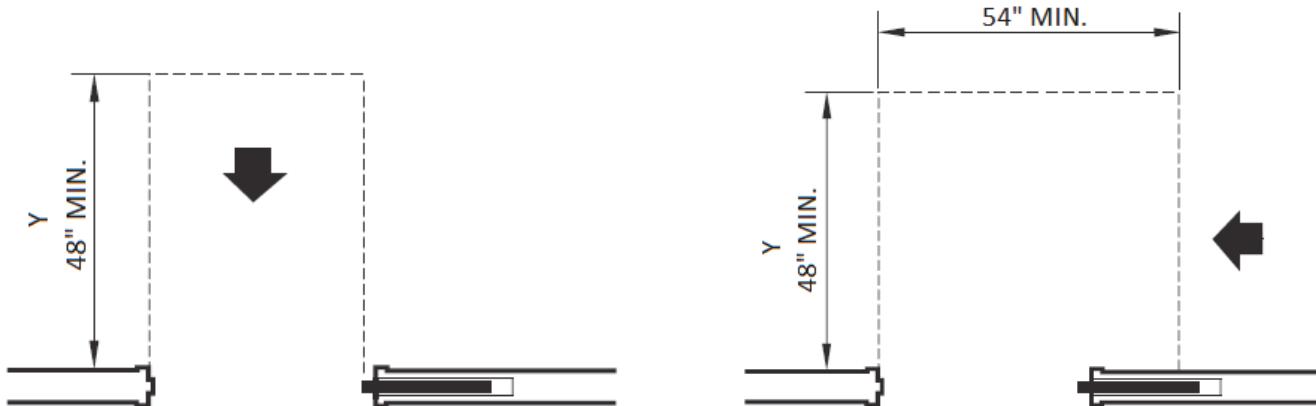


FIGURE 11A-8D  
FRONT APPROACH—SLIDING DOORS  
AND FOLDING DOORS

FIGURE 11A-8E  
SLIDE SIDE APPROACH—SLIDING DOORS  
AND FOLDING DOORS

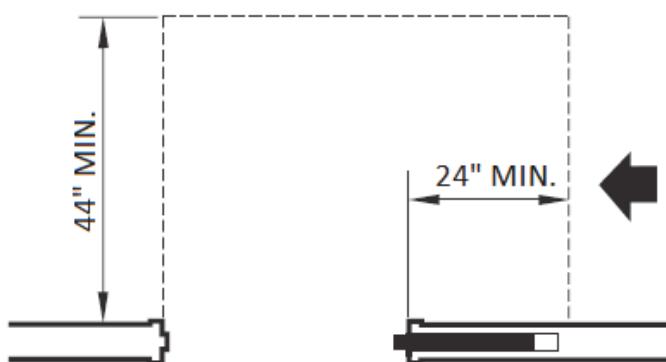
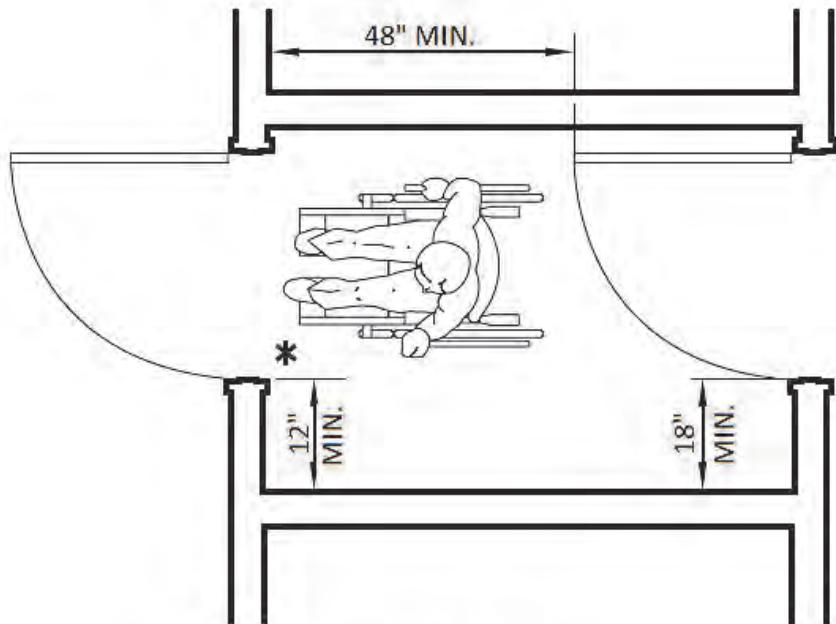
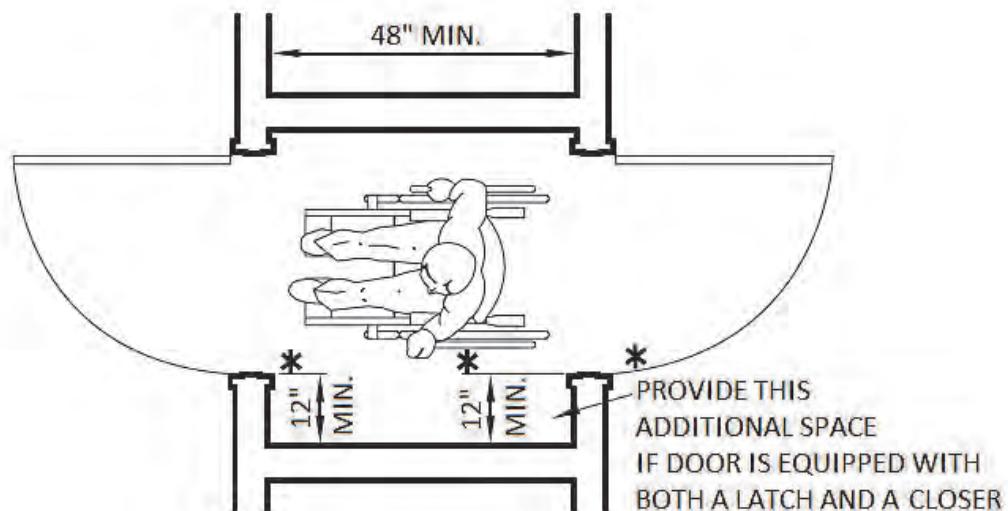


FIGURE 11A-8F  
LATCH SIDE APPROACH—SLIDING DOORS AND FOLDING DOORS



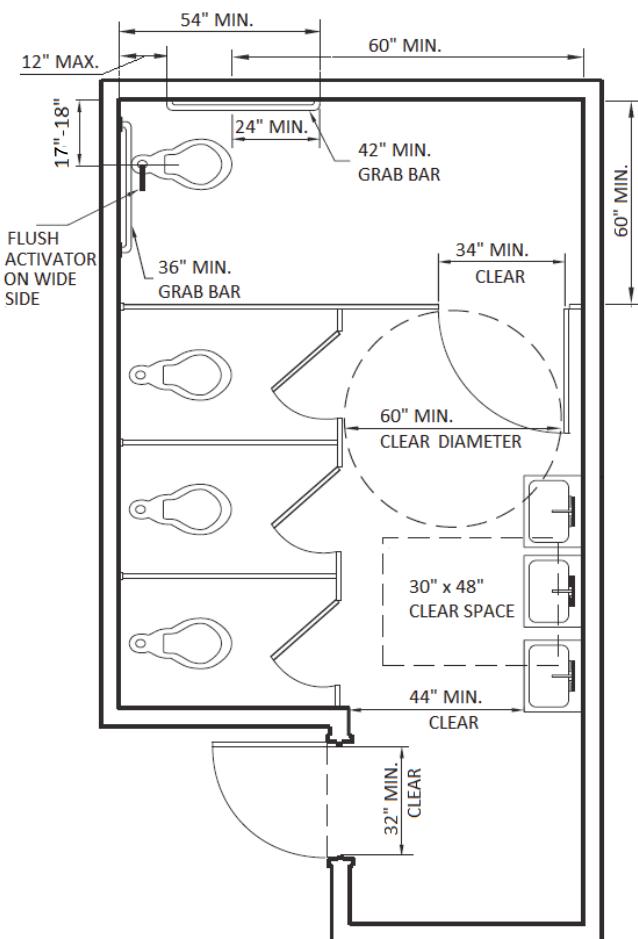
(a) DOORS IN SERIES



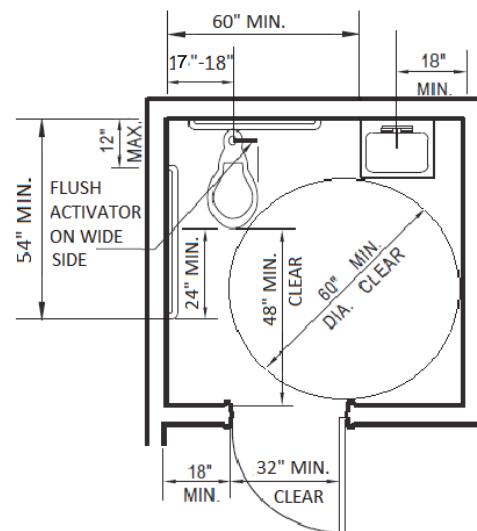
(b) BOTH DOORS OPEN OUT

(SERVING OTHER THAN A REQUIRED EXIT STAIRWAY)

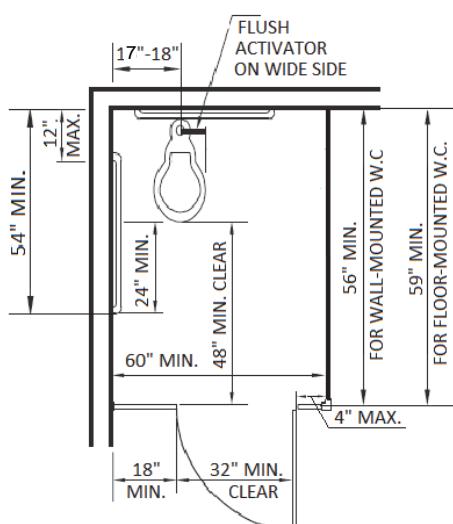
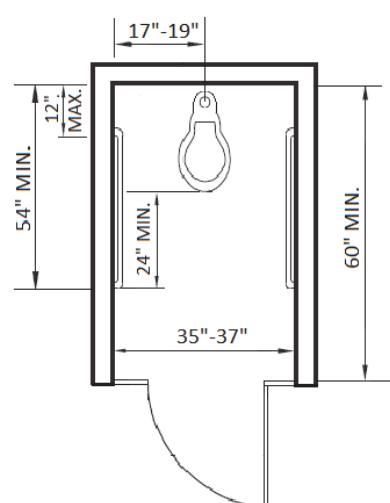
FIGURE 11A-8G  
VESTIBULE



(a) MULTIPLE-ACCOMMODATION TOILET FACILITY

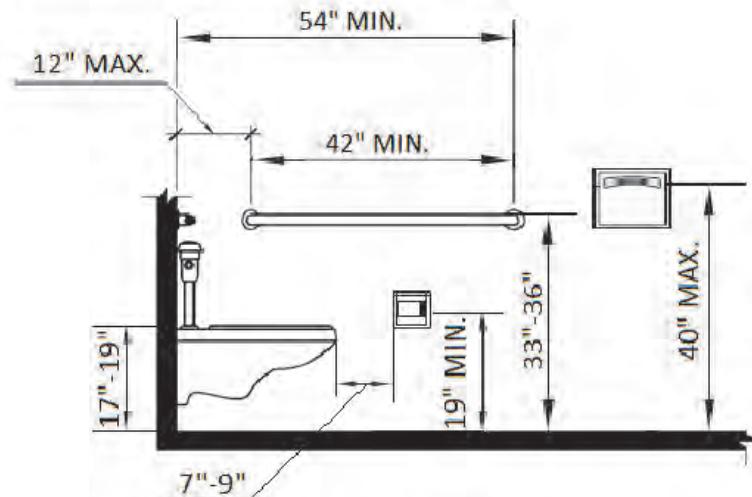


(b) SINGLE-ACCOMMODATION TOILET FACILITY

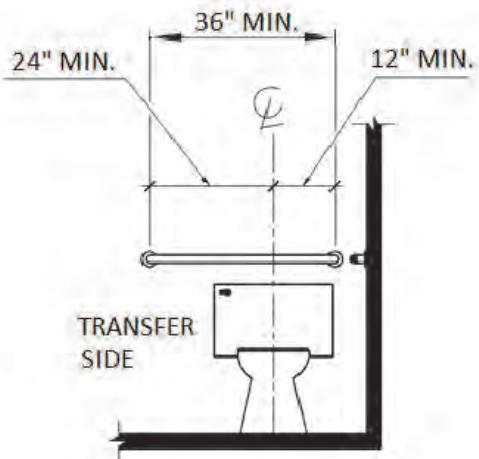
(c) ACCESSIBLE WATER CLOSET COMPARTMENT  
WITHIN MULTIPLE-ACCOMMODATION TOILET FACILITY

(d) AMBULATORY ACCESSIBLE COMPARTMENT

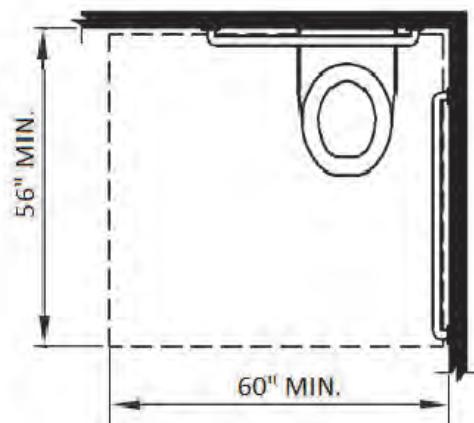
FIGURE 11A-9A  
TOILET FACILITIES



(a) SIDE VIEW



(b) FRONT VIEW



(c) CLEAR FLOOR SPACE AT WATER CLOSETS

FIGURE 11A-9B  
WATER CLOSETS

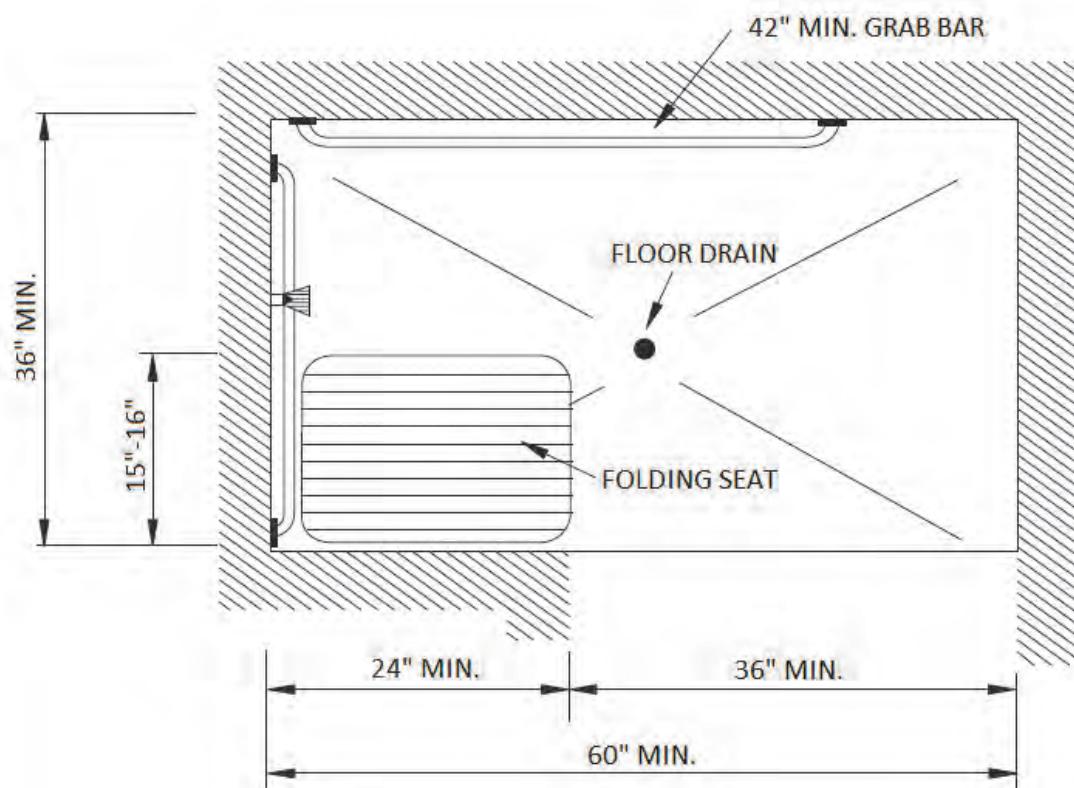


FIGURE 11A-9K  
ALTERNATE ROLL-IN SHOWER

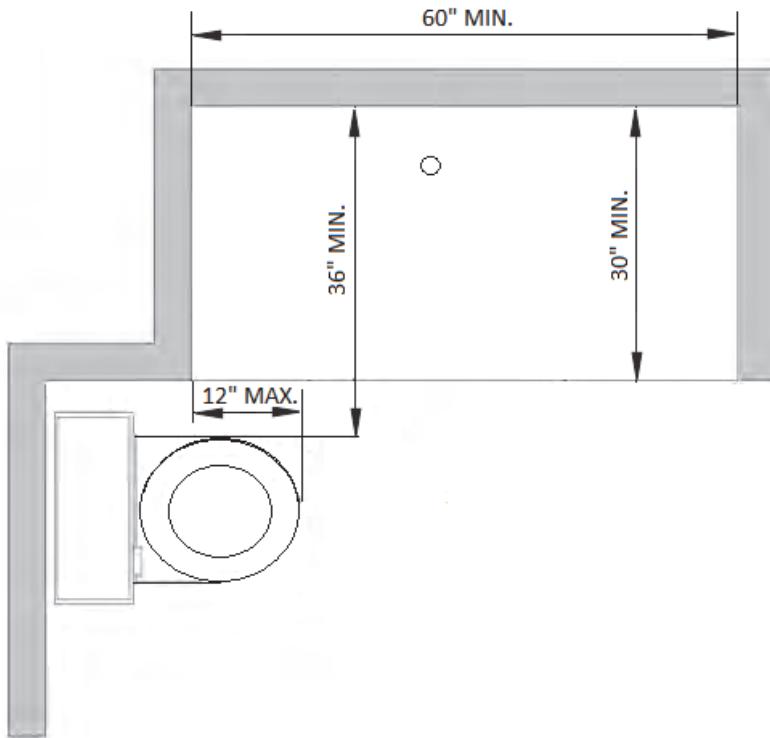


FIGURE 11A-9L  
SHOWER WITH WATER CLOSET

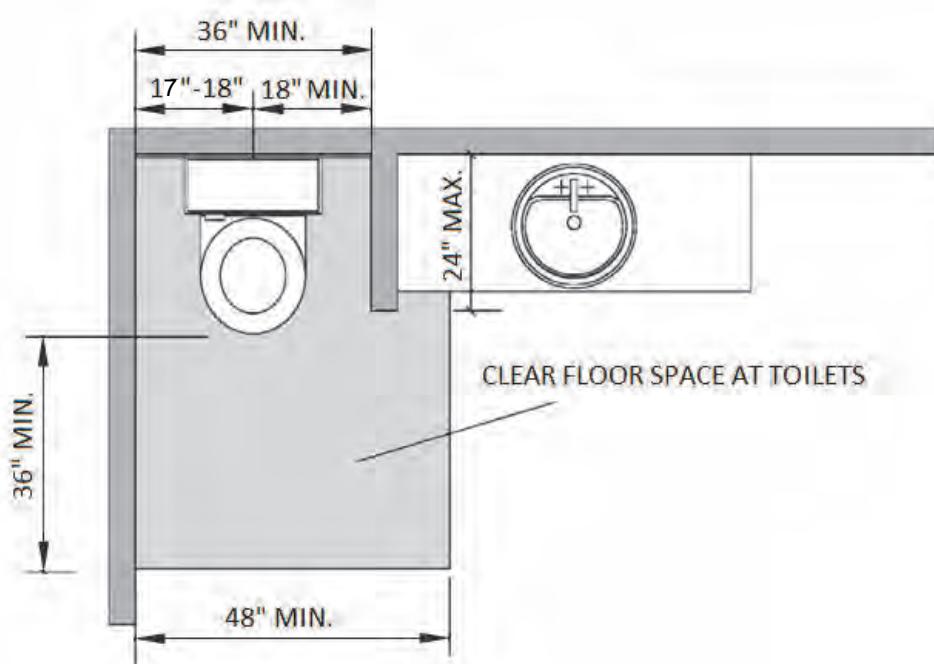
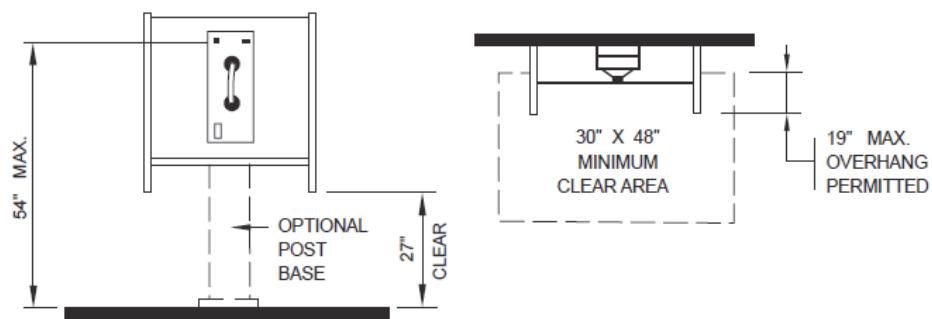
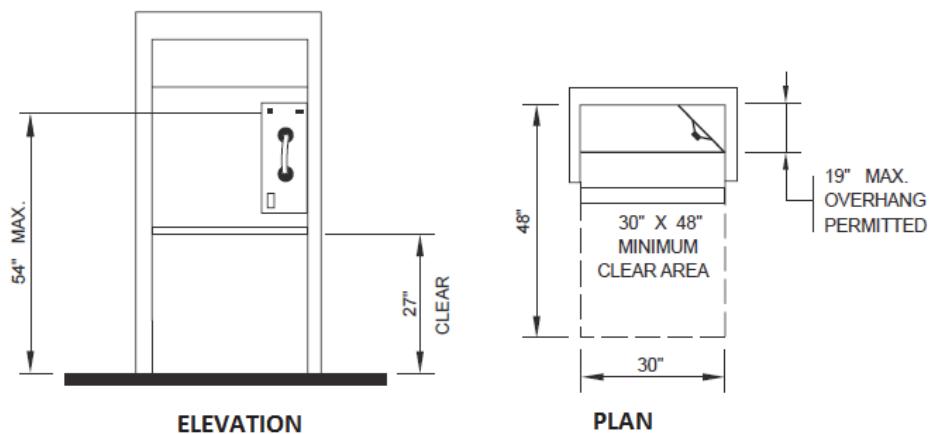


FIGURE 11A-9M  
WING WALL OR CABINET AT WATER CLOSET



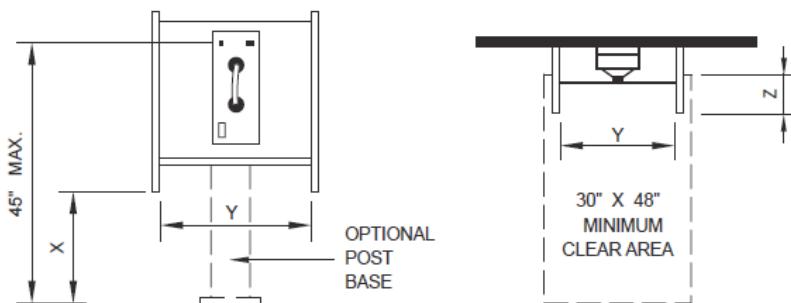
ELEVATION PLAN

## (a) SIDE REACH ARRANGEMENT



ELEVATION PLAN

## (b) FULL HEIGHT ENCLOSURE



**NOTE:** IF Y IS LESS THAN 30", THEN  
X SHALL BE GREATER THAN 27".

ELEVATION

**NOTE:** IF Z IS GREATER THAN 12", THEN  
Y SHALL BE GREATER THAN 30".

PLAN

## (c) FORWARD REACH ARRANGEMENT

**FIGURE 11A-11B**  
**MOUNTING HEIGHTS AND CLEARANCES FOR TELEPHONES**



FIGURE 11A-11C  
INTERNATIONAL TTY SYMBOL



FIGURE 11A-11D  
VOLUME CONTROL TELEPHONES



FIGURE 11A-11E  
INTERNATIONAL SYMBOL OF ACCESS FOR HEARING LOSS

aisles complying with *Section 11B-904.3* shall be located in the same location as the check-out aisle identification.

**Exception:** Where all check-out aisles comply with *Section 11B-904.3*, signs complying with *Section 11B-703.7.2.1* shall not be required.

**11B-216.12 Amusement rides.** Signs identifying the type of access provided on amusement rides shall be provided at entries to queues and waiting lines. In addition, where accessible unload areas also serve as accessible load areas, signs indicating the location of the accessible load and unload areas shall be provided at entries to queues and waiting lines. *Signs shall comply with Section 11B-703.5 and shall include the International Symbol of Accessibility complying with Section 11B-703.7.2.1.*

#### **11B-216.13 Cleaner Air Symbol**

**11B-216.13.1 Use of Cleaner Air Symbol.** *Use of the Cleaner Air Symbol is voluntary. Where publicly funded facilities or any facilities leased or rented by the State of California, not including concessionaires, comply with the conditions of use identified in Section 11B-216.13.3, a Cleaner Air Symbol complying with Section 11B-703.7.2.5 is permitted to be posted in compliance with Section 11B-216.3 to indicate rooms, facilities, and paths of travel that are accessible to and usable by people who are adversely impacted by airborne chemicals or particulates and/or the use of electrical fixtures and/or devices.*

**11B-216.13.2 Removal of Cleaner Air 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 of use identified in Section 11B-216.13.3, the Cleaner Air Symbol shall be removed and shall not be replaced until the minimum conditions are again met.*

**11B-216.13.3 Conditions of use.** *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 particle-board 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 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, that may impact the cleaner air designation. The log shall also include the product label as well as the Material Safety Data Sheets (MSDS).*

#### **11B-217 Telephones**

**11B-217.1 General.** Where coin-operated public pay telephones, coinless public pay telephones, public closed-circuit telephones, public courtesy phones, or other types of public telephones are provided, public telephones shall be provided in accordance with *Section 11B-217* for each type of public telephone provided. For purposes of this section, a bank of telephones shall be considered to be two or more adjacent telephones.

**11B-217.2 Wheelchair accessible telephones.** Where public telephones are provided, wheelchair accessible telephones complying with *Section 11B-704.2* shall be provided in accordance with Table 11B-217.2.

**Exception:** Drive-up only public telephones shall not be required to comply with *Section 11B-217.2*.

**TABLE 11B-217.2  
WHEELCHAIR ACCESSIBLE TELEPHONES**

NUMBER OF TELEPHONES PROVIDED ON A FLOOR, LEVEL, OR EXTERIOR SITE	MINIMUM NUMBER OF REQUIRED WHEELCHAIR ACCESSIBLE TELEPHONES
1 or more single units	<i>At least 50 percent of telephone units, but not less than 1 per floor, level, and exterior site</i>
1 bank	<i>At least 50 percent of telephone units per bank, but not less than 1 per floor, level, and exterior site</i>
2 or more banks	<i>At least 50 percent of telephone units per bank, but not less than 1 per bank</i> <i>At least 1 telephone per floor shall meet the requirements for a forward reach telephone.</i>

**11B-217.3 Volume controls.** All public telephones shall have volume controls complying with *Section 11B-704.3*.

**11B-217.4 TTYs.** TTYs complying with *Section 11B-704.4* shall be provided in accordance with *Section 11B-217.4*.

**11B-217.4.1 Bank requirement.** Where four or more public pay telephones are provided at a bank of telephones, at least one public TTY complying with *Section 11B-704.4* shall be provided at that bank.

**Exception: Reserved.**

**11B-217.4.2 Floor requirement.** TTYs in public buildings shall be provided in accordance with *Section 11B-217.4.2.1*. TTYs in private buildings shall be provided in accordance with *Section 11B-217.4.2.2*.

**11B-217.4.2.1 Public buildings.** Where at least one public pay telephone is provided on a floor of a public building, at least one public TTY shall be provided on that floor.

**11B-217.4.2.2 Private buildings.** Where four or more public pay telephones are provided on a floor of a private building, at least one public TTY shall be provided on that floor.

**11B-217.4.3 Building requirement.** TTYs in public buildings shall be provided in accordance with *Section 11B-217.4.3.1*. TTYs in private buildings shall be provided in accordance with *Section 11B-217.4.3.2*.

**11B-217.4.3.1 Public buildings.** Where at least one public pay telephone is provided in a public building, at least one public TTY shall be provided in the building. Where at least one public pay telephone is provided in a public use area of a public building, at least one public TTY shall be provided in the public building in a public use area.

**11B-217.4.3.2 Private buildings.** Where four or more public pay telephones are provided in a private building, at least one public TTY shall be provided in the building.

**Exception:** In a stadium or arena, in a convention center, in a hotel with a convention center or in a covered mall, if an interior public pay telephone is provided at least one interior public TTY shall be provided in the facility.

**11B-217.4.4 Exterior site requirement.** Where four or more public pay telephones are provided on an exterior site, at least one public TTY shall be provided on the site.

**11B-217.4.5 Rest stops, emergency roadside stops, and service plazas.** Where at least one public pay telephone is provided at a public rest stop, emergency roadside stop, or service plaza, at least one public TTY shall be provided.

**11B-217.4.6 Hospitals.** Where at least one public pay telephone is provided serving a hospital emergency room, hospital recovery room, or hospital waiting room, at least one public TTY shall be provided at each location.

**11B-217.4.7 Transportation facilities.** In transportation facilities, in addition to the requirements of *Sections 11B-217.4.1* through *11B-217.4.4*, where at least one public

pay telephone serves a particular entrance to a bus or rail facility, at least one public TTY shall be provided to serve that entrance. In airports, in addition to the requirements of *Sections 11B-217.4.1* through *11B-217.4.4*, where four or more public pay telephones are located in a terminal outside the security areas, a concourse within the security areas, or a baggage claim area in a terminal, at least one public TTY shall be provided in each location.

**11B-217.4.8 Detention and correctional facilities.** In detention and correctional facilities, where at least one pay telephone is provided in a secured area used only by detainees or inmates and security personnel, at least one TTY shall be provided in at least one secured area.

**11B-217.5 Shelves for portable TTYs.** 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 at the bank shall be provided with a shelf and an electrical outlet in accordance with *Section 11B-704.5*.

**Exceptions:**

1. Secured areas of detention and correctional facilities where shelves and outlets are prohibited for purposes of security or safety shall not be required to comply with *Section 11B-217.5*.
2. The shelf and electrical outlet shall not be required at a bank of telephones with a TTY.

## 11B-218 Transportation facilities

**11B-218.1 General.** Transportation facilities shall comply with *Section 11B-218*.

**11B-218.2 New and altered fixed guideway stations.** New and altered stations in rapid rail, light rail, commuter rail, intercity rail, high speed rail, and other fixed guideway systems shall comply with *Sections 11B-810.5* through *11B-810.10*.

**11B-218.3 Key stations and existing intercity rail stations.** Key stations and existing intercity rail stations shall comply with *Sections 11B-810.5* through *11B-810.10*.

**11B-218.4 Bus shelters.** Where provided, bus shelters shall comply with *Section 11B-810.3*.

**11B-218.5 Other transportation facilities.** In other transportation facilities, public address systems shall comply with *Section 11B-810.7* and clocks shall comply with *Section 11B-810.8*.

## 11B-219 Assistive listening systems

**11B-219.1 General.** Assistive listening systems shall be provided in accordance with *Section 11B-219* and shall comply with *Section 11B-706*.

**11B-219.2 Required systems.** An assistive listening system shall be provided in assembly areas, including conference and meeting rooms.

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

**11B-219.3 Receivers.** 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. Twenty-five percent minimum of receivers provided, but no fewer than two, shall be hearing-aid compatible in accordance with Section 11B-706.3.*

**Exceptions:**

1. Where a building contains more than one assembly area and the assembly areas required to provide assistive listening systems are under one management, the total number of required receivers shall be permitted to be calculated according to the total number of seats in the assembly areas in the building provided that all receivers are usable with all systems.
2. Where all seats in an assembly area are served by an induction loop assistive listening system, the minimum number of receivers required by Section 11B-219.3 to be hearing-aid compatible shall not be required to be provided.

**11B-219.4 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 (15240 mm) viewing distance of the stage or playing area and shall have a complete view of the stage or playing area.*

**11B-219.5 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.*

**11B-220 Automatic teller machines, fare machines and point-of-sale devices.**

**11B-220.1 Automatic teller machines and fare machines.** Where automatic teller machines or self-service fare vending, collection, or adjustment machines are provided *they shall comply with Section 11B-220.1.* Where bins are provided for envelopes, waste paper, or other purposes, at least one of each type shall comply with Section 11B-811.

**11B-220.1.1 One automatic teller machine or fare machine.** *Where one automatic teller machine or fare machine is provided at a location, it shall comply with Sections 11B-707.2 through 11B-707.8.*

**11B-220.1.2 Two automatic teller machines or fare machines.** *Where two automatic teller machines or fare machines are provided at a location, one shall comply with Sections 11B-707.2 through 11B-707.8 and one shall comply with Sections 11B-309, 11B-707.2, 11B-707.4, 11B-707.5, 11B-707.6, 11B-707.7.2 and 11B-707.8.*

**11B-220.1.3 Three or more automatic teller machines or fare machines.** *Where three or more automatic teller machines or fare machines are provided at a location, at least 50 percent shall comply with Sections 11B-707.2 through 11B-707.8 and the rest shall comply with Sections 11B-309, 11B-707.2, 11B-707.4, 11B-707.5, 11B-707.6, 11B-707.7.2 and 11B-707.8.*

**11B-220.2 Point-of-sale devices.** *Where point-of-sale devices are provided, all devices at each location shall comply with Sections 11B-309.4, 11B-707.3, and 11B-707.7.2. In addition, point-of-sale systems that include a video touch screen or any other non-tactile keypad shall comply with either Section 11B-707.9.1.1 or 11B-707.9.1.2. Where point-of-sale devices are provided at check stands and sales and service counters, they shall comply with Section 11B-707.9.1, and shall also comply with Sections 11B-707.2, 11B-707.3 and 11B-707.4.*

**Exception:** *Where a single point-of-sale device is installed for use with any type of motor fuel, it shall comply with Sections 11B-220.2 and 11B-309. Where more than one point-of-sale device is installed for use with a specific type of motor fuel, a minimum of two for that type shall comply with Sections 11B-220.2 and 11B-309. Types of motor fuel include, but are not limited to, gasoline, diesel, compressed natural gas, methanol, ethanol or electricity.*

**11B-221 Assembly areas**

**11B-221.1 General.** Assembly areas shall provide wheelchair spaces, companion seats, designated aisle seats and semi-ambulant seats complying with Sections 11B-221 and 11B-802. In addition, lawn seating shall comply with Section 11B-221.5.

**11B-221.2 Wheelchair spaces.** Wheelchair spaces complying with Section 11B-221.2 shall be provided in assembly areas with fixed seating.

**11B-221.2.1 Number and location.** Wheelchair spaces shall be provided complying with Section 11B-221.2.1.

**11B-221.2.1.1 General seating.** Wheelchair spaces complying with Section 11B-802.1 shall be provided in accordance with Table 11B-221.2.1.1.

**TABLE 11B-221.2.1.1  
NUMBER OF WHEELCHAIR SPACES IN ASSEMBLY AREAS**

NUMBER OF SEATS	MINIMUM NUMBER OF REQUIRED WHEELCHAIR SPACES
4 to 25	1
26 to 50	2
51 to 150	4
151 to 300	5
301 to 500	6
501 to 5000	6, plus 1 for each 100, or fraction thereof, between 501 through 5000
5001 and over	46, plus 1 for each 200, or fraction thereof, over 5000

**11B-221.2.1.2 Luxury boxes, club boxes, and suites in arenas, stadiums, and grandstands.** In each luxury box, club box, and suite within arenas, stadiums, and grandstands, wheelchair spaces complying with *Section 11B-802.1* shall be provided in accordance with Table 11B-221.2.1.1.

**11B-221.2.1.3 Other boxes.** In boxes other than those required to comply with *Section 11B-221.2.1.2*, the total number of wheelchair spaces required shall be determined in accordance with Table 11B-221.2.1.1. Wheelchair spaces shall be located in not less than 20 percent of all boxes provided. Wheelchair spaces shall comply with *Section 11B-802.1*.

**11B-221.2.1.4 Team or player seating.** At least one wheelchair space complying with *Section 11B-802.1* shall be provided in team or player seating areas serving areas of sport activity.

**Exception:** Wheelchair spaces shall not be required in team or player seating areas serving bowling lanes not required to comply with *Section 11B-206.2.11*.

**11B-221.2.1.5 Stadium-style movie theaters.** In stadium-style movie theaters, the total number of wheelchair spaces required shall be determined in accordance with Table 11B-221.2.1.1. The required wheelchair spaces shall be located on risers or cross-aisles in the stadium section that satisfy at least one of the following criteria:

1. Located within the rear 60 percent of the seats provided in the theater; or
2. Located within the area of the theater in which the vertical viewing angles (as measured to the top of the screen) are from the 40<sup>th</sup> to the 100<sup>th</sup> percentile of vertical viewing angles for all seats as ranked from the seats in the first row (1<sup>st</sup> percentile) to seats in the back row (100<sup>th</sup> percentile).

**11B-221.2.1.6 Specialty seating areas.** In assembly areas, wheelchair spaces shall be provided in each specialty seating area that provides spectators with distinct services or amenities that generally are not available to other spectators. The number of wheelchair spaces provided in specialty seating areas shall be included in, rather than be in addition to, the total number of wheelchair spaces required by Table 11B-221.2.1.1.

**Exception:** In existing buildings and facilities, if it is not readily achievable for wheelchair spaces to be placed in each specialty seating area, those services or amenities shall be provided to individuals with disabilities, and their companions, at other designated accessible locations at no additional cost.

**11B-221.2.2 Integration.** Wheelchair spaces shall be an integral part of the seating plan.

**11B-221.2.3 Lines of sight and dispersion.** Wheelchair spaces shall provide lines of sight complying with *Section 11B-802.2* and shall comply with *Section 11B-221.2.3*. In

providing lines of sight, wheelchair spaces shall be dispersed. Wheelchair spaces shall provide spectators with choices of seating locations and viewing angles that are substantially equivalent to, or better than, the choices of seating locations and viewing angles available to all other spectators. When the number of wheelchair spaces required by *Section 11B-221.2.1* has been met, further dispersion shall not be required. *In stadiums, arenas and grandstands, wheelchair spaces shall be dispersed to all levels that include seating served by an accessible route.*

**Exception:** Wheelchair spaces in team or player seating areas serving areas of sport activity shall not be required to comply with *Section 11B-221.2.3*.

**11B-221.2.3.1 Horizontal dispersion.** Wheelchair spaces shall be dispersed horizontally. *In assembly areas that have seating encircling, in whole or in part, a field of play or performance, wheelchair spaces shall be dispersed horizontally around the field of play or performance area.*

#### Exceptions:

1. Horizontal dispersion shall not be required in assembly areas with 300 or fewer seats if the companion seats required by *Section 11B-221.3* and wheelchair spaces are located within the 2<sup>nd</sup> or 3<sup>rd</sup> quartile of the total row length. Intermediate aisles shall be included in determining the total row length. If the row length in the 2<sup>nd</sup> and 3<sup>rd</sup> quartile of a row is insufficient to accommodate the required number of companion seats and wheelchair spaces, the additional companion seats and wheelchair spaces shall be permitted to be located in the 1<sup>st</sup> and 4<sup>th</sup> quartile of the row.
2. In row seating, two wheelchair spaces shall be permitted to be located side-by-side.

**11B-221.2.3.2 Vertical dispersion.** Wheelchair spaces shall be dispersed vertically at varying distances from the screen, performance area, or playing field. In addition, wheelchair spaces shall be located in each balcony or mezzanine that is located on an accessible route.

#### Exceptions:

1. Vertical dispersion shall not be required in assembly areas with 300 or fewer seats if the wheelchair spaces provide viewing angles that are equivalent to, or better than, the average viewing angle provided in the facility.
2. In bleachers, wheelchair spaces shall not be required to be provided in rows other than rows at points of entry to bleacher seating.

**11B-221.2.4 Temporary structures.** Wheelchair spaces shall not be located on, or be obstructed by, temporary platforms or other movable structures.

**Exception:** When an entire seating section is placed on temporary platforms or other movable structures in an area where fixed seating is not provided, in order to

complying with *Section 11B-806.3* shall be dispersed among the various classes of guest rooms, and shall provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests. Where the minimum number of guest rooms required to comply with *Section 11B-806* is not sufficient to allow for complete dispersion, guest rooms shall be dispersed in the following priority: guest room type, number of beds, and amenities. At least one guest room required to provide mobility features complying with *Section 11B-806.2* shall also provide communication features complying with *Section 11B-806.3*. Not more than 10 percent of guest rooms required to provide mobility features complying with *Section 11B-806.2* shall be used to satisfy the minimum number of guest rooms required to provide communication features complying with *Section 11B-806.3*.

**11B-224.6 Storage.** *Fixed or built-in storage facilities within guest rooms required to provide mobility features shall comply with Section 11B-225.*

#### **11B-225 Storage**

**11B-225.1 General.** Storage facilities shall comply with *Section 11B-225*.

**11B-225.2 Storage.** Where storage is provided in accessible spaces, at least one of each type shall comply with *Section 11B-811*.

**11B-225.2.1 Lockers.** Where lockers are provided, at least 5 percent, but no fewer than one of each type, shall comply with *Section 11B-811*.

**11B-225.2.2 Self-service shelving.** Self-service shelves shall be located on an accessible route complying with *Section 11B-402*. Self-service shelving shall not be required to comply with *Section 11B-308*.

**11B-225.2.3 Library book stacks.** *Book stacks available for public use shall be 54 inches (1372 mm) maximum above the finish floor.*

#### **Exceptions:**

1. *Book stacks available for public use may be higher than 54 inches (1372 mm) maximum above the finish floor when an attendant is available to assist persons with disabilities.*
2. *Book stacks restricted to employee use are not required to comply with these requirements.*

**TABLE 11B-224.2  
GUEST ROOMS WITH MOBILITY FEATURES**

TOTAL NUMBER OF GUEST ROOMS PROVIDED	MINIMUM NUMBER OF REQUIRED ROOMS WITHOUT ROLL-IN SHOWERS	MINIMUM NUMBER OF REQUIRED ROOMS WITH ROLL-IN SHOWERS	TOTAL NUMBER OF REQUIRED ROOMS
1 to 25	0	1	1
26 to 50	1	1	2
51 to 75	3	1	4
76 to 100	4	1	5
101 to 150	5	2	7
151 to 200	6	2	8
201 to 300	7	3	10
301 to 400	8	4	12
401 to 500	9	4	13
501 to 1000	2 percent of total	1 percent of total	3 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000	10, plus 1 for each 100, or fraction thereof, over 1000	30, plus 2 for each 100, or fraction thereof, over 1000

**TABLE 11B-224.4  
GUEST ROOMS WITH COMMUNICATION FEATURES**

TOTAL NUMBER OF GUEST ROOMS PROVIDED	MINIMUM NUMBER OF REQUIRED GUEST ROOMS WITH COMMUNICATION FEATURES
1	1
2 to 25	2
26 to 50	4
51 to 75	7
76 to 100	9
101 to 150	12
151 to 200	14
201 to 300	17
301 to 400	20
401 to 500	22
501 to 1000	5 percent of total
1001 and over	50, plus 3 for each 100 over 1000

**11B-225.3 Self-service storage facilities.** Self-service storage facilities shall provide individual self-service storage spaces complying with these requirements in accordance with Table 11B-225.3.

**11B-225.3.1 Dispersion.** Individual self-service storage spaces shall be dispersed throughout the various classes of spaces provided. Where more classes of spaces are provided than the number required to be accessible, the number of spaces shall not be required to exceed that required by Table 11B-225.3. Self-service storage spaces complying with Table 11B-225.3 shall not be required to be dispersed among buildings in a multi-building facility.

### 11B-226 Dining surfaces and work surfaces

**11B-226.1 General.** Where dining surfaces are provided for the consumption of food or drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with Section 11B-902. In addition, where work surfaces are provided for use by other than employees, at least 5 percent shall comply with Section 11B-902.

#### Exceptions:

1. Sales counters and service counters shall not be required to comply with Section 11B-902. See Section 11B-227.
2. Check writing surfaces provided at check-out aisles not required to comply with Section 11B-904.3 shall not be required to comply with Section 11B-902.

**11B-226.2 Dispersion.** Dining surfaces required to comply with Section 11B-902 shall be dispersed throughout the space or facility containing dining surfaces *for each type of seating in a functional area. Work surfaces required to comply with Section 11B-902 shall be dispersed throughout the space or facility containing work surfaces.*

**11B-226.3 Dining surfaces exceeding 34 inches in height.** Where food or drink is served for consumption at a counter exceeding 34 inches (864 mm) in height, a portion of the main counter 60 inches (1525 mm) minimum in length shall be provided in compliance with Section 11B-902.3.

### 11B-227 Sales and service

**11B-227.1 General.** Where provided, check-out aisles, sales counters, service counters, food service lines, queues, and waiting lines shall comply with Sections 11B-227 and 11B-904.

**11B-227.2 Check-out aisles.** Where check-out aisles are provided, check-out aisles complying with Section 11B-904.3 shall be provided in accordance with Table 11B-227.2. Where check-out aisles serve different functions, check-out aisles complying with Section 11B-904.3 shall be provided in accordance with Table 11B-227.2 for each function. Where check-out aisles are dispersed throughout the building or facility, check-out aisles complying with Section 11B-904.3 shall be dispersed. When check-out aisles are open for customer use, a minimum of one accessible check-out aisle shall always be available. As check-out aisles are opened and closed based on fluctuating customer levels, the number of accessible check-out aisles available shall comply with Table 11B-227.2. When not all check-out aisles are accessible, accessible check-out aisles shall be identified by a sign complying with Section 11B-904.3.4.

**Exception:** In existing buildings, where the selling space is under 5000 square feet ( $465 \text{ m}^2$ ) no more than one check-out aisle complying with Section 11B-904.3 shall be required.

**11B-227.2.1 Altered check-out aisles.** Where check-out aisles are altered, at least one of each check-out aisle serving each function shall comply with Section 11B-904.3 until the number of check-out aisles complies with Section 11B-227.2.

**11B-227.3 Counters.** Where provided, at least one of each type of sales counter and service counter shall comply with Section 11B-904.4. Where counters are dispersed throughout the building or facility, counters complying with Section 11B-904.4 also shall be dispersed.

**11B-227.4 Food service lines.** Food service lines shall comply with Section 11B-904.5. Where self-service shelves are provided, at least 50 percent, but no fewer than one, of each type provided shall comply with Section 11B-308.

**11B-227.5 Queues and waiting lines.** Queues and waiting lines servicing counters or check-out aisles required to com-

TABLE 11B-225.3  
SELF-SERVICE STORAGE FACILITIES

TOTAL SPACES IN FACILITY	MINIMUM NUMBER OF SPACES REQUIRED TO BE ACCESSIBLE
1 to 200	5 percent, but no fewer than 1
201 and over	10, plus 2 percent of total number of units over 200

TABLE 11B-227.2  
CHECK-OUT AISLES

NUMBER OF CHECK-OUT AISLES OF EACH FUNCTION	MINIMUM NUMBER OF CHECK-OUT AISLES OF EACH FUNCTION REQUIRED TO COMPLY WITH 11B-904.3
1 to 4	1
5 to 8	2
9 to 15	3
16 and over	3, plus 20 percent of additional aisles

**11B-407.4.8.1.4 Destination indicator.** In destination-oriented elevators, a display shall be provided in the car with visible indicators to show car destinations.

**11B-407.4.8.2 Audible indicators.** Audible indicators shall comply with Section 11B-407.4.8.2.

**11B-407.4.8.2.1 Signal type.** The signal shall be an automatic verbal annunciator which announces the floor at which the car is about to stop.

**Exception:** For elevators other than destination-oriented elevators that have a rated speed of 200 feet per minute (1 m/s) or less, a non-verbal audible signal with a frequency of 1500 Hz maximum which sounds as the car passes or is about to stop at a floor served by the elevator shall be permitted.

**11B-407.4.8.2.2 Signal level.** The verbal annunciator shall be 10 dB minimum above ambient, but shall not exceed 80 dB, measured at the annunciator.

**11B-407.4.8.2.3 Frequency.** The verbal annunciator shall have a frequency of 300 Hz minimum to 3000 Hz maximum.

**11B-407.4.9 Emergency communication.** Emergency two-way communication systems shall comply with Section 11B-308. Raised symbols or characters, white on a black background, and Braille shall be provided adjacent to the device and shall comply with Sections 11B-703.2 and 11B-703.3. Emergency two-way communication systems between the elevator and a point outside the hoistway shall comply with ASME A17.1.

**11B-407.4.10 Support rail.** Support rails shall be provided on at least one wall of the car.

**11B-407.4.10.1 Location.** Clearance between support rails and adjacent surfaces shall be 1½ inches (38 mm) minimum. Top of support rails shall be 31 inches (787 mm) minimum to 33 inches (838 mm) maximum above the floor of the car. The ends of the support rail shall be 6 inches (152 mm) maximum from adjacent walls.

**11B-407.4.10.2 Surfaces.** Support rails shall be smooth and any surface adjacent to them shall be free of sharp or abrasive elements.

**11B-407.4.10.3 Structural strength.** Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the support rail, fastener, mounting device, or supporting structure.

#### 11B-408 Limited-use/limited-application elevators

**11B-408.1 General.** Limited-use/limited-application elevators shall comply with Section 11B-408 and with ASME A17.1. They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic.

**11B-408.2 Elevator landings.** Landings serving limited-use/limited-application elevators shall comply with Section 11B-408.2.

**11B-408.2.1 Call buttons.** Elevator call buttons and keypads shall comply with Section 11B-407.2.1.

**11B-408.2.2 Hall signals.** Hall signals shall comply with Section 11B-407.2.2.

**11B-408.2.3 Hoistway signs.** Signs at elevator hoistways shall comply with Section 11B-407.2.3.1.

**11B-408.3 Elevator doors.** Elevator hoistway doors shall comply with Section 11B-408.3.

**11B-408.3.1 Sliding doors.** Sliding hoistway and car doors shall comply with Sections 11B-407.3.1 through 11B-407.3.3 and 11B-408.4.1.

**11B-408.3.2 Swinging doors.** Swinging hoistway doors shall open and close automatically and shall comply with Sections 11B-404, 11B-407.3.2 and 11B-408.3.2.

**11B-408.3.2.1 Power operation.** Swinging doors shall be power-operated and shall comply with ANSI/BHMA A156.19.

**11B-408.3.2.2 Duration.** Power-operated swinging doors shall remain open for 20 seconds minimum when activated.

**11B-408.4 Elevator cars.** Elevator cars shall comply with 11B-408.4.

**11B-408.4.1 Car dimensions and doors.** Elevator cars shall provide a clear width 42 inches (1067 mm) minimum and a clear depth 54 inches (1372 mm) minimum. Car doors shall be positioned at the narrow ends of cars and shall provide 32 inches (813 mm) minimum clear width.

#### Exceptions:

1. Cars that provide a clear width 51 inches (1295 mm) minimum shall be permitted to provide a clear depth 51 inches (1295 mm) minimum provided that car doors provide a clear opening 36 inches (914 mm) wide minimum.

#### 2. Reserved.

**11B-408.4.2 Floor surfaces.** Floor surfaces in elevator cars shall comply with Sections 11B-302 and 11B-303.

**11B-408.4.3 Platform to hoistway clearance.** The platform to hoistway clearance shall comply with Section 11B-407.4.3.

**11B-408.4.4 Leveling.** Elevator car leveling shall comply with Section 11B-407.4.4.

**11B-408.4.5 Illumination.** Elevator car illumination shall comply with Section 11B-407.4.5.

**11B-408.4.6 Car controls.** Elevator car controls shall comply with Section 11B-407.4.6. Control panels shall be centered on a side wall.

**11B-408.4.7 Designations and indicators of car controls.** Designations and indicators of car controls shall comply with Section 11B-407.4.7.

**11B-408.4.8 Emergency communications.** Car emergency signaling devices complying with Section 11B-407.4.9 shall be provided.

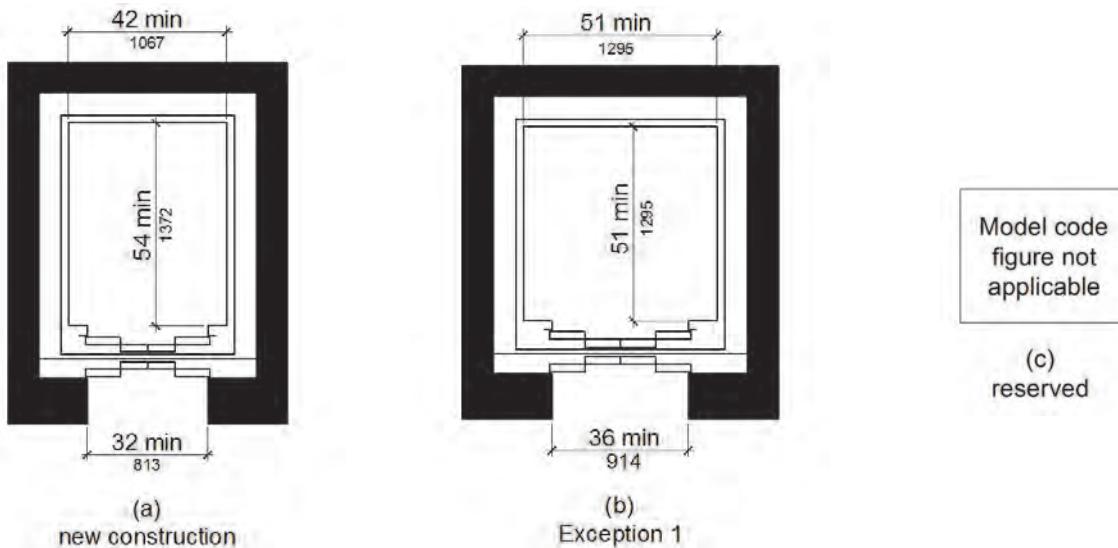


FIGURE 11B-408.4.1  
LIMITED-USE/LIMITED-APPLICATION (LULA) ELEVATOR CAR DIMENSIONS

#### **11B-409 Private residence elevators**

**11B-409.1 General.** Private residence elevators that are provided within a residential dwelling unit required to provide mobility features complying with Sections 11B-809.2 through 11B-809.4 shall comply with Section 11B-409 and with ASME A17.1. They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic.

**11B-409.2 Call buttons.** Call buttons shall be  $\frac{3}{4}$  inch (19.1 mm) minimum in the smallest dimension and shall comply with Section 11B-309.

**11B-409.3 Elevator doors.** Hoistway doors, car doors, and car gates shall comply with Sections 11B-409.3 and 11B-404.

**Exception:** Doors shall not be required to comply with the maneuvering clearance requirements in Section 11B-404.2.4.1 for approaches to the push side of swinging doors.

**11B-409.3.1 Power operation.** Elevator car and hoistway doors and gates shall be power operated and shall comply with ANSI/BHMA A156.19. Power operated doors and gates shall remain open for 20 seconds minimum when activated.

**Exception:** In elevator cars with more than one opening, hoistway doors and gates shall be permitted to be of the manual-open, self-close type.

**11B-409.3.2 Location.** Elevator car doors or gates shall be positioned at the narrow end of the clear floor spaces required by Section 11B-409.4.1.

**11B-409.4 Elevator cars.** Private residence elevator cars shall comply with Section 11B-409.4.

**11B-409.4.1 Inside dimensions of elevator cars.** Elevator cars shall provide a clear floor space of 36 inches (914 mm) minimum by 48 inches (1219 mm) minimum and shall comply with Section 11B-305.

**11B-409.4.2 Floor surfaces.** Floor surfaces in elevator cars shall comply with Sections 11B-302 and 11B-303.

**11B-409.4.3 Platform to hoistway clearance.** The clearance between the car platform and the edge of any landing sill shall be 1½ inch (38 mm) maximum.

**11B-409.4.4 Leveling.** Each car shall automatically stop at a floor landing within a tolerance of  $\frac{1}{2}$  inch (12.7 mm) under rated loading to zero loading conditions.

**11B-409.4.5 Illumination levels.** Elevator car illumination shall comply with Section 11B-407.4.5.

**11B-409.4.6 Car controls.** Elevator car control buttons shall comply with Sections 11B-409.4.6, 11B-309.3, 11B-309.4, and shall be raised or flush.

**11B-409.4.6.1 Size.** Control buttons shall be  $\frac{3}{4}$  inch (19.1 mm) minimum in their smallest dimension.

**11B-409.4.6.2 Location.** Control panels shall be on a side wall, 12 inches (305 mm) minimum from any adjacent wall.

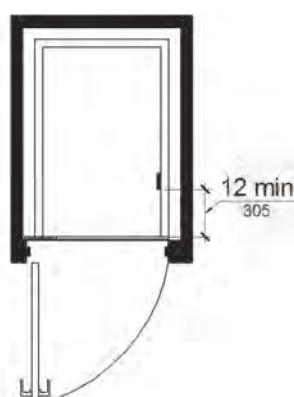


FIGURE 11B-409.4.6.2  
LOCATION OF PRIVATE RESIDENCE  
ELEVATOR CONTROL PANEL

**11B-409.4.7 Emergency communications.** Emergency two-way communication systems shall comply with *Section 11B-409.4.7*.

**11B-409.4.7.1 Type.** A telephone and emergency signal device shall be provided in the car.

**11B-409.4.7.2 Operable parts.** The telephone and emergency signaling device shall comply with *Sections 11B-309.3* and *11B-309.4*.

**11B-409.4.7.3 Compartment.** If the telephone or device is in a closed compartment, the compartment door hardware shall comply with *Section 11B-309*.

**11B-409.4.7.4 Cord.** The telephone cord shall be 29 inches (737 mm) long minimum.

#### 11B-410 Platform lifts

**11B-410.1 General.** Platform lifts shall comply with ASME

- > A18.1. Platform lifts shall not be attendant-operated and shall provide unassisted entry and exit from the lift.

**11B-410.2 Floor surfaces.** Floor surfaces in platform lifts shall comply with *Sections 11B-302* and *11B-303*.

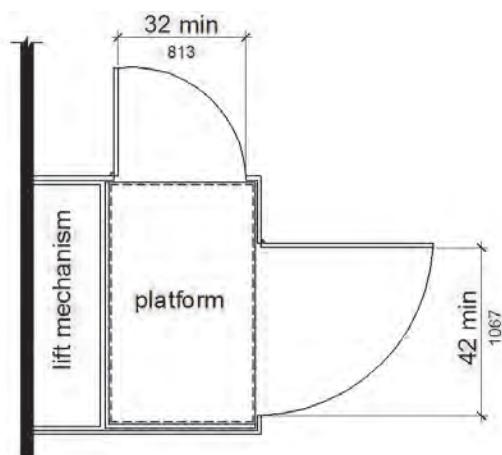
**11B-410.3 Clear floor space.** Clear floor space in platform lifts shall comply with *Section 11B-305*.

**11B-410.4 Platform to runway clearance.** The clearance between the platform sill and the edge of any runway landing shall be  $1\frac{1}{4}$  inch (32 mm) maximum.

**11B-410.5 Operable parts.** Controls for platform lifts shall comply with *Section 11B-309*.

**11B-410.6 Doors and gates.** Platform lifts shall have low-energy power-operated doors or gates complying with *Section 11B-404.3*. Doors shall remain open for 20 seconds minimum. End doors and gates shall provide a clear width 32 inches (813 mm) minimum. Side doors and gates shall provide a clear width 42 inches (1067 mm) minimum.

**Exception:** Platform lifts serving two landings maximum and having doors or gates on opposite sides shall be permitted to have self-closing manual doors or gates.



**FIGURE 11B-410.6  
PLATFORM LIFT DOORS AND GATES**

**11B-410.7 Landing size.** The minimum size of landings at platform lifts shall be 60 inches by 60 inches (1524 mm by 1524 mm).

**11B-410.8 Restriction sign.** A sign complying with *Section 11B-703.5* shall be posted in a conspicuous place at each landing and within the platform enclosure stating "No Freight" and include the International Symbol of Accessibility complying with *Section 11B-703.7.2.1*.

## DIVISION 5:

### GENERAL SITE AND BUILDING ELEMENTS

#### **11B-501 General**

**11B-501.1 Scope.** The provisions of *Division 5* shall apply where required by *Division 2* or where referenced by a requirement in this *chapter*.

#### **11B-502 Parking spaces**

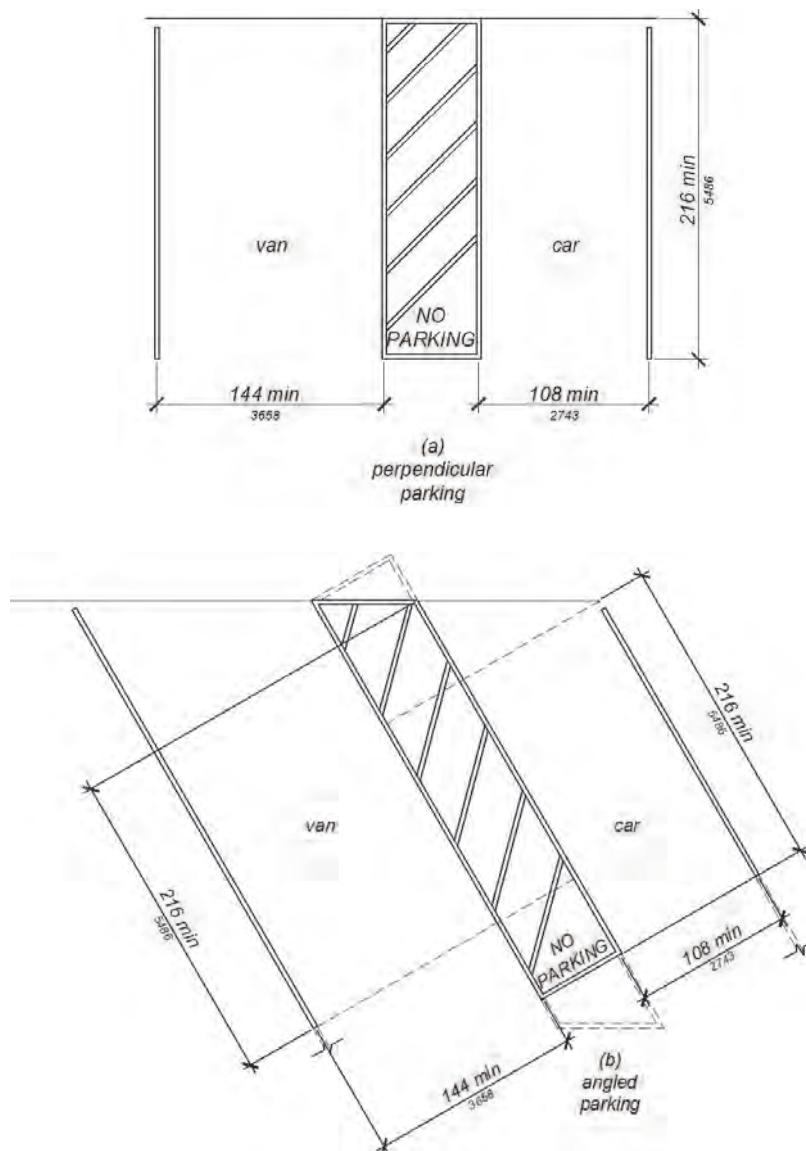
**11B-502.1 General.** Car and van parking spaces shall comply with *Section 11B-502*. Where parking spaces are marked with lines, width measurements of parking spaces and access aisles shall be made from the centerline of the markings.

**Exception:** Where parking spaces or access aisles are not adjacent to another parking space or access aisle, measure-

ments shall be permitted to include the full width of the line defining the parking space or access aisle.

**11B-502.2 Vehicle spaces.** *Car and van parking spaces shall be 216 inches (5486 mm) long minimum. Car parking spaces shall be 108 inches (2743 mm) wide minimum and van parking spaces shall be 144 inches (3658 mm) wide minimum, shall be marked to define the width, and shall have an adjacent access aisle complying with *Section 11B-502.3*.*

**Exception:** Van parking spaces shall be permitted to be 108 inches (2743 mm) wide minimum where the access aisle is 96 inches (2438 mm) wide minimum.



**FIGURE 11B-502.2**  
**VEHICLE PARKING SPACES**

permanently posted either immediately adjacent to the parking space or within the projected parking space width at the head end of the parking space. Signs may also be permanently posted on a wall at the interior end of the parking space.

**11B-502.6.4 Marking.** Each accessible car and van space shall have surface identification complying with either Section 11B-502.6.4.1 or 11B-502.6.4.2.

**11B-502.6.4.1** The parking space shall be marked with an International Symbol of Accessibility complying with Section 11B-703.7.2.1 in white on a blue background a minimum 36 inches wide by 36 inches high (914 mm by 914 mm). The centerline of the International Symbol of Accessibility shall be a maximum of 6 inches (152 mm) from the centerline of the parking space, its sides parallel to the length of the parking space and its lower corner at, or lower side aligned with, the end of the parking space length.

**11B-502.6.4.2** The parking space shall be outlined or painted blue and shall be marked with an International Symbol of Accessibility complying with Section 11B-703.7.2.1 a minimum 36 inches wide by 36 inches high (914 mm by 914 mm) in white or a suitable contrasting color. The centerline of the International Symbol of Accessibility shall be a maximum of 6 inches (152 mm) from the centerline of the parking space, its sides parallel to the length of the parking space and its lower corner at, or lower side aligned with, the end of the parking space.

**11B-502.7 Relationship to accessible routes.** Parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent accessible routes.

**11B-502.7.1 Arrangement.** Parking spaces and access aisles shall be designed so that persons using them are not required to travel behind parking spaces other than to pass behind the parking space in which they parked.

**11B-502.7.2 Wheel stops.** A curb or wheel stop shall be provided if required to prevent encroachment of vehicles over the required clear width of adjacent accessible routes.

**11B-502.8 Additional signage.** An additional sign shall be posted either; 1) in a conspicuous place at each entrance to an off-street parking facility or 2) immediately adjacent to on-site accessible parking and visible from each parking space.

**11B-502.8.1 Size.** The additional sign shall not be less than 17 inches (432 mm) wide by 22 inches (559 mm) high.

**11B-502.8.2 Lettering.** The additional sign shall clearly state in letters with a minimum height of 1 inch (25 mm) 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 \_\_\_\_\_."

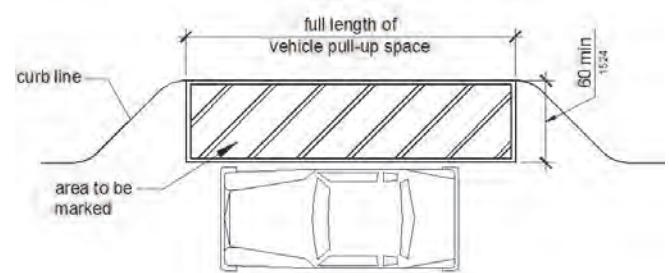
Blank spaces shall be filled in with appropriate information as a permanent part of the sign.

### 11B-503 Passenger drop-off and loading zones

**11B-503.1 General.** Passenger drop-off and loading zones shall comply with Section 11B-503.

**11B-503.2 Vehicle pull-up space.** Passenger drop-off and loading zones shall provide a vehicular pull-up space 96 inches (2438 mm) wide minimum and 20 feet (6096 mm) long minimum.

**11B-503.3 Access aisle.** Passenger drop-off and loading zones shall provide access aisles complying with Section 11B-503 adjacent and parallel to the vehicle pull-up space. Access aisles shall adjoin an accessible route and shall not overlap the vehicular way.



**FIGURE 11B-503.3  
PASSENGER DROP-OFF AND LOADING ZONE ACCESS AISLE**

**11B-503.3.1 Width.** Access aisles serving vehicle pull-up spaces shall be 60 inches (1524 mm) wide minimum.

**11B-503.3.2 Length.** Access aisles shall extend the full length of the vehicle pull-up spaces they serve.

**11B-503.3.3 Marking.** Access aisles shall be marked with a painted borderline around their perimeter. The area within the borderlines shall be marked with hatched lines a maximum of 36 inches (914 mm) on center in a color contrasting with that of the aisle surface.

**11B-503.4 Floor and ground surfaces.** Vehicle pull-up spaces and access aisles serving them shall comply with Section 11B-302. Access aisles shall be at the same level as the vehicle pull-up space they serve. Changes in level are not permitted.

**Exception:** Slopes not steeper than 1:48 shall be permitted.

**11B-503.5 Vertical clearance.** Vehicle pull-up spaces, access aisles serving them, and a vehicular route from an entrance to the passenger loading zone and from the passenger loading zone to a vehicular exit shall provide a vertical clearance of 114 inches (2896 mm) minimum.

**11B-503.6 Identification.** Each passenger loading zone designated for persons with disabilities shall be identified with a reflectorized sign complying with Section 11B-703.5. It shall be permanently posted immediately adjacent to and visible from the passenger loading zone stating "Passenger Loading

*Zone Only" and including the International Symbol of Accessibility complying with Section 11B-703.7.2.1 in white on a dark blue background.*

#### 11B-504 Stairways

**11B-504.1 General.** Stairs shall comply with Section 11B-504.

**11B-504.2 Treads and risers.** All steps on a flight of stairs shall have uniform riser heights and uniform tread depths. Risers shall be 4 inches (102 mm) high minimum and 7 inches (178 mm) high maximum. Treads shall be 11 inches (279 mm) deep minimum.

**11B-504.3 Open risers.** Open risers are not permitted.

##### *Exceptions:*

1. *On exterior stairways, an opening of not more than  $\frac{1}{2}$  inch (12.7 mm) may be permitted between the base of the riser and the tread.*
2. *On exterior stairways, risers constructed of grating containing openings of not more than  $\frac{1}{2}$  inch (12.7 mm) may be permitted.*

**11B-504.4 Tread surface.** Stair treads shall comply with Section 11B-302. Changes in level are not permitted.

**Exception:** Treads shall be permitted to have a slope not steeper than 1:48.

**11B-504.4.1 Contrasting stripe.** 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 (51 mm) wide to a maximum of 4 inches (102 mm) wide placed parallel to, and not more than 1 inch (25 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 material that is at least as slip resistant as the other treads of the stair. A painted stripe shall be acceptable. Grooves shall not be used to satisfy this requirement.*

**11B-504.5 Nosings.** The radius of curvature at the leading edge of the tread shall be  $\frac{1}{2}$  inch (12.7 mm) maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical. The permitted projection of the nosing shall extend  $1\frac{1}{4}$  inches (32 mm) maximum over the tread below.

**Exception:** In existing buildings there is no requirement to retroactively alter existing nosing projections of  $1\frac{1}{2}$  inches (38 mm) which were constructed in compliance with the building code in effect at the time of original construction.

**11B-504.6 Handrails.** Stairs shall have handrails complying with Section 11B-505.

**11B-504.7 Wet conditions.** Stair treads and landings subject to wet conditions shall be designed to prevent the accumulation of water.

**11B-504.8 Floor identification.** Floor identification signs required by Chapter 10, Section 1022.9 complying with Sections 11B-703.1, 11B-703.2, 11B-703.3 and 11B-703.5 shall be located at the landing of each floor level, placed adjacent to the door on the latch side, in all enclosed stairways in buildings two or more stories in height to identify the floor level. At the exit discharge level, the sign shall include a raised five pointed star located to the left of the identifying floor level. The outside diameter of the star shall be the same as the height of the raised characters.

#### 11B-505 Handrails

**11B-505.1 General.** Handrails provided along walking surfaces complying with Section 11B-403, required at ramps complying with Section 11B-405, and required at stairs complying with Section 11B-504 shall comply with Section 11B-505.

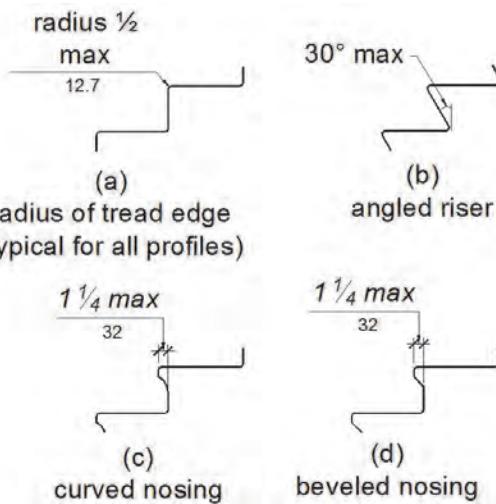
**11B-505.2 Where required.** Handrails shall be provided on both sides of stairs and ramps.

##### *Exceptions:*

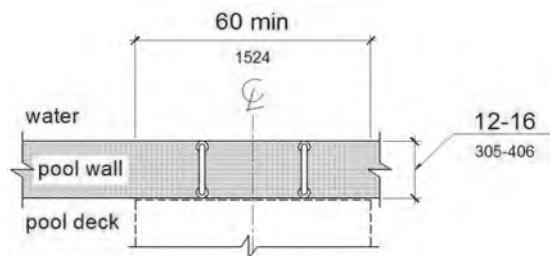
1. In assembly areas, handrails shall not be required on both sides of aisle ramps where a handrail is provided at either side or within the aisle width.
2. Curb ramps do not require handrails.
3. At door landings, handrails are not required when the ramp run is less than 6 inches (152 mm) in rise or 72 inches (1829 mm) in length.

**11B-505.3 Continuity.** Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs and ramps shall be continuous between flights or runs.

**Exception:** In assembly areas, ramp handrails adjacent to seating or within the aisle width shall not be required to be continuous in aisles serving seating.



**FIGURE 11B-504.5  
STAIR NOSINGS**



**FIGURE 11B-1009.4.3  
DEPTH AND LENGTH OF TRANSFER WALLS**

**11B-1009.4.4 Surface.** Surfaces of transfer walls shall not be sharp and shall have rounded edges.

**11B-1009.4.5 Grab bars.** At least one grab bar complying with *Section 11B-609* shall be provided on the transfer wall. Grab bars shall be perpendicular to the pool wall and shall extend the full depth of the transfer wall. The top of the gripping surface shall be 4 inches (102 mm) minimum and 6 inches (152 mm) maximum above transfer walls. Where one grab bar is provided, clearance shall be 24 inches (610 mm) minimum on both sides of the grab bar. Where two grab bars are provided, clearance between grab bars shall be 24 inches (610 mm) minimum.

**Exception:** Grab bars on transfer walls shall not be required to comply with *Section 11B-609.4*.

**11B-1009.5 Transfer systems.** Transfer systems shall comply with *Section 11B-1009.5*.

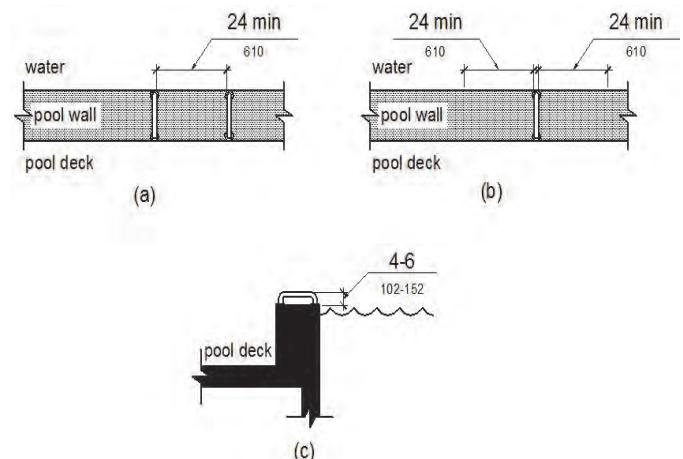
**11B-1009.5.1 Transfer platform.** A transfer platform shall be provided at the head of each transfer system. Transfer platforms shall provide 19 inches (483 mm) minimum clear depth and 24 inches (610 mm) minimum clear width.

**11B-1009.5.2 Transfer space.** A transfer space of 60 inches (1524 mm) minimum by 60 inches (1524 mm) minimum with a slope not steeper than 1:48 shall be provided at the base of the transfer platform surface and shall be centered along a 24 inch (610 mm) minimum side of the transfer platform. The side of the transfer platform serving the transfer space shall be unobstructed.

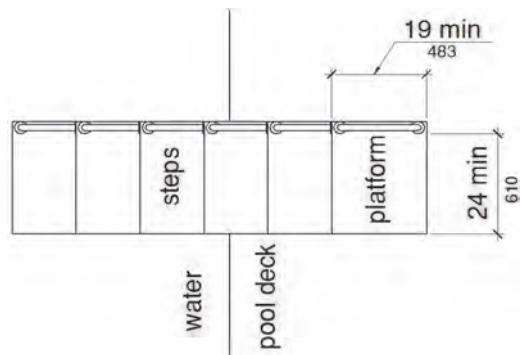
**11B-1009.5.3 Height.** The height of the transfer platform shall comply with *Section 11B-1009.4.2*.

**11B-1009.5.4 Transfer steps.** Transfer step height shall be 8 inches (203 mm) maximum. The surface of the bottom tread shall extend to a water depth of 18 inches (457 mm) minimum below the stationary water level.

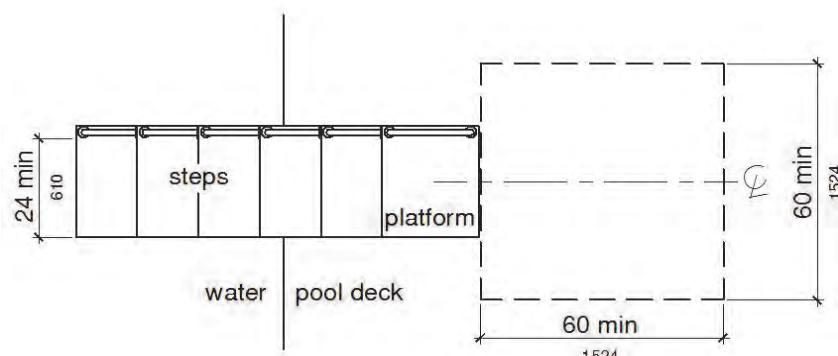
**11B-1009.5.5 Surface.** The surface of the transfer system shall not be sharp and shall have rounded edges.



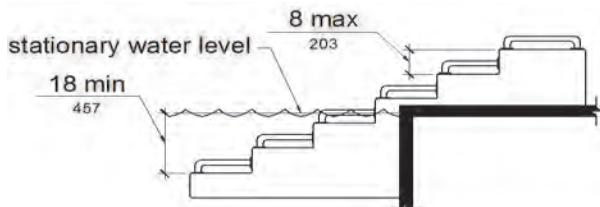
**FIGURE 11B-1009.4.5  
GRAB BARS FOR TRANSFER WALLS**



**FIGURE 11B-1009.5.1  
SIZE OF TRANSFER PLATFORM**

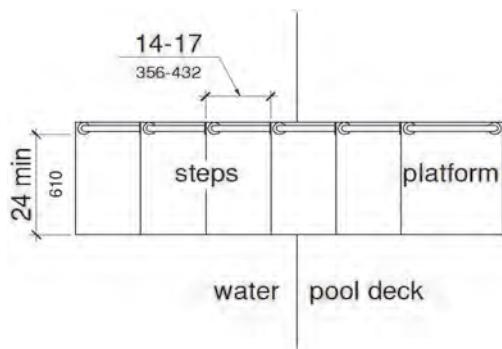


**FIGURE 11B-1009.5.2  
CLEAR DECK SPACE AT TRANSFER PLATFORM**



**FIGURE 11B-1009.5.4  
TRANSFER STEPS**

**11B-1009.5.6 Size.** Each transfer step shall have a tread clear depth of 14 inches (356 mm) minimum and 17 inches (432 mm) maximum and shall have a tread clear width of 24 inches (610 mm) minimum.



**FIGURE 11B-1009.5.6  
SIZE OF TRANSFER STEPS**

**11B-1009.5.7 Grab bars.** At least one grab bar on each transfer step and the transfer platform or a continuous grab bar serving each transfer step and the transfer platform shall be provided. Where a grab bar is provided on each step, the tops of gripping surfaces shall be 4 inches (102 mm) minimum and 6 inches (152 mm) maximum above

each step and transfer platform. Where a continuous grab bar is provided, the top of the gripping surface shall be 4 inches (102 mm) minimum and 6 inches (152 mm) maximum above the step nosing and transfer platform. Grab bars shall comply with *Section 11B-609* and be located on at least one side of the transfer system. The grab bar located at the transfer platform shall not obstruct transfer.

**Exception:** Grab bars on transfer systems shall not be required to comply with *Section 11B-609.4*.

**11B-1009.6 Pool stairs.** Pool stairs shall comply with *Section 11B-1009.6*.

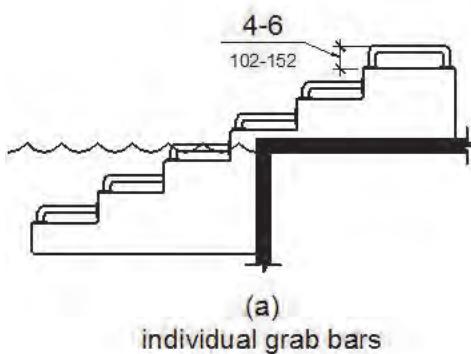
**11B-1009.6.1 Pool stairs.** Pool stairs shall comply with *Section 11B-504*.

**Exception:** Pool step riser heights shall not be required to be 4 inches (102 mm) high minimum and 7 inches (178 mm) high maximum provided that riser heights are uniform.

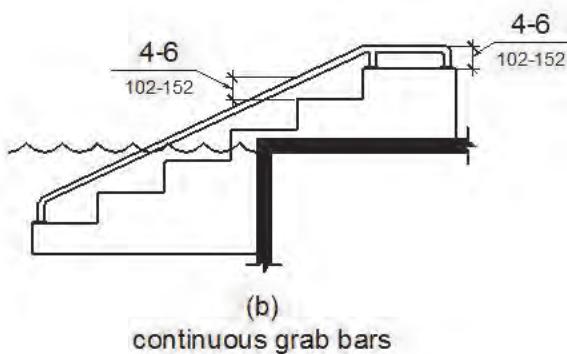
**11B-1009.6.2 Handrails.** The width between handrails shall be 20 inches (508 mm) minimum and 24 inches (610 mm) maximum. Handrail extensions required by *Section 11B-505.10.3* shall not be required on pool stairs.

**11B-1010 Shooting facilities with firing positions**

**11B-1010.1 Turning space.** A circular turning space 60 inches (1524 mm) diameter minimum with slopes not steeper than 1:48 shall be provided at shooting facilities with firing positions.



(a)  
individual grab bars



(b)  
continuous grab bars

**FIGURE 11B-1009.5.7  
GRAB BARS**

room is provided, it shall have a minimum clear floor area of 80 square feet ( $7.4 \text{ m}^2$ ), the least dimension of which shall be 8 feet (2438mm). The room shall contain a handwashing fixture.

**1224.4.4.1.1 Airborne infection isolation exam/treatment room.** When provided, the airborne infection isolation room shall be an exam/treatment room, shall be labeled with the words "Airborne Infection Room", and provide the following:

1. Capacity. Each airborne infection isolation exam/treatment room shall contain only one examination table or recliner.
2. Handwashing station. A handwashing station shall be located in each airborne infection isolation exam/treatment room.
3. Gowning and storage area. An area for gowning and storage of clean and soiled materials shall be located directly outside or inside the entry door to the airborne infection isolation exam/treatment room.
4. Doors. Room doors shall be self-closing and include latching devices.
5. Sealed-tight room. Room perimeter walls, ceiling, floors, doors and penetration shall be sealed tightly to minimize air infiltration from the outside or from other spaces.
6. Ventilation. The ventilation shall be provided as required by the California Mechanical Code for airborne infection isolation room.

**1224.4.4.1.1.1 Airborne infection isolation exam/treatment anteroom.** An airborne infection isolation anteroom is not required; however, when an anteroom is provided, it shall meet the following requirements:

1. The anteroom shall provide space for persons to don personal protective equipment before entering the patient room.
2. All doors to the anteroom shall have self-closing devices.
3. The anteroom shall provide storage of personal protective equipment (e.g. respirators, gowns, gloves) and clean equipment.
4. Ventilation shall be provided in the anteroom as required by the California Mechanical Code for airborne infection isolation anteroom.

#### **1224.4.4.2 Specimen and blood collection facilities.**

**1224.4.4.2.1 Specimen collection facilities.** When provided, specimen collection facilities shall comply with the following requirements:

1. Urine collection rooms shall be equipped with a water closet and handwashing station.

**Exception:** The handwashing station may be located immediately outside the collection room when the specimen is used for drug testing.

2. Use of the toilet room provided within the examination and treatment room shall be permitted for specimen collection.

**1224.4.4.2.2 Blood collection facilities.** When provided, blood collection facilities shall comply with the following requirements:

1. Space for a chair and work counter shall be provided.
2. A handwashing station shall be provided.

**1224.4.5 Outpatient waiting rooms.** Waiting rooms for outpatients shall provide a seating area and space for wheelchairs and have public corridor access to, or provisions for, public toilet, drinking fountain and telephone.

**Note:** One waiting area may serve more than one department or service.

**1224.4.5.1 Outpatient access.** If x-ray examinations are to be performed on outpatients, outpatient access to the radiological spaces shall not traverse a nursing unit.

**Exception:** Satellite radiology, laboratory, pharmacy, and physical and occupational therapy space serving inpatients may be located in nursing units and inpatient treatment areas.

#### **1224.4.6 Miscellaneous requirements.**

**1224.4.6.1 Station outlets.** Station outlets for oxygen, vacuum, and medical air shall comply with Table 1224.4.6.1.

**1224.4.6.2 Gas and vacuum systems.** The design, installation and testing of medical gas and vacuum systems shall conform to Table 1224.4.6.1 and NFPA 99.

**1224.4.6.3 Hyperbaric facilities.** The design and construction of hyperbaric facilities shall conform to NFPA 99.

**1224.4.6.4 Laboratories.** The design and construction of hospital laboratories shall conform to NFPA 99.

**1224.4.6.5 Nurse call systems.** The location of nurse call devices shall comply with Table 1224.4.6.5. The design of call systems shall comply with the California Electrical Code, Part 3 of Title 24.

#### **1224.4.7 Corridors.**

**1224.4.7.1 Width.** The minimum width of corridors and hallways shall be 8 feet (2438 mm).

**Exception:** Patient-care corridors and hallways in hospitals for psychiatric care of patients who are not bedridden shall have a minimum clear and unobstructed width of 6 feet (1829 mm). For the purposes of this section, bedridden patients shall be defined as patients confined to beds who would be transported or evacuated in beds or litters.

**1224.4.7.2 Light traffic.** Service corridors and hallways with anticipated light traffic volume for nonpatient use may be reduced to a width of 5 feet (1524 mm) if approved by the enforcing agency.

**Exception:** Corridors and hallways in administrative and business areas may be reduced to a width of 44 inches (1118 mm).

**TABLE 1224.4.6.1**  
**STATION OUTLETS FOR OXYGEN, VACUUM (SUCTION), AND MEDICAL AIR<sup>1, 6</sup>**

	LOCATIONS	OXYGEN	VACUUM	MEDICAL AIR
1	Patient rooms (medical/surgical unit)	1/bed	1/bed	—
2	Examination or treatment (medical/surgical unit and postpartum care)	1/room	1/room	—
3	Airborne infection isolation or protective environment rooms (medical/surgical unit)	1/bed	1/bed	—
4	Seclusion room (medical/surgical unit and postpartum care)	1/bed	1/bed	—
5	Intensive care (general)	3/bed	3/bed	1/bed
6	Airborne infection isolation	3/bed	3/bed	1/bed
7	Coronary-care service space	3/bed	2/bed	1/bed
8	Pediatric intensive care	3/bed	3/bed	1/bed
9	Newborn intensive care	3/bassinet	3/bassinet	3/bassinet
10	Newborn nursery (full term)	1/4 bassinets <sup>2</sup>	1/4 bassinets <sup>2</sup>	1/4 bassinets <sup>2</sup>
11	Pediatric and adolescent	1/bed	1/bed	1/bed
12	Pediatric nursery	1/bassinet	1/bassinet	1/bassinet
13	Psychiatric patient room	—	—	—
14	Seclusion treatment room	—	—	—
15	General operating room	2/room	3/room	—
16	Cardio, ortho, neurological	2/room	3/room	—
17	Orthopedic surgery	2/room	3/room	—
18	Surgical cysto and endo	1/room	3/room	—
19	Post-anesthesia care unit	1/bed	3/bed	1/bed
20	Anesthesia workroom	1 per workstation	—	1 per workstation
21	Not used	—	—	—
22	Postpartum bedroom	1/bed	1/bed	—
23	Cesarean operating/delivery room	2/room	3/room	1/room
24	Infant resuscitation space <sup>4</sup>	1/bassinet	1/bassinet	1/bassinet
25	Labor room	1/room	1/room	—
26	OB recovery room	1/bed	3/bed	—
27	Labor/delivery/recovery (LDR) <sup>5</sup>	1/bed	1/bed	—
28	Labor/delivery/recovery/postpartum (LDRP) <sup>5</sup>	1/bed	1/bed	—
29	Initial emergency management	1/bed	1/bed	1/bed
30	Triage area (definitive emergency care)	1/station	1/station	—
31	Definitive emergency care examination or treatment rooms	1/bed	1/bed	1/bed
32	Definitive emergency care observation unit	1/bed	1/bed	—
33	Trauma/cardiac room(s)	2/bed	3/bed	1/bed
34	Orthopedic and cast room	1/room	1/room	—
35	Cardiac catheterization lab	2/bed	2/bed	2/bed
36	Autopsy room	—	1 per workstation	—
37	MRI	1/room	1/room	1/room

1. For any area or room not described above, the facility clinical staff shall determine outlet requirements after consultation with the enforcing agency.

2. Four bassinets may share one outlet that is accessible to each bassinet.

3. Not used.

4. When infant resuscitation takes place in a room such as cesarean section/delivery or LDRP, then the infant resuscitation services must be provided in that room in addition to the minimum service required for the mother.

5. One outlet for mother and one for each bassinet.

6. Renovation projects of existing spaces where the existing function is not changed, are not required to comply with the requirements of this table.

**TABLE 1224.4.11  
ACCEPTABLE CEILING AND CARPET LOCATIONS**

AREAS/ROOMS <sup>3,4</sup>	GENERAL ACUTE CARE HOSPITAL CEILING/CARPET	ACUTE PSYCHIATRIC HOSPITAL CEILING/CARPET	SKILLED NURSING AND INTERMEDIATE-CARE FACILITIES CEILING/CARPET	CLINIC CEILING/CARPET
Patient bedrooms	3	*	3	*
Patient corridors/hallways	3	*	3	*
Airborne infection isolation rooms	2	N	2	N
Protective environment rooms	1	N	1	N
Nurses' or administration station	3	Y	3	Y
Utility rooms	2	N	2	N
Surgical units <sup>2</sup>	2	N	-	-
Operation rooms	1	N	-	-
Surgical corridors/hallways	2	N	-	-
Recovery	3	N	-	-
Radiological unit <sup>2</sup>	3	*	3	*
X-ray rooms <sup>1</sup>	3	N	3	N
Treatment rooms <sup>2</sup>	2	N	3	N
Examination rooms	3	*	3	*
Administration	4	Y	4	Y
Central sterile supply	2	N	2	N
Clinical laboratories	3	N	3	N
Pharmacy	3	*	3	*
Morgue and autopsy	3	N	-	-
General storage rooms	3	N	3	N
Housekeeping rooms	2	N	2	N
Laundry	1 <sup>5</sup>	N	1 <sup>5</sup>	N
Soiled linen	2	N	3	N
Clean linen	3	N	3	N
Kitchens	1 <sup>5</sup>	N	1 <sup>5</sup>	N
Dining rooms	3	*	3	*
Dishwasher rooms	2	N	2	N
Dietary day storage	2	N	2	N
Catheterization laboratory	1	N	-	-
Chronic dialysis	3	*	-	-
Coronary care	3	*	-	-
Dental	3	*	-	-
Hydrotherapy	2	N	2	N
Intensive-care nursery	3	*	-	-
Intensive care	3	*	-	-
Occupational therapy	3	*	3	*
Obstetrical unit <sup>2</sup>	3	*	-	-
Delivery rooms	1	N	-	-
Labor rooms, LDRP and LDR	3	N	-	-
Nurseries	3	N	-	-
Physical therapy	3	*	3	*
Radiation therapy	3	*	-	-
Speech pathology and audiology	3	Y	3	Y

**Ceilings:**

1 – Continuous monolithic surface equal in smoothness to enamel plaster.

2 – Smooth and easily cleanable without perforations or fissures.

3 – Pin perforated, fine fissured, or lightly textured.

4 – Any finish meeting code requirements.

**Carpets:**

Yes = Y

No = N

\* Upon approval by the licensing agency with adequate maintenance procedure. However, should the carpet not be maintained adequately, the licensing agency has the right to have it removed and replaced with another acceptable material.

**Footnotes:**

1. Carpet permitted in mammography.

2. Except those rooms specified otherwise.

3. For rooms not listed, contact the Office of Statewide Health Planning and Development (OSHPD).

4. Table applies to new construction, additions, remodels, and conversions. The patching and replacement of existing materials will be permitted.

5. Lay-in ceiling meeting the requirements of Section 1224.4.11.4.1.7 may be substituted in laundry and kitchens.

**1224.4.11.3 Wall finishes.** Wall finishes shall comply with the following requirements:

1. Wall finishes shall be washable. In the vicinity of plumbing fixtures, wall finishes shall be smooth, scrubbable and water-resistant.
2. Wall finishes in areas such as operating rooms, delivery rooms and trauma rooms shall be monolithic, scrubbable and able to withstand cleaning with chemicals.
3. Wall finishes in operating rooms, cesarean delivery rooms, isolation rooms and sterile processing rooms shall be free of fissures, open joints or crevices that may retain or permit passage of dirt particles.
4. Wall finishes in areas such as clean corridors, central sterile supply spaces, specialized radiographic rooms and minor surgical procedure rooms shall be washable, smooth and able to withstand cleaning with chemicals.
5. Wall areas penetrated by pipes, ducts and conduits shall be tightly sealed to minimize entry of rodents and insects. Joints of structural elements shall be similarly sealed.
6. Wall finish requirements of Section 1224.4.11.3 do not apply to boiler rooms, mechanical equipment rooms, administration departments, other offices, enclosed stairways, maintenance shops and similar spaces.

**1224.4.11.3.1 Dietary and food preparation areas.** Dietary and food preparation areas shall comply with the following requirements:

1. In dietary and food preparation areas, wall construction, finish, and trim, including the joints between the walls and the floors, shall be free of spaces that can harbor insects and rodents.
2. Wall surfaces in wet areas (e.g., kitchens, environmental services closets) shall be monolithic and all seams shall be covered and/or sealed.

**1224.4.11.4 Ceilings.** Ceilings in areas occupied by patients and the public shall be cleanable with the use of routine housekeeping equipment. Acoustic and lay-in ceiling, where used, shall not create ledges or crevices.

**1224.4.11.4.1 Ceiling finishes.** Ceiling finishes shall comply with Table 1224.4.11 and the following requirements:

*Semirestricted areas:*

1. Ceiling finishes in semirestricted areas such as airborne infection isolation exam/treatment rooms, surgical corridors, central sterile supply spaces and minor surgical procedure rooms, shall be nonabsorptive, nonperforated, capable of withstanding cleaning with chemicals, and without crev-

ices that can harbor mold and bacterial growth.

2. If a lay-in ceiling is provided in semi-restricted areas, it shall be gasketed or each ceiling tile shall weigh at least one pound per square foot to prevent the passage of particles from the cavity above the ceiling plane into the semirestricted environment. Perforated, regular, serrated cut or highly textured tiles are not acceptable.

*Restricted areas:*

3. Ceilings in restricted areas shall be monolithic with no cracks or perforations.
4. Ceilings in restricted areas shall be scrubbable and able to withstand cleaning and/or disinfecting chemicals.
5. All access openings in restricted area ceilings shall be gasketed.

*Dietary and laundry areas:*

6. Provide either a sealed monolithic and scrubbable gypsum board ceiling or a lay-in ceiling.
7. If a lay-in ceiling is provided, it shall include the following:
  - a) A rust-free grid.
  - b) Ceiling tiles that weigh at least one pound per square foot and are smooth, scrubbable, nonabsorptive, nonperforated and able to withstand cleaning with chemicals.
8. Ceiling finish requirements of Section 1224.4.11.4.1 do not apply to boiler rooms, mechanical equipment rooms, administration departments, other offices, enclosed stairways, maintenance shops and similar spaces.

**1224.4.12 Courts.** Where one or more walls of a court contain a door or window of one or more patients' bedrooms, the least dimension of the court shall be 20 feet (6096 mm) between facing structures.

**1224.4.13 Elevators.**

**1224.4.13.1 Patient.** Patient elevators shall have minimum inside platform dimensions of 5 feet by 8 feet (1524 mm by 2438 mm), and a minimum clear door opening of 4 feet 0 inches (1219 mm).

**1224.4.13.2 Passenger.** Passenger elevators shall have minimum inside platform dimensions of 4 feet 8 inches by 7 feet 4 inches (1422 mm by 2236 mm).

**1224.4.13.3 Patient services.** Buildings over one story in height with accommodations or services for patients on floors without grade-level entrance shall provide at least one patient elevator.

**1224.4.13.4 Low patient capacity.** If bed patients are accommodated on one or more floors, other than the

main entrance floor or where operating rooms or delivery rooms are above or below the main entrance floor, at least one patient elevator shall be provided.

**1224.4.13.5 Medium patient capacity.** At least one patient elevator and one service elevator shall be provided in hospitals with a capacity of from 60 to 149 beds on floors other than the main entrance floor.

**1224.4.13.6 High patient capacity.** At least one patient elevator, one passenger elevator and one service elevator shall be provided in hospitals with a capacity of 150 or more beds on floors other than the main entrance floor.

**1224.4.14 Garbage, solid waste and trash storage.** Rooms or screening enclosures shall be provided for the washing and cleaning of garbage containers and for the storage of garbage, trash and other solid wastes. Such rooms or screening enclosures shall include the following:

1. A concrete floor with a curb and with a drain connected to the sewer.
2. Steam or hot-water and cold-water supply.
3. A minimum floor area of  $\frac{1}{2}$  square foot ( $0.046 \text{ m}^2$ ) per bed, but not less than 25 square feet ( $2.3 \text{ m}^2$ ), the least dimension of which shall be 4 feet (1219 mm).
4. A method of limiting access to the material except by authorized persons.

**1224.4.15 Housekeeping room.** This room shall be a minimum floor area of 15 square feet ( $1.4 \text{ m}^2$ ). It shall contain a service sink or floor receptor and provisions for storage of supplies and housekeeping equipment.

**1224.4.16 Laundry and trash chutes.** Gravity-type laundry and trash chutes shall have a minimum diameter of 2 feet (610 mm) and shall be designed to prevent distribution of airborne contaminating elements to all floors served.

**1224.4.17 Telephone.** Each floor accommodating patients shall have a telephone installed for patient use. Such telephones shall be readily accessible to patients who are limited to wheel chairs and stretchers. This may not be required in separate buildings having six or fewer beds which are restricted to occupancy by ambulatory patients.

**1224.4.18 Grab bars.** Each toilet, bathtub and shower serving patients shall have conveniently placed grab bars that shall comply with Chapter 11B.

**Exception:** Excluding facilities designed for use by persons with disabilities, grab bars may be deleted from those facilities serving chemical dependency recovery and psychiatric patients.

## 1224.5 NOISE CONTROL.

**1224.5.1 Impact noises.** Recreation rooms, exercise rooms, equipment rooms and similar spaces where impact noises may be generated, shall not be located directly over patient bed areas or delivery and operating suites, unless special provisions are made to minimize such noise.

**1224.5.2 Noise reduction.** The noise reduction criteria shown in Table 1224.5 shall apply to partitions, floors, and ceiling construction in patient areas.

**TABLE 1224.5  
SOUND TRANSMISSION LIMITATIONS  
IN ACUTE CARE GENERAL HOSPITALS**

NEW CONSTRUCTION	AIRBORNE SOUND TRANSMISSION CLASS (STC) <sup>1</sup>	
	Partitions	Floors
Patient room to patient room	45	40
Public space to patient room <sup>3</sup>	55	40
Service areas to patient room <sup>4</sup>	65	45
Patient room access corridor <sup>5</sup>	45	45
Exam room to exam room	45	
Exam room to public space	45	
Toilet room to public space	45	
Consultation rooms/conference rooms to public space	45	
Consultation rooms/conference rooms to patient rooms	45	
Staff lounges to patient rooms	45	

1. Sound Transmission Class (STC) shall be determined by tests in accordance with methods set forth in ASTM 90 and ASTM 413. Where partitions do not extend to the structure above, sound transmission through ceilings and composite STC performance shall be considered.
2. Treatment rooms shall be treated the same as patient rooms.
3. Public space includes corridors (except patient room access corridors), lobbies, dining rooms, recreation rooms, and similar space.
4. Service areas for the purposes of this table include kitchens, elevators, elevator machine rooms, laundries, garages, maintenance rooms, boiler and mechanical equipment rooms, and similar spaces of high noise. Mechanical equipment located on the same floor or above patient rooms, offices, nurses stations, and similar occupied space shall be effectively isolated from the floor.
5. Patient room access corridors contain composite walls with doors/windows and have direct access to patient rooms.
6. Renovation projects of existing spaces where the existing function is not changed, are not required to comply with the requirements of Table 1224.5.

## BASIC SERVICES

### 1224.6 Reserved

### 1224.7 Reserved

### 1224.8 Reserved

### 1224.9 Reserved

### 1224.10 Reserved

### 1224.11 Reserved

### 1224.12 Reserved

### 1224.13 Reserved

## 1224.14 NURSING SERVICE SPACE.

### 1224.14.1 Patient rooms.

**1224.14.1.1 Capacity.** No patient room shall be designed to accommodate more than eight beds.

**1224.14.1.2 Space requirements.** In new construction, patient rooms shall have a minimum of 100 square feet ( $9.29 \text{ m}^2$ ) of clear floor area per bed in multiple-bed rooms and 120 square feet ( $11.15 \text{ m}^2$ ) of clear floor

area for single-bed rooms. The dimensions and arrangement of rooms shall be such that there is a minimum of 3 feet (914 mm) between the sides and foot of the bed and any wall or any other fixed obstruction. In multiple-bed rooms, a clearance of 4 feet (1219 mm) shall be available at the foot of each bed to permit the passage of equipment and beds.

**Exceptions:**

1. Where renovation of existing patient rooms is undertaken in facilities built under the 2001 or prior California Building Code, patient rooms shall have no less than 80 square feet (7.43 m<sup>2</sup>) of clear floor area per bed in multiple-bed rooms and 110 square feet (10.22 m<sup>2</sup>) of clear floor area in single-bed rooms.
2. For shelled spaces built under the 2001 or prior California Building Code, patient rooms shall have no less than 80 square feet (7.43 m<sup>2</sup>) of clear floor area per bed in multiple-bed rooms and 110 square feet (10.22 m<sup>2</sup>) of clear floor area in single-bed rooms.

**1224.14.1.3 Windows.** Each patient room shall have a window in accordance with Section 1224.4.9.

**1224.14.1.4 Arrangement.** Patient rooms shall not be designed to permit the placement of beds more than three deep from the exterior window, but shall be of such shape and dimensions to allow for the performance of routine functions, including the easy transfer of patients to and from bed to wheelchair or wheeled gurney.

**1224.14.1.5 Outside exposure.** All patient bedrooms shall have an outside exposure and shall not be below ground level.

**1224.14.1.6 Handwashing fixtures.** A handwashing fixture shall be provided in the patient room. Water spouts used shall have clearances adequate to avoid contaminating utensils and the contents of carafes, etc. In multiple-bed rooms the handwashing fixture shall be located outside of the patient's cubicle curtain so that it is accessible to staff. Where renovation of patient rooms is undertaken a handwashing fixture shall be located in the toilet room or patient room.

**1224.14.1.7 Toilet room.** Each patient shall have access to a toilet room without having to enter the general corridor area. One toilet room shall serve no more than four beds and no more than two patient rooms. The toilet room shall contain a water closet and a lavatory and the door shall swing outward or be double acting. Unless located in a toilet room, bedpan-washing fixtures shall be installed in dedicated rooms, separate from patient care areas.

**1224.14.1.8 Patient storage.** Each patient shall have within his or her room a separate wardrobe, locker, or closet suitable for hanging full-length garments and for storing personal effects.

**1224.14.1.9 Privacy.** In multiple-bed rooms, visual privacy from casual observation by other patients and vis-

itors shall be provided for each patient. The design for privacy shall not restrict patient access to the entrance, lavatory, or toilet room.

**1224.14.1.10 Grab bars.** Grab bars shall be installed in accordance with Section 1224.4.18.

**1224.14.1.11 Room identification.** Each patient room shall be labeled with an identification number, letter or combination of the two.

**1224.14.2 Service areas.** Unless otherwise indicated, provision for the services listed below shall be in or readily available to each nursing unit. The size and location of each service area will depend upon the numbers and types of beds served. Identifiable spaces are required for each of the indicated functions. Each service area may be arranged and located to serve more than one nursing unit but, unless noted otherwise, at least one such service area shall be provided on each nursing floor. Where the words "room" or "offices" are used, a separate, enclosed space for the one named function is intended; otherwise, the described area may be specific space in another room or common area.

**1224.14.2.1 Administrative center(s) or nurse station(s).** This area shall have space for counters and storage and shall have convenient access to handwashing fixtures. It may be combined with or include centers for reception, charting and communication.

**1224.14.2.2 Nurse or supervisor office.**

**1224.14.2.3 Toilet room(s) conveniently located for staff use.**

**1224.14.2.4 Multipurpose room(s) for staff, patients, patients' families for patient conferences, reports, education, training sessions, and consultation.** These rooms must be accessible to each nursing unit. They may be on other floors if convenient for regular use. One such room may serve several nursing units and/or departments.

**1224.14.2.5 Examination or treatment room(s).** Examination or treatment rooms are optional. If provided, provision shall be made to preserve patient privacy from observation from outside the exam room through an open door.

**1224.14.2.6 Clean utility room.** If the room is used for preparing patient care items, it shall contain a work counter, a handwashing fixture, and storage facilities for clean and sterile supplies. If the room is used only for storage and holding as part of a system for distribution of clean and sterile materials, the work counter and handwashing fixture may be omitted. Soiled and clean utility or holding rooms shall be separated and have no direct connection.

**1224.14.2.7 Soiled workroom or soiled holding room.** This room shall be separate from the clean utility room. The soiled workroom utilities room shall contain a clinical sink (or equivalent flushing-rim fixture). The room shall contain a handwashing fixture. The above fixtures shall both have a hot and cold mixing faucet. The room shall have a work counter and space for separate cov-

be positioned so the operator has a full view of the approach and entrance to the MRI scanner room.

2. An anteroom or area visible from the control room shall be located outside the MRI scanner room so that patients, health care personnel, and other employees must pass through it before entering the scanning area and control room. The room or area shall be outside the restricted areas of the MRI's magnetic field.
3. A computer room shall be provided.

**1224.18.4.1 Hand-washing station.** Hand-washing station(s) shall be provided convenient to the MRI scanner room, but need not be within the room.

**1224.18.4.2 Wall, floor, and ceiling assemblies.** Wall, floor, and ceiling assemblies shall accommodate the installation of required radio frequency (RF)-shielded assemblies. All doors, windows, and penetrations into the RF-shielded enclosure shall be RF-shielded. As well as RF shielding, individual sites may also require magnetic shielding on some or all surfaces to contain portions of the magnetic field not contained by the RF shield.

**1224.18.4.3 Lighted sign.** MRI rooms shall be clearly marked with a red light and lighted sign stating, "The Magnet Is On". This light and sign are to be lighted at all times and have a backup energy source to remain illuminated for at least 24 hours in the event of a loss of power.

**1224.18.4.4 Magnetic field strength identification.** Facilities shall use finishes or markings to identify the critical values of the magnetic field surrounding the MRI scanner, including the 5-gauss exclusion zone or other magnetic field strength values that may impair the operation of equipment.

**1224.18.4.5 Special ventilation requirements.** Where superconducting MRI scanners are installed, an insulated cryogen quench exhaust pipe as well as room exhaust and pressure equalization shall be provided to protect occupants in the event of a cryogen breach.

**1224.18.5 Ultrasound.** When provided, the ultrasound room shall comply with the following:

#### **1224.18.5.1 Space requirements.**

1. **Area.** Rooms used for ultrasound examination/treatment shall have a minimum clear floor area of 120 square feet ( $11.15 \text{ m}^2$ ).
2. **Clearances.** A minimum clear dimension of 3 feet (914 mm) shall be provided on three sides of the table/stretcher.

**1224.18.5.2 Handwashing fixture.** A handwashing fixture shall be provided within the procedure room.

**1224.18.5.3 Patient toilet(s).** A patient toilet shall be directly accessible to the procedure room. The patient toilet may be permitted to serve more than one procedure room.

**1224.18.6 Mammography.** When provided, the mammography room shall comply with the following:

#### **1224.18.6.1 Space requirements.**

1. **Area.** Mammography rooms shall be a minimum of 100 square feet ( $9.3 \text{ m}^2$ ).
2. **Shielded alcove.** Each x-ray room shall include a shielded control alcove. For mammography machines with built-in shielding for the operator, omission of the alcove shall be permitted when approved by the certified physicist.

**1224.18.6.2 Handwashing fixture.** A handwashing fixture shall be provided within the procedure room.

**1224.18.7 Support spaces.** The following spaces are common to the imaging service area and are minimum requirements unless stated otherwise:

**1224.18.7.1 Patient's toilet room(s).** In service spaces with procedure rooms that do not have dedicated patient toilets, provide a minimum of one patient toilet room within the service space.

**1224.18.7.2 Patient dressing rooms.** Dressing rooms shall be provided convenient to the imaging rooms.

**1224.18.7.3 Staff facilities.** In service space of three or more procedure rooms, staff toilet room(s) internal to the service space shall be provided.

**1224.18.7.4 Film storage (active).** If film systems are used, provide the following:

1. A room with cabinet or shelves for filing patient film for immediate retrieval shall be provided.
2. Storage facilities for unexposed film which shall include protection of film against exposure or damage.

**1224.18.7.5 Locked storage.** Provision shall be made for locked storage of medications and drugs.

### **1224.19 PHARMACEUTICAL SERVICE SPACE**

**1224.19.1 Licensed pharmacy.** All hospitals having a licensed capacity of 100 or more beds shall have a pharmacy on the premises licensed by the California Board of Pharmacy.

**Note:** See General Acute Care Hospitals §70263(a), Article 3, Chapter 1, Division 5, Title 22, California Code of Regulations, for requirements concerning hospitals with fewer than 100 beds. The pharmacy room or service space shall conform to the requirements of § 1751, Article 7, Division 17, Title 16, California Code of Regulations as enforced by the California Board of Pharmacy.

**1224.19.1.1 Handwashing fixture.** Handwashing fixture(s) shall be provided within each separate room where open medication is handled, or in an anteroom, or immediately outside the room where open medication is handled, still within the pharmaceutical service space.

**Exception:** ISO Class 5 sterile preparation areas (e.g., chemotherapy and intravenous solutions) and

*their ISO Class 7 buffer area(s) shall not contain sources of water (sinks) or floor drains. However the anteroom to the buffer area shall have a hand-washing fixture regardless of its intended ISO Classification (i.e. Class 7 or Class 8). Reference: U.S. Pharmacopeia (USP) 797 Pharmaceutical Compounding – Sterile Preparations.*

**1224.19.1.2 Location.** Provide for convenient access to toilet room and locker.

## 1224.20 DIETETIC SERVICE SPACE

**1224.20.1 General.** Food service facilities and equipment shall conform to these standards, the standards of the National Sanitation Foundation and the requirements of the local public health agency.

**1224.20.2 Functional elements.** On-site conventional food service preparation shall be provided as follows in the size and number appropriate for the type of food service selected:

**1224.20.2.1 Location.** Patient food preparation areas shall be directly accessible to the entry for food supply deliveries and for the removal of kitchen wastes, interior transportation, storage, etc., without traversing patient or public circulation. Food preparation, service and storage shall be inaccessible to nondietetic service staff.

**1224.20.2.2 Receiving/control stations.** Provide an area for the receiving and control of incoming dietary supplies.

### 1224.20.2.3 Storage.

1. Food storage space shall be convenient to the receiving area and shall be located to exclude traffic through the food preparation area to reach them. Storage spaces for bulk, refrigerated, and frozen foods shall be provided. At least one week's (7 days) supply of staple foods and at least two (2) days' supply of frozen, and two (2) days' supply of perishable foods shall be maintained on the premises. Food storage components shall be grouped for convenient access from receiving and to the food preparation areas. All food shall be stored clear of the floor. Lowest shelf shall be not less than 12 inches (305 mm) above the floor or shall be closed in and sealed tight for ease of cleaning.

As a minimum, dietary storage space shall be provided in accordance with the following schedule:

Licensed Bed Capacity	Storage Space
1 to 99 beds	2 square feet (0.19 m <sup>2</sup> ) per bed
100 to 199 beds	200 square feet (18.58 m <sup>2</sup> ) plus 1 square foot 0.0929 m <sup>2</sup> ) per bed in excess of 100 beds

200 beds and over	300 square feet (27.99 m <sup>2</sup> ), plus 1/2 square foot (0.0465 m <sup>2</sup> ) per bed in excess of 200 beds
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Space to allow refrigeration for the storage of frozen and chilled foods shall be provided at a minimum of 2 cubic feet (0.057 m<sup>3</sup>) of usable space per bed.

2. Additional storage space for dietetic service supplies, such as paper products, equipment, tray delivery carts, etc., shall be provided.
3. Storage areas and sanitizing facilities for cans, carts and mobile-tray conveyors shall be provided.
4. Waste storage and recycling facilities (per local requirements) shall be located in a separate room easily accessible to the outside for direct pickup or disposal.

**1224.20.2.4 Cleaning supplies storage.** Provide a separate storage room for the storage of nonfood items such as cleaning supplies that might contaminate edibles.

**1224.20.2.5 Food preparation workspaces.** Provide workspaces for food preparation, cooking, and baking. These areas shall be as close as possible to the user (i.e. tray assembly and dining). Provide additional spaces for thawing and portioning.

**1224.20.2.6 Assembly and distribution.** Provide a patient tray assembly area and locate within close proximity to the food preparation and distribution areas.

**1224.20.2.7 Food service carts.** A cart distribution system shall be provided with spaces for storage, loading, distribution, receiving, and sanitizing of the food service carts. The cart traffic shall be designed to eliminate any danger of cross-circulation between outgoing food carts and incoming soiled carts, and the cleaning and sanitizing process. Cart circulation shall not be through food preparation areas.

**1224.20.2.8 Dining area.** Provide dining space(s) for ambulatory patients, staff, and visitors. These spaces shall be separate from the food preparation and distribution areas.

**1224.20.2.9 Vending services.** If vending devices are used for unscheduled meals, provide a separate room that can be accessed without having to enter the main dining area.

**1224.20.2.10 Ware-washing facilities.** Ware-washing space shall be provided in a room separate from food preparation and serving areas. It shall be designed to prevent contamination of clean wares with soiled wares through cross-traffic. The clean wares shall be transferred for storage or use in the dining room area without having to pass through food preparation areas.

1. Commercial-type ware-washing equipment shall be provided.

work counter, a handwashing fixture, and storage facilities for clean and sterile supplies. If the room is used only for storage and holding as part of a system for distribution of clean and sterile materials, the work counter and handwashing fixture may be omitted.

**1225.4.1.3.2 Soiled workroom or soiled holding room.** This room shall be separate from the clean utility room. The soiled workroom/utility room shall contain a clinical sink (or equivalent flushing-rim fixture). The room shall contain a handwashing fixture. The above fixtures shall both have a hot and cold mixing faucet. The room shall have a work counter and space for separate covered containers for soiled linen and waste. Rooms used only for temporary holding of soiled material may omit the clinical sink and work counter. If the flushing-rim clinical sink is eliminated, facilities for cleaning bedpans shall be provided elsewhere.

**1225.4.1.4 Visual privacy.** A method of assuring visual privacy for each patient shall be provided in patient rooms and in tub, shower and toilet rooms.

**1225.4.1.5 Treatment or exam room.** If provided, the treatment or exam room shall comply with all of the requirements of Section 1224.4.4.

**1225.4.1.6 Toilet room and bath facilities.** Separate toilet room facilities shall be provided for the use of patients and personnel.

**1225.4.1.6.1 Grab bars.** Each toilet, bathtub and shower serving patients shall be provided with conveniently located grab bars.

**1225.4.1.6.2 Bathroom facilities.** Bathroom facilities shall be provided for patients in convenient locations in at least the following ratios:

Bathtubs or showers      1:20 patients or major fraction thereof.

(Minimum one bathtub on each floor)

Lavatories                  1:8 patients

(Fixtures shall be equipped with gooseneck spouts without aerators and may have conventional controls.)

Toilets                    1:6 patients

Fixtures serving individual patient rooms shall not be considered as meeting the required ratios for bedrooms not served by individual adjoining toilet room or bathrooms. Changes in these ratios for wards or units in which bed patients only are to be cared for, may be permitted by the enforcing agency.

**1225.4.1.7 Patient/nurse call system.** A patient/nurse call system complying with Section 517-123, California Electrical Code, shall be provided.

**1225.4.1.8 Special-purpose rooms.** Special-purpose rooms for the purpose of single-patient occupancy shall be provided at a ratio of one room for every 35 patients

or fraction thereof. Airborne infection isolation rooms may be included in determining the number of special-purpose rooms required for the facilities.

**1225.4.1.9 Airborne infection isolation rooms.** If provided, the airborne infection isolation room shall comply with all of the requirements of Section 1224.14.3.

**1225.4.1.10 Protective environment room(s).** If provided, the protective environment room shall comply with all of the requirements of Section 1224.14.4.

#### 1225.4.2 DIETETIC SERVICE SPACE.

**1225.4.2.1 General.** Food service facilities and equipment shall conform with these standards, the standards of the National Sanitation Foundation, and the requirements of the local public health agency.

**1225.4.2.1.1 Distribution.** Provision(s) shall be made for transport of hot and cold foods as required, appropriate for the type of food service selected.

**1225.4.2.1.2 Dining space.** Separate dining spaces shall be provided for patients and staff. These spaces shall be separate from the food preparation and distribution areas.

**1225.4.2.1.3 Location.** The design and location of dining facilities shall encourage patient use.

**1225.4.2.1.4 Food service.** Facilities shall be furnished to provide nourishment and snacks between scheduled meal service.

**1225.4.2.2 Functional elements.** The following facilities, in the size and number appropriate for the type of food service selected, shall be provided:

**1225.4.2.2.1 Location.** Food-service areas shall be directly accessible to the entry for food supply deliveries and for the removal of kitchen wastes.

**1225.4.2.2.2 Receiving/control stations.** A control station shall be provided for the receiving and control of incoming dietary supplies.

**1225.4.2.2.3 Food preparation facilities.** Food preparation facilities shall be provided to accommodate the method of food preparation required.

1. Conventional food preparation systems require space and equipment for preparing, cooking, and baking.

2. Convenience food service systems using frozen prepared meals, bulk packaged entrees, individual packaged portions, or those using contractual commissary services require space and equipment for thawing, portioning, cooking, and baking.

**1225.4.2.2.4 Handwashing station(s).** Handwashing station(s) shall be located in the food preparation area.

**1225.4.2.2.5 Ice-making facilities.** Ice-making facilities may be located in the food preparation area or in a separate room. They shall be easily cleanable and convenient to the dietary function.

**1225.4.2.2.6 Assembly and distribution.** A patient tray assembly area shall be provided and shall be located within close proximity to the food preparation and distribution areas.

1. If food service carts are utilized, a cart distribution system shall accommodate spaces for storage, loading, distribution, receiving, and sanitizing of the food service carts. Cart circulation shall not be through food preparation areas.

**1225.4.2.2.7 Ware-washing facilities.** Ware-washing space shall be provided in a room separate from the food preparation and serving area. It shall be designed to prevent contamination of clean wares with soiled wares through cross-traffic. The clean wares shall be transferred for storage or use in the dining area without having to pass through food preparation areas.

1. Commercial-type ware-washing equipment shall be provided.
2. Space shall be provided for receiving, scraping, sorting, and stacking soiled tableware, and for transferring clean tableware to the using areas.
3. Convenient handwashing stations shall be provided in the ware-washing space.

**1225.4.2.2.8 Pot-washing facilities.** Pot-washing facilities shall include multi-compartmented sinks.

**1225.4.2.2.9 Office space.** Office or other space shall be provided for the dietitian or dietetic service supervisor.

#### **1225.4.2.2.10 Storage.**

1. Food storage space, including cold storage, shall be provided for a supply of food of at least a 7 day staple, 2 day frozen, 2 day perishable, and an emergency food and water supply. All food shall be stored clear of the floor. The lowest shelf shall be not less than 12 inches (305 mm) above the floor or shall be closed in and sealed tight, for ease of cleaning.

As a minimum, dietary storage space shall be provided in accordance with the following schedule:

Licensed Bed Capacity	Storage Space
1 to 99 beds	2 square feet (0.19 m <sup>2</sup> ) per bed
100 to 199 beds	200 square feet (18.58 m <sup>2</sup> ) plus 1 square foot 0.0929 m <sup>2</sup> ) per bed in excess of 100 beds
200 beds and over	300 square feet (27.99 m <sup>2</sup> ), plus 1/2 square foot

(0.0465 m<sup>2</sup>) per bed  
in excess of 200 beds

Space to allow refrigeration for the storage of frozen and chilled foods shall be provided at a minimum of 2 cubic feet (0.057 m<sup>3</sup>) of usable space per bed.

2. Additional storage space for dietetic service supplies, such as paper products, equipment, tray delivery carts, etc. shall be provided.
3. Storage areas and sanitizing facilities for cans, carts, and mobile-tray conveyors shall be provided.
4. Waste, storage, and recycling facilities (per local requirements) shall be located in a separate room easily accessible to the outside for direct pickup or disposal.

**1225.4.2.2.11 Toilet rooms.** Toilet rooms shall be provided for the exclusive use of the dietary staff. They shall not open directly into the food preparation areas, but shall be in close proximity.

**1225.4.2.2.12 Lockers.** An enclosed, separate area shall be provided for dietetic service employees' clothing and personal belongings.

**1225.4.2.2.13 Housekeeping room.** A housekeeping room meeting the requirements of Section 1224.4.15 shall be located within the dietary department for the exclusive use of the dietary department.

**1225.4.2.3 Outside service.** On approval of the Licensing Agency, when food is provided by an outside food service, the facility shall maintain adequate space, equipment, and food supplies to accommodate required functional elements listed in Section 1225.4.2.2, as required to provide patient food service in the event that the outside food service is interrupted.

### **SUPPORT SERVICES**

#### **1225.4.3 ADMINISTRATION SPACE.**

**1225.4.3.1 Administration and public spaces.** An administration area shall be provided which shall include space for business, administration, admitting, public toilet room(s), lobby, and public telephone.

**1225.4.3.2 Medical record storage.** Space shall be provided for the storage of medical records.

**1225.4.3.3 Office.** An office for the director of nurses shall be provided.

#### **1225.4.4 STERILE SUPPLIES.**

**1225.4.4.1 Storage.** Each facility shall provide space for the storage of disposable sterile supplies or provide space for sterilization and disinfection equipment.

**Exception:** Facilities with contractual arrangements for outside autoclaving and sterilizing services.

**1225.4.4.2 Central sterile supply.** If provided, shall accommodate the following:

**1225.4.4.2.1 Minimum requirements.** A central supply and sterilizing area shall be provided. Rooms

and spaces shall accommodate the following services and equipment:

1. Soiled work area. A receiving and gross cleaning area which shall contain work space and equipment for cleaning medical and surgical equipment and for disposal of or processing of soiled material.
2. Clean work area. A clean work area which shall contain work space and equipment for sterilizing medical and surgical equipment and supplies.
3. Sterilizing space.
4. Storage. Space for sterile supplies and unsterile supplies.

**1225.4.4.2.2 Sterilizers.** All sterilizers and autoclaves which emit steam exhaust shall be vented to the outside of the building. Such vents shall be independent from the plumbing vent system.

**Exception:** Small instrument sterilizers.

#### 1225.4.5 STORAGE.

**1225.4.5.1 Required areas.** Facilities shall provide combined general and specialized storage in accordance with the following schedule:

Licensed Bed Capacity	Storage Area
1 to 10 beds	120 square feet (11.15 m <sup>2</sup> ) minimum
11 to 100 beds	12 square feet (1.11 m <sup>2</sup> ) per bed
Over 100 beds	1,200 square feet (111.48 m <sup>2</sup> ) plus 5 square feet (0.46 m <sup>2</sup> ) per bed for each bed over 100

**1225.4.5.2 Specialized storage.** Shall include those spaces identified in the dietetic food storage of Section 1225.4.2.2.10 and as follows:

**1225.4.5.2.1 Linen.** Separate and enclosed facilities for clean and soiled linen in each nursing unit. The clean linen storage space shall have a minimum area of 10 square feet (0.93 m<sup>2</sup>) and may be within the clean utility room. The soiled linen collection space shall have an area of no less than 10 square feet (0.93 m<sup>2</sup>), except where linen chutes are provided, and may be within the soiled utility room.

**1225.4.5.2.2 Supply.** One supply storage space having a minimum area of 15 square feet (1.39 m<sup>2</sup>) shall be provided in each nursing unit. Supply storage may be within the clean utility room used only as part of a system for distributing clean and sterile supplies.

**1225.4.5.2.3 Wheelchairs.** A room or space shall be provided in each nursing unit for wheelchairs and stretchers. The wheelchair and stretcher space shall have a minimum area of 15 square feet (1.39 m<sup>2</sup>).

**1225.4.5.2.4 Separate supplies.** Sterile and unsterile supplies shall be stored separately.

**1225.4.5.2.5 Location.** All storage spaces shall be directly accessible on the site of the licensed facility.

**1225.4.6 HOUSEKEEPING ROOMS.** Housekeeping rooms shall be provided to serve each department and nursing unit, and may be shared by compatible departments, except when specifically required by other sections.

**1225.4.7 LAUNDRY.** If a laundry is to be provided, the following is required in addition to the laundry room:

1. A separate soiled linen receiving, holding and sorting room with handwashing fixture.
2. A separate clean linen storage, issuing and holding room.
3. Storage for laundry supplies.

**1225.4.7.1 Outside service.** If linen is processed off site, the following shall be provided within the facility:

1. A soiled linen holding room.
2. A separate clean linen receiving and storage room.

**1225.4.8 EMPLOYEE DRESSING ROOMS AND LOCKERS.** Separate dressing rooms with toilet(s), lavatories, and lockers for male and female personnel shall be provided.

**1225.5 SKILLED NURSING UNIT MODELS.** The requirements of the Medical Model or the Household Model shall apply to the Nursing Unit(s) in its entirety.

#### 1225.5.1 MEDICAL MODEL.

**1225.5.1.1 General construction.** Skilled nursing and intermediate-care facilities shall comply with Sections 1224.4 through 1224.13 whenever applicable.

#### 1225.5.1.2 NURSING SERVICE SPACE.

**1225.5.1.2.1 Patient bedrooms.** Patients shall be accommodated only in rooms with the following minimum floor area, exclusive of toilet rooms, wardrobes, entrance vestibules, and fixed furnishings or equipment.

1. Single-patient rooms: 110 square feet (10.21 m<sup>2</sup>).
2. Multi-patient rooms: 80 square feet (7.43 m<sup>2</sup>) || per bed.

**1225.5.1.2.2 Bed clearance.** A minimum distance of 3 feet (914 mm) shall be provided between beds and 4 feet (1219 mm) between the foot of beds and walls or fixed objects in multi-patient rooms, and 3 feet (914 mm) in single-patient rooms.

**1225.5.1.2.3 Patient room beds.** Patient rooms shall not be designed to permit the placement of beds more than three deep from the exterior window, but shall be of such shape and dimensions to allow for the performance of routine functions, including the easy transfer of patients to and from bed to wheelchair or wheeled stretcher. No patient room shall be designed to accommodate more than four beds.

**1225.5.1.2.4 Outside exposure.** All patient bedrooms shall have an outside exposure and shall not be below ground level.

**1225.5.1.2.5 Patient storage.** Each patient room shall be provided with wardrobe or locker spaces for clothing, toilet articles, or other personal belongings for each patient.

**Exception:** Pediatric and psychiatric patient rooms.

#### **1225.5.1.3 PHARMACEUTICAL SERVICE SPACE.**

**1225.5.1.3.1 Drug space and storage.** Adequate space shall be provided at each nursing station for the storage of drugs and preparation of medication doses.

**1225.5.1.3.2 Drug access.** All spaces and areas used for the storage of drugs shall be lockable and accessible to authorized personnel only.

**1225.5.1.3.3 Narcotics.** Specific space shall be designed for safe storage of narcotics and other dangerous drugs.

**1225.5.1.3.4 Drug refrigeration.** Facilities shall provide for storage of drugs requiring refrigeration.

**1225.5.1.3.5 Pharmacy.** The pharmacy shall not serve the general public unless a separate public entrance or a separate public serving window is utilized.

#### **1225.5.1.4 ACTIVITY PROGRAMMING SPACE.** Designated activity areas appropriate to independent and group needs of patients shall be provided as follows:

##### **1225.5.1.4.1 Skilled nursing facilities.**

1. **Recreation room.** Each floor of each building accommodating six or more patients shall be provided with a recreation room with a minimum of 100 square feet ( $9.29 m^2$ ).
2. **Recreation and dining.** A minimum of 100 square feet ( $9.29 m^2$ ) plus 12 square feet ( $1.11 m^2$ ) per bed shall be provided for recreation and dining activities.

##### **1225.5.1.4.2 Intermediate-care facilities.**

1. **Recreation room.** Each floor of each building accommodating five or more patients shall be provided with a recreation room with a minimum of 150 square feet ( $13.94 m^2$ ).
2. **Recreation and dining.** A minimum of 30 square feet ( $2.79 m^2$ ) per bed for recreation and dining activities.
3. **Outdoor space for activities and recreation.**

**1225.5.1.4.3 Equipment and supplies.** Recreation and dining spaces shall be provided with space to store equipment and supplies.

#### **1225.5.2 HOUSEHOLD MODEL.**

**1225.5.2.1 General construction.** Skilled nursing and intermediate-care facilities shall comply with

Sections 1224.4 through 1224.13 whenever applicable, and the following sections:

**1225.5.2.1.1 Door thresholds.** Door thresholds, except where required at exterior doors and expansion joint covers, shall be designed to facilitate use of wheelchairs and carts and to prevent tripping, and shall provide a smooth and level transition from surface-to-surface.

**1225.5.2.1.2 Seating area.** A seating area(s) located out of the required egress width shall be provided along the access corridor that is used by patients.

**1225.5.2.1.3 Towel bars.** Towel bars shall be provided at each bathing facility.

**1225.5.2.1.4 Hardware.** All patient use plumbing fixtures and door operating hardware shall be equipped with lever type hardware for easy gripping and turning.

**1225.5.2.1.5 Drinking fountain.** A minimum of one drinking fountain shall be provided per resident floor, unless drinking water is available from the resident dietary area.

##### **1225.5.2.2 Cluster/household unit and resident unit.**

**1225.5.2.2.1 Design.** Each resident unit shall consist of the resident rooms, resident support areas, and resident living areas. The unit shall be designed as a cluster/household resident unit or as a resident unit with double or single loaded access corridors. If the cluster/household unit design is utilized, it shall be designed around resident support and living areas with a maximum of 20 patients per cluster/household unit. If the double or single loaded corridor resident unit design is utilized, the access corridor shall be designed so that travel distance from the entrance of the resident unit to the furthest resident room door is no more than 60 feet ( $18.29 m$ ) without a change of corridor direction or a node for a resident sitting area.

**1225.5.2.2.2 Arrangement.** Each resident unit shall be arranged to avoid unnecessary and unrelated travel through the unit.

**1225.5.2.2.3 Distinct parts or neighborhoods.** Both the cluster/household unit and resident unit designs may be grouped into distinct parts or neighborhoods to a maximum of 60 patients. These distinct parts or neighborhoods composed of the resident unit(s) as described in Section 1225.5.2.2.1 may share the functional requirements of the resident support areas as described in Sections 1225.5.2.4 and 1225.5.2.5 of this code.

##### **1225.5.2.3 Resident room.**

**1225.5.2.3.1 Capacity.** In new construction and additions, the maximum room capacity shall be two patients. Resident sleeping areas in all double resident room designs shall be visually separated from each other by a full height wall or a permanently

**1226.5.11.6.9 Cleanup room.** Refer to Section 1224.39.2, Item 4.

**1226.5.11.6.10 Sterile and pharmaceutical supply storage.** Refer to Section 1226.4.13.5.

#### **1226.5.11.7 Additional support areas for patients.**

**1226.5.11.7.1 Outpatient change area.** A separate space shall be provided where patients change out of their street clothing and are prepared for the procedure. This space shall include provisions for clothing storage, toilet room(s), sink, space for clothing change and gowning area.

### **NUCLEAR MEDICINE**

**1226.5.12 Nuclear medicine.** When provided, nuclear medicine services space shall comply with Section 1224.34 and the provisions of this section:

**1226.5.12.1 Radiation protection.** When provided, refer to Section 1224.34.1.1.

**1226.5.12.2 Nuclear medicine room.** Refer to Section 1224.34.1.2.

**1226.5.12.3 Radiopharmacy.** When provided, refer to Section 1224.34.1.3.

**1226.5.12.4 Support areas for nuclear medicine services.**

**1226.5.12.4.1 Cleanup.** Refer to Section 1224.34.2.2.

**1226.5.12.4.2 Dose administration area.** Refer to Section 1224.34.2.5.

**1226.5.12.4.3 Holding.** Refer to Section 1224.34.2.6.

**1226.5.12.4.4 Patient dressing rooms.** Refer to Section 1224.34.2.7.

**1226.5.12.4.5 Patient toilet room(s).** Refer to Section 1224.34.2.8.

**1226.5.12.4.6 Staff toilet room(s).** Refer to Section 1224.34.2.9.

**1226.5.12.4.7 Handwashing fixtures.** Refer to Section 1224.34.2.10.

**1226.5.12.4.8 Control desk and reception.** Refer to Section 1226.5.3.

**1226.5.12.4.9 Clean linen storage.** A storage area for clean linen shall be provided.

**1226.5.12.4.10 Soiled and contaminated material.** Refer to Section 1224.34.2.13.

**1226.5.12.5 Radiotherapy service space.** When provided, radiotherapy service space shall comply with the following provisions of this section:

**1226.5.12.5.1 Radiation protection.** Refer to Section 1224.34.3.2.

**1226.5.12.5.2 Room sizes.** Refer to Section 1224.34.3.3.

**1226.5.12.5.3 General support area.** Refer to Section 1224.34.3.4.

**1226.5.12.6 Additional support areas for linear accelerator.**

**1226.5.12.6.1 Mold room.** Refer to Section 1224.34.4.1.

**1226.5.12.6.2 Block room.** Refer to Section 1224.34.4.2.

**1226.5.12.7 Additional support areas for cobalt room.**

**1226.5.12.7.1 Hot lab.**

**1226.5.12.8 High dose rate brachytherapy room.**

### **CANCER TREATMENT/INFUSION THERAPY**

**1226.5.13 Cancer treatment/infusion therapy service space.** When provided, cancer treatment/infusion therapy service space shall comply with the provisions of this section:

**1226.5.13.1 Treatment area.**

**1226.5.13.1.1 Location.** Refer to Section 1224.39.4.2.1.

**1226.5.13.1.2 Nurses' station(s).** Refer to Section 1224.39.4.2.2.

**1226.5.13.1.3 Individual patient treatment areas.** Refer to Section 1224.39.4.2.3.

**1226.5.13.1.4 Handwashing fixtures.** Refer to Section 1224.39.4.2.4.

**1226.5.13.1.5 Privacy.** Refer to Section 1224.39.4.2.5.

**1226.5.13.1.6 Medication dispensing.** Refer to Section 1224.39.4.2.6.

**1226.5.13.1.7 Examination room.** Refer to Section 1224.39.4.2.7.

**1226.5.13.1.8 Clean utility room.** Refer to Section 1224.39.4.2.8.

**1226.5.13.1.9 Soiled utility room.** Refer to Section 1224.39.4.2.9.

**1226.5.13.1.10 Nourishment station.** Refer to Section 1224.39.4.2.10.

**1226.5.13.1.11 Housekeeping room.** Refer to Section 1224.39.4.2.11.

**1226.5.13.1.12 Supplies.** Refer to Section 1224.39.4.2.12.

**1226.5.13.1.13 Storage.** Refer to Section 1224.39.4.2.13.

**1226.5.13.1.14 Clean linen storage.** Refer to Section 1224.39.4.2.14.

**1226.5.13.1.15 Patient storage.** Refer to Section 1224.39.4.3.2.

### **PRIMARY CARE CLINICS**

**1226.6 PRIMARY CARE CLINICS.** Primary care clinics and outpatient clinical services of a hospital providing services equivalent to a primary care clinic shall comply with Sections 1226.4.3 through 1226.4.8 and the provisions of this section.

**1226.6.1 Examination and treatment areas.**

**1226.6.1.1 Examination room(s).** Refer to Section 1224.4.4.1.

**1226.6.1.2 Treatment room(s).** Treatment room(s) for minor procedures (e.g. minor surgical procedures, casting), if provided, shall have a minimum area of 120 square feet ( $11.15 \text{ m}^2$ ), the least dimension of which shall be 10 feet (3048 mm), excluding such spaces such as vestibules and work counters, and shall meet the requirements in Section 1224.4.4.1.

#### 1226.6.2 Support areas for examination rooms.

**1226.6.2.1 Administrative center or nurse station.** Refer to Section 1226.4.13.1.

**1226.6.2.2 Medication station.** Refer to Section 1226.4.13.2.

**1226.6.2.3 Clean utility room.** Refer to Section 1226.4.13.3.

**1226.6.2.4 Soiled workroom or soiled linen holding.** Refer to Section 1226.4.13.4.

#### 1226.6.3 Support areas for patients.

**1226.6.3.1 Patient toilet room(s).** Refer to Section 1226.4.14.1.

**1226.6.3.2 Specimen collection and/or blood collection facilities.** When provided, refer to Section 1224.4.4.2.

#### 1226.6.4 General support services and facilities.

**1226.6.4.1 Garbage, solid waste, medical waste and trash storage.** Refer to Section 1226.4.9.

**1226.6.4.2 Housekeeping room.** Refer to Section 1224.4.15.

#### 1226.6.5 Public and administrative areas.

##### 1226.6.5.1 Public area.

**1226.6.5.1.1 Reception.** Refer to Section 1226.4.16.1.1.

**1226.6.5.1.2 Outpatient waiting room.** Refer to Section 1224.4.5.

**1226.6.5.1.3 Public toilet(s).** Refer to Section 1224.4.5.

**1226.6.5.1.4 Public telephone access.** Refer to Section 1224.4.5.

**1226.6.5.1.5 Drinking fountain(s).** Refer to Section 1224.4.5.

##### 1226.6.5.2 Administrative services

**1226.6.5.2.1 Medical records storage.** Refer to Section 1226.4.16.2.1.

**1226.6.5.2.2 Equipment and supply storage.** Refer to Section 1226.4.16.2.2.

#### 1226.6.6 Support areas for staff.

**1226.6.6.1 Staff toilet(s).** Refer to Section 1226.4.17.1.

**1226.6.6.2 Storage for employees.** Refer to Section 1226.4.17.2.

**1226.7 PRIMARY CARE CLINICS PROVIDING ABORTION SERVICES.** Primary care clinics providing abortion services shall comply with the minimum requirements for primary care clinics in Section 1226.6 in addition to the following provisions:

**1226.7.1 Treatment room.** When provided, shall have a minimum area of 120 square feet ( $11.15 \text{ m}^2$ ), the least dimension of which shall be 10 feet (3048 mm), excluding such spaces as vestibules and work counters.

**Exception:** Treatment rooms used for aspiration and/or medical abortion may be, as a minimum, sized as examination rooms.

**1226.7.2 Post-abortion recovery area.** Shall have a minimum area of 60 square feet ( $5.57 \text{ m}^2$ ) per recovery bed, with cubicle curtains for patient privacy and comply with the following requirements:

##### 1226.7.2.1 Clearances.

- The design shall provide a minimum clear dimension of 4 feet (1.22 meters) between the sides of adjacent lounge chairs and between the foot of the lounge chairs and the nearest obstruction.

- When permanent partitions (full or partial height or width) are used to partially define the patient care station (rather than cubicle curtains), a minimum clear dimension of 3 feet (914 mm) shall be provided on the sides of the lounge chair.

**1226.7.3 Patient storage.** Space for the storage of patient clothing and personal items.

**1226.7.4 Counseling.** A room or private area of at least 60 square feet ( $5.57 \text{ m}^2$ ) for pre-abortion and post-abortion counseling.

#### SURGICAL CLINICS

**1226.8 SURGICAL CLINICS.** Outpatient surgical clinics, and outpatient clinical services of a hospital providing services equivalent to a surgical clinic, shall comply with Sections 1226.4.2 through 1226.4.8 and the provisions of this section.

##### 1226.8.1 Outpatient surgical service space.

**1226.8.1.1 Operating room(s).** Refer to Section 1224.39.2, Item 1.

**1226.8.1.2 Preoperative patient holding.** Refer to Section 1224.15.2.

**1226.8.1.3 Post-anesthesia recovery area.** Refer to Section 1224.16.

##### 1226.8.2 Support areas for outpatient surgery.

**1226.8.2.1 Control station.** Refer to Section 1224.15.3.1.

**1226.8.2.2 Supervisor's office or station.** Refer to Section 1224.15.3.2.

**1226.8.2.3 Substerile areas.** When provided, refer to Section 1224.15.3.3.

**1226.8.2.4 Medication station.** Refer to Section 1226.4.13.2.

**1226.8.2.5 Scrub facilities.** Refer to Section 1224.15.3.5.

**1226.8.2.6 Clock.** Refer to Section 1224.15.3.6.

**1226.8.2.7 Soiled workroom.** Refer to Section 1224.15.3.7.

**1226.8.2.8 Clean utility room.** Refer to Section 1224.15.3.8.

## REHABILITATION THERAPY SERVICE SPACES.

**1226.10.5 Physical therapy service space.** A physical therapy service space shall be provided. The service space shall comply with the following provisions:

1. **Individual treatment area(s).** Refer to Section 1224.35.2, Item 1.
2. **Handwashing fixture(s).** Refer to Section 1224.35.2, Item 2.
3. **Exercise area.** Refer to Section 1224.35.2, Item 3.
4. **Clean linen and towel storage.** Refer to Section 1224.35.2, Item 4.
5. **Storage for equipment and supplies.** Refer to Section 1224.35.2, Item 5
6. **Separate storage for soiled linen, towels and supplies.** Refer to Section 1224.35.2, Item 6.

**1226.10.6 Occupational therapy service space.** When an occupational therapy service is provided, the service space shall comply with following provisions:

1. **Work areas and counters.** Refer to Section 1224.35.3, Item 1.
2. **Handwashing fixture(s).** Refer to Section 1224.35.3, Item 2.
3. **Storage for supplies and equipment.** Refer to Section 1224.35.3, Item 3.
4. **Area for teaching daily living activities.** Refer to Section 1224.35.3, Item 4.

**1226.10.7 Speech pathology and/or audiology service space.** When speech pathology and/or audiology service(s) is provided, the service space shall comply with the following provisions:

1. **Interview, consultation and treatment space.** Refer to Section 1224.35.4, Item 1.
2. **Waiting area.** Refer to Section 1224.35.4, Item 2.
3. **Handwashing fixture.** Refer to Section 1224.35.4, Item 3.
4. **Testing unit.** If an audiology service is provided. Refer to Section 1224.35.4, Item 4.

## ALTERNATIVE BIRTHING CLINICS

**1226.11 ALTERNATIVE BIRTHING CLINICS.** Alternative birthing clinics and outpatient clinical services of a hospital providing services equivalent to alternative birthing clinics shall comply with Sections 1226.4.3 through 1226.4.8 and the provisions of this section:

### 1226.11.1 Birthing service space.

**1226.11.1.1 Birthing room.** A birthing room shall have a minimum clear floor area of 200 square feet (18.58 square meters), including the newborn care area. A birthing room shall have a minimum clear dimension of 12 feet (3658 mm). The maximum number of beds per room shall be one.

**1226.11.1.2 Location.** Birthing rooms shall be located out of the path of unrelated traffic and under direct supervision of the facility staff.

**1226.11.1.3 Nurse call system.** A nurse call system shall be located in the birthing room which will alert the nearest continually staffed administrative center or nurses' station. Refer to Section 1224.4.6.5 for requirements.

**1226.11.1.4 Hand-washing stations.** A handwashing fixture, as defined in Section 1224.3, shall be located within or directly outside the room. If the fixture is located within the room, the fixture may be screened or within openable casework.

**1226.11.1.5 Lighting.** Lighting capable of 1076 lux (100 footcandles) at working surfaces shall be provided. Dimmer switches may be used.

**1226.11.1.6 Window.** Each birthing room shall have an outside window. Refer to Sections 1224.4.9.4 and 1224.4.9.5.

**1226.11.1.7 Privacy.** Windows or doors within a normal sightline that would permit observation into the room shall be arranged or draped, as necessary, for mother and newborn privacy.

**1226.11.1.8 Newborn care area.** When provided, a separate newborn care area shall be provided that is in addition to the birthing room.

**1226.11.1.9 Examination room.** When provided, the examination room shall meet the requirements of Section 1224.4.4.

### 1226.11.2 Support areas for birthing services.

**1226.11.2.1 Administrative center or nurse station.** Refer to Section 1226.4.13.1.

**1226.11.2.2 Medication station.** Refer to Section 1226.4.13.2.

**1226.11.2.3 Clean utility room.** Refer to Section 1226.4.13.3.

**1226.11.2.4 Soiled utility or soiled holding room.** Refer to Section 1226.4.13.4.

**1226.11.2.5 Crash cart space.** Space for storing crash cart shall be provided.

**1226.11.2.6 Clean-up room.** Each birthing room shall have access to a clean-up room with a handwashing fixture and work space which is separate from any sterilizing facilities. The clean-up room shall provide 24 square feet (2.23 m<sup>2</sup>) per birthing room up to eight rooms, with no dimensions less than 6 feet (1829 mm).

**1226.11.2.7 Ice-making equipment.** Each facility shall have equipment to provide ice for treatments and nourishment. Ice-making equipment shall be permitted in the clean utility or the nourishment room/area. Ice intended for human consumption shall be provided in the nourishment station and shall be served from self-dispensing ice-makers.

**1226.11.2.8 Nourishment room or area.** When provided, refer to Section 1226.4.13.7.

**1226.11.2.9 Medical gas outlets.** When provided, oxygen and suction capabilities may be portable or piped.

**1226.11.3 Support areas for mother and newborn.**

**1226.11.3.1 Patient toilet room(s).** Each birthing room shall have direct access to a private toilet room with lavatory, shower or tub and nurse call system. Facilities for cleaning bedpans shall be provided in the toilet room.

**1226.11.4 General support services and facilities.**

**1226.11.4.1 Housekeeping room.** Refer to Section 1224.4.15.

**1226.11.4.2 Garbage, solid waste, medical waste and trash storage.** Refer to Section 1226.4.9.

**1226.11.4.3 Areas for off-site laundry services.** Refer to Section 1226.4.15.1.

**1226.11.5 Public and administrative areas.**

**1226.11.5.1 Public area.**

**1226.11.5.1.1 Reception.** Refer to Section 1226.4.16.1.1.

**1226.11.5.1.2 Outpatient waiting room.** Refer to Section 1224.4.5.

**1226.11.5.1.3 Public toilet(s).** Refer to Section 1224.4.5.

**1226.11.5.1.4 Public telephone.** Refer to Section 1224.4.5.

**1226.11.5.1.5 Drinking fountain.** Refer to Section 1224.4.5.

**1226.11.5.2 Administrative services.**

**1226.11.5.2.1 Medical records storage.** Refer to Section 1226.4.16.2.1.

**1226.11.5.2.2 Equipment and supply storage.** Refer to 1226.4.16.2.2.

**1226.11.6 Support areas for staff.**

**1226.11.6.1 Staff toilet(s).** Refer to Section 1226.4.17.1.

**1226.11.6.2 Storage for employees.** Refer to Section 1226.4.17.2.

**1226.11.6.3 Staff lounge.** Refer to Section 1226.4.17.3.

**1226.11.6.4 Staff clothing change area.** When provided, a changing room with shower shall be provided for staff to change into work attire.

**PSYCHOLOGY CLINICS**

**1226.12 PSYCHOLOGY CLINICS.** Psychology clinics and outpatient clinical services of a hospital providing services equivalent to a psychology clinic shall comply with Sections 1226.4.3 through 1226.4.8 and the provisions of this section.

Psychology clinics shall provide at least an interview room, consulting room and group therapy room.

**1226.12.1 Public and administrative area.**

**1226.12.1.1 Public area.**

**1226.12.1.1.1 Reception.** Refer to Section 1226.4.16.1.1.

**1226.12.1.1.2 Outpatient waiting room.** Refer to Section 1224.4.5.

**1226.12.1.1.3 Public toilet(s).** Refer to Section 1224.4.5.

**1226.12.1.1.4 Drinking fountain.** Refer to Section 1224.4.5.

**1226.12.1.1.5 Public telephone.** Refer to Section 1224.4.5.

**1226.12.1.2 Administrative Area.**

**1226.12.1.2.1 Medical Records storage.** Refer to Section 1226.4.16.2.1.

**1226.12.1.2.2 Equipment and supply storage.** Refer to Section 1226.4.16.2.2.

**SECTION 1227 [OSHPD 4]  
CORRECTIONAL TREATMENT CENTERS**

**1227.1 Scope.** The provisions of this section shall apply to correctional treatment centers.

**1227.2 Application.** New buildings and additions, alterations or repairs to existing buildings subject to licensure shall comply with applicable provisions of the California Electrical Code, California Mechanical Code, California Plumbing Code, and California Fire Code (Parts 3, 4, 5, and 9 of Title 24) and this section.

**1227.3 Definitions.**

**BASIC SERVICES** for correctional treatment centers are those services required for licensure as a correctional treatment center, including medical, surgical, psychiatrist, psychologist, nursing, pharmacy and dietary. See "Optional services."

**HAND WASHING FIXTURE** is a special application sink having a water supply spout mounted so the discharge point is at least 5 inches (127 mm) above the fixture rim and equipped with hot and cold supply controls not requiring direct contact of the hands for operation. The fixture cannot be equipped with an aerator and wrist or elbow blade handles. Gooseneck spouts shall not be used in correctional treatment centers.

**LICENSING AGENCY** is the Department of Health Services.

**OPTIONAL SERVICES** are inpatient or outpatient services which are not required to be provided by law or regulation for licensure. An optional service, when provided, must accommodate the provisions of this section. See "Basic services."

**OUTPATIENT SERVICE** is an organizational unit of the correctional treatment center which provides nonemergency health care services to patients.

**1227.4 GENERAL CONSTRUCTION.**

**1227.4.1 Services/systems and utilities.** Correctional treatment centers shall comply with this section.

**1227.4.1.1 Oxygen, vacuum and medical air.** Correctional treatment centers shall comply with the requirements of Section 1224.4.6 wherever applicable.

**1227.4.2 Service spaces.** Spaces for dietary, laundry, morgue, ambulance entrance, receiving areas, power plants, mechanical equipment, incinerator, garbage can cleaning, automobile parking and storage areas for garbage, trash and medical gases shall be located and constructed to minimize noise, steam, odors and hazards in patient care areas and bedrooms.

**1227.4.3 Treatment spaces.** Radiology, laboratory, pharmacy and physical therapy spaces shall not be located in nursing units, surgical units, perinatal units, nursery areas, central sterilization rooms, food service areas, power plants, mechanical equipment rooms, maintenance shops, general storage, laundry, employees' dressing or housekeeping facilities.

**1227.4.4 Treatment or exam room.** If a treatment room or an exam room is provided, it shall have a minimum area of 80 square feet ( $7.43\text{ m}^2$ ), the least dimension of which shall be 8 feet (2438 mm).

**1227.5 CORRIDORS.**

**1227.5.1 Width.** The minimum width of corridors shall be 8 feet (2438 mm).

**Exception:** Patient-care corridors in correctional treatment centers for psychiatric care of patients who are not bedridden shall have a minimum clear and unobstructed width of 6 feet (1829 mm). For the purpose of this section, bedridden patients shall be defined as patients confined to beds who would be transported or evacuated in beds or litters.

**1227.5.2 Service corridors width.** Service corridors with anticipated light traffic volume for nonpatient use may be reduced to a width of 5 feet (1524 mm) if approved by the enforcing agency.

**Exception:** Corridors in administrative and business areas may be reduced to a width of 44 inches (1118 mm).

**1227.5.3 Handrails.** Corridors for patient traffic in areas providing skilled nursing, intermediate, care or rehabilitation services shall be furnished with a handrail on both sides at a height not less than 30 inches (762 mm) or greater than 36 inches (914 mm).

**1227.5.4 Connections.** Corridor systems shall connect all patient rooms and essential services.

**1227.6 DOORS AND DOOR OPENINGS.**

**1227.6.1 Toilet room doors.** Doors to toilet rooms shall have an opening of not less than 32 inches (813 mm) clear in width and shall be equipped with hardware which will permit the door to swing outward or in a manner to negate the need to push against a patient who may have collapsed within the toilet room.

**1227.6.2 Pocket doors.** Pocket sliding doors are not permitted.

**Exception:** Doors not serving as exit doors from administration areas.

**1227.6.3 Door view windows.** Doors to patient bedrooms shall be provided with a view window with a minimum area of 288 square inches (0.186 square meters). Window sill height shall not be higher than 42 inches (1067 mm) from the floor.

**1227.7 WINDOWS AND SCREENS.**

**1227.7.1 Natural light.** Rooms approved for the housing of patients shall be provided with natural light by means of glazed openings.

**1227.7.2 Screens.** When windows are operable, they shall be provided with insect screens of 16 meshes to the inch.

**1227.7.3 Light and ventilation.** All portions of a building used by patients, personnel or other persons shall be provided with artificial light and a mechanically operated ventilating system as specified in the California Electrical Code and the California Mechanical Code.

**1227.7.4 Patient viewing windows.** Each patient bedroom shall be provided with viewing windows from the corridor to allow full and unobstructed visual observation of the patient.

**1227.8 CEILING HEIGHTS.**

**1227.8.1 Minimum height.** The minimum height of ceilings shall be 8 feet (2438 mm).

**Exception:** Closet, toilet rooms and bathroom minimum ceiling heights shall not be less than 7 feet (2134 mm).

**1227.8.2 Minimum height with fixed ceiling equipment.** Rooms containing ceiling-mounted, major fixed equipment or ceiling-mounted surgical light fixtures shall have ceiling heights to accommodate the equipment or fixtures and their normal movement.

**1227.9 INTERIOR FINISHES****1227.9.1 Floor finishes.**

**1227.9.1.1 Floor finishes.** Shall be smooth, waterproof and durable.

**Exception:** Upon written appropriate documented request, the enforcing agency may grant approval of the installation of carpet. See Table 1224.4.11.

**1227.9.1.2 Resilient flooring.** If used in toilet and bathing rooms, shall be continuous and extend upward onto the walls at least 5 inches (127 mm).

**1227.9.2 Wall bases.**

**1227.9.2.1 Materials and installation.** The material and textures of bases and the installation thereof shall be such as to minimize dust-catching surfaces, moisture, infiltration and the harboring of vermin.

**Exception:** In locations where carpet is permitted as a floor finish material, the use of carpeted base (coved or strip base) up to a maximum height of 5 inches (127 mm) is also permissible.

**1227.9.2.2 Wood bases.** Wood bases are prohibited except in administration departments and other offices described in Section 1227.16.

**Exceptions:** Wall bases in kitchens, operating rooms, delivery rooms, emergency operating rooms, cast rooms, special procedure rooms and other areas which are subject to wet cleaning methods shall be made integral and coved with the floor, and constructed without voids at the intersection of floor and wall surfaces.

**1227.9.3 Walls.** Interior wall finishes shall be smooth, washable and durable.

**1227.9.4 Ceilings.** Ceiling finishes shall be in compliance with Table 1224.4.11.

**Exceptions:** Walls and ceiling finish requirements do not apply to boiler rooms, mechanical equipment rooms, administration departments, other offices, enclosed stairways, maintenance shops and similar spaces.

## 1227.10 ELEVATORS.

**1227.10.1** Patient elevators shall have minimum inside platform dimensions of 5 feet by 8 feet (1524 mm by 2438 mm) and a minimum clear door opening of 4 feet, 0 inches (1118 mm).

**1227.10.2** Passenger elevators shall have minimum inside platform dimensions of 4 feet, 8 inches by 7 feet, 4 inches (1422 mm by 2236 mm).

**1227.10.3** Buildings over one story in height with accommodations or services for patients on floors without grade level entrance shall provide at least one passenger or patient elevator.

**1227.10.4** If bed patients are accommodated on one or more floors, other than the main entrance floor or where operating rooms or delivery rooms are above or below the main entrance floor, at least one patient elevator shall be provided.

**1227.10.5** At least one patient elevator and one service elevator shall be provided in correctional treatment centers with a capacity of 60 to 149 beds on floors other than the main entrance floor.

**1227.10.6** At least one patient elevator, one passenger elevator and one service elevator shall be provided in hospitals with a capacity of 150 or more beds on floors other than the main entrance floor.

**1227.10.7** If elevators in the correctional institution meet the above size requirements and are easily accessible, the elevators need not be duplicated in the correctional treatment centers.

**1227.11 GARBAGE-SOLID WASTE AND TRASH STORAGE.** Rooms or screening enclosures shall be provided for the washing and cleaning of garbage containers and for the storage of garbage, trash, and other solid wastes. Such rooms or screening enclosures shall include the following:

1. A concrete floor with a curb and with a drain connected to the sewer.

2. Steam or hot-water and cold-water supply.
3. A minimum floor area of .5 square feet ( $0.046 m^2$ ) per bed, but not less than 25 square feet ( $2.32 m^2$ ), the least dimension of which shall be 4 feet (1219 mm).
4. A method of limiting access to the material except by authorized persons.

## BASIC SERVICES

### 1227.12 NURSING SERVICE SPACE.

**1227.12.1 Patient bedrooms.** Patients shall be accommodated only in rooms with the following minimum floor area, exclusive of toilet rooms, wardrobes, entrance vestibules, and fixed furnishings or equipment.

1. Single-patient rooms: 110 square feet ( $10.22 m^2$ ).
2. Multi-patient rooms: 80 square feet ( $7.43 m^2$ ) per bed.

**1227.12.2 Distance.** A minimum distance of 3 feet (914 mm) shall be provided between beds and 4 feet (1219 mm) between the foot of beds and walls or fixed objects in multipatient rooms, and 3 feet (914 mm) in single-patient rooms.

**1227.12.3 Airborne infection isolation rooms.** Single rooms shall be provided for the isolation of patients with airborne communicable disease at a ratio of one room for each 35 beds, or major fraction thereof. At least one airborne infection isolation room shall be provided. Airborne infection isolation rooms shall be labeled with the words "Airborne Infection Room" on or adjacent to the anteroom side of the door between the isolation room and the anteroom.

**1227.12.3.1 Alternates.** Alternate designs for modifications to isolation rooms in operation prior to the effective date of this section may be utilized when it can be demonstrated that the alternate design meets performance requirements, without compromising any health or life-safety requirement.

**1227.12.3.2 Anteroom doors.** Airborne infection isolation room(s) shall have self-closing and latching devices on all anteroom doors.

**1227.12.3.3 Anteroom.** A separate anteroom shall be provided between the airborne infection isolation room and the corridor, which shall constitute the primary entrance to the negative pressure isolation room. This anteroom shall have a handwashing fixture, work counter at least 3 feet (914 mm) long, cabinets and space to gown and to store clean and soiled materials. There shall be a view window from the anteroom to the isolation room and means to allow for airflow from the anteroom into the negative pressure isolation room. Doors shall be aligned to allow large equipment to be wheeled into the airborne infection isolation room unless a secondary door complying with Section 1227.12.3.4 is provided. One anteroom may serve no more than two airborne infection isolation rooms.

**1227.12.3.4 Secondary entry.** When a secondary entry is provided directly from the corridor to the negative-pressure isolation room, secondary doors shall be pro-

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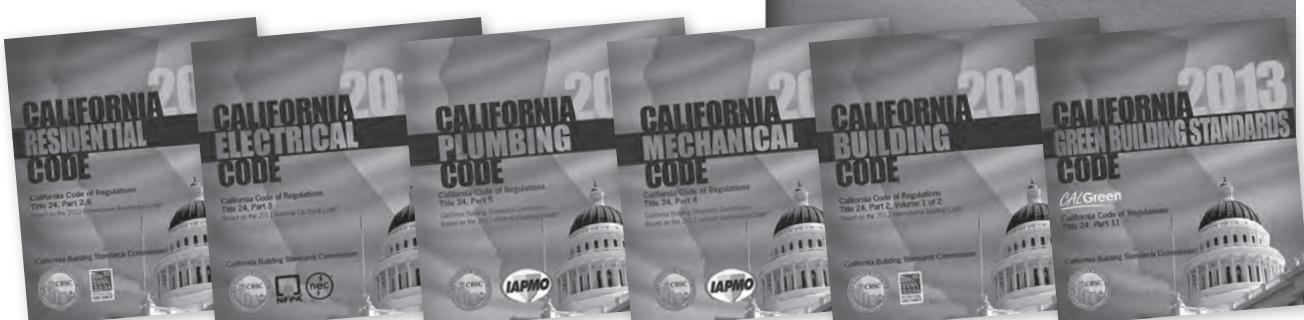
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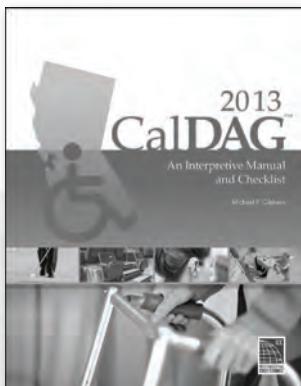
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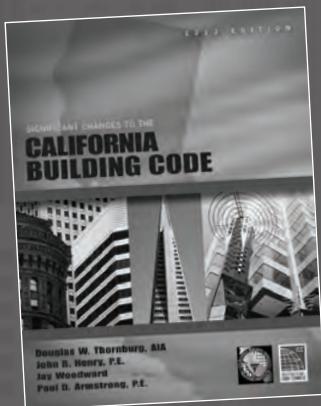
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