

Accessibility in Commercial and Residential Buildings



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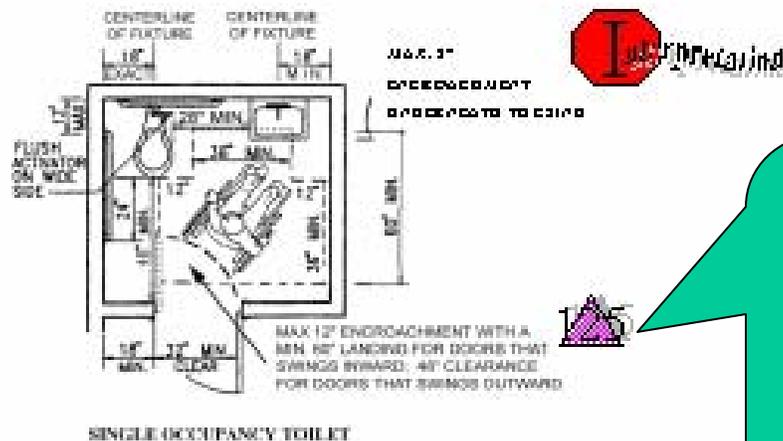
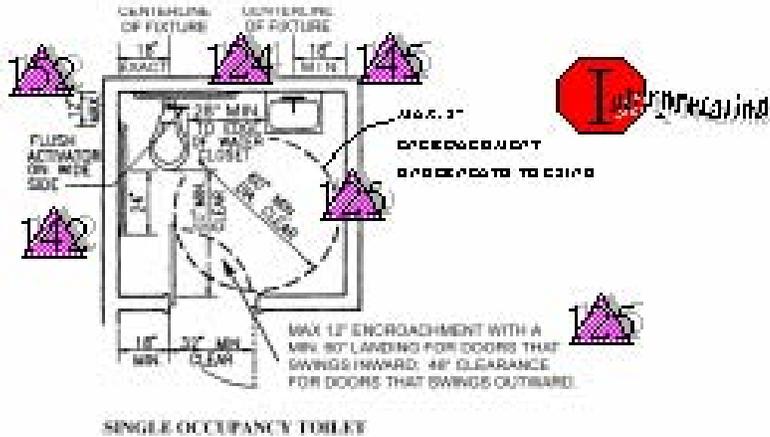
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Restrooms – Single Accommodation

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These numbers reference the corresponding code sections, located in Appendix A or B

Modifications that request for private sanitary facility (ie. restroom and shower exclusively use by the building owner) to be exempt from accessibility requirements will no longer be granted.

The Americans with Disabilities Act (ADA) became law on July 26, 1990. Its purpose was to remove physical and other barriers affecting the estimated 43 million Americans who have some form of disability and, in effect, to fully integrate disabled persons into the work and social environment. Since the ADA is federal civil right legislation, authority for enforcement of its provisions lies with the U.S. Department of Justice and the federal courts.

State Assembly Bill 1077, which was passed into law on January 1, 1993, required revisions to state access laws for the purpose of integrating the more restrictive requirements of the ADA. California law was required to be strengthened where it was weaker than the ADA and was retained where it provided more protection/accessibility than the ADA. The revised Title 24, after "certification" by the Department of Justice, would result in a single comprehensive document that would satisfy the model code, state code, and the federal accessibility requirements.

On March 5, 1993 the California State Building Commission approved the formal regulations adoption of disabled access requirements, which consisted of the incorporation of the more restrictive ADA requirements, for commercial projects and publicly-funded living accommodations, hotels, and motels. These new revised state regulations, Title 24, had a publication date of October 1, 1993 with an effective date for enforcement by local building departments of April 1, 1994.

State Legislation:

The State of California Access Laws which govern the access requirements for enforcement by the Building Official consist of the *Government Code* and the *Health and Safety Code*.

1. The Government Code is the state legislation applicable to public buildings and facilities with access requirements adopted in 1968.
2. The Health and Safety Code is the state legislation applicable to privately funded buildings and facilities with access requirements adopted in 1970.

In the legislation, the Office of the State Architect was charged with the responsibility for developing regulations for access to buildings and facilities. Until such time as the regulations, later known as *Title 24* were developed, the *Government Code* adopted, as the access standard, the 1961 edition of the *American Standards Association (ASA) Specifications A117.1*, later known as the *American National Standards Institute (ANSI) Specifications*.

State Regulation:

Title 24 of the *California Code of Regulations* is the regulation for accessibility that applies to commercial and residential construction.

1. The Office of the State Architect Access Compliance Section (OSA/AC) developed the access regulations for commercial and residential (hotel, motel, and dormitory building or complex) construction contained in *Title 24*. Their *Interpretive Manual* was also developed to help implement the regulations.
2. The Department of Housing and Community Development (HCD) developed the access regulations for apartment and condominium construction contained in *Title 24*. Their interpretive manual, *New Horizons*, was developed to implement the regulations.

Federal Legislation/Requirements:

1. The *ASA (ANSI) Standards* were approved on October 31, 1961. These standards contained six pages of recommendations which provided less than adequate information on how to make a building accessible. These standards were

Introduction

published by the National Society for Crippled Children and Adults, Inc. , with the permission of the American Standards Association, Inc.

These standards were used in California from March 4, 1972 until July 1, 1982 as access requirements for all buildings and facilities used by the public, with the exception of private residences.

2. The *Americans with Disabilities Act (ADA)* is federal legislation prohibiting discrimination against disabled individuals which seeks to guarantee equal opportunities for the disabled in the areas of employment, public accommodations, transportation, state and local government services, and telecommunications. The *ADA* was signed into law on July 26, 1990. The *ADA* is composed of the following four title:

I. Employment practices.

II. Public services.

III. Public accommodations and services operated by private entities.

IV. Telecommunications.

Of most interest to building owners, designers, and contractors is *Title III*, which includes the removal of architectural barriers where such removal is "Readily Achievable" and establishes accessibility standards for new construction and alterations.

The guidelines under *Title III* became effective on January 26, 1992. For new construction, the statute refers to facilities designed and constructed for first occupancy after January 26, 1993.

Enforcement of the *ADA* is through a complaint procedure to the Department of Justice and eventually to the courts.

3. The *Federal Fair Housing Amendments Act of 1988 (FHAA)* is federal legislation that became effective on March 13, 1991. This Act preempted state requirements for accessibility in housing for physically disabled wherever the Federal requirements were more stringent than the state requirements.

The disabled access portion of the *Federal Fair Housing Amendments Act of 1988* applies to multi-family dwellings, including condominiums,

Introduction

with four or more units, unless either of the following occurs :

1. The development receives a building permit on or before January 13, 1990 and completes construction under that permit.
2. The development is designed and constructed for first occupancy * on or before March 13, 1991.

* First occupancy for condominium buildings is the date of first sale.
First occupancy for apartment buildings is the date of first lease or rent.

Local building officials have no authority and are not responsible for enforcement of the *Federal Fair Housing Amendments Act* requirements.

On April 15, 1992, the "*Emergency Regulations*" of the State of California that combined portions of the existing state regulations with the more stringent requirements of the *FHAA* became effective

History-Commercial

Mar 4, 1972 Effective date of disabled access requirements (*1961 ASA (ANSI) Standards*) for all buildings and facilities used by the public, not including private residences.

1. Buildings and facilities were required by Statute (*Government Code*) to comply with the *1961 ASA (ANSI) Standards* until regulations were developed by the Office of the State Architect (OSA).

July 1, 1982 Effective date of *Title 24 Regulations* for commercial facilities.

1. Developed by the Office of the State Architect (OSA).
2. Applicable to commercial and residential (hotel, motel, dormitory building or complex) construction.
3. *Title 24 Regulations* are contained in the *California Administrative Code* (later referred to as the *California Code of Regulations*).

Jan 1, 1983 Effective date of revisions to *Title 24 Regulations* for commercial facilities.

1. Miscellaneous changes, the most significant of which was the lever hardware requirement for existing doors being remodeled or along a path of travel in buildings undergoing alterations.

Sept 15, 1984 Effective date of revisions to *Title 24 Regulations* for commercial facilities.

1. Miscellaneous changes, the most significant of which related to requirements for plumbing, elevators, stairs, and landings at doors.

History-Commercial

Jan 1, 1990 Effective date of revisions to ***Title 24 Regulations*** for commercial facilities.

1. Miscellaneous changes, the most significant of which related to requirements for elevators, disabled parking stall identification, lavatory, grab bar, and water closet locations, and assembly seating and listening devices.

Apr 1, 1994 Effective date of revisions to ***Title 24 Regulations*** for commercial facilities.

1. Adopted by the State Building Standards Commission on March 5, 1993.
2. Published by the International Conference of Building Officials (IBO) on October 1, 1993.
3. Includes the 1992 amendments to the ***1991 Uniform Building Code (UBC)*** as mandated by Statute (***Health and Safety Code***).
4. Integrated into ***Title 24*** those portions of the federal ***Americans With Disabilities Act (ADA)*** that were either more stringent than the state ***Title 24 Regulations***, or that contained requirements that were not found in the state ***Title 24 Regulations***.
5. Chapter/section format revised similar to ***UBC*** format with the majority of the access requirements relocated into the new Chapter 31 A.

2004 2002 edition of Los Angeles Building Code is currently used. All requirements are in Chapter 11A for residential buildings and 11B for commercial and 11C for fuel dispensing facilities.

History-Apartments

Dec 9,1982 The State Building Standards Commission approved the adaptability and accessibility regulations for apartment houses with a cost cap of \$1,000 per applicable unit.

Dec 19,1983 Amendments to the applicability of the regulations, approved by the State Building Standards Commission:

1. Cost cap reduced from \$1,000 to \$600 per applicable unit.
2. Applicable to five or more dwelling units on the same site.
3. Condominium buildings were exempt.

Sep 15,1984 “Cost cap” regulations went into effect.

Jan 1, 1990 Amendments to the regulations became effective. The major items approved by commission were:

1. The cost cap was repealed.
2. Five percent of all apartment buildings on site were to fully comply with the access and adaptability regulations.
3. All other accessible units would be required to provide twelve mandatory features.
4. Condominium buildings were exempt.

Mar 13, 1991 The housing provisions of the Federal Housing Amendments Act of 1988 became effective with enforcement by HUD.

Apr 15, 1992 The California Building Standards Commission emergency regulations became effective. The major items were:

1. Applicable to four or more units in one building.
2. All units at ground floor levels were to comply with the access regulations.
3. Applicable to condominium buildings.

Jul 15, 1993 California multi-family Disabled Access Regulations became effective.

2004 Chapter 11A in 2002 Los Angeles Building Code based on 2001 California Building Code is currently in effect.

Accessibility in Existing Commercial Buildings



Accessibility for Existing Buildings

Per Section 1134B.2

Accessibility is required for all existing buildings (including historical) and the following must comply:

1. The area of specific alteration, structural repair or addition
2. A primary entrance to the building or facility.
3. The primary path of travel to the specific area of alterations, structural repair or addition.
4. Sanitary facilities serving the area.
5. Drinking fountains serving the area.
6. Public phones serving the area.

Exceptions

Per Section 1134.B.2.1

There are four exceptions:

1. The accumulated improvement valuation within a three- year period shall not exceed the valuation threshold of \$101,000 (Jan/2004) See page I 10.
2. Non-elevator buildings built before July 1, 1982 with a permit valuation > \$101,000.
See page I 11.
3. Alterations to remove barriers. See page I 12.
4. Projects consisting of maintenance and cosmetic work. See page I 13.

NOTE: Publicly funded buildings, emergency offices, lease spaces for government offices must comply. Exception 1& 2 listed above do not apply to government offices.
See Section 101.17.11.1(1.2)for more information.

Exception 1

The accumulated improvement valuation within a three year period shall not exceed the valuation threshold of \$101,000 (1/2004)

- The proposed work must be performed by the same tenant in the same tenant space within a three- year period.
- If an “Unreasonable Hardship” determination is made and if the cost of providing upgrades outside of the area of alteration, structural repair, or addition exceeds 20% of the project cost, only 20% of the project construction cost needs to be spent on the following items (in the order listed):
 - a. An accessible entrance to the building or facility
 - b. An accessible path of travel to the area of alteration
 - c. Accessible sanitary facilities
 - d. Accessible drinking fountains
 - e. Additional accessible elements such as parking, storage and alarms.

Exception 2

Non-elevator buildings built before July 1, 1982 with a permit valuation > \$101,000.

- Even though the cost of alteration, structural repair, or addition exceeds \$101,000, only 20% of the project valuation needs to be spent on the accessibility improvements outside the area of remodel.
- For example, if the valuation for a T.I located on the 2nd floor of a non-elevator building (that was built prior to July 1, 1982) is \$250,000, the applicant must spend a minimum of \$50,000 ($\$250,000 \times 20\%$) on accessibility improvements outside the area of remodel as outlined in Exception 1.

The applicant does not have to upgrade ALL elements along the path of travel.

Exception 3

Alterations to Remove Barriers (Section 1134B.2.1, Exception #3)

The following are examples of alterations, structural repairs or additions solely for the purpose of removing barriers. Accessibility improvements need not extend beyond the limited to the actual scope of the project. However, all work must comply with the provisions of this Code.

- When altering ONE building entrance
- When altering ONE toilet facility
- When altering existing elevators
- When altering existing steps
- When altering existing handrails

The following examples are a few commonly encountered alteration projects from exception 3.6 and 3.7. (See exception 3.6 for a complete listing).

- Installing accessible ramps
- Making curb cuts in sidewalks and entrances
- Widening doors
- Installing accessible door hardware
- Installing grab bars in toilet stalls
- Rearranging toilet partitions to increase maneuvering space.
- Altering existing parking lots by resurfacing and/ or restriping

Projects consisting of maintenance and cosmetic work:

Examples:

- Heating, ventilation, air conditioning, reroofing
- Electrical work not involving placement of switches and receptacles
- Installation of equipment (no structural calculations).
- Cosmetic work such as painting and carpeting

Note: the installation of carpet still needs to comply with Section 1124B.3.

If carpet or carpet tile is used on a ground or floor surface, it shall be securely attached; have a firm cushion, pad or backing or no cushion or pad; and have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. The maximum pile height shall be 1/2". Exposed edges of carpet shall be fastened to floor surfaces and have trim along the entire length of the exposed edge. Carpet edge trim shall comply with Section 1124B.2.

(1124B.3, Fig 11B-7B(b))

1134B.2.2 Where it is **technically infeasible** in the area of an alteration to make existing restroom facilities code compliant and to install separate sanitary facilities for each sex, then the installation of at least one unisex toilet/bathroom per floor being altered, located in the same area as existing toilet facilities, will be permitted. Such a facility shall meet the requirements of Section 1115B.7.2.

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

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

- 1.1 Where the occupant load is less than 10, except Group I, Division 1 Occupancies, doorways may be 30 inches (762 mm) in clear width.
- 1.2 Where occupant load is greater than 10 and it is determined that compliance with Section 1120A.2.3 would create an unreasonable hardship, doorways may be 30 inches (762 mm) in clear width.

2. In existing buildings, the provisions of this section shall not apply when legal or physical constraints will not allow compliance with these building standards or equivalent facilitation without creating an unreasonable hardship. See Section 101.17.11, Item 4.

Summary of Exceptions

PROPOSED PROJECT	EXAMPLES	EXEMPT	NOT EXEMPT	COMMENTS
General				
Projects with no construction work		X		
Earth quake repair/ seismic retrofitting buildings (all work to be at or within the diaphragm)	Div. 88, Div. 91, Div. 95, epoxy crack repair	X		Installation of shear walls to stabilize the structure shall require disabled access compliance.
Projects that only involve the installation of accessibility features (ie. installing grab bars, lifts, ramps...etc.)		X		All installations have to meet accessibility guidelines.
Publicly funded buildings , emergency offices, lease spaces for government offices must fully comply. See Section 101.17.11.1 for more information.			X	The elevator exemption per Section 1103.B.1 will not apply.
T-bar ceiling (cosmetic only)	removal and replacement of acoustic panels (existing metal T-bar grid to remain)	x		
Alterations solely for the purpose of removing barriers to meet accessibility requirements per Section 1134B.2.1 Exception # 3:				All alterations have to meet current code requirements.
altering one building entrance		X		"
altering one existing toilet facility		X		"
installing grab bars in toilet stalls		X		"
altering existing elevators		X		"
installing a new elevator <i>and providing a path of travel to the elevator</i>		X		"
altering existing steps and handrails		X		"
installing ramps		X		"
making curb cuts		X		"
installing accessible door hardware		X		"
creating designated accessible parking stalls		X		"
altering existing parking lots by resurfacing and/or restriping		X		"
Projects which consist only of heating, ventilation, air conditioning, reroofing, electrical work not involving placement of switches and receptacles, cosmetic work such as painting.				"
Trellis, gas station canopies		X	X	Check path of travel and restrooms. Increase in floor area may require additional plumbing fixtures.

Summary of Exceptions

PROPOSED PROJECT	EXAMPLES	EXEMPT	NOT EXEMPT	COMMENTS
Offsite parking				
Repainting parking stalls (existing layout to remain)		X	X	Both on-site and off-site parking needs accessible parking stalls
Restriping of the parking lot				
Remodel of storefront/ facade remodel.				check path of travel from the accessible stall to the entrance.
Unmanned structures	water towers, buildings housing telecommunication equipments	X		
State approved coaches				check parking, path of travel & restrooms (if the restrooms are not located within the trailer)
APARTMENTS				
S.F.D. & duplexes that are not publicly funded		X		Publicly funded buildings shall also comply with Federal ADA requirements.
Multiple duplexes on one lot		X		Disabled Access requirements apply to buildings and not to the number of dwellings on one lot.
Buildings containing less than four condominium units		X		
Apartments of three or more units				
Conversions from an apartment to condominium after a C of O has been issued for the apartment.		X		
Alterations to an existing covered multifamily dwelling units without removing any existing accessibility features.	Restroom remodel in an existing apartment unit, currently there are no grab bars or any indications of existing accessibility features	X		Can not remove any accessibility features.
Addition to an existing apartment without creating a new ground floor unit.		X		Stairways leading to the new units above the ground floor and additional parking are also exempt.
Townhouse type multifamily dwelling units without elevators.		X		

Hardship Exemption Form

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CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: January 12, 2004

TO: All Disabled Access Plan Reviewers and Structural Plan Check Engineers

FROM: Ewa O'Neal
Disabled Access Engineer

SUBJECT: **VALUATION THRESHOLD FOR ALTERATIONS,
STRUCTURAL REPAIRS , OR ADDITIONS**

Exception No. 1 under Los Angeles Building Code section 1134B.2 specifies a valuation threshold of \$50,000, based on the January 1981 "ENR US20 Cities" average construction cost index of 3372.02 ("Engineering News Record", McGraw Hill Publishing Company), for use in making an "Unreasonable Hardship" determination for construction projects consisting of alterations, structural repairs, or additions. This exception further requires the enforcing agency to annually update the valuation threshold to an amount based on the increase in the index since the last figure was used.

Based on the January 2004 average construction cost index of 6825, effective immediately, the valuation threshold is hereby increased to **\$101,000** and shall be used by all staff in making an "Unreasonable Hardship" determination.

Attached is the updated Information Bulletin P/BC 2002-76 for unreasonable hardship determination, unreasonable hardship finding, and an updated unreasonable hardship blank form. Effective immediately, discard all old forms and use the updated version.

Hardship Exemption Form

INFORMATION BULLETIN FORM "A"



"UNREASONABLE HARDSHIP" DETERMINATION FOR COMMERCIAL ALTERATION PROJECTS

When the total construction cost of alterations, structural repairs, or additions to existing buildings and facilities does not exceed a valuation threshold of \$93,000 (rev. 01-2001) and the enforcing agency finds that full compliance with the requirements for disabled access upgrades serving the area of alteration, structural repair, or addition creates an "unreasonable hardship", as detailed in Code Section 1134B.2.1, can be requested when the cost of providing the disabled access upgrades is disproportionate to the total construction cost; that is, where it exceeds 20% of the cost of the project without these upgrades. Under this determination, upgrades will still need to be made, but only to the point where the upgrade costs are disproportionate (i.e. 20% of the total construction cost will be required to be spent toward these upgrades).

In choosing which accessible elements to provide, prior to the area of alteration, structural repair, or access in the following order:

1. An accessible building entrance and an access to the public sidewalk, or the accessible parking
2. An accessible route of travel from the access to the alteration, structural repair, or addition.
3. At least one accessible restroom for each sex
4. Accessible telephones, if provided.
5. Accessible drinking fountains, if provided.
6. Additional accessible elements such as parking

Your plan reviewer will provide additional information re determination if you choose to apply for this for your

On the reverse side of this Information Bulletin is an e recorded for a project where an "unreasonable hards

LARUCPhardshipbullet.Doc Title 24-Non-Residential (v-1.0-6/2001)

This valuation may differ from the permit valuation. The Project Valuation is the actual construction cost (i.e. painting, carpeting, consulting fees, etc. can be excluded).



Application for Unreasonable Hardship to Disabled Access Requirements Form "A"
 (For Existing Buildings Where Cost of Construction do not exceed \$93,000 (rev. 1-2001) 1134B.2. Exc. 1

Project Address: 900 S. FREMONT AVE, ALHAMBRA	Plan Check # 01-085-750
Project description: OFFICE SPACE	Total Construction Cost (project valuation) \$75,000

It is requested that the above project be granted an exemption from the requirements of the State of California Title 24, Accessibility Regulations, as specifically listed below. The specific accessibility features that create a hardship may be exempted but not all of them. **The area of alteration itself may not be exempted.**

Access Features item Provide description below	Does this feature meet latest edition of Title 24?	If not, is this feature going to be made accessible as Part of this permit?	If so, cost of making feature accessible? (Documentation may be required) \$ _____
1. Path of travel to entrance	<u>YES</u>	_____	\$ _____
2. Entrance to Building	<u>YES</u>	_____	\$ _____
3. Path of travel within building/ facility to area remodel	<u>YES</u>	_____	\$ _____
4. Elevator	<u>NA</u>	_____	\$ _____
5. Restrooms	<u>NO</u>	<u>YES</u>	\$ <u>18,000</u>
6. Public telephones if provided	<u>NA</u>	_____	\$ _____
7. Drinking fountains if provided	<u>NA</u>	_____	\$ _____
8. Other (parking, ,etc.)	<u>YES</u>	_____	\$ _____
Total cost of access features provided (A)			\$ <u>18,000</u>
Total cost of construction and all other work performed over the last 3 years (B)			\$ <u>75,000</u>
Percentage of total cost of project (20% minimum) : (A + B) x 100%			<u>24%</u>
Description of access features to be provided <u>relocate lavatories to provide required height and clearances,</u>			
<u>relocate existing wall adjoining water closet compartments and install conforming water closets and grab</u>			
<u>bars in men's and women restrooms.</u>			

APPLICANT INFORMATION

I certify that the above noted information is true and correct.

Name (print) _____ Signature _____

Firm Address _____ Position _____

FOR DEPARTMENT USE ONLY

Approved by _____ Title _____ Date _____

Denied by _____ Title _____ Date _____

This document shall be part of the Building plans and shall be entered in the job file of the enforcing agency.

Hardship Exemption Form

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INFORMATION BULLETIN / PUBLIC -BUILDING CODE
REFERENCE NO.: 91.1134B Effective: 7-01-99
DOCUMENT NO. P/BC 2002-76 Revised: 1-12-04
Previously Issued As: IB DA-2



UNREASONABLE HARDSHIP DETERMINATION FOR COMMERCIAL ALTERATION PROJECTS

When the total construction cost of alterations, **structural repairs, or additions to existing buildings and facilities** does not exceed a valuation threshold of **\$101,000** and the enforcing agency finds that full compliance with the requirements for disabled access upgrades serving the area of alteration, structural repair, or addition creates an "unreasonable hardship," an exception can be granted to allow for less than full compliance for the upgrades. This determination for "unreasonable hardship," as detailed in Code Section 1134B.2. 1, can be requested when the cost of providing the disabled access upgrades is disproportionate to the total construction cost; that is, where it exceeds 20% of the cost of the project without these upgrades. Under this determination, upgrades will still need to be made, but only to the point where the upgrade costs are disproportionate (i.e. 20% of the total construction cost will be required to be spent toward these upgrades).

In choosing which accessible elements to provide, priority should be given to those elements that will provide the greatest access in the following order:

1. An accessible building entrance and an accessible path of travel to this entrance from either the public sidewalk or the disabled parking space.
2. An accessible route of travel from the accessible building entrance to the area of alteration, structural repair, or addition.
3. At least one accessible restroom for each sex serving the area of alteration, structural repair, or addition.
4. Accessible telephones, if provided, serving the area of alteration, structural repair, or addition.
5. Accessible drinking fountains, if provided, serving the area of alteration, structural repair, or addition.
6. Additional accessible elements such as parking, storage, and alarms.

Your plan reviewer will provide additional information regarding the "unreasonable hardship" determination if you choose to apply for this for your project.

The second page of this Information Bulletin is an example of the findings that must be provided for a project where an "unreasonable hardship" determination is made. A blank form is also attached.

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities. For efficient handling of information internally and in the internet, conversion to this new format of code related and administrative information bulletins including MGD and RGA that were previously issued will allow flexibility and timely distribution of information to the public.

Hardship Exemption Form



Application for Unreasonable Hardship to Disabled Access Requirements (Form A)
 (For Existing Buildings Where Cost of Construction does not exceed \$101,000 (rev. 1-2004) Sec. 1124B.2. Exc. 1)

Project Address: <u>900 S. Fremont Avenue</u>	Plan Check # <u>O1LAXXX</u>
Project Description: <u>Office tenant improvement</u>	Total Construction Cost (project valuation) \$ <u>75,000</u>

It is requested that the above project be granted an exemption from the requirements of the State of California Title 24, Accessibility Regulations, as specifically listed below. The specific accessibility features that create a hardship may be exempted but not all of them. **The area of alteration itself may not be exempted.**

Access Features item Provide description below	Does this feature meet latest edition of Title 24?	If not, is this feature going to be made accessible as part of this permit?	If so, cost of making feature accessible? (Documentation may be required)
1. Path of travel to entrance	<u>Yes</u>		\$ _____
2. Entrance to Building	<u>Yes</u>		\$ _____
3. Path of travel within building / facility to area remodel	<u>Yes</u>		\$ _____
4. Elevator	<u>NA</u>		\$ _____
5. Restrooms	<u>No</u>		\$ <u>18,000</u>
6. Public telephones if provided	<u>NA</u>		\$ _____
7. Drinking fountains if provided	<u>NA</u>		\$ _____
8. Other (parking, etc.)	<u>Yes</u>		\$ _____
Total Cost of access features provided (A)			\$ <u>18,000</u>
Total cost of construction (B)			\$ <u>75,000</u>
(A + B) x 100% (20% minimum expenditure is required)			<u>24%</u>
Has the same tenant performed work in the same tenant space, within the last three years?			<u>No</u>
Description of access features to be provided	<u>Provide accessible men's and women's restrooms</u>		

Applicant Information

I certify that the above noted information is true and correct.

Name (print) John Smith
 Firm Address 201 West Figueroa Street, Suite #110
Los Angeles, CA 90000

Signature: John Smith
 Position project Architect

FOR DEPARTMENT USE ONLY

Approved by: _____
 Denied by: _____

Title: _____ Date: _____
 Title: _____ Date: _____

As a covered entity under Title I of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities. For efficient handling of information internally and in the internet, conversion to this new format of code related and administrative information bulletins including MGD and RGA that were previously issued will allow flexibility and timely distribution of information to the public.

Hardship Exemption Form



Application for Unreasonable Hardship to Disabled Access Requirements (Form A)
 (For Existing Buildings Where Cost of Construction does not exceed \$101,000 (rev. 1-2004) Sec. 1124B.2. Exc. 1)

Project Address:	Plan Check #
Project Description:	Total Construction Cost (project valuation) \$ _____

It is requested that the above project be granted an exemption from the requirements of the State of California Title 24, Accessibility Regulations, as specifically listed below. The specific accessibility features that create a hardship may be exempted but not all of them. **The area of alteration itself may not be exempted.**

Access Features item Provide description below	Does this feature meet latest edition of Title 24?	If not, is this feature going to be made accessible as part of this permit?	If so, cost of making feature accessible? (Documentation may be required)
1. Path of travel to entrance	_____	_____	\$ _____
2. Entrance to Building	_____	_____	\$ _____
3. Path of travel within building / facility to area remodel	_____	_____	\$ _____
4. Elevator	_____	_____	\$ _____
5. Restrooms	_____	_____	\$ _____
6. Public telephones if provided	_____	_____	\$ _____
7. Drinking fountains if provided	_____	_____	\$ _____
8. Other (parking, etc.)	_____	_____	\$ _____
Total Cost of access features provided (A)			\$ _____
Total cost of construction (B)			\$ _____
(A + B) x 100% (20% minimum expenditure is required)			_____
Has the same tenant performed work in the same tenant space, within the last three years?			_____
Description of access features to be provided _____			

Applicant Information

I certify that the above noted information is true and correct.

Name (print) _____
 Firm Address _____

Signature _____
 Position _____

FOR DEPARTMENT USE ONLY

Approved by _____ Title _____ Date _____
 Denied by _____ Title _____ Date _____

Hardship Exemption Form

Completed forms shall be processed by :

1. Creating an attachment in PCIS and attaching the original form to the permit (for the cashier).
2. Attaching one copy to the plans (do not staple onto the plans).
3. Giving a copy to the applicant.

Edit Application Menu - B29MAIN

Application: Applic. (pencil icon)
Applicant: Applicant (person icon)
Contact: Contact (person icon)
Tenant: Tenant (person icon)
CAEGP: CAEGP (document icon)

Exceptions: Exceptn (hammer icon)
Description of Work: Work Des (document icon)
Checklist Items: Checklist App. (document icon) ← **Red Arrow**
Address: Situs Add (map icon)
Owner: Edit Owners (house icon)

Parcel Document Index: Document (document icon)
Geo Indicators: GEO Indicator (map icon)
Parcel Info: Parcel Info (map icon)
Structures: Assign Structure (building icon)
Structures Inventory: Inventory App. (building icon)

Conditions: Conditn Clearance (checkmark icon)
Process: Process (document icon)
Valuation: Valuatn (calculator icon)

Application Checklist Items - BCHCKBOX

Application # 02016 10000 04437 Line 1 Save & ESC Exit

Checklist Type	Description	Date	Box
Attachment	Plot Plan		
Fabricator Reqd	Shop Welds		
Fabricator Reqd	Structural Steel		
Special Inspect	Field Welding		
Special Inspect	Structural Observation		
Attachment	D.A. Hardship Exemption		

Search, Update, Delete, Save buttons

Application Group: Building
Application Type: Bldg-Alter/Repair

Checklist Type	Description
Attachment	Metes & Bounds Legal
Attachment	Plot Plan
Attachment	Misc. (See Comments)
Attachment	D.A. Hardship Exemption ← Red Arrow
Attachment	Pre-PCIS Application
Attachment	CEQA Historic Questionnaire
Attachment	CEQA Notice of Determination
Attachment	CEQA Notice of Exemption

Visual Index -Parking

1129.3 Medical Care Outpatient Facilities. At facilities providing medical care and other services for persons with mobility impairments, parking spaces complying with this section shall be provided in accordance with Table 11B-6 except as follows:

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

TABLE 11B-6-- SPACES REQUIRED

Total Number of Parking Spaces in Lot or Garage	Minimum Required Number of Spaces
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1000	2 % of total
1001 and over	20 plus 1 for each 100 or fraction thereof over 1001

Accessible van stalls must have a loading area on the passenger side of the vehicle. See page I 23

In a tandem parking situation, specially equipped handicap cars requires them to be self parked furthest away from the driveway. See page I 24

Accessible parking spaces shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own. See page I 26

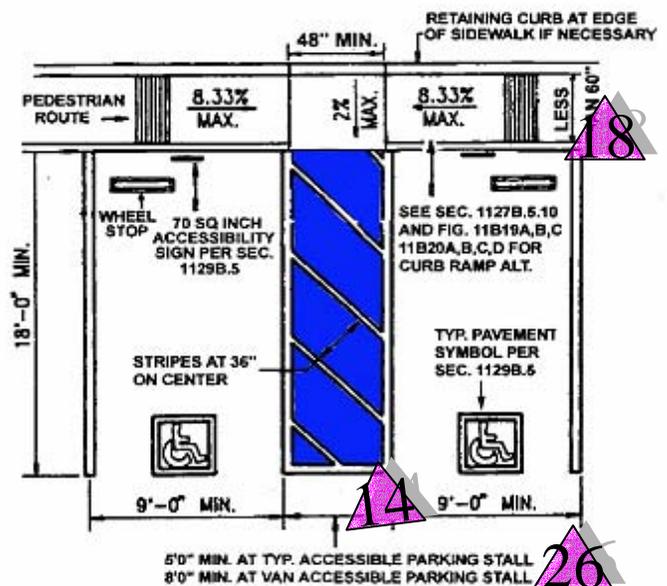
All entrances to and vertical clearances within the parking structures shall have a minimum vertical clearance of 8'-2" to an accessible parking spaces. (The 8'-2" clearance is not only required to the van stall but all accessible stalls).

Accessible parking shall be provided for ***BOTH*** onsite and offsite parking spaces.

1129 B.4.2 Van Space(s). One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches wide minimum and shall be designated van accessible as required by Section 1129B.5. All such spaces may be grouped on one level of a parking structure.

HOWEVER,

1129B.2 Less than Five Spaces. When less than five parking spaces are provided at buildings and facilities subject to these regulations, one shall be 14 feet wide and lined to provide a 9 foot parking area and a 5 foot loading and unloading area. However, there is no requirement that the space be reserved exclusively or identified for use by persons with disabilities only.



RECOMMENDED DOUBLE PARKING STALLS

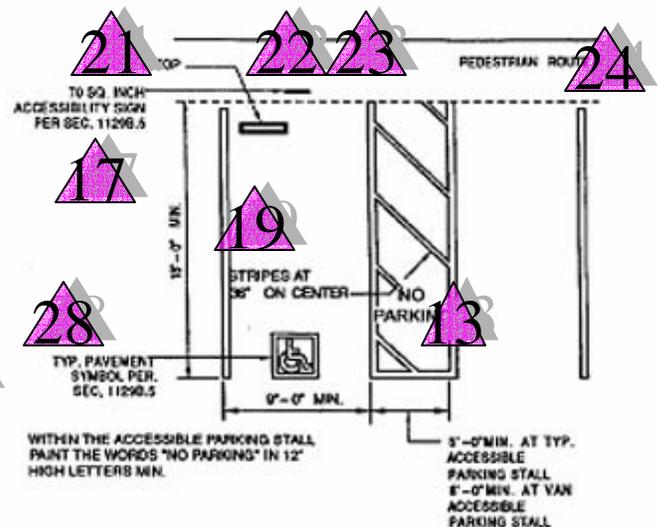


FIGURE 11B-18A DOUBLE PARKING STALLS

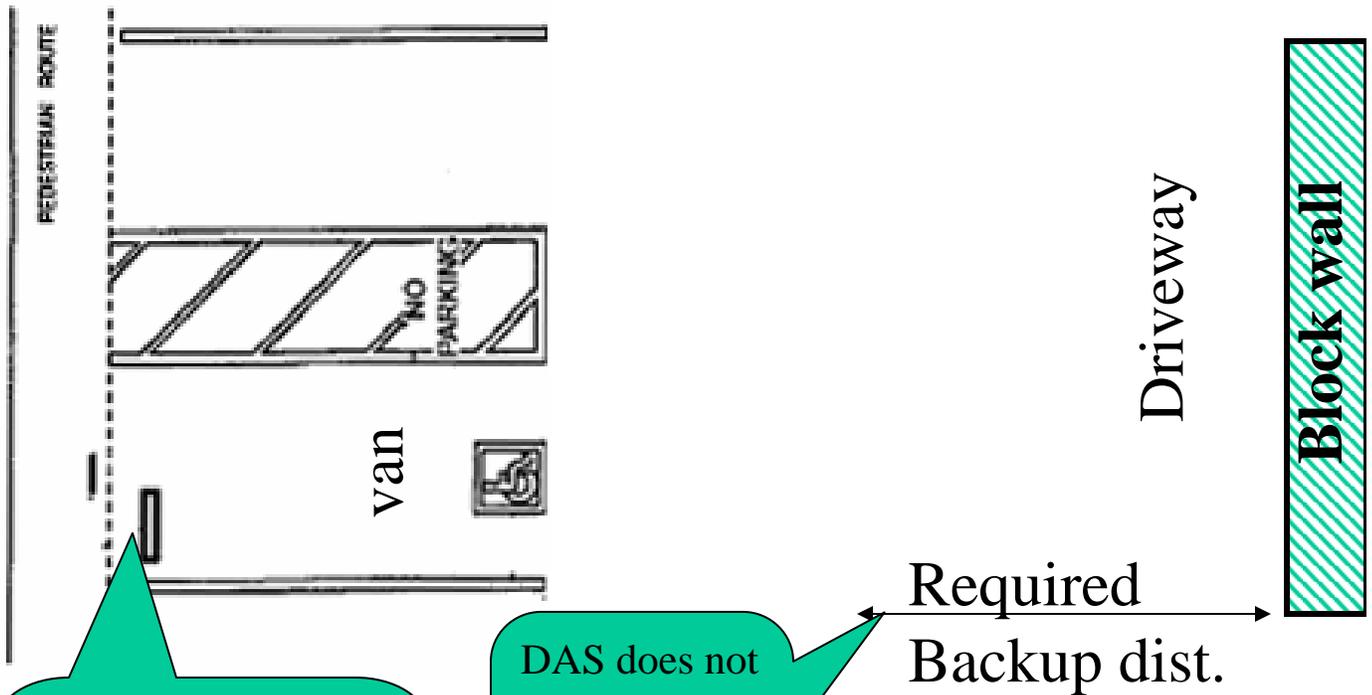
14

Handicap Van Parking Stalls



Accessible van parking space must have the loading and unloading aisle on the passenger side of the parking stall.

Handicap Van Parking Stalls



DAS checks for:

- the number of accessible stalls
- min. 9' wide stall
- min. 18' stall depth

DAS does not check parking parameters from the Zoning Code

Valet drivers can not operate these specially equipped car, therefore, in tandem parking situations, the accessible stall must be the one furthest away from the driveway.



Specially equipped cars for disabled driver.

Path of travel

Path of travel for alterations to an existing building can either be from the street or from an accessible parking stall. This interpretation is from a memo by Ron Shigeta dated 9/29/93. Secondly, this Path of Travel stamp must appear on all site plans showing the path of accessibility for a person in a wheel chair.

CITY OF LOS ANGELES INTRA OFFICE MEMORANDUM

Date: June 8, 2001

To: Disabled Access Plan Check, Counter Plan Check Engineering and Structural Plan Check Engineering Personnel

From: Christina Yee
Disabled Access Section

RE: PRIMARY PATH OF TRAVEL STAMP (Revision of September 29, 1993-memo)

Section 1134B of the California Building Code (1998 edition), specifies that the primary path of travel to the specific area of alteration, structural repair or addition, and sanitary facilities, drinking fountains and public telephones serving the area shall comply with all provisions of Division I, New Buildings.

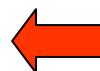
Providing a primary path of travel to the area of alteration, addition or structural repair is required, and is to be verified in the field by the building inspectors. When the plans do not accurately reflect the site conditions, the result is delays in construction, for the applicant must return to plan check and obtain approval for plan revisions that show a conforming path of travel. The delays can be avoided if the project designer verifies that a fully conforming path of travel is provided prior to submitting plans for a building permit, and this information is included on the plans.

Therefore, the project designer will be responsible for demonstrating that a conforming path of travel is provided at the project site. When reviewing plans for compliance with disabled access regulations, plan check personnel are to continue implementing the following procedure:

1. Check to see that the path of travel from the public way or accessible parking space to the area of remodel is clearly indicated on the plans by use of arrows ().
2. Place the following stamp on the sheet of the plans that shows the path of travel and on the back of the permit application. Obtain the signature of the person responsible for the project design and verify that the information required by the stamp is completed.

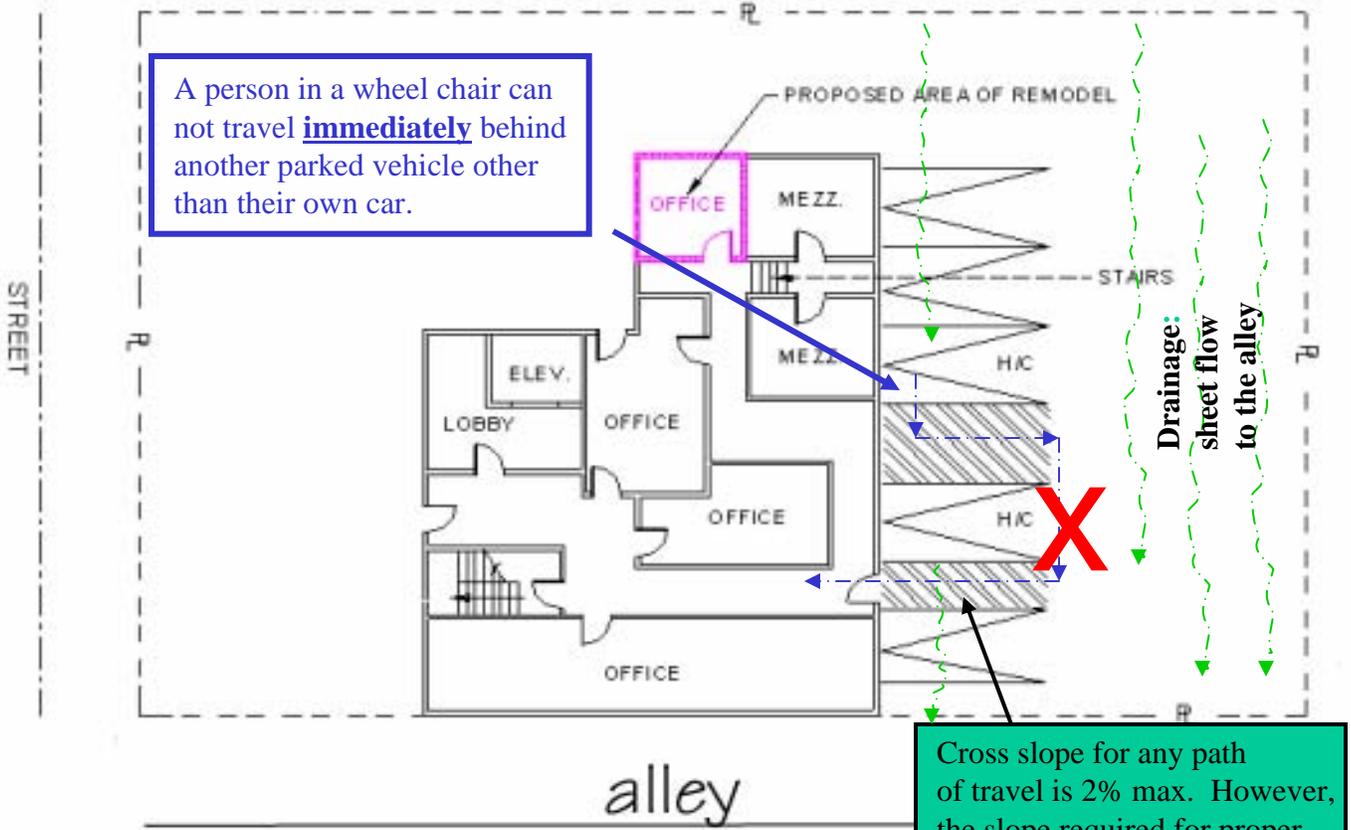
PRIMARY PATH OF TRAVEL

I certify that the primary path of travel to the area of alteration from the public way or accessible parking space as indicated on the plans does not include steps or a slope exceeding 1:20 except where access is provided by a ramp with 1:12 maximum slope or accessible elevator. I understand that if the primary path of travel is found not to be as indicated, significant delays may result.

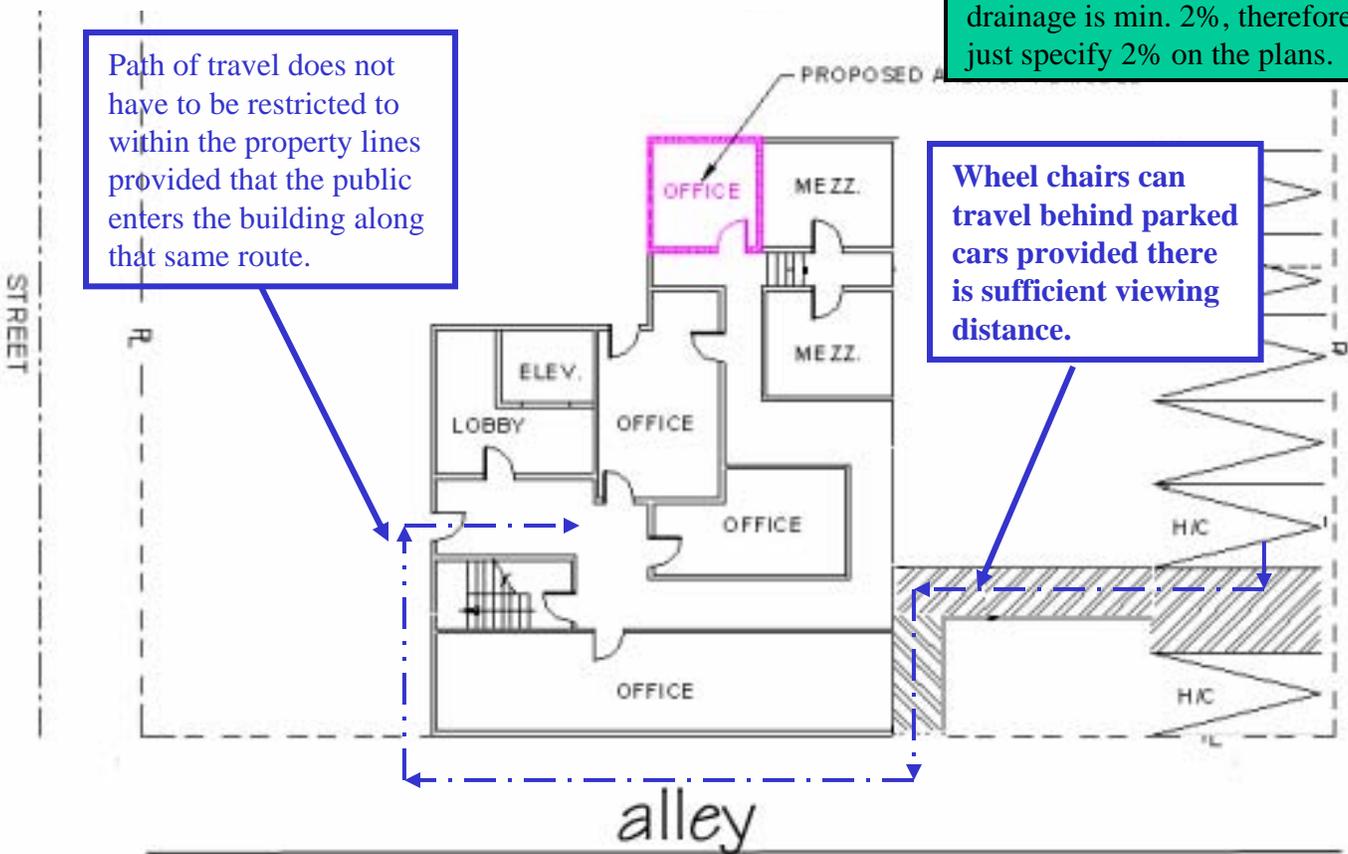


Signature _____ Position _____
Print Name _____ Date _____

Locations of Accessible Stalls



Cross slope for any path of travel is 2% max. However, the slope required for proper drainage is min. 2%, therefore, just specify 2% on the plans.



Path of Travel

CALIFORNIA BUILDING CODE

its and Paths of Travel; and Division IV, Accessibility for Existing Buildings

Entrances — [for HCD 1/AC] Section 1120A.1; [for DSA/AC] Section 1133B

Doors — [for HCD 1/AC] Section 1120A.2; [for DSA/AC] Section 1133B.2

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

Stairways — [for HCD 1/AC] Section 1120A.4; [for DSA/AC] Section 1133B.4

Ramps — [for HCD 1/AC] Section 1120A.5; [for DSA/AC] Section 1133B.5

Aisles — [for DSA/AC] Section 1133B.6

Walks and Sidewalks — [for HCD 1/AC] Section 1120A.7; [for DSA/AC] Section 1133B.7

Hazards — [for HCD 1/AC] Section 1120A.7; [for DSA/AC] Section 1133B.8

Elevators — [for DSA/AC & HCD 1/AC] Section 3003

Special Wheelchair Lifts — [for HCD 1/AC] Section 1110A.2; [for DSA/AC] Section 1116B.2

Alarms — Chapter 35.

See also Part 3, California Electrical Code, and Part 5, California Plumbing Code.

1114B.1.2 Accessible route of travel. When a building, or portion of a building, is required to be accessible or adaptable, an accessible route of travel shall be provided to all portions of the building, to accessible building entrances and between the building and the public way. Except within an individual dwelling unit, an accessible route of travel shall not pass through kitchens, storage rooms, restrooms, closets or other spaces used for similar purposes. At least one accessible route within the boundary of the site shall be provided from public transportation stops, accessible parking and accessible passenger loading zones, and public streets or sidewalks, to the accessible building entrance they serve. The accessible route shall, to the maximum extent feasible, coincide with the route for the general public. At least one accessible route shall connect accessible buildings, facilities, elements and spaces that are on the same site. At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements and with all accessible dwelling units within the building or facility. An accessible route shall connect at least one accessible entrance of each accessible dwelling unit with those exterior and interior spaces and facilities that serve the accessible dwelling unit.

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

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

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

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

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

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

SECTION 1134B — ACCESSIBILITY FOR EXISTING BUILDINGS

1134B.1 Scope. The provisions of this division apply to renovation, structural repair, alteration and additions to existing buildings, including those identified as historic buildings. This division identifies minimum standards for removing architectural barriers, and providing and maintaining accessibility to existing buildings and their related facilities.

1134B.2 General. All existing buildings and facilities, when alterations, structural repairs or additions are made to such buildings or facilities, shall comply with all provisions of Division I, New Buildings, except as modified by this division. These requirements shall apply only to the area of specific alteration, structural repair or addition and shall include those areas listed below:

1134B.2.1 A primary entrance to the building or facility and the primary path of travel to the specific area of alteration, structural repair or addition, and sanitary facilities, drinking fountains and public telephones serving the area.

EXCEPTIONS: 1. When the total construction cost of alterations, structural repairs or additions does not exceed a valuation threshold of \$50,000, based on January 1981, "ENR US20 Cities" average construction cost index of 3372.02 (Engineering News Record, McGraw Hill Publishing Company), and the enforcing agency finds that compliance with this code creates an unreasonable hardship, compliance shall be limited to the actual work of the project. The enforcing agency shall annually update the valuation threshold to a current amount based on the increase in the index since the last figure used as required by Section 1004.5.4.

5. [For SFM] A portion of a stairway landing within an exit enclosure which is vented to the exterior and is separated from the interior of the building by not less than one-hour fire-resistive do

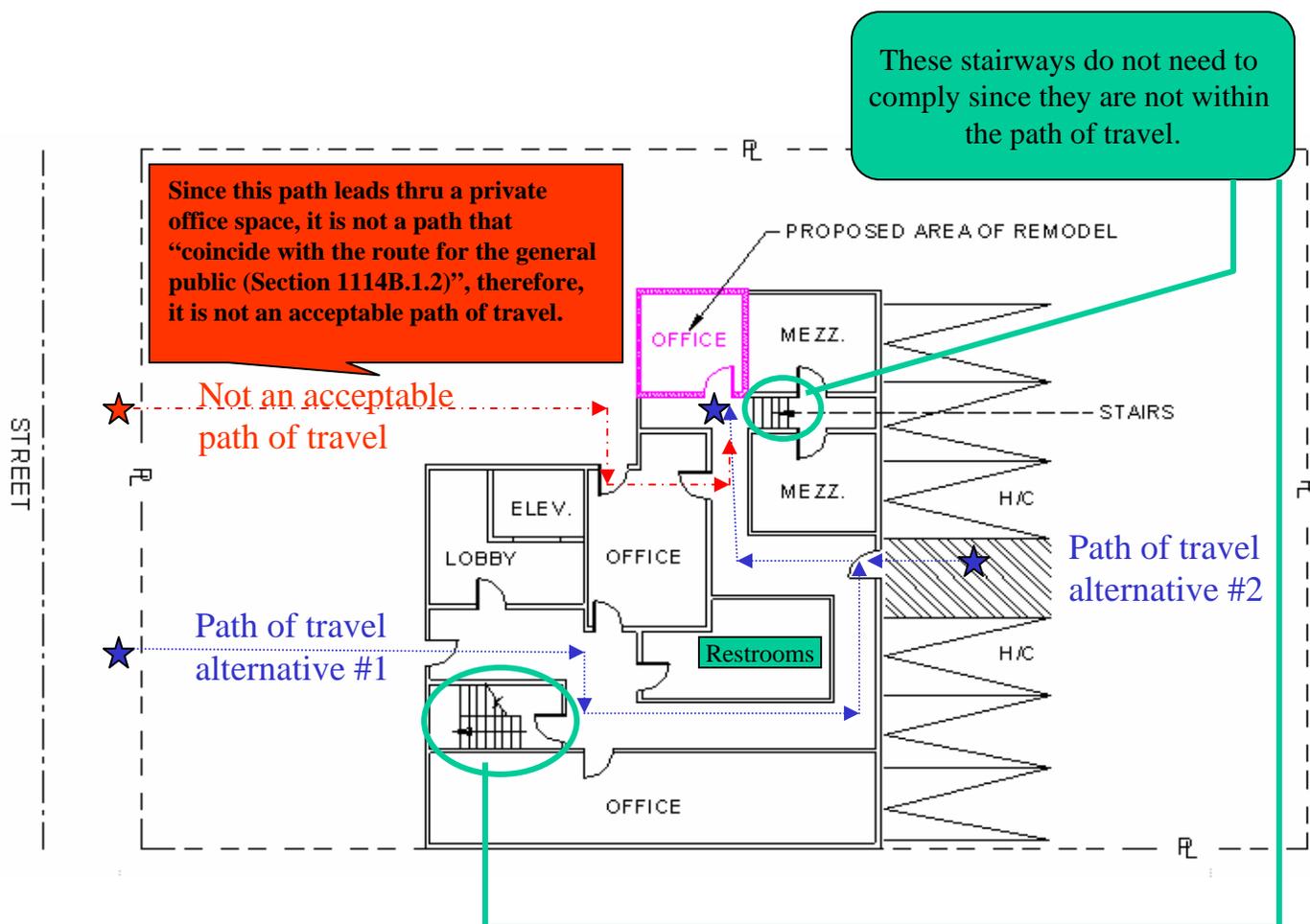
To summarize:

A "path of travel" for an existing building shall lead from the public way or a accessible parking stall to the area of alteration, and also the sanitary facilities, drinking fountains & phones serving this area of construction. Furthermore, this path shall, to the maximum extent feasible, coincide with the route for the general public and shall not pass through any kitchens, storage rooms, restrooms, closets or other spaces used for similar purposes.

Path of travel

Scenario #1:

Remodeling the 1st floor office. The project valuation is **less than** \$101,000.
(The restrooms are on the ground floor level)



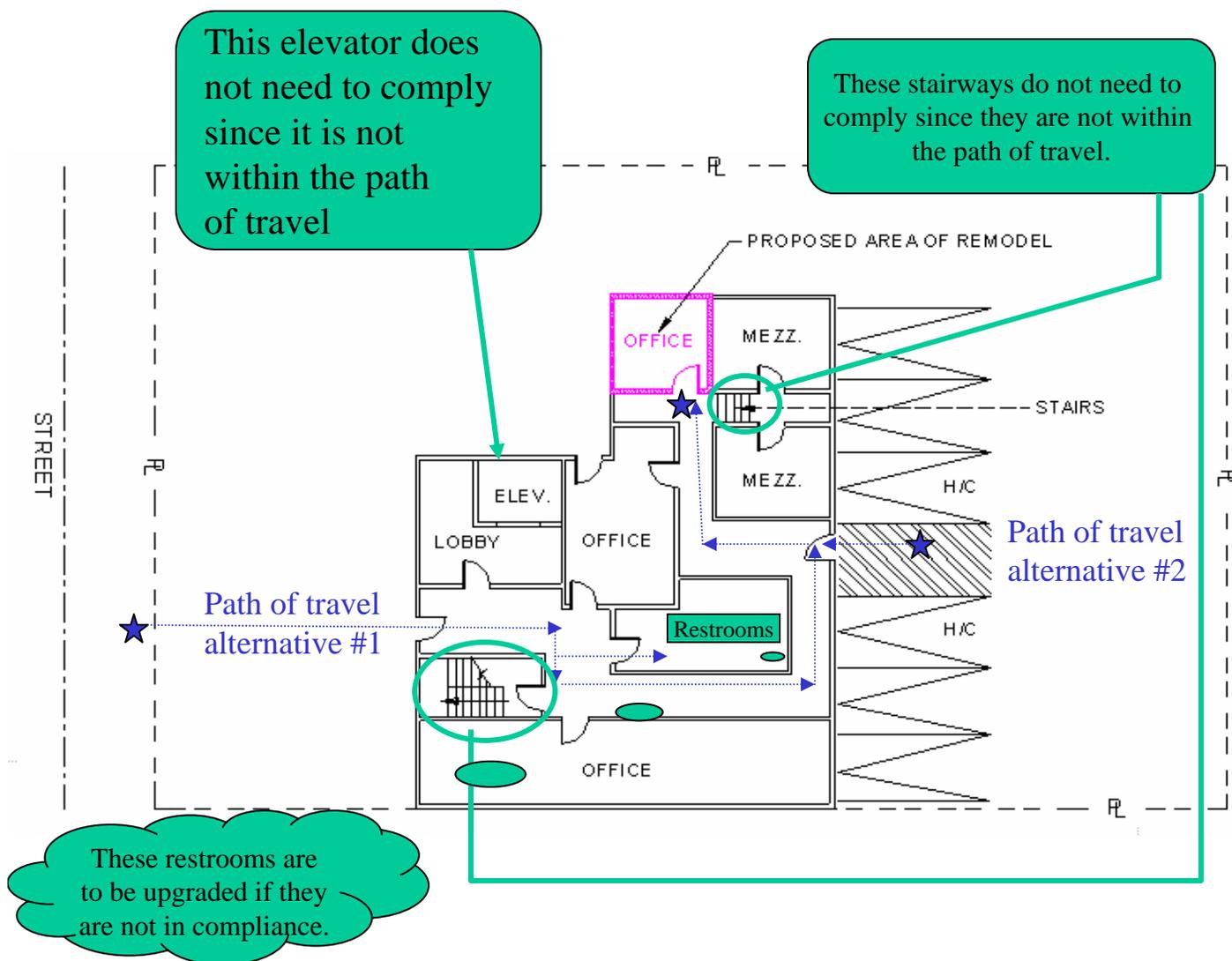
Since the construction cost is less than \$101,000 the applicant can apply for a 20% hardship exemption and provide upgrades (along the path of travel) in this order of importance :

1. An accessible entrance
2. An accessible route to the altered area
3. At least one accessible restroom for each sex
4. Accessible telephones
5. Accessible drinking fountains, and
6. Additional accessible elements such as parking, storage and alarms.

Path of travel

Scenario #2:

Remodeling the 1st floor office. The project valuation is **more than** \$101,000.
(The restrooms are on the ground floor)



All of the following elements along the path of travel must comply :

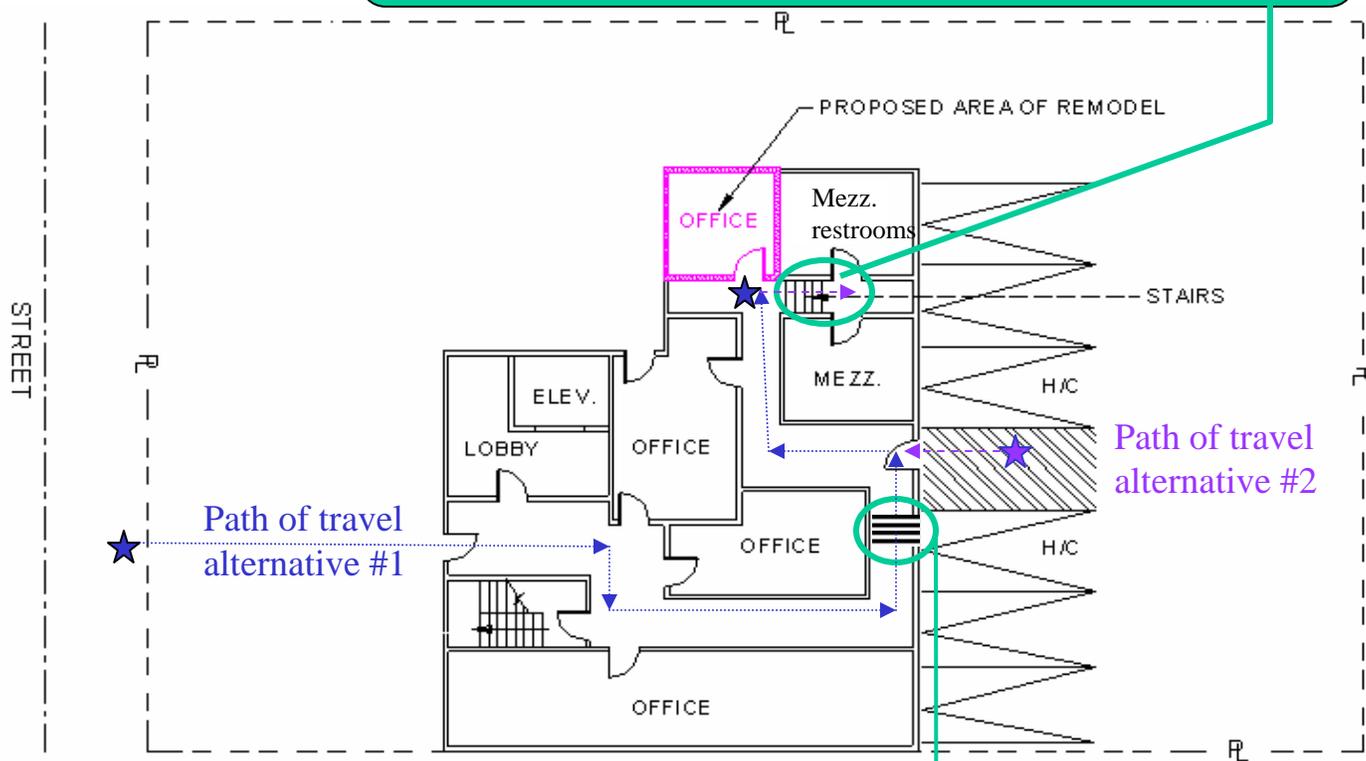
1. An accessible entrance
2. An accessible route to the altered area
3. At least one accessible restroom for each sex
4. Accessible telephones
5. Accessible drinking fountains, and
6. Additional accessible elements such as parking, storage and alarms.

Path of travel

Scenario #3:

Remodeling the 1st floor office. The project valuation is **more** than \$101,000. (The restrooms are on the mezzanine floor level).

This stairways **needs** to be replaced by a ramp or lift since it is within both paths of travel to the restrooms. A second alternative is to build a new restroom on the ground floor to serve this area of remodel.



This stairway is an obstruction along the the path of travel if Alternative #1 is selected. The stairway should be replaced by a ramp or a lift.

All of the following elements along the path of travel **must** comply :

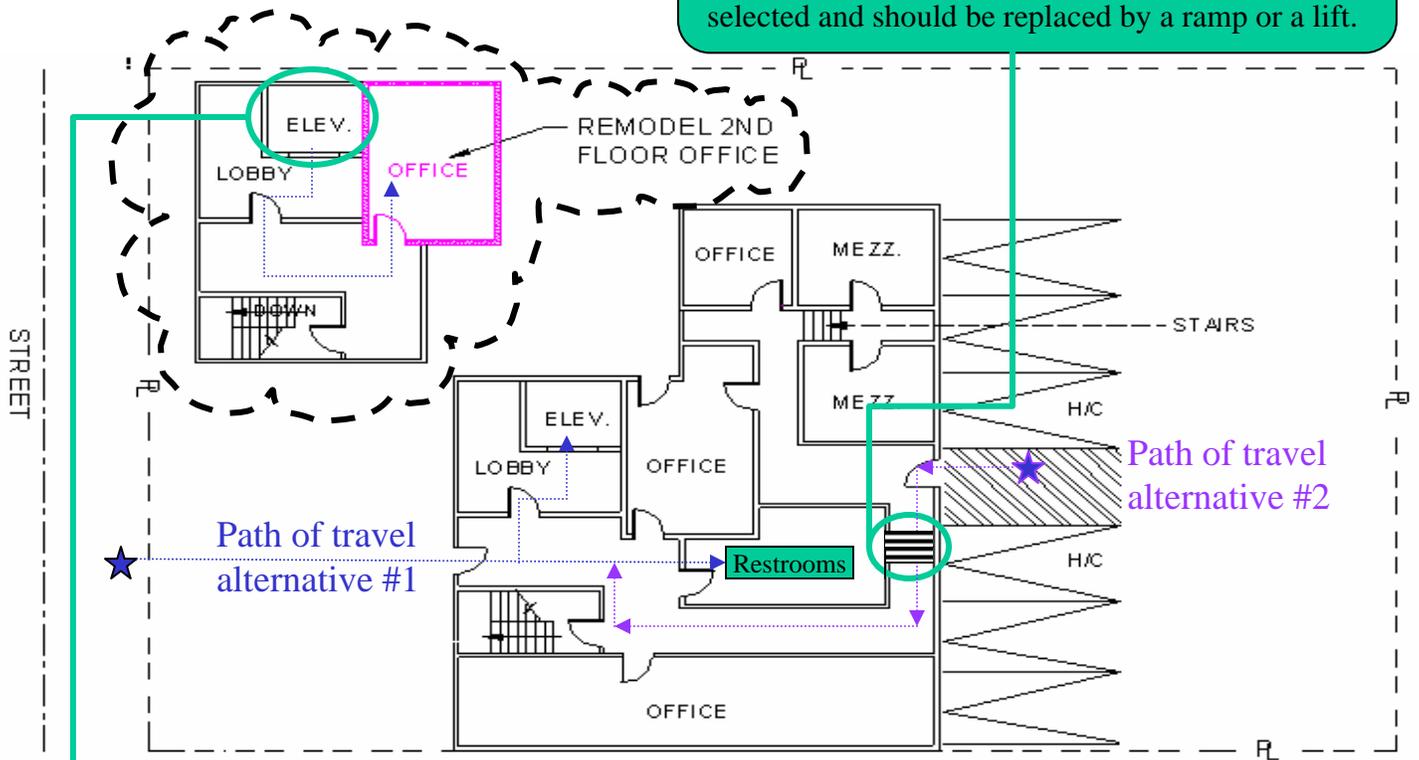
1. An accessible entrance
2. An accessible route to the altered area
3. At least one accessible restroom for each sex
4. Accessible telephones
5. Accessible drinking fountains, and
6. Additional accessible elements such as parking, storage and alarms.

Path of Travel

Scenario #4:

Remodeling the 2nd floor office. The project valuation is **more than** \$101,000.
(The restrooms are on the ground floor)

This stairway **does not need** to comply if Alt. #1 is selected. However, this stairway is an obstruction along the path of travel if Alternative #2 is selected and should be replaced by a ramp or a lift.



If there is an elevator in a multi-story building, that elevator will always serve as the path of travel for construction work on the floors above.

If there are no elevators, then the path of travel shall lead through the stairways to the second floor. The stairway would have to be improved for accessibility.

Path of Travel

1114B.2.1 [For SFM] General. In buildings or portions of buildings required to be accessible, accessible means of egress shall be provided in the same number as required for exits by Chapter 10. When an exit required by Chapter 10 is not accessible, an area for evacuation assistance shall be provided.

Areas for evacuation assistance shall comply with the requirements of this code and shall adjoin an accessible route of travel complying with this code.

EXCEPTIONS: 1. Areas of evacuation assistance are not required in buildings or facilities having a supervised automatic sprinkler system.

2. In alterations of existing buildings, areas of evacuation assistance are not required.

Department of General Services

State of California



STATE OF CALIFORNIA
DIVISION OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES

March 1, 1994

POLICY #94-05 (ACCESS)

ACCESSIBILITY REQUIREMENTS FOR EXITS, EXITWAYS, AND AREAS OF RESCUE ASSISTANCE

This Policy notice is to describe the requirements for Access Compliance as required for exits, exitways, and areas of rescue assistance in all occupancies, except privately funded housing. Access regulations are applicable to all such projects, and do provide exceptions for hardship circumstances only when written findings justify those exceptions.

Exits, Exitways, and Areas of Rescue Assistance:

All entrances must be accessible, but exit-only doors are treated separately by the California Building Code. In existing buildings only the accessible entrance doors are required to be accessible and "egressable" for people with disabilities.

However, in new buildings, all exit only doors (doors without entry hardware) are required to be accessible and "egressable" for peoples with disabilities. There are 3 exceptions:

1. All exits are exempt in buildings with fully supervised sprinkler systems.
2. Any exit with a 1-hour protected area of rescue assistance is exempt..
3. Any non-required (courtesy) exit more than 24 inches above or below adjacent grade which are posted "not accessible exit" are exempt.

Note that a "supervised sprinkler system" means a permanent relay notification system or other monitored system, and does not include an occasional oversight programs.

Signed by

Handwritten signature of Vilas Mujumdar.

Vilas Mujumdar, Chief
Office of Regulation Services

3/8/94
Date

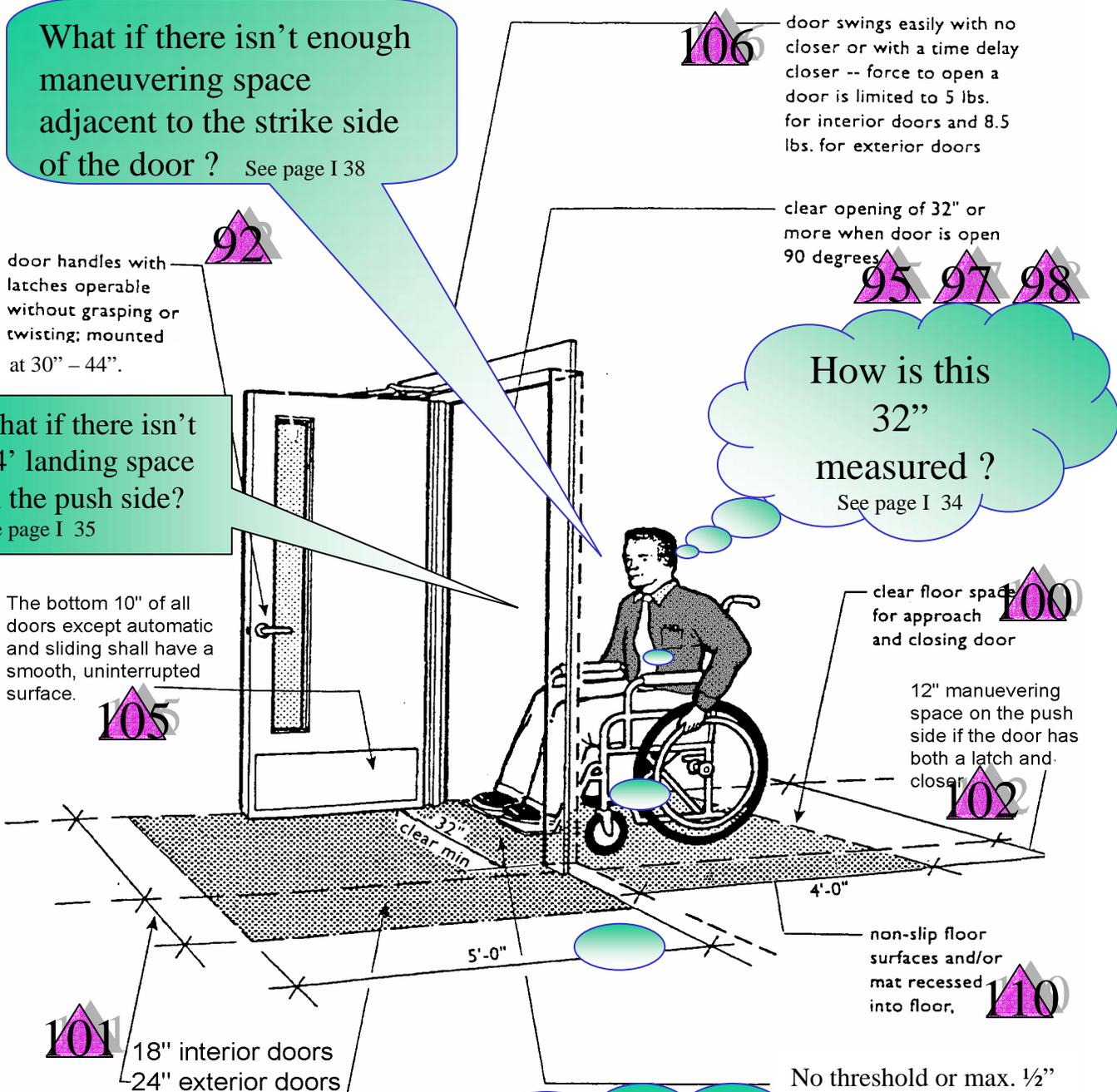
Visual index -Doors

What if there isn't enough maneuvering space adjacent to the strike side of the door? See page I 38

door handles with latches operable without grasping or twisting; mounted at 30" - 44".

What if there isn't a 4' landing space on the push side? See page I 35

The bottom 10" of all doors except automatic and sliding shall have a smooth, uninterrupted surface.



106 door swings easily with no closer or with a time delay closer -- force to open a door is limited to 5 lbs. for interior doors and 8.5 lbs. for exterior doors

clear opening of 32" or more when door is open 90 degrees

95 97 98

How is this 32" measured? See page I 34

clear floor space for approach and closing door

12" maneuvering space on the push side if the door has both a latch and closer

non-slip floor surfaces and/or mat recessed into floor,

101 18" interior doors
24" exterior doors

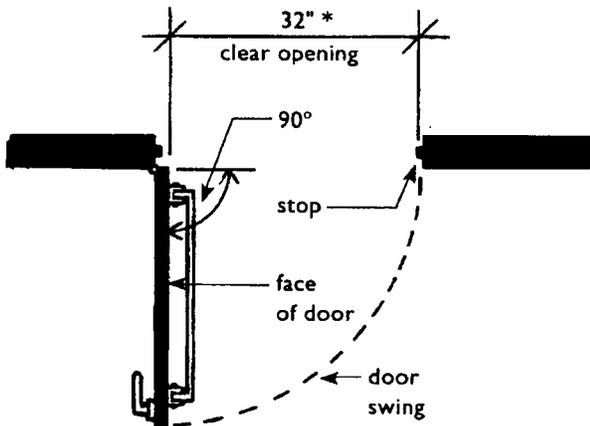
No threshold or max. 1/2"

clear floor space beside door on pull side so user can get out of way of door swing; the actual maneuvering clearances required depend on the direction of approach to both sides of the door,

What if this is a 24" thick wall, how would the strike edge clearance be affected? See page I 36

103

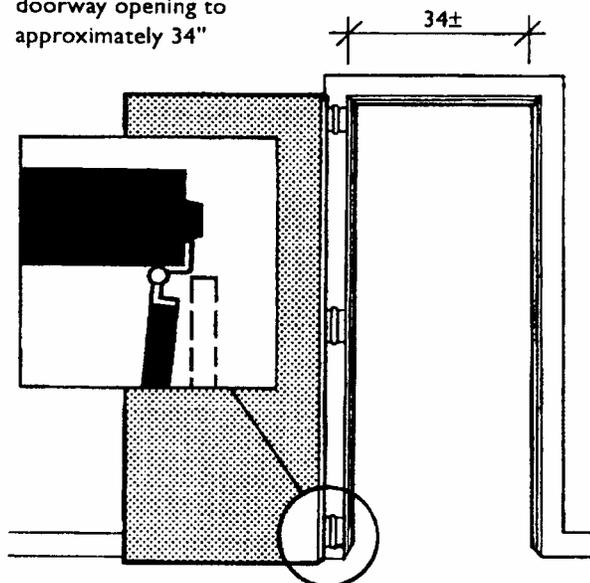
doors at public and common use spaces may be equipped with panic hardware



Measuring Clear Width at Hinged Doors

Door hardware can project into the minimum 32" clear opening.

installation of swing-clear hinges is a modification that increases a 32" doorway opening to approximately 34"

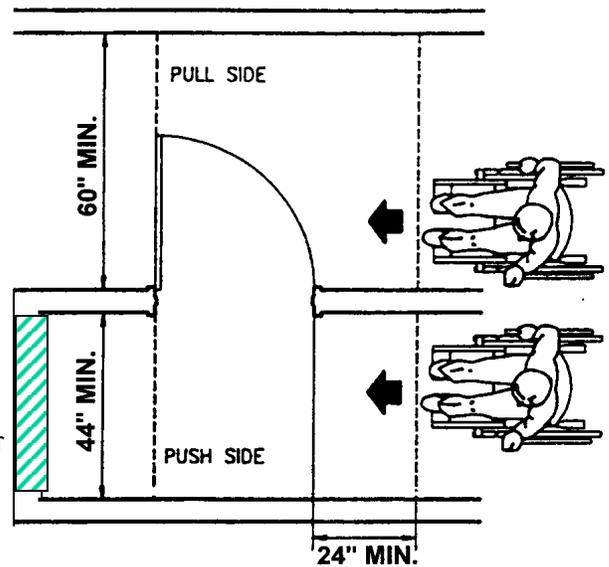


Use of Swing-Clear Hinges

The use of specialty hinges can increase the doorway clearance.

Alt. details for the 48" landing

This detail has been modified to include a wall and to illustrate this 44" landing is only acceptable for approach from the latch side of the door.

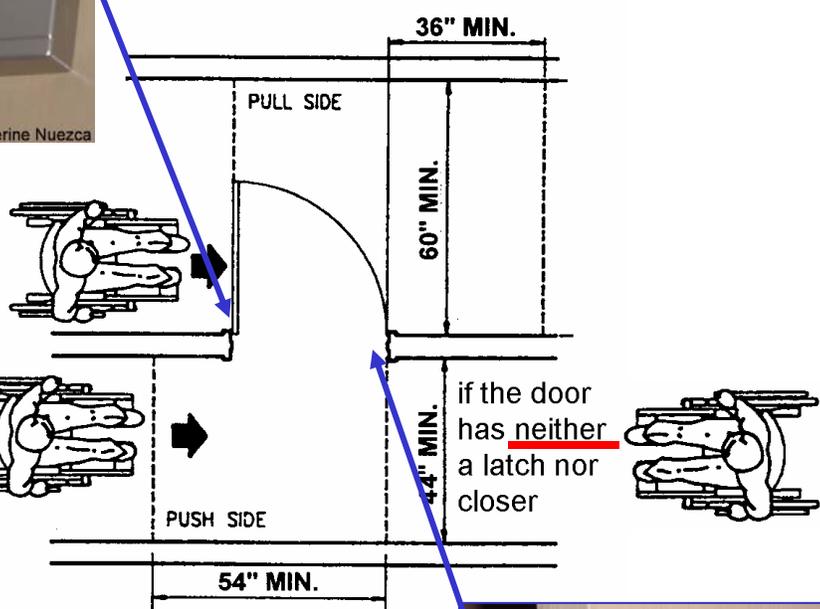


(C) LATCH APPROACH



Door Closer

Courtesy of Catherine Nuezca



(b) Hinge approach

This detail has been modified to show that this door without latch and closer can be accessible from both direction. (The Code states that it is only accessible from the hinge side).



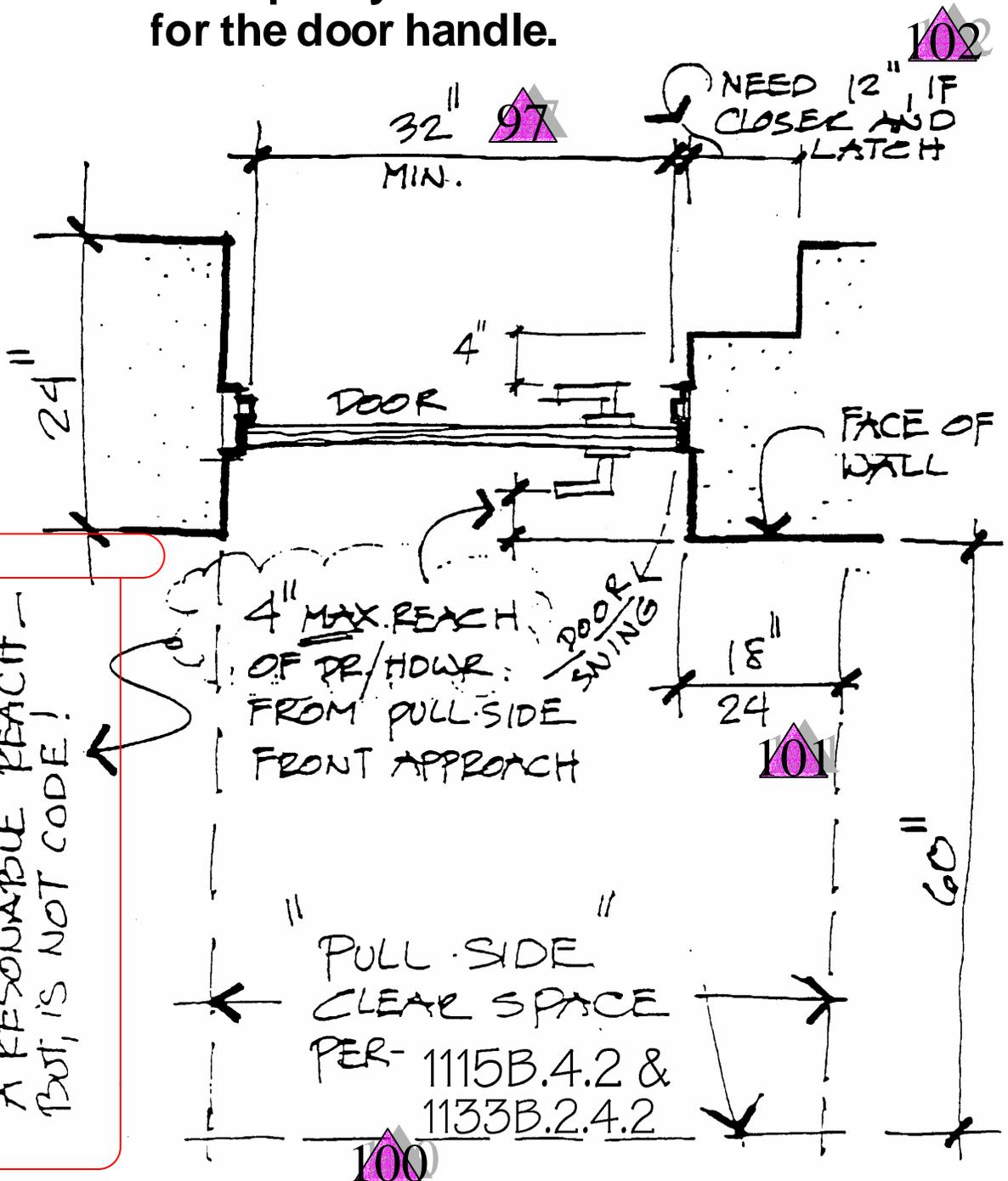
Door Latch

Courtesy of Catherine Nuezca

Thicken Walls

This is an interpretation from the Division of State Architect. There are no code sections that specify a max. 4" reach for the door handle.

- Sec. 1133B.1.1.1.1
- Sec. 1118B.1
- If ≤ 24 " then 32" clear door width
- If > 24 " then 36" clear door width



THE 4" INCHES IS A REASONABLE REACH - BUT, IS NOT CODE!

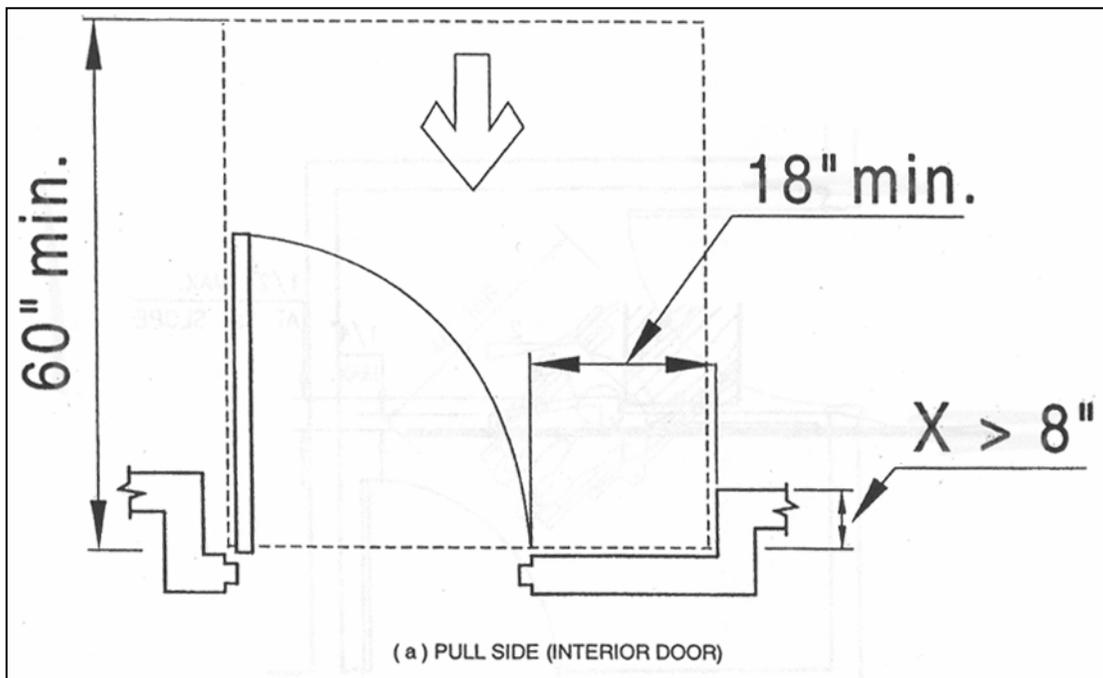
102

97

101

100

Thicken Walls



Alternatives for Door Swing Clearances

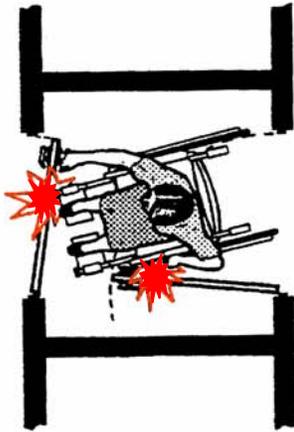
For the 18” or 24” pull side clearance problems:

- Provide an automatic door opener (a modification will be required).
- Use a pocket door

For the 12” push side clearance problems:

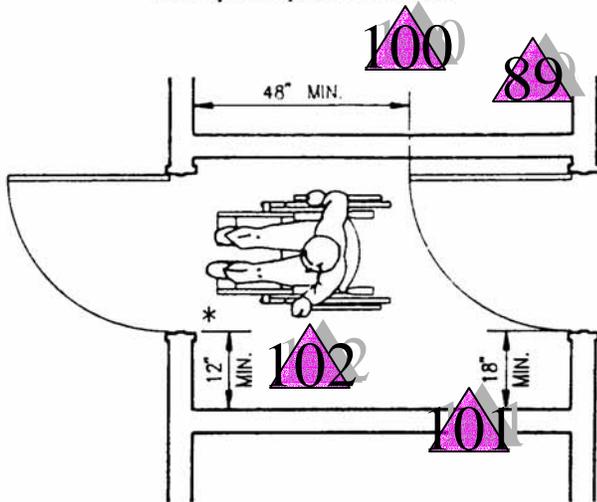
- Provide a “push open” assembly (ie. panic hardware).
- Remove a latch or a closer (note: corridor doorways require both latch and closer).
- Provide an automatic door opener (a modification will be required).
- Use a pocket door.

Doors in Series or Vestibules

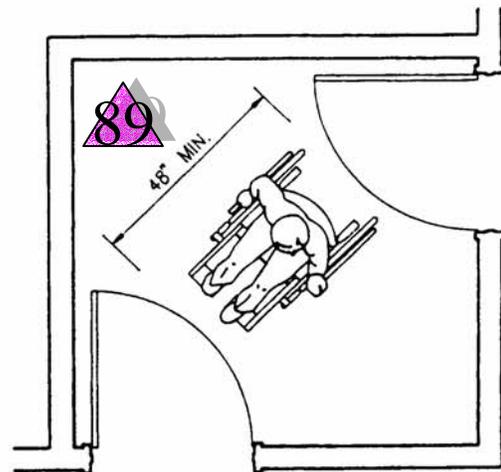


Inadequate Space in Vestibule

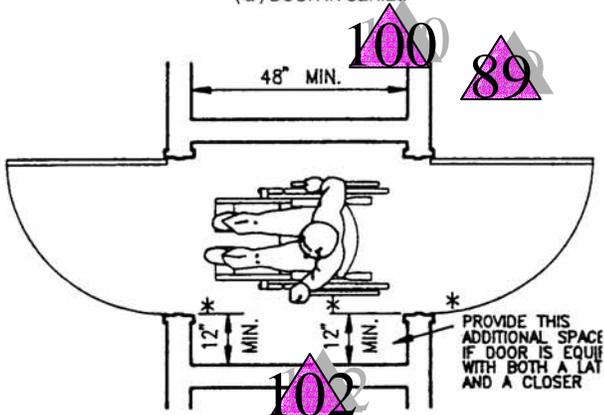
After opening the first door, the user does not have enough maneuvering space to open the second door.



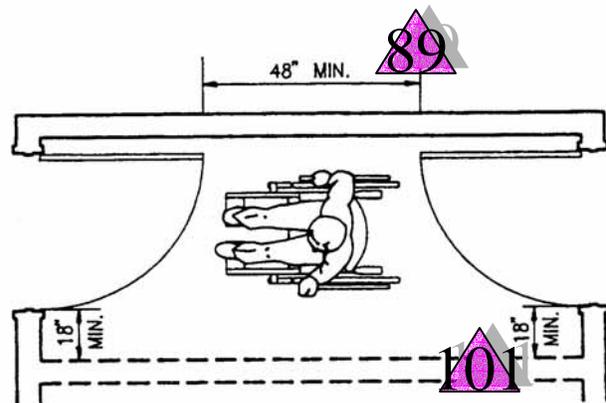
(a) DOOR IN SERIES



(a) DOORS AT ADJACENT WALLS

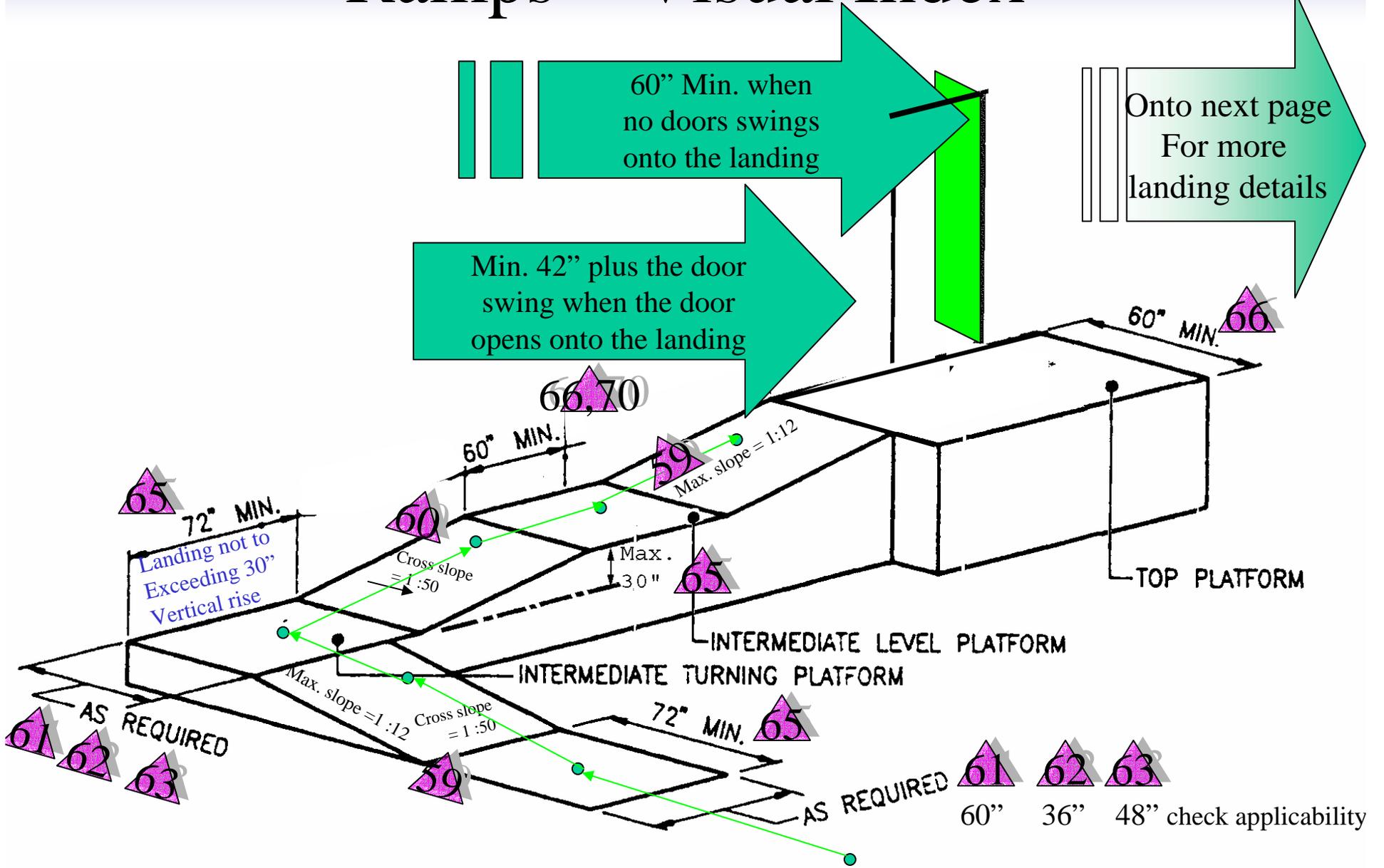


(b) BOTH DOORS OPEN OUT



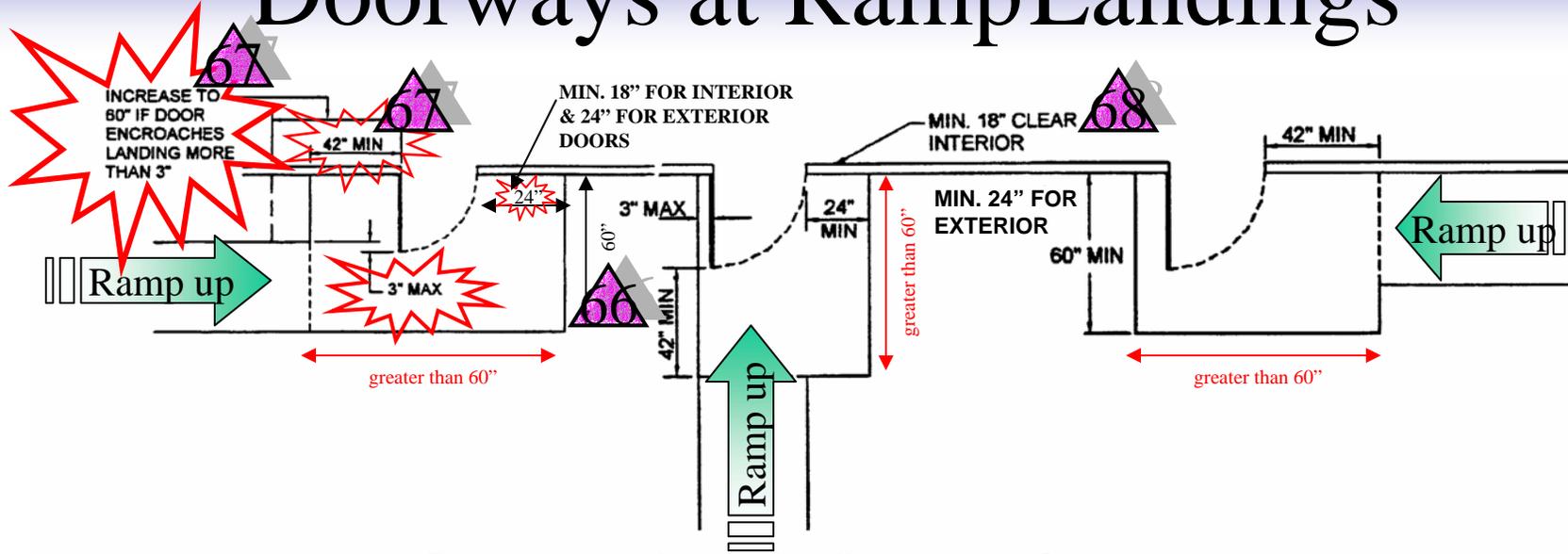
(b) DOORS AT OPPOSITE WALLS

Ramps - Visual Index

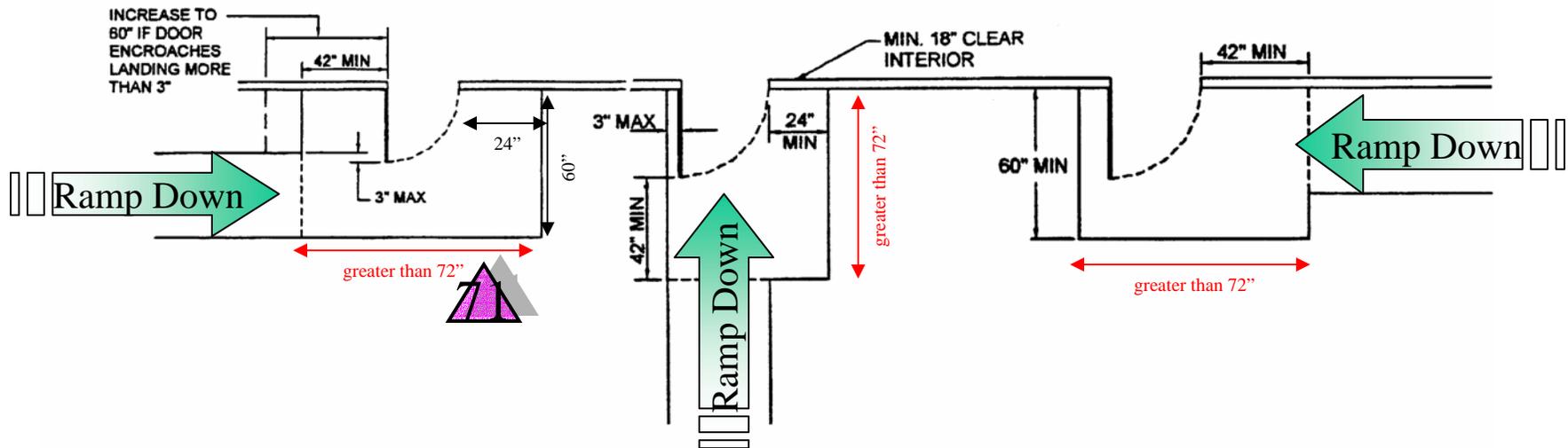


Ramps are required if the slope of pathway is greater than 1:20.

Doorways at Ramp Landings



Doorways at the top landing space of a ramp.



Doorways at the bottom landing space of a ramp

Interpretation: Doors at Ramp Landings

12. Doors in any position shall not reduce the minimum dimension of the ramp landing to less than 42" and shall not reduce the required width by more than 3" when fully open.

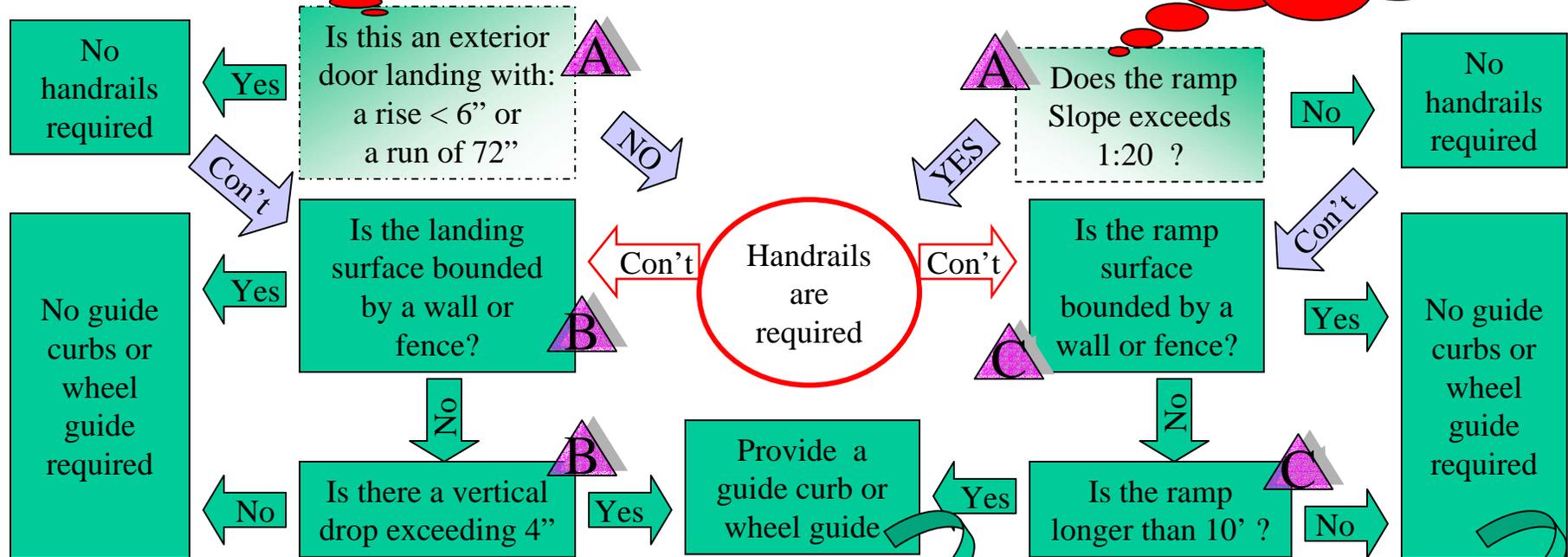
(1133B.5.4.3 & 1003.3.4.4, Fig.11-B-39&39)

a) 42" is required in the direction parallel with the slope of the ramp.

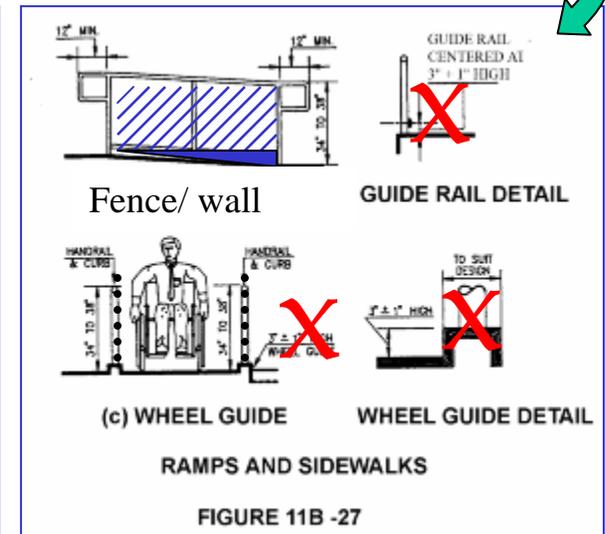
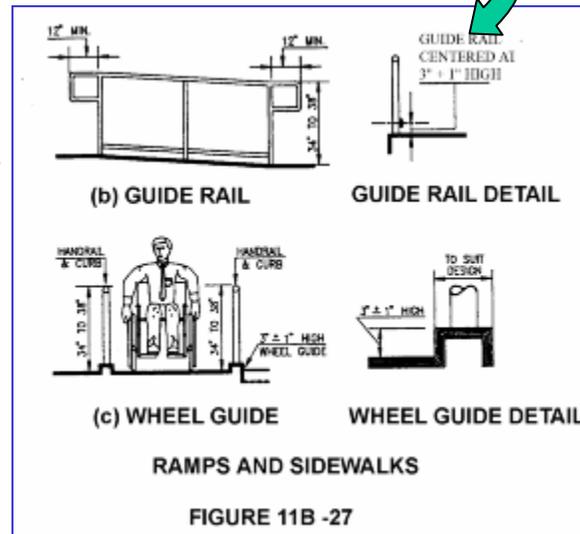
Handrails

START HERE FOR LANDINGS

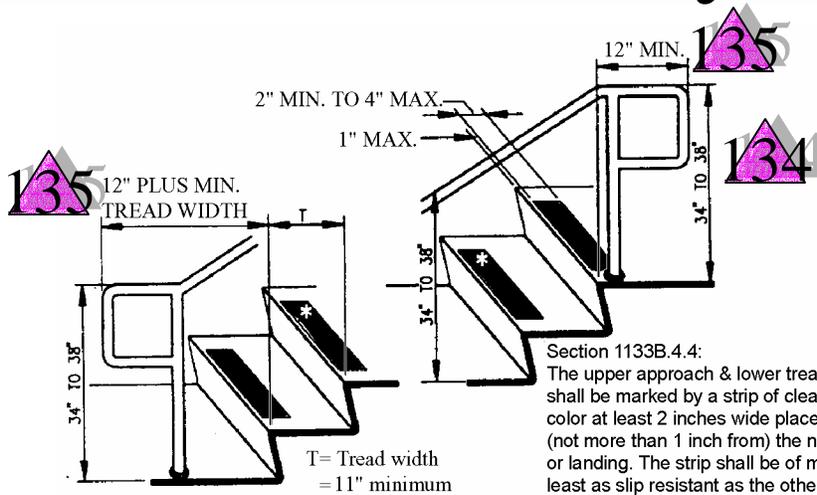
FOR RAMPS START HERE



- A. Handrails are required on ramps that provide access if ramp slope exceeds 1' rise in 20' of horizontal run, except that at exterior door landings, handrails are not required on ramps less than 6" rise or 72" in length. (1133B.5.5.1)
Provide a guide curb, minimum of 2" in height or a wheel guide, centered 3" +/- 1" above the ramp or landing surface **if:**
- B. the landing exceeds a 4" vertical drop and not bounded by a wall or fence.
also
- C. the ramp exceeds 10' in length and not bounded by a wall or fence (1133B.5.4.9 & 1133B.5.6)



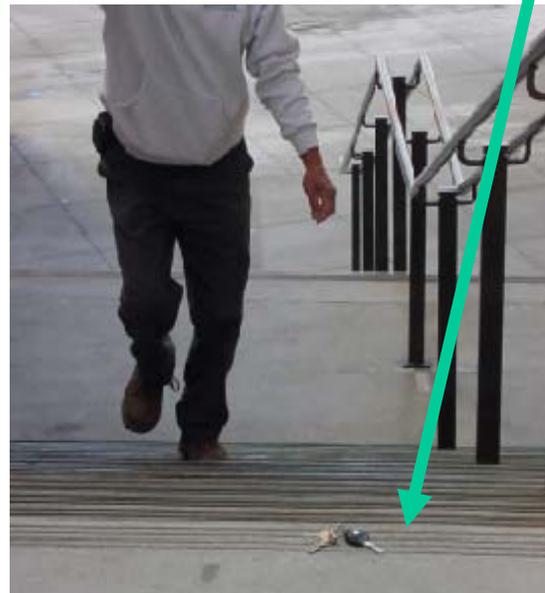
Stairways



Grooves embedded into the concrete are NOT consider an equivalent form of providing contrasting colors.

Section 1133B.4.4:
 The upper approach & lower tread of each stair shall be marked by a strip of clearly contrasting color at least 2 inches wide placed parallel to and (not more than 1 inch from) the nose of the step or landing. The strip shall be of material that is at least as slip resistant as the other treads of the stair.
 * For exterior stairways, all treads shall have contrasting colors as described above.

WARNING STRIPING AND HANDRAIL EXTENSIONS



Grooves were painted with contrasting color.



After

Before

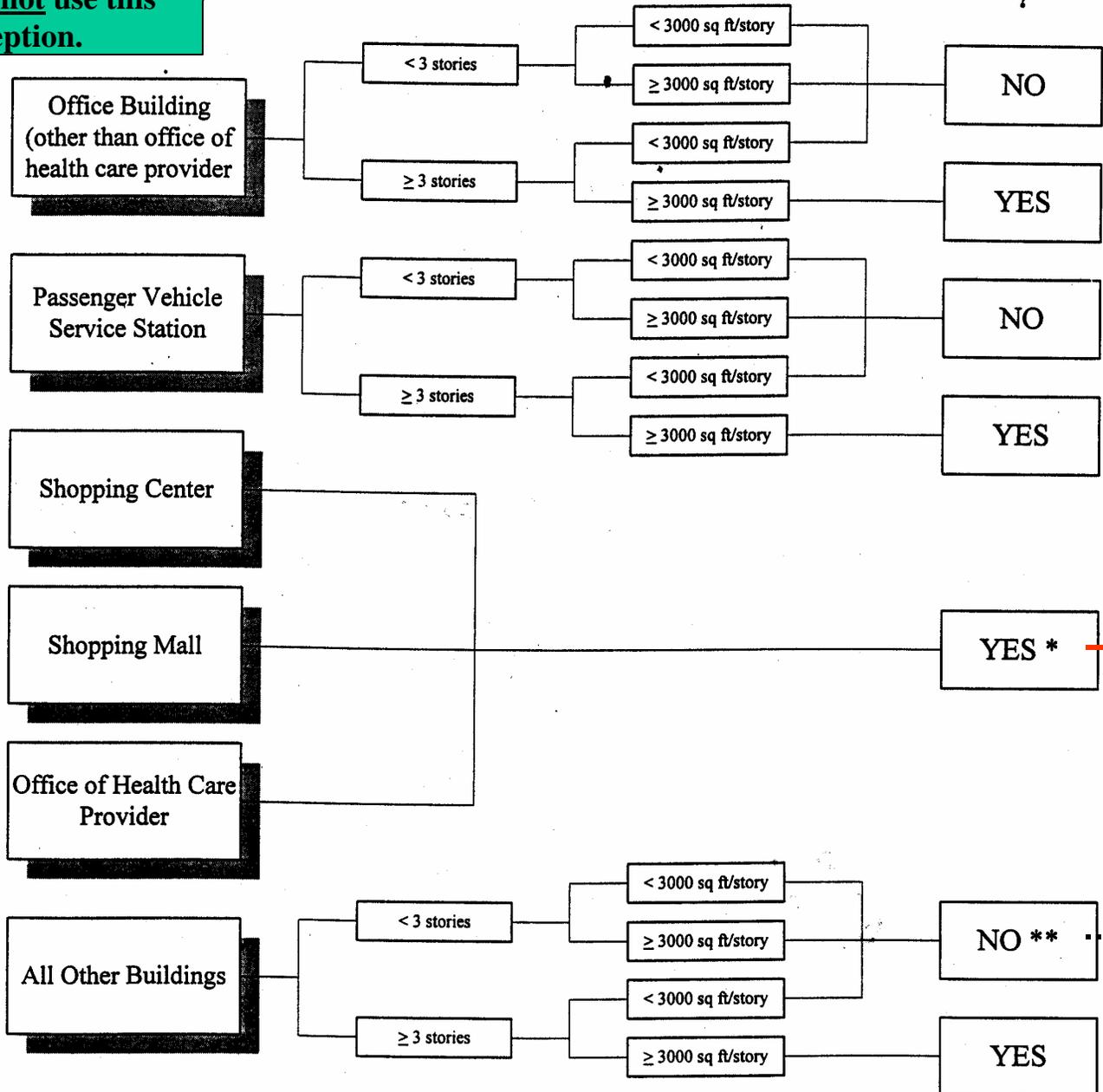
Elevators

Publicly funded structures and government leased offices as defined in Section 101.17.11 can not use this exception.

MULTI-STORY BUILDING ELEVATOR EXCEPTION

(Sec 1103B.1 exc. 2 ... privately-funded buildings only) ... mrw 1-2000

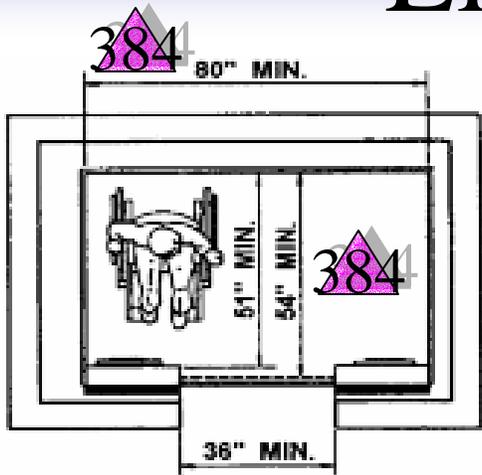
**ELEVATOR
REQUIRED
?**



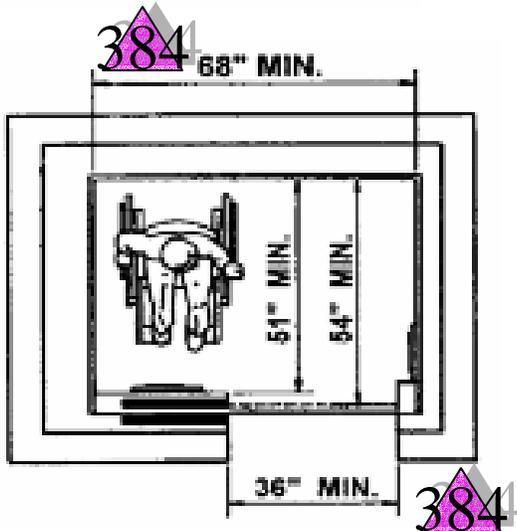
See next page

* Ramp or elevator required to floors above & below the first floor regardless of number of stories or floor areas

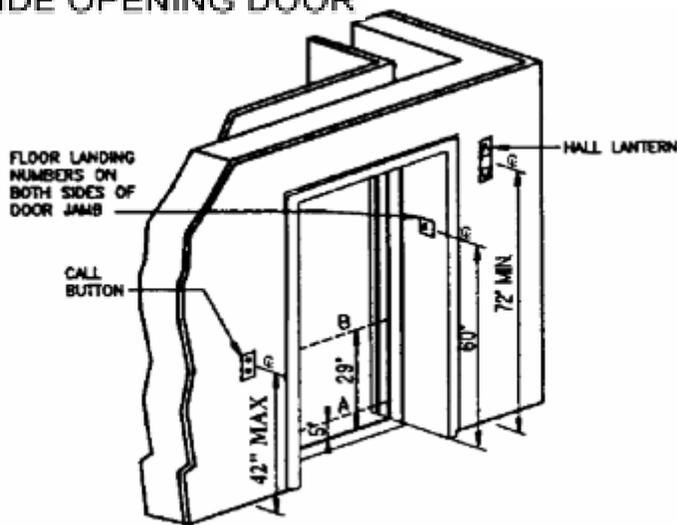
** Ramp or elevator not required to floors above & below the first floor if "reasonable portions" of all facilities & accommodations provided on floors above & below the first floor are available & accessible on the first floor



CENTER OPENING DOOR



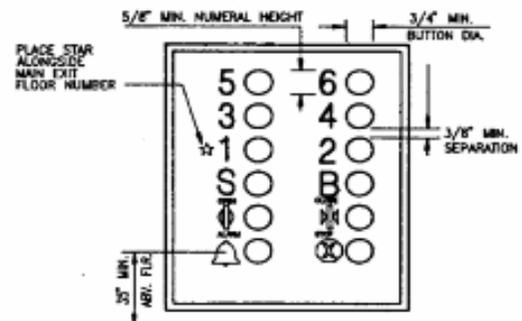
SIDE OPENING DOOR



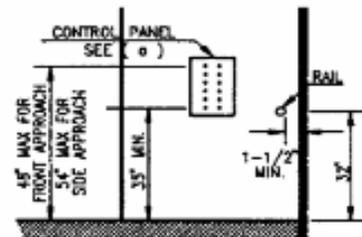
MINIMUM DIMENSIONS
OF ELEVATOR CARS
FIGURE 30-A

The “rule of thumb” for a “reasonable portion” is 25% of the area for any use located on above or below the ground floor.

For example: proposed mezzanine for new storage space in an existing restaurant. The ground floor must have 25% of the mezzanine area for storage to be exempt from installing an elevator or a lift.



(a) ELEVATOR CONTROL
PANEL DETAILS



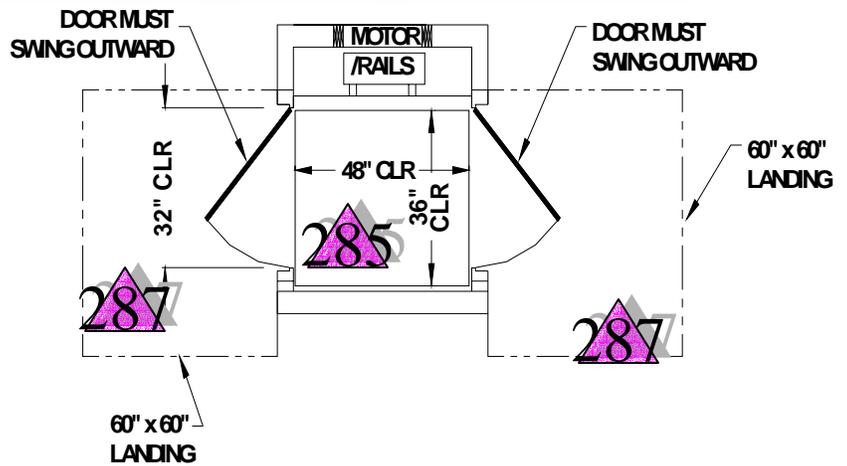
(b) MAXIMUM INSTALLATION HEIGHTS
ABOVE CAB FLOOR
ELEVATOR CONTROL PANEL

Handicap Lifts

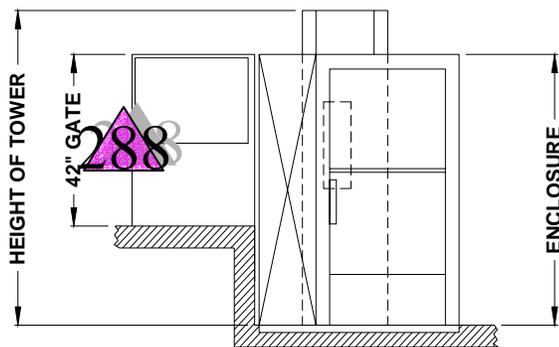
Path of travel in existing buildings between two landings having a vertical difference greater than 12 feet must be accomplished by means of an elevator.



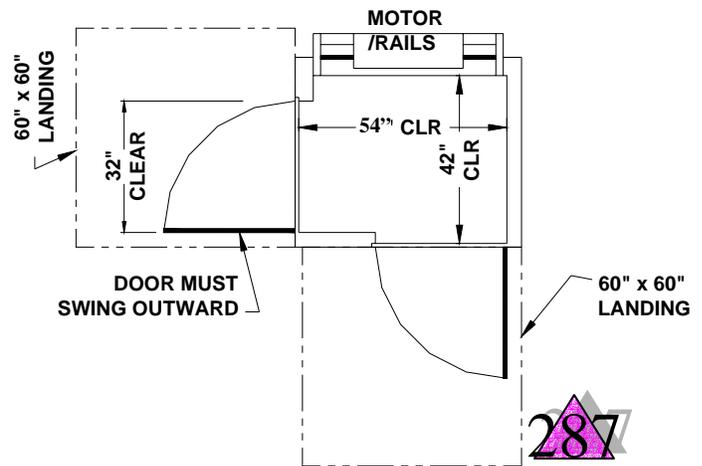
Lift mounted to stairways is not acceptable because it does not have the "sufficient size to accommodate large motorized wheelchairs"



**HANDICAP LIFT - TOP VIEW
FRONT AND BACK ACCESS**



ELEVATION



**HANDICAP LIFT - TOP VIEW
FRONT AND SIDE ACCESS**

Handicap Lifts

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DEPARTMENT OF GENERAL SERVICES

STATE OF CALIFORNIA

PETE WILSON, GOVERNOR



Street, 5th Floor, Sacramento 95814

(916) 445-5753

OCT 22 RECEIVED
OCT 22 RECEIVED

October 20, 1992

Mr. Neil Chaitin
Hankin Specialty Equipment, Inc.
72 Otis Street
San Francisco, CA 94103-1236

Dear Mr. Chaitin:

90° TURN CHAIR LIFTS

Thank you for your letter dated October 16, 1992. After reviewing platform size requirements for 90° turn chair lift, we feel that 42"x 54" would be the minimum acceptable dimension. Any approved mechanical system can be used if it satisfies the code requirements.

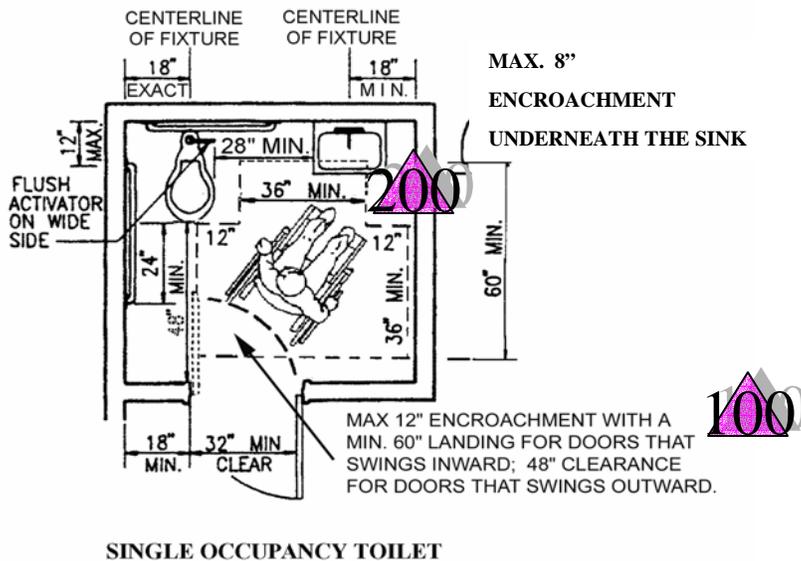
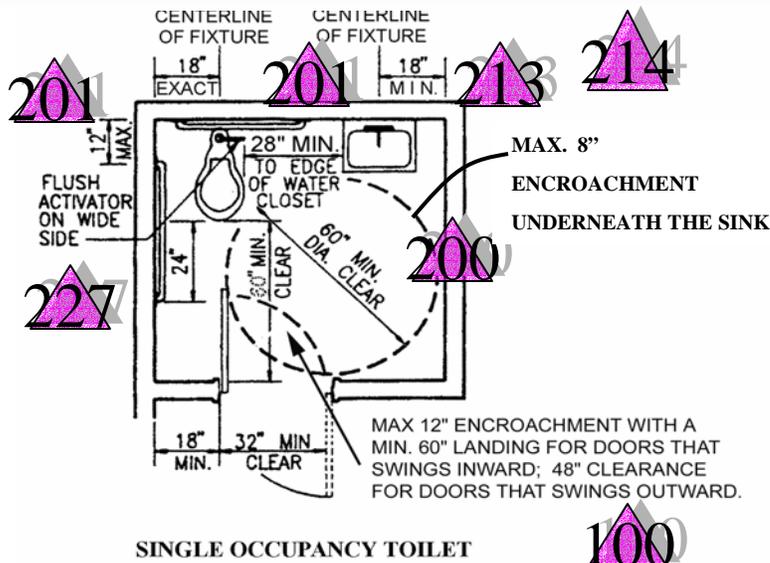
Please, feel free to contact this office if you need further help.

Sincerely,

Saher Yassa, AIA
Access Compliance

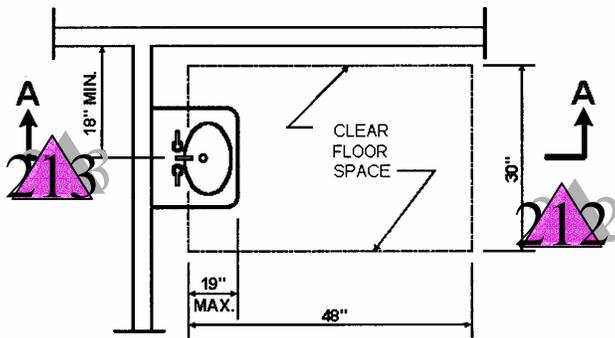
SY:dbchaitin.sy

Restrooms –Single Accommodation

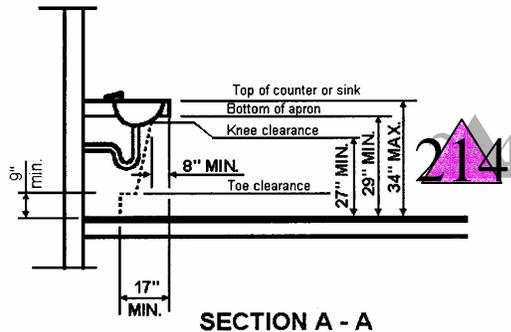


Modifications that request for private sanitary facility (i.e., restroom and shower exclusively used by the building owner) to be exempt from accessibility requirements will no longer be granted.

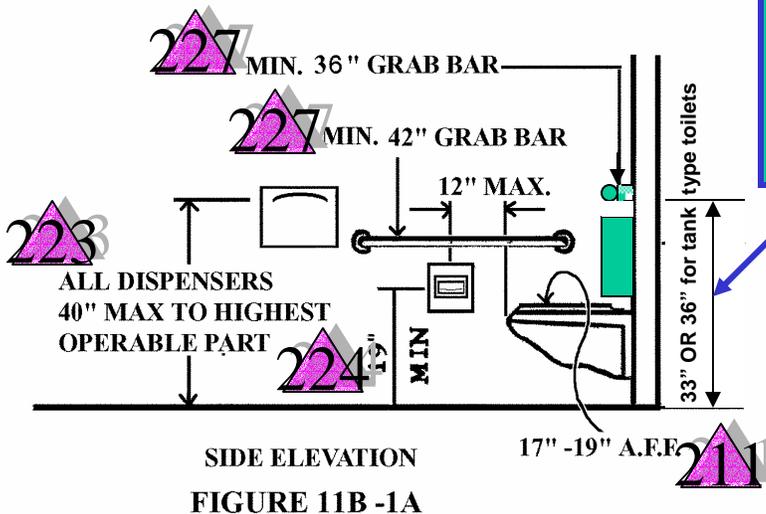
Accessory Fixtures



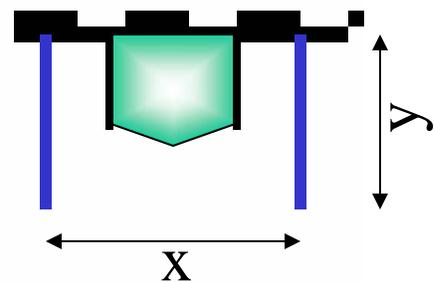
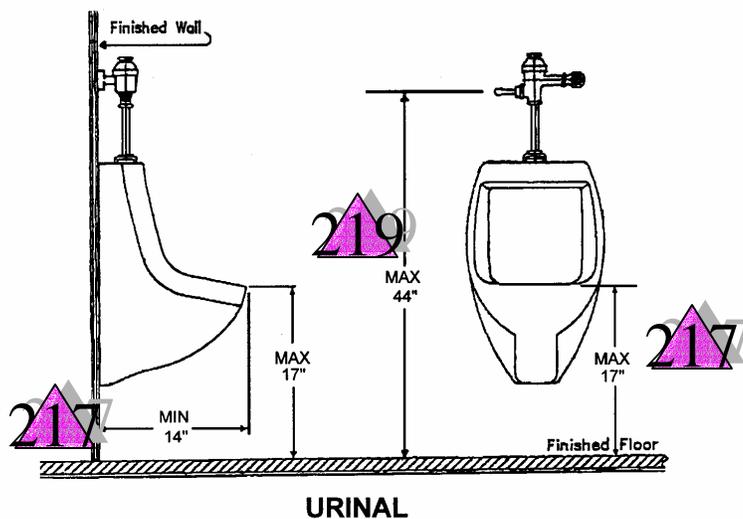
FLOOR PLAN



LAVATORY CLEARANCES

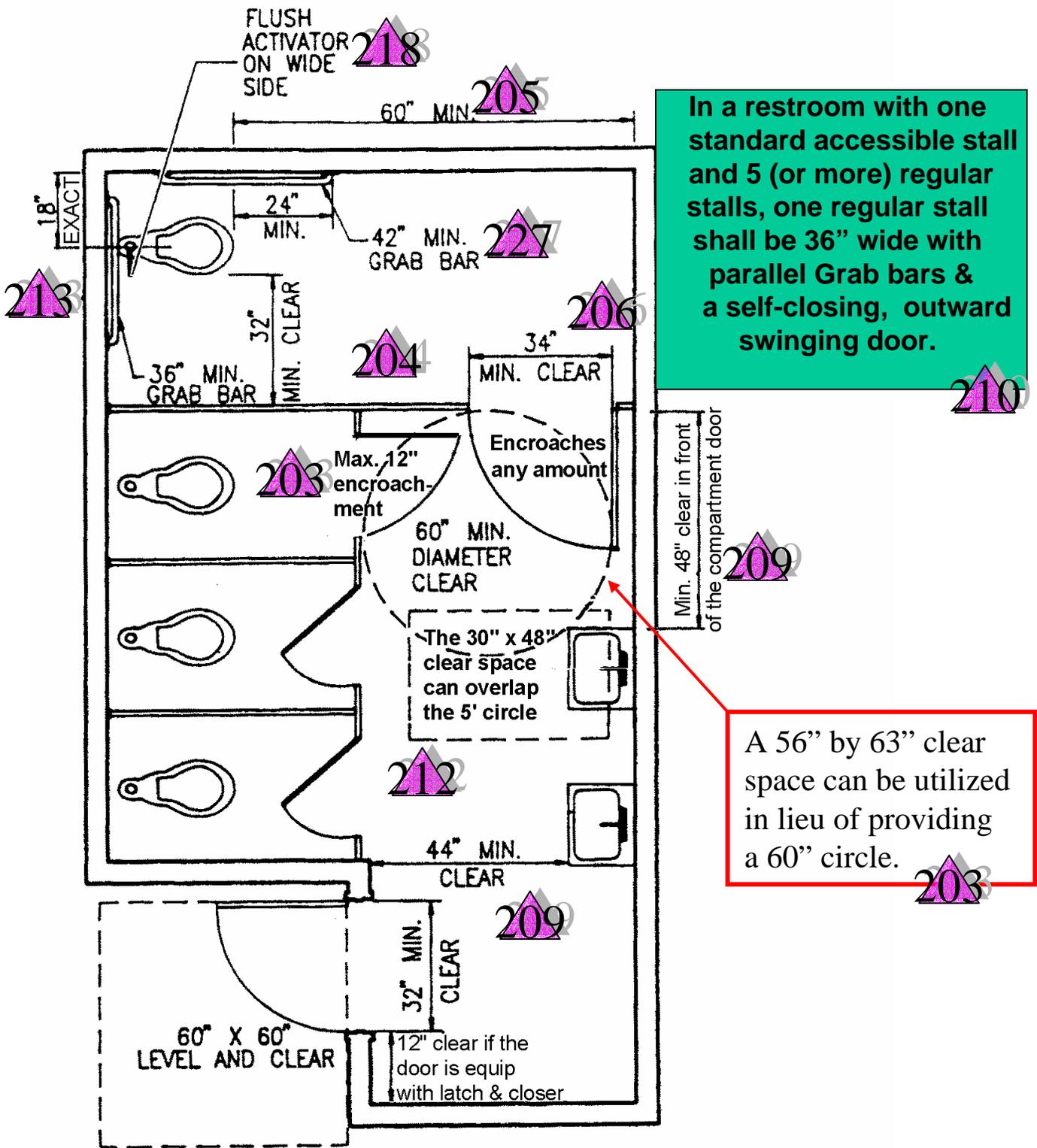


Grab bars shall be securely attached 33" above and parallel to the floor, except that where a tank-type toilet is used which obstructs placement at 33", the grab bar may be as high as 36".



If $Y \leq 24"$, then $X = 30"$
 If $Y > 24"$, then $X = 36"$

Multiple Accommodation



In a restroom with one standard accessible stall and 5 (or more) regular stalls, one regular stall shall be 36" wide with parallel Grab bars & a self-closing, outward swinging door.

A 56" by 63" clear space can be utilized in lieu of providing a 60" circle.

FIGURE 11B -1B --MULTIPLE ACCOMMODATION TOILETS

RESTROOMS

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

These details provide equivalent facilitation for existing buildings only. All projects must meet the definition of unreasonable hardship before utilizing these details. A modification shall be filed with the City identifying these hardship findings.

Section 222 -Unreasonable Hardship exists when the enforcing agency finds that compliance with the building standard would make the specific work of the project affected by the building standard unfeasible, based on an overall evaluation of the following factors:

1. The cost of providing access.
2. The cost of all construction contemplated.
3. The impact of proposed improvements on financial feasibility of the project.
4. The nature of the accessibility which would be gained or lost.
5. The nature of the use of the facility under construction and its availability to persons with disabilities. The details of any finding of unreasonable hardship shall be recorded and entered in the files of the enforcing agency.

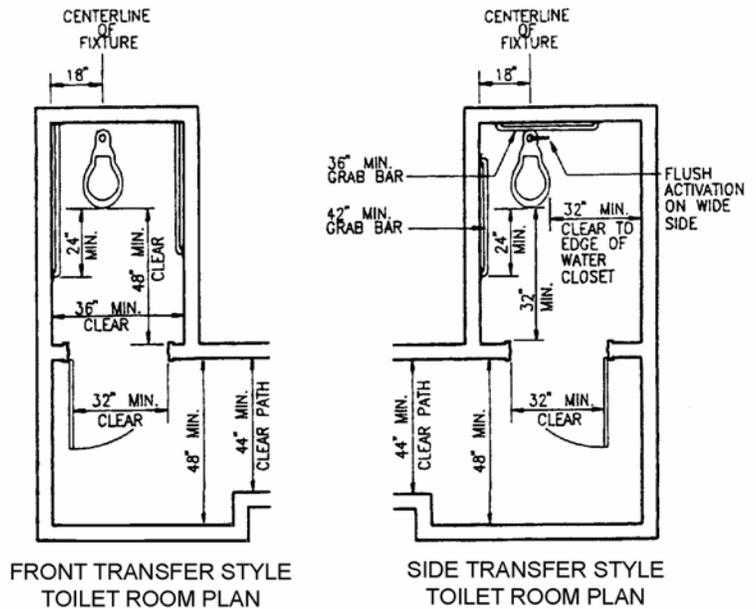
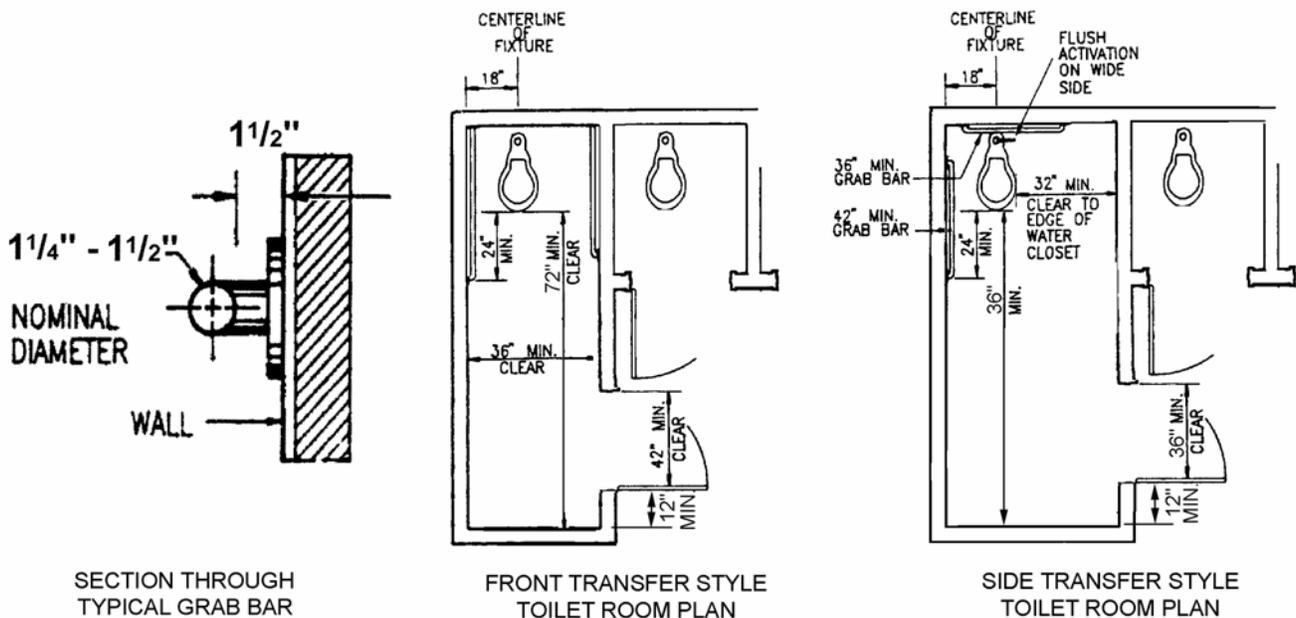
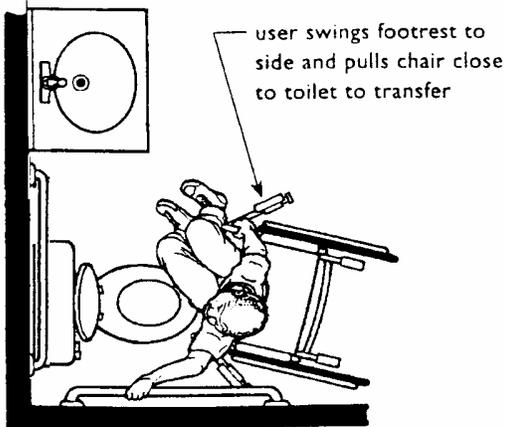


FIGURE 1B -1C-EQUIVALENT FACILITATION FOR EXISTING BUILDINGS ONLY.

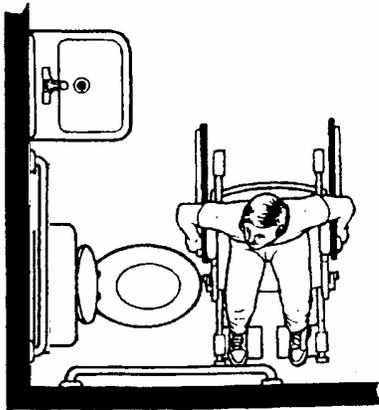
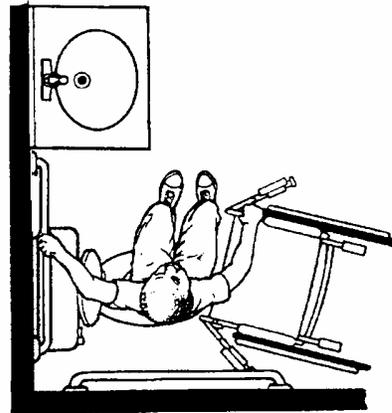


RECOMMENDED DETAILS FOR EQUIVALENT FACILITATION WITH SIDE ENTRY DOOR.

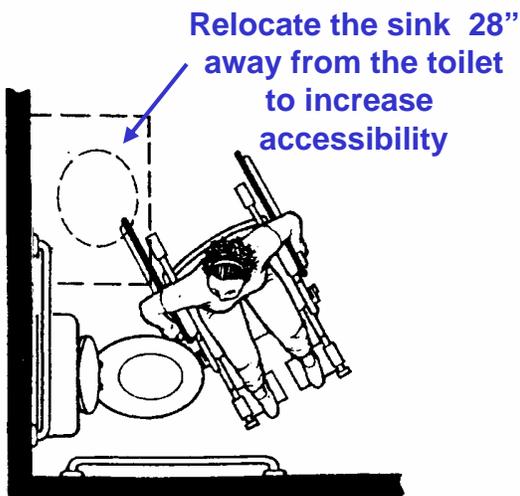
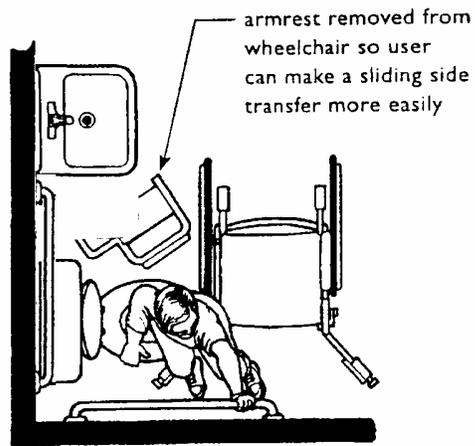
Wheelchair Transfer



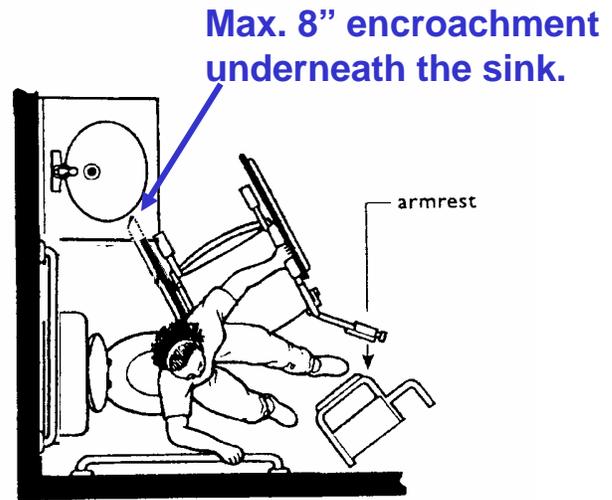
**Forward Approach
(Front Transfer)**



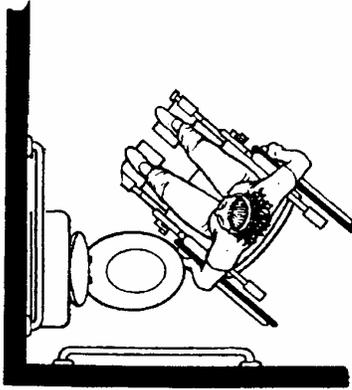
**Perpendicular Approach
(Side Transfer)**



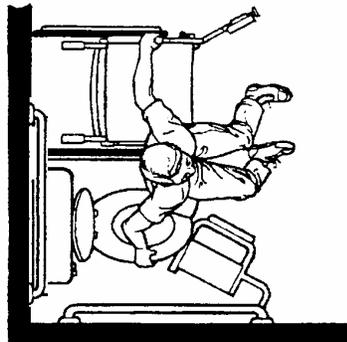
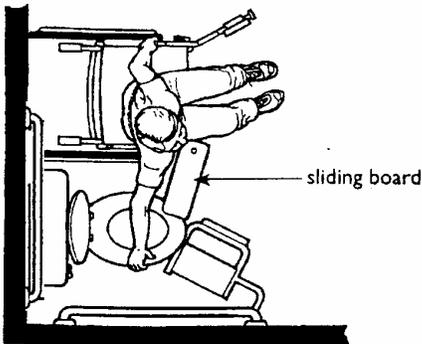
**Diagonal Approach
(Probably Most Frequently Used Unassisted Transfer Technique)**



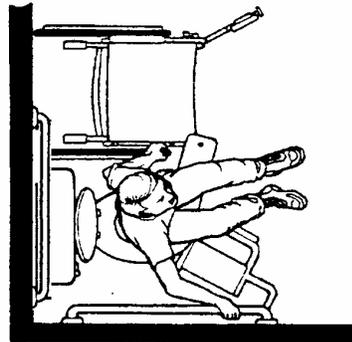
Wheelchair Transfer (continue)



Reverse Diagonal Approach
(Diagonal Transfer)



Parallel Approach
(Side Transfer Using Sliding Board)



Historical Codes

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I55

CITY OF LOS ANGELES INTRA-DEPARTMENTAL CORRESPONDENCE

Date: May 6, 2002

To: Disabled Access Plan Check Staff,
APC and Counter Plan Check Engineers

From: Ewa O'Neal,
Disabled Access Engineer

RE: ACCESSIBILITY IN QUALIFIED HISTORICAL BUILDINGS

This memo clarifies the accessibility requirements in **qualified historical buildings**. Pursuant to Section 1135B of Title 24 California Code of Regulations, the State Historical Code Part 8 of Title 24 California Code of Regulations shall be applied to "qualified historical buildings."

Qualified Historical Building or Property is defined in Section 8-218 of the 1998 California Historical Building Code (CHBC) as "any building, structure, district or collection of structures and their associated sites deemed of importance to the history, architecture of culture of any area by an appropriate local, state or federal governmental jurisdiction..."

These are identified by zoning information files Z1145-XXXX, with the last four digits designating as a City, State, or Federal historical monument (City 0-999; State 1000-1999; Federal 2000-2999.) Buildings/structures under consideration by the Cultural Heritage Commission for historic listing are identified by numbers 5000 and above.

Qualified historical buildings are not exempt from the provisions of the State Title 24 Accessibility Regulations. However, in accordance with Section 8-602 of CHBC which has been adopted by the City and appears as part of the Chapter 34 in the Los Angeles Building Code, "the regular code for access for persons with disabilities shall be applied to qualified historic buildings or properties **unless** strict compliance with the regular code will threaten or destroy the historical significance or character-defining features of the building or property." It further stipulates alternative provisions may be used when the historical significance or character-defining features are threatened.

Historical Codes

In order for an owner or applicant to utilize these alternative provisions of the CHBC, the following steps shall be followed by the staff reviewing plans for disabled access compliance.

1. Verify that the building, structure or site is identified in the City records as being deemed historic by either a city, state or federal jurisdiction.
2. Review the documentation (for significant or historic features) provided by the applicant as required per section 8-602.2.
Acceptable documents are:
 - a) Letter from the Cultural Heritage Commission (Jay Oren) identifying the specific significant or historic feature that must be maintained to preserve the integrity of the qualified historical building,
 - b) Letter/report from a building historian identifying the character defining features and stating the reasons for application of the alternative provisions.

Note that the above documentation needs to be part of the public record (Microfilm as a PCIS permit application attachment or attach to an approved modification as part of the justification.)

3. Only alternatives as specified in Section 8-603 can then be utilized pursuant to Section 8-602.2 item 2.
4. If the specific accessibility requirement is not a preferred alternative listed in section 8-603, then refer the matter to the Disabled Access Supervisor for alternative consideration under Sections 8-604 and 8-605 of the CHBC.
5. Any consideration under sections 8-604 and 8-605, will require a public hearing as specified under section 8-604.3

Please note that the regular provisions of the accessibility requirements also contain exceptions that can be applied to existing buildings, including **qualified historical buildings**. Note that an owner/applicant must provide the documentation listed above only if they need to utilize the provisions of CHBC.

2. Existing previously approved fire escapes and fire escape ladders shall be acceptable as one of the required means of egress provided they extend to the ground and are easily negotiated, adequately signed, and in good working order. Access shall be by an opening having a minimum width and height of 29 inches (737 mm) when open. No sill shall be more than 30 inches (762 mm) above the adjacent floor, landing or approved step.

3. The enforcing agency shall grant reasonable exceptions to specific provisions covered under applicable regulations where such exceptions will not adversely affect the life safety intended. (Examples: Existing door openings and corridor and stairway widths of less than the specified dimensions may be permitted, provided there is sufficient width and height for a person to pass through the opening or traverse the exit; existing stairways having risers and treads at variance with the specified rise and run for the occupant load and use are allowed.)

4. Upon specific case approval, the front or main exit door(s) need not be swung to the direction of exit travel provided other means or conditions of exiting, as necessary to serve the total occupant load served, are otherwise provided.

5. In lieu of total conformance with existing exiting requirements, the enforcing agency may accept any other condition which will allow or provide for the ability to quickly and safely evacuate any portion of a building without undue exposure and which will meet the intended exiting and life safety stipulated by these regulations.

8-502.2 Fire Escapes and Fire Escape Ladders. New fire escapes and new fire escape ladders shall comply with the following:

1. Access from a corridor shall not be through an intervening room.

2. All openings within 10 feet (3048 mm) shall be protected by three-fourths-hour fire assemblies. When located within a recess or vestibule, adjacent enclosure walls shall be of not less than one-hour fire-resistive construction.

3. Egress from the building shall be by a clear opening having a minimum dimension of not less than 29 inches (737 mm). Such openings shall be openable from the inside without the use of a key or special knowledge or effort. The sill of an opening giving access shall not be more than 30 inches (762 mm) above the floor, step or landing of the building or balcony.

4. Fire escape stairways and balconies shall support the dead load plus a live load of not less than 100 pounds per square foot (4.79 kN/m²) and shall be provided with a top and intermediate handrail on each side. The pitch of the stairway shall not exceed 72 degrees with a minimum width of 18 inches (457 mm). Treads shall not be less than 4 inches (102 mm) in width and the rise between treads shall not exceed 10 inches (254 mm). All stair and balcony railings shall support a horizontal force of not less than 50 pounds per lineal foot (729.5 N/m) of railing.

5. Balconies shall not be less than 44 inches (1118 mm) in width with no floor opening other than the stairway opening greater than 5/8 inch (15.9 mm) in width. Stairway openings in such balconies shall not be less than 22 inches by 44 inches (559 by 1118 mm). The balustrade of each balcony shall not be less than 36 inches (914 mm) high with not more than 9 inches (287 mm) between balusters.

6. Fire escapes shall extend to the roof or provide an approved gooseneck ladder between the top floor landing and the roof when serving buildings four or more stories in height having roofs with less than 4 units vertical in 12 units horizontal (33.3% slope). Fire escape ladders shall be designed and connected to the building to withstand a horizontal force of 100 pounds (445 N) placed anywhere on the rung. All ladders shall be at least 15 inches (381 mm) wide, located within 12 inches (305 mm) of the building. Ladder rungs shall be 3/4 inch (19.1 mm) in diameter and shall be located 12 inches (305 mm) on center. Openings for roof access ladders through cornices and similar projections shall have minimum dimensions of 30 inches by 33 inches (762 by 838 mm).

The length of fire escapes and exit ladder devices shall be limited to that approved by the building official based on products listed by a recognized testing laboratory.

7. The lowest balcony shall not be more than 18 feet (5486 mm) from the ground. Fire escapes shall extend to the ground or be provided with counterbalanced stairs reaching to the ground.

8. Fire escapes shall not take the place of stairways required by the codes under which the building was constructed.

9. Fire escapes shall be kept clear and unobstructed at all times and maintained in good working order.

SECTION 8-503 — ESCAPE OR RESCUE WINDOWS AND DOORS

Basements in dwelling units and every sleeping room below the fourth floor shall have at least one openable window or door approved for emergency escape which shall open directly into a public street, alley, yard or exit court. Escape or rescue windows or doors shall have a minimum clear area of 3.3 square feet (0.31 m²) and a minimum width or height dimension of 18 inches (457 mm) and be operable from the inside to provide a full, clear opening without the use of special tools.

EXCEPTION: Escape or rescue windows in Group R-1 Hotel occupancies may comply with the regular code.

Chapter 8-6

ALTERNATIVE ACCESSIBILITY PROVISIONS

SECTION 8-601 — PURPOSE, INTENT AND SCOPE

8-601.1 Purpose. The purpose of this chapter is to provide alternative regulations to facilitate access and use by persons with disabilities to and throughout buildings or structures designated as qualified historical buildings or properties. These regulations require enforcing agencies to accept any reasonably equivalent alternatives to regular code when dealing with qualified historical buildings or properties.

8-601.2 Intent. It is the intent of this chapter to preserve the integrity of qualified historical buildings and properties while providing access to and use by persons with disabilities.

8-601.3 Scope. These regulations shall apply to every qualified historical building or property that is required to provide access to persons with disabilities.

SECTION 8-602 — BASIC PROVISIONS

8-602.1 Regular Code. The regular code for access for persons with disabilities shall be applied to qualified historical buildings or properties unless strict compliance with the regular code will threaten or destroy the historical significance or character-defining features of the building or property.

8-602.2 Alternative Provisions. If the historical significance or character-defining features are threatened, alternative provisions for access may be applied pursuant to this chapter provided the following conditions are met:

1. Such alternative provisions shall be applied only on an item-by-item or a case-by-case basis. (See, e.g., Section 8-603.)

2. The alternative provisions are applied according to the priorities outlined in Section 8-603 whereby the alternative providing the greatest accessibility is listed first.

3. Documentation is provided stating the reasons for the application of the alternative provisions. Such documentation shall be maintained as a part of the public record.

CHAP. 34, DIV. II
8-602.2
8-701.3

A modification can be considered.

4. If it is listed in Section 8-602.2, character defining features may be applied to the building or site or cause unreasonable hardship.

SECTION 8-603 — PREFERRED ALTERNATIVES

The alternatives below each category are listed in order of priority. These alternatives apply only to the specific building standards listed below.

8-603.1 Entry. These alternatives do not allow exceptions for the requirement of level landings in front of doors, except as provided in Section 8-603.3. Alternatives listed in order of priority are:

1. Access to any entrance used by the general public and no further than 200 feet (60 960 mm) from the primary entrance.
2. Access at any entrance not used by the general public but open and unlocked with directional signs at the primary entrance and as close as possible to, but no further than 200 feet (60 960 mm) from, the primary entrance.

8-603.2 Doors. Alternatives listed in order of priority are:

1. Single-leaf door which provides a minimum 30 inches (762 mm) of clear opening.
2. Single-leaf door which provides a minimum 29½ inches (749 mm) clear opening
3. Double door, one leaf of which provides a minimum 29½ inches (749 mm) clear opening.
4. Double doors operable with a power-assist device to provide a minimum 29½ inches (749 mm) clear opening when both doors are in the open position.

8-603.3 Power-assisted Doors. A power-assisted door or doors may be considered an equivalent alternative to level landings, strikeside clearance and door-opening forces required by the regular code.

8-603.4 Toilet Rooms. In lieu of separate-gender toilet facilities as required in the regular code, an accessible unisex toilet facility may be designated.

8-603.5 Exterior and Interior Ramps and Lifts. Alternatives listed in order of priority are:

1. A lift or a ramp of greater than standard slope but no greater than 1:10, for horizontal distances not to exceed 12 feet (3658 mm). Signs shall be posted at upper and lower levels to indicate steepness of the slope.
2. Access by ramps of 1:6 slope for horizontal distance not to exceed 13 inches (330 mm). Signs shall be posted at upper and lower levels to indicate steepness of the slope.
3. Access provided by experiences, services, functions, materials and resources through methods, including, but not limited to, maps, plans, videos, virtual reality, and related equipment, at accessible levels. This alternative shall be documented as required in Section 8-605.

SECTION 8-604 — EQUIVALENT FACILITATION

Use of other designs and technologies, or deviation from particular technical and scoping requirements, are permitted if the application of the alternative provisions contained in Section 8-603 would threaten or destroy the historical significance or

character-defining features of the building or site or cause unreasonable hardship.

Alternatives to Section 8-604 are permitted only where the following conditions are met:

1. Such alternatives shall be applied only on an item-by-item or a case-by-case basis.
2. The alternative design and/or technologies used will provide substantially equivalent or greater accessibility to, and usability of, the facility.
3. The official charged with the enforcement of the standards shall document the reasons for the application of the alternative design and/or technologies and their effect on the historical significance or character-defining features. Such documentation shall be in accordance with Section 8-602.2, Item 3, and shall include the opinions and comments of state or local accessibility officials and the opinions and comments of representative local groups of people with disabilities. Such documentation shall be recorded and entered into the permanent file of the enforcing agency.

SECTION 8-605 — EXCEPTIONS

If the historical significance or character-defining features would be threatened or destroyed by the application of alternative access standards as provided by this chapter, and no equivalent facilitation as provided in Section 8-604 is feasible, an exception from the literal requirements for full and equal access or any alternative provisions may be provided only if the following conditions are met:

1. Such exception is considered only on an item-by-item or a case-by-case basis.
2. Interpretive exhibits and/or equal services of the exempted significant historical aspects are provided for the public in a location fully accessible to and usable by persons with disabilities, including persons with hearing and sight impairment.
3. Services are provided in an accessible location equal to those provided in the excepted location.
4. The official charged with enforcement of the standards shall document the reasons for the application of the alternative design and/or technologies and their effect on the historical significance or character-defining features. Such documentation shall be in accordance with Section 8-602.2, Item 3, and shall include the opinions and comments of state or local accessibility officials, and the opinions and comments of representative local groups of people with disabilities. Such documentation shall be recorded and entered into the permanent file of the enforcing agency.

Chapter 8-7

ALTERNATIVE STRUCTURAL REGULATIONS

SECTION 8-701 — PURPOSE, INTENT AND SCOPE

8-701.1 Purpose. The purpose of this chapter is to provide alternative regulations for the structural safety of buildings or structures designated as qualified historical buildings or properties. These regulations shall be substantially equivalent to the regular code with qualified exceptions.

8-701.2 Intent. The intent of these regulations is to preserve the historical significance of buildings or structures at large through the application of alternative structural regulations.

8-701.3 Scope. The alternative structural regulations provided by Section 8-705 are to be applied in conjunction with the regular

Requires a Board hearing

Checklist Items

1. Path of Travel from the parking or public way to primary entrance.
 - a. Accessible parking requirements
 - i. Number of accessible spaces
 - ii. Van spaces
 - iii. Location
 - iv. Path of Travel
 - b. Ramps

2. Primary entrances
 - a. Size of door
 - b. Hardware
 - c. Kick plate
 - d. Threshold
 - e. Maneuvering clearances.
 - f. Landing

3. Elevators (at least one elevator must comply with the following):
 - a. Add floor numbers to both sides of each elevator jamb.
 - b. Replace hallway call buttons with buttons that are 1/8" above the surrounding surface and centered at 42" A.F.F.
 - c. Replace car control panel buttons as follows:
 - i. Buttons to be 3/4 and raised 1/8". White, illuminated with 5/8" black Arabic numeral. Recess the black ring on the call buttons into the black panel.
 - ii. Standard Arabic numeral to be to the left of the control button and raised 1/32".
 - iii. Braille symbol raised 1/40" to be located immediately below the numeric character.
 - iv. A minimum 3/8" clear space shall be provided

between rows of control buttons

- i. The highest control button is to be centered at 54" max.
 - ii. The "Stop" and "Alarm" buttons are to be at a minimum 35" from the floor.
 - e. Differentiate audible tone in the elevator lobby for the different direction of travel. (i.e. once for up and twice for down).
 - f. Add audible sound indicating cab stopping or passing floors.
 - g. Emergency intercom systems shall be adjusted for non-verbal use. Include emergency procedure instructions.
 - h. Provide international symbols and Braille on the telephone panel.
5. Restrooms
 - a. Entrance door
 - b. Landings at door
 - c. Strike edge clearance
 - d. Door symbols and other signage
 - e. 60" circle or "T" shaped space (See figure 11B-12)
 - f. Replacement of fixtures
 - g. Clear space at urinals, lavatories and toilets
 - h. Grab bars
6. Public phones
 - a. Text phones
 - b. Clear floor ground
7. Drinking fountains
 - a. Hi/ low
 - b. Alcove, wing walls or textured floor surface.

Accessibility in New Commercial Buildings

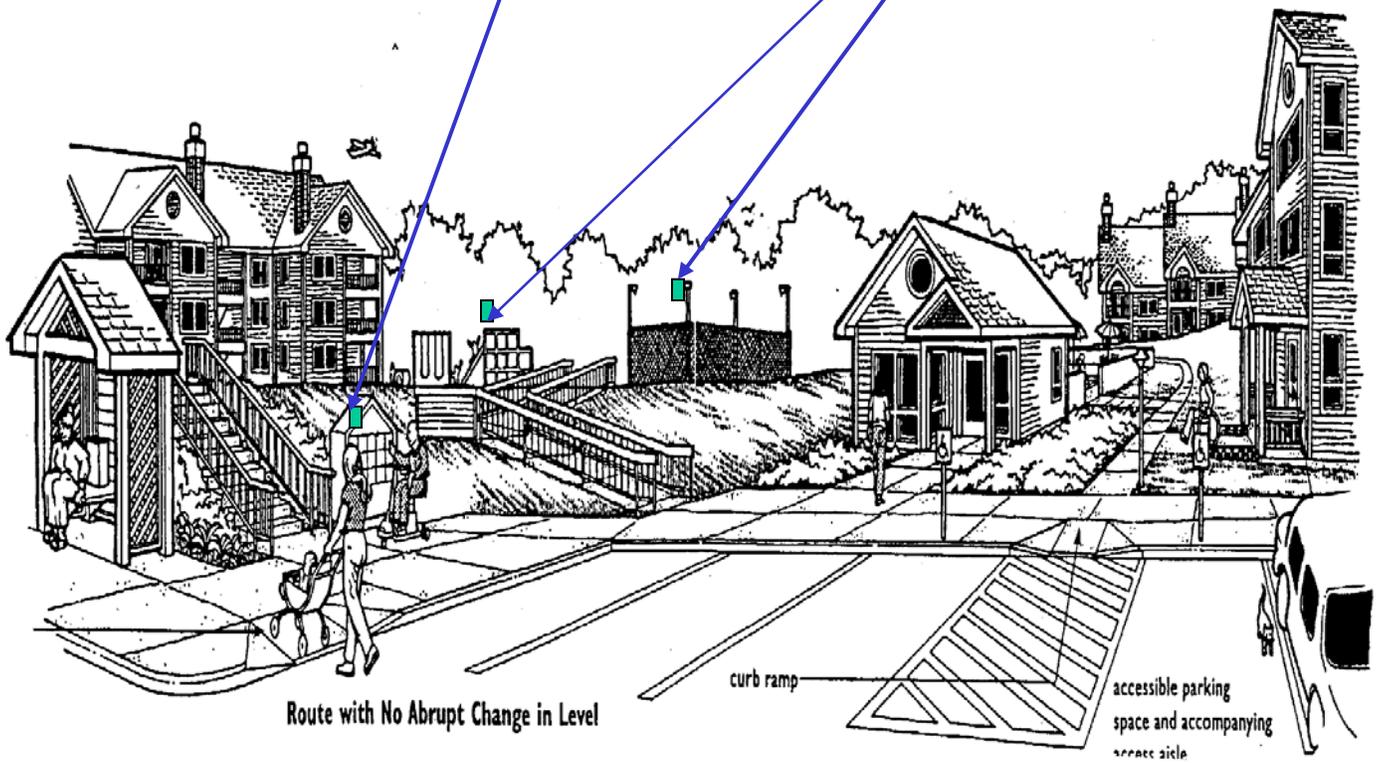


Site Development

These details are shown to illustrate the importance of accessibility to **all** features and elements of the building.

Mail box kiosk to be located on an accessible route

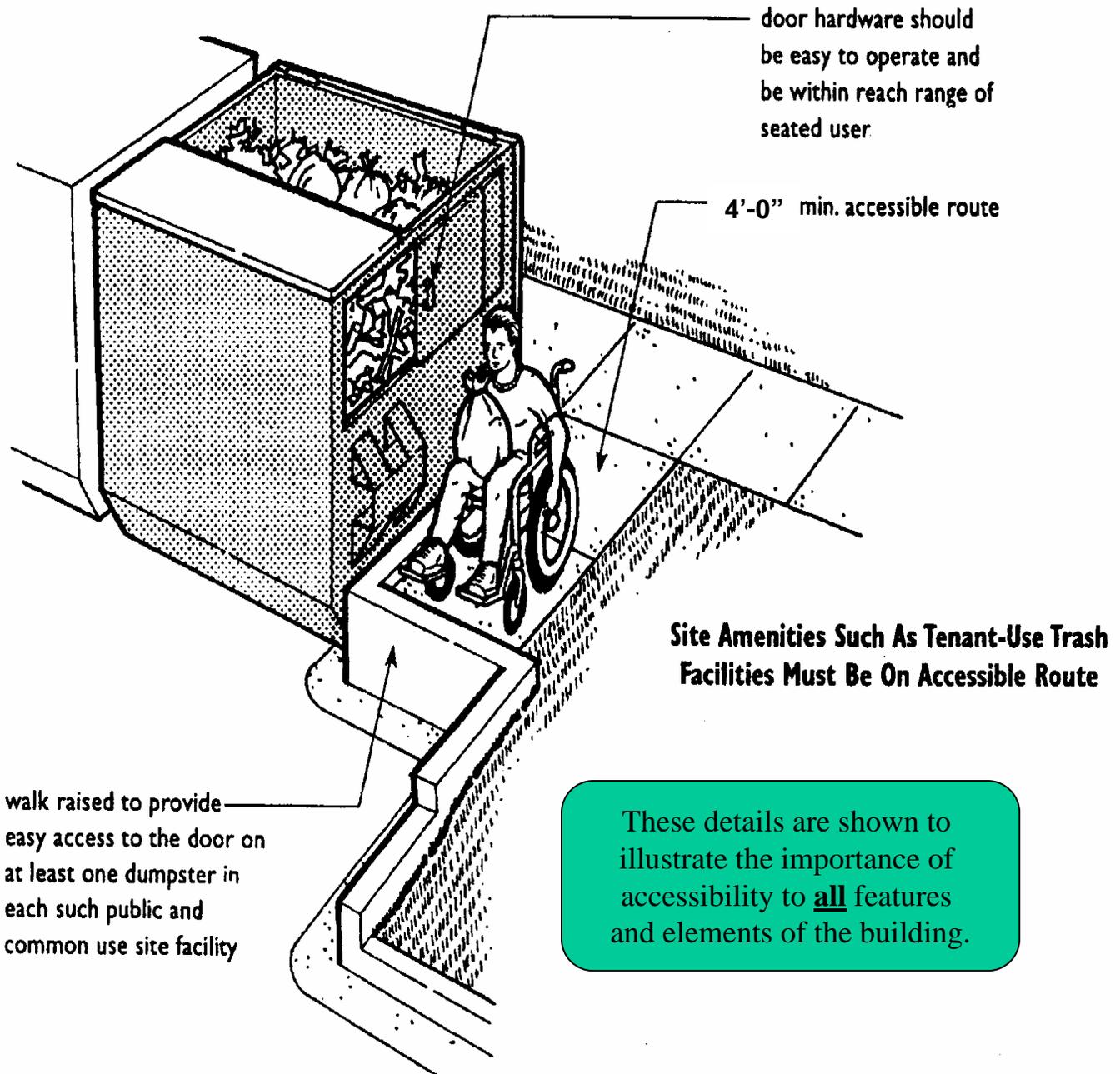
Playgrounds and tennis courts are accessible by means of ramps



Route with No Abrupt Change in Level

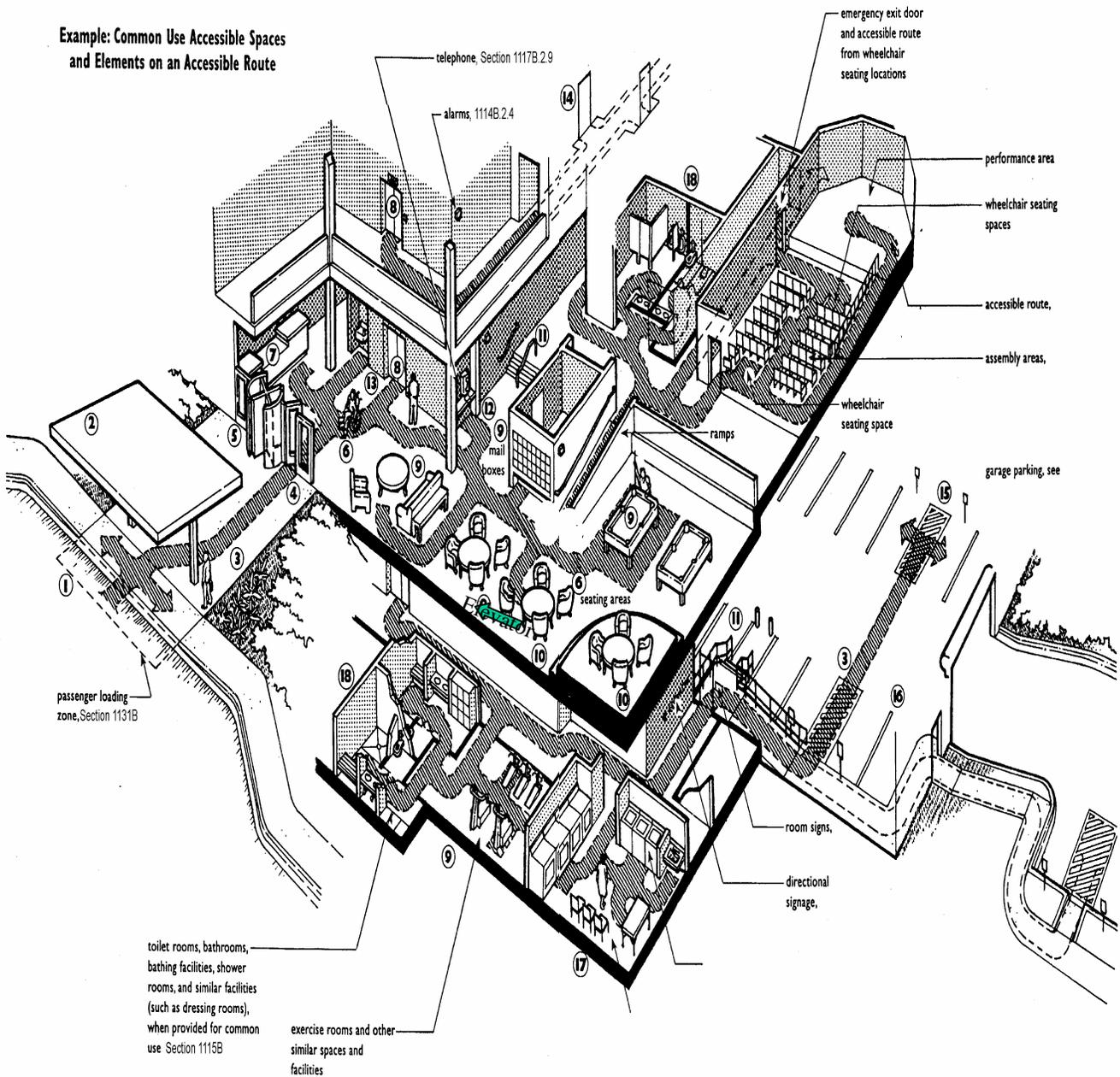
curb ramp

accessible parking space and accompanying access aisle



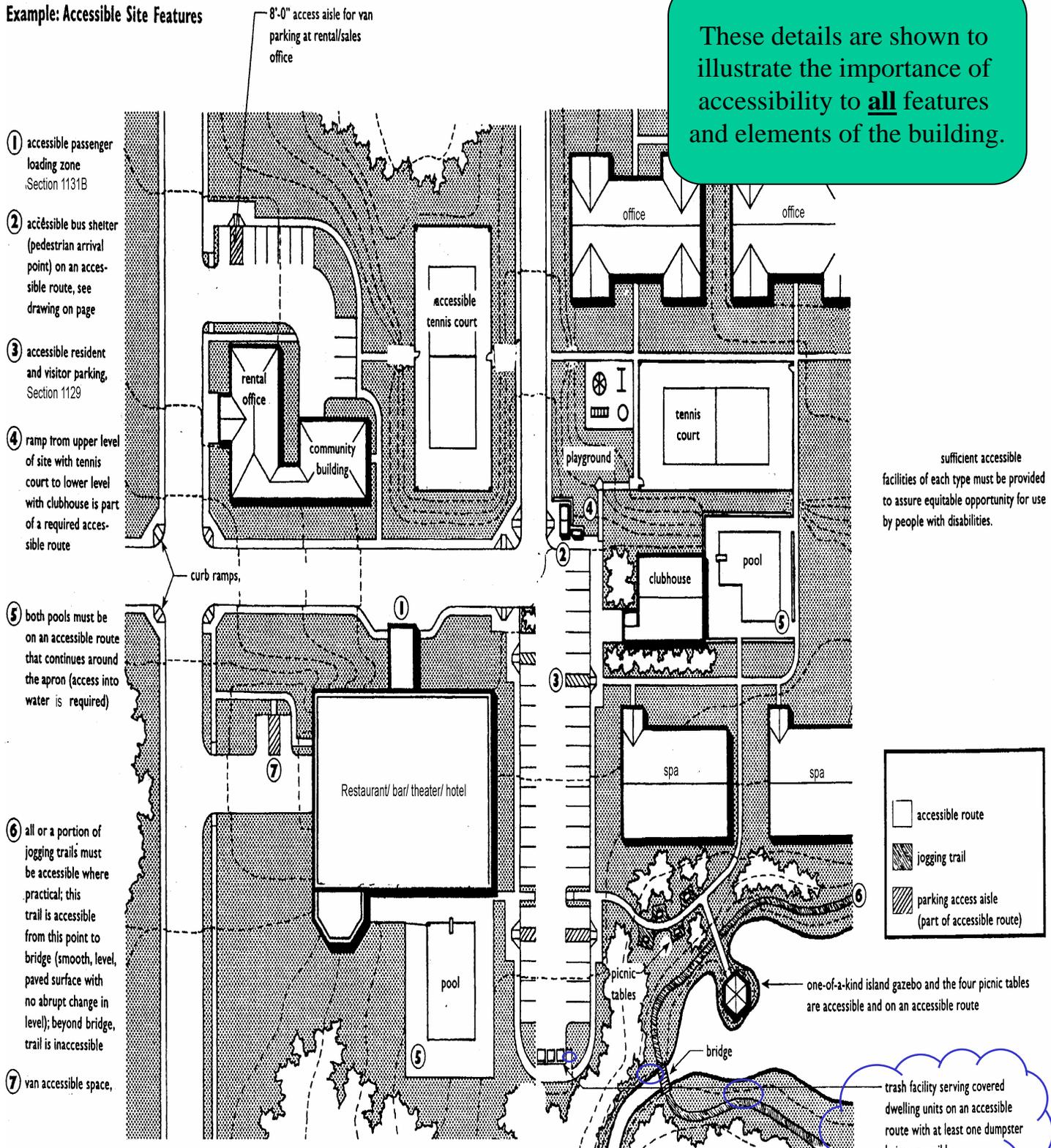
These details are shown to illustrate the importance of accessibility to **all** features and elements of the building.

Example: Common Use Accessible Spaces and Elements on an Accessible Route



Site Development

Example: Accessible Site Features



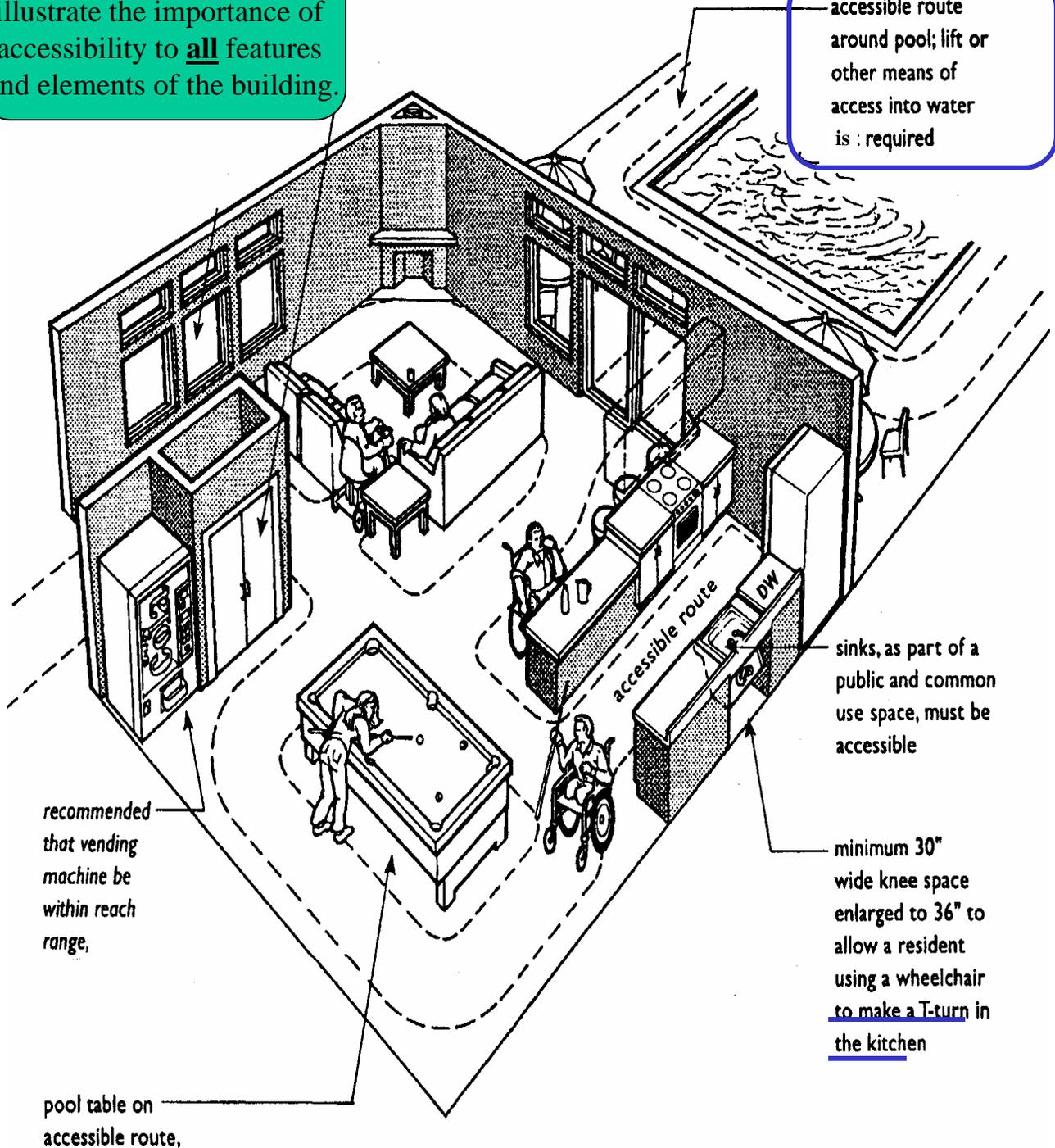
These details are shown to illustrate the importance of accessibility to all features and elements of the building.

sufficient accessible facilities of each type must be provided to assure equitable opportunity for use by people with disabilities.

See page II 2

These details are shown to illustrate the importance of accessibility to all features and elements of the building.

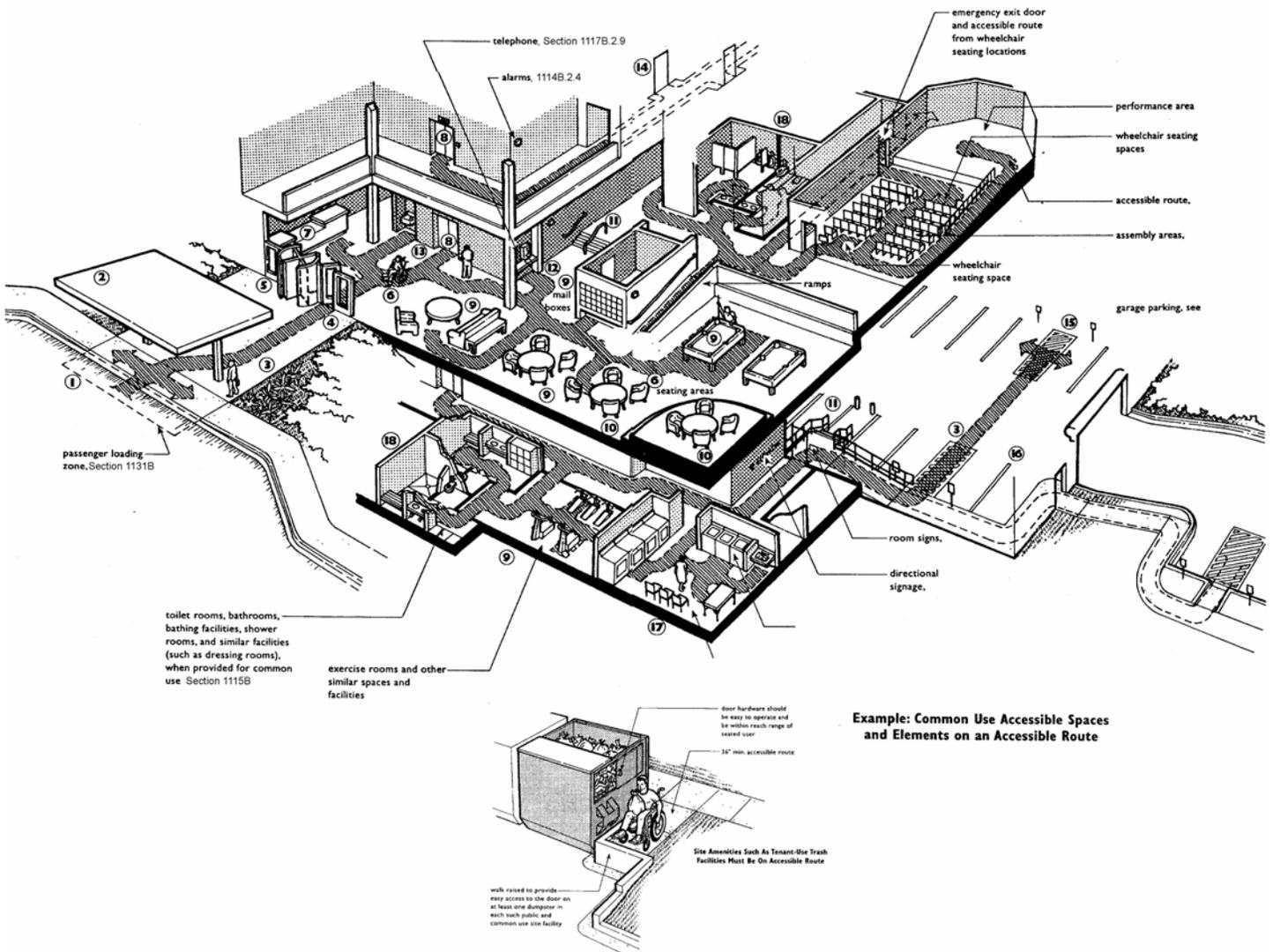
accessible route around pool; lift or other means of access into water is : required



Accessible Elements and Features of a Public and Common Use Clubhouse

Public and common use kitchens must be usable and at least meet the requirements

These details are shown to illustrate the importance of accessibility to all features and elements of the building.



Example: Common Use Accessible Spaces and Elements on an Accessible Route

SECTION 1114B — FACILITY ACCESSIBILITY

When buildings are required to be accessible, buildings and facilities shall be accessible as provided in this section and in those sections listed in Section 1114B.1.1.

1114B.1 Design and Construction.

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

... accessible means of egress shall be provided in the same number as required for exits by Chapter 10...

Section 1133B

Doors — [for HCD 1/AC] Section 1120A.2; [for DSA/AC] Section 1133B.2

When an exit required by Chapter 10 is not accessible (i.e. a person in a wheelchair cannot exit down a stairway) an area of evacuation assistance shall be provided.

DSA/AC] Section 1133B.7

Hazards — [for HCD 1/AC] Section 1120A.7; [for DSA/AC] Section 1133B.8

An area of evacuation assistance is not required in buildings or facilities having a supervised sprinkler system.

1114B.1.2 Accessible route of travel. When a building, or portion of a building, is required to be accessible or adaptable, an accessible route of travel shall be provided to all portions of the building, to accessible building entrances and between the building and the public way. Except within an individual dwelling unit, an accessible route of travel shall not pass through kitchens, storage rooms, restrooms, closets or other spaces used for similar purposes. At least one accessible route within the boundary of the site shall be provided from public transportation stops, accessible parking and accessible passenger loading zones, and public streets or sidewalks, to the accessible building entrance they serve. The accessible route shall, to the maximum extent feasible, coincide with the route for the general public. At least one accessible route shall connect accessible buildings, facilities, elements and spaces that are on the same site. At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements and with all accessible dwelling units within the building or facility. An accessible route shall connect at least one accessible entrance of each accessible dwelling unit with those exterior and interior spaces and facilities that serve the accessible dwelling unit.

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

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

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

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

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

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

1114B.2 Egress and Areas for Evacuation Assistance.

1114B.2.1 [For SFM] General. In buildings or portions of buildings required to be accessible, accessible means of egress shall be provided in the same number as required for exits by Chapter 10. When an exit required by Chapter 10 is not accessible, an area for evacuation assistance shall be provided.

Areas for evacuation assistance shall comply with the requirements of this code and shall adjoin an accessible route of travel complying with this code.

EXCEPTIONS: 1. Areas of evacuation assistance are not required in buildings or facilities having a supervised automatic sprinkler system.

2. In alterations of existing buildings, areas of evacuation assistance are not required.

1114B.2.2 [For SFM] Areas for evacuation assistance.

1114B.2.2.1 [For SFM] Location and construction. An area for evacuation assistance shall be one of the following:

1. [For SFM] A portion of a stairway landing within a smoke-proof enclosure, complying with Section 1005.3.3.

2. [For SFM] A portion of an exterior exit balcony located immediately adjacent to an exit stairway when the exterior exit balcony complies with Section 1006.3. Openings to the exterior of the building located within 20 feet (6096 mm) of the area for evacuation assistance shall be protected with fire assemblies having a three-fourths-hour fire-protection rating.

3. [For SFM] A portion of a one-hour fire-resistive corridor complying with Section 1004.3.4 located immediately adjacent to an exit enclosure.

4. [For SFM] A vestibule located immediately adjacent to an exit enclosure and constructed to the same fire-resistive standards as required by Section 1004.3.4.

5. [For SFM] A portion of a stairway landing within an exit enclosure which is vented to the exterior and is separated from the interior of the building by not less than one-hour fire-resistive door assemblies.

6. [For SFM] When approved by the building official, an area or room which is separated from other portions of the building by a smoke barrier. Smoke barriers shall have a fire-resistive rating of not less than one hour and shall completely enclose the area or room. Doors in the smoke barrier shall be tightfitting smoke- and draft-control assemblies having a fire-protection rating of not less than 20 minutes and shall be self-closing or automatic closing. The area or room shall be provided with an exit directly to an exit enclosure. When the room or area exits into an exit enclosure which is required to be of more than one-hour fire-resistive construction, the room or area shall have the same fire-resistive construction, including the same opening protection, as required for the adjacent exit enclosure.

7. [For SFM] An elevator lobby complying with Section 1114B.2.3.

1114B.2.2.2 [For SFM] Size. Each area for evacuation assistance shall provide at least two accessible areas that are not less than 30 inches by 48 inches (762 mm by 1219 mm). The area for

Visual Index -Parking

1129.3 Medical Care Outpatient Facilities. At facilities providing medical care and other services for persons with mobility impairments, parking spaces complying with this section shall be provided in accordance with Table 11B-6 except as follows:

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

TABLE 11B-6-- SPACES REQUIRED

Total Number of Parking Spaces in Lot or Garage	Minimum Required Number of Spaces
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1000	2 % of total
1001 and over	20 plus 1 for each 100 or fraction thereof over 1001

Accessible van stalls must have a loading area on the passenger side of the vehicle. See page I 23

In a tandem parking situation, specially equipped handicap cars requires them to be self parked furthest away from the driveway. See page I 24

Accessible parking spaces shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own. See page I 26

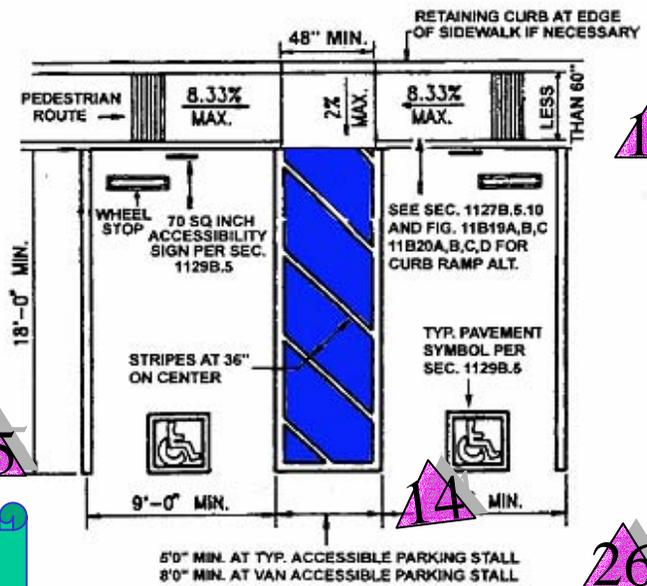
All entrances to and vertical clearances within the parking structures shall have a minimum vertical clearance of 8'-2" to an accessible parking spaces. (The 8'-2" clearance is not only required to the van stall but all accessible stalls).

Accessible parking shall be provided for ***BOTH*** onsite and offsite parking spaces.

1129 B.4.2 Van Space(s). One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches wide minimum and shall be designated van accessible as required by Section 1129B.5. All such spaces may be grouped on one level of a parking structure.

HOWEVER,

1129B.2 Less than Five Spaces. When less than five parking spaces are provided at buildings and facilities subject to these regulations, one shall be 14 feet wide and lined to provide a 9 foot parking area and a 5 foot loading and unloading area. However, there is no requirement that the space be reserved exclusively or identified for use by persons with disabilities only.



RECOMMENDED DOUBLE PARKING STALLS

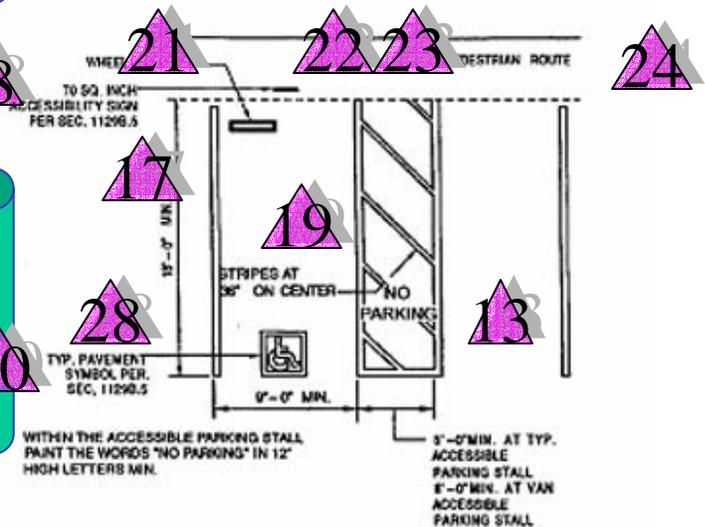
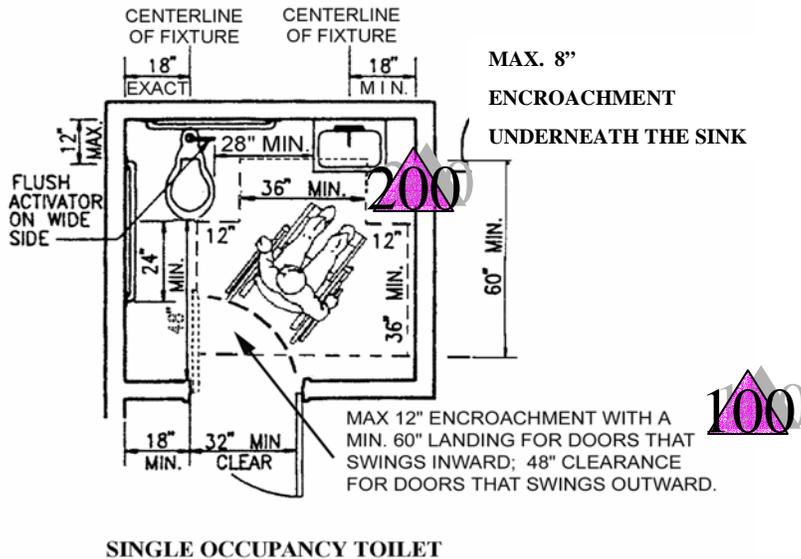
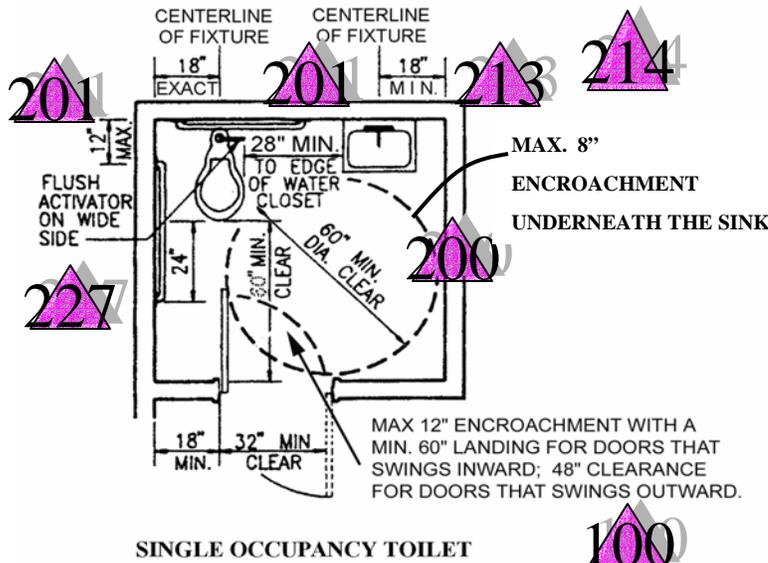


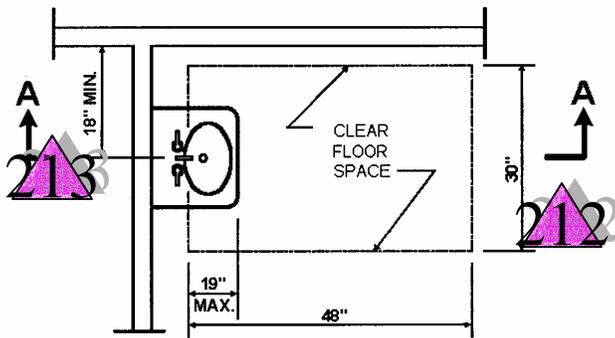
FIGURE 11B-7A DOUBLE PARKING STALLS

Restrooms –Single Accommodation

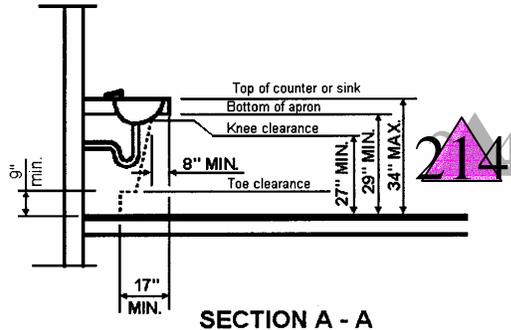


Modifications that request for private sanitary facility (ie. restroom and shower exclusively used by the building owner) to be exempt from accessibility requirements will no longer be granted.

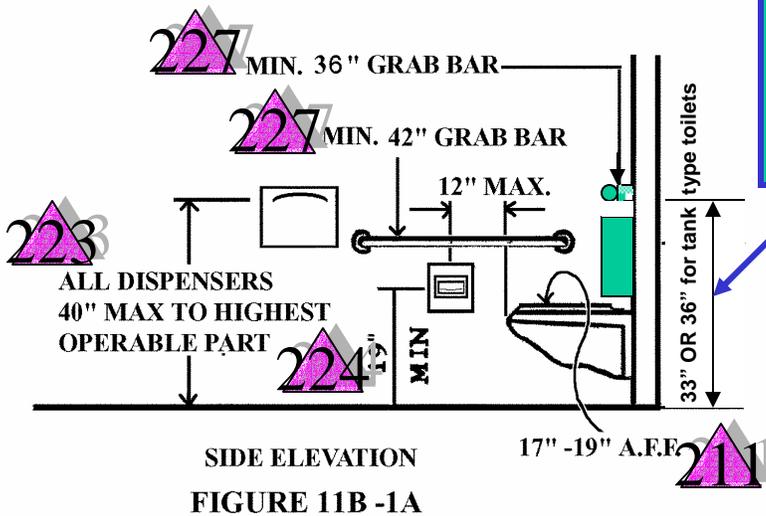
Accessory Fixtures



FLOOR PLAN

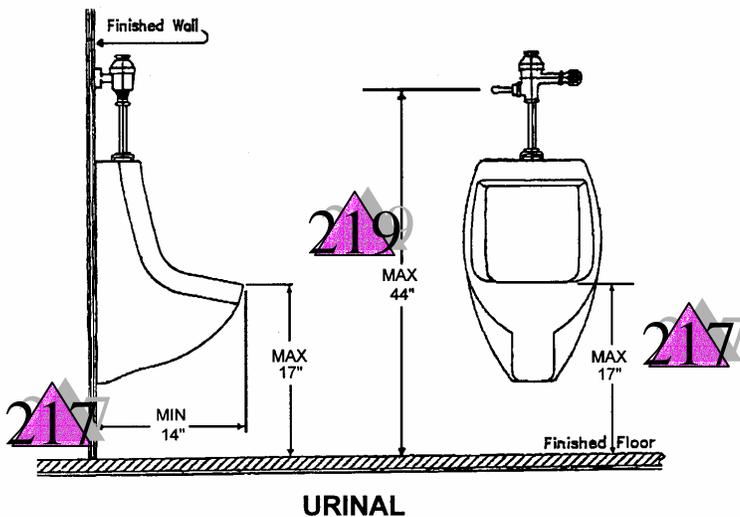


LAVATORY CLEARANCES

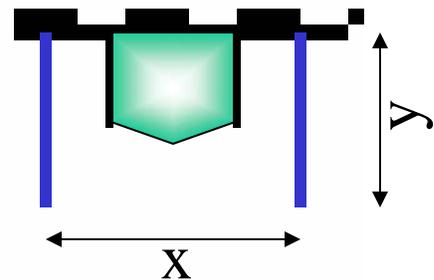


SIDE ELEVATION
FIGURE 11B -1A

Grab bars shall be securely attached 33" above and parallel to the floor, except that where a tank-type toilet is used which obstructs placement at 33", the grab bar may be as high as 36".



URINAL



If $Y \leq 24"$, then $X = 30"$
If $Y > 24"$, then $X = 36"$

Multiple Accommodation

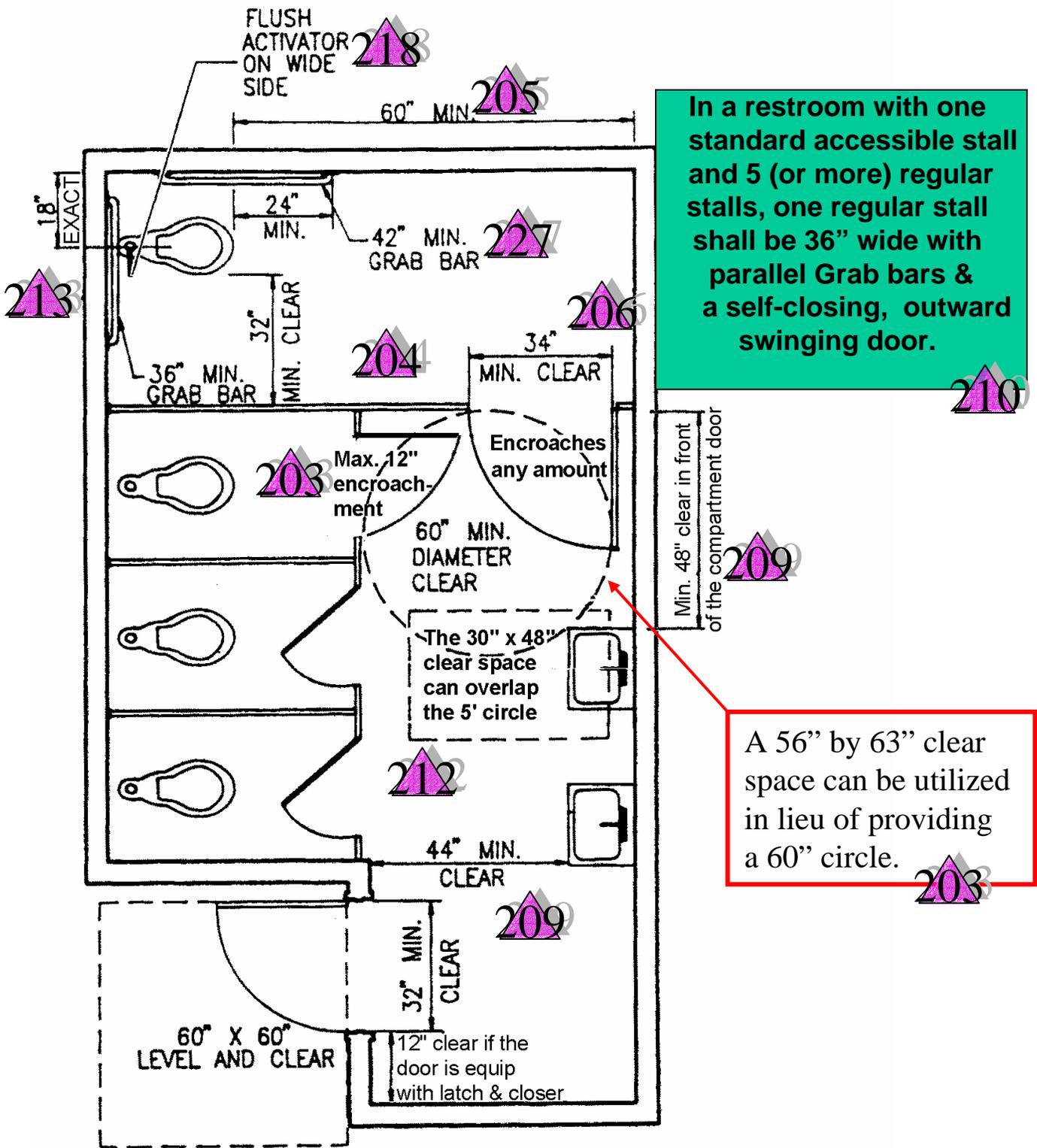
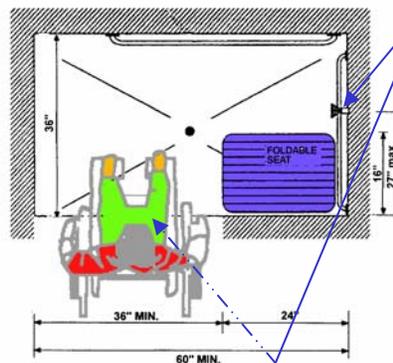
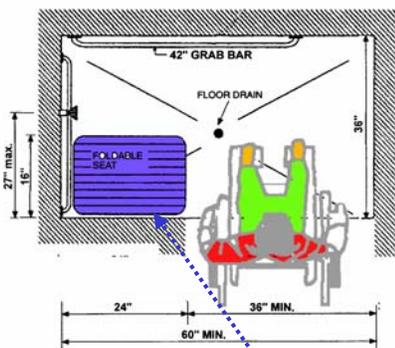


FIGURE 11B -1B --MULTIPLE ACCOMMODATION TOILETS

Commercial showers are the most complicated features to check, there are three types of showers:

- California Showers (42" x 48"), see page II 13
- Commercial Showers (36" x 60"), see pages II 14-15
- Open Showers, see page II 16

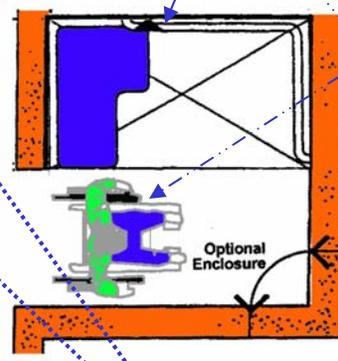
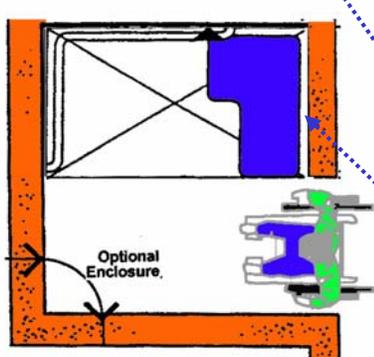
Follow the steps as outline below to design the proper layout for a commercial shower.



Step #2:

The controls and shower heads shall be mounted to the wall that is perpendicular to the long side of the folding seat . (See next page)

Approach Perpendicular to the Entry



Step #1:

The key is to determine whether the shower entry way is parallel or perpendicular to the path of entrance.

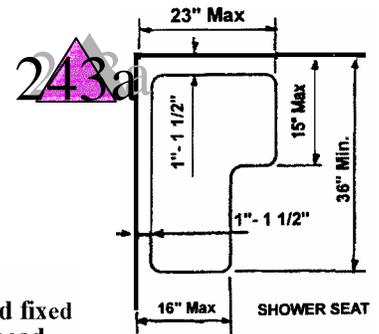
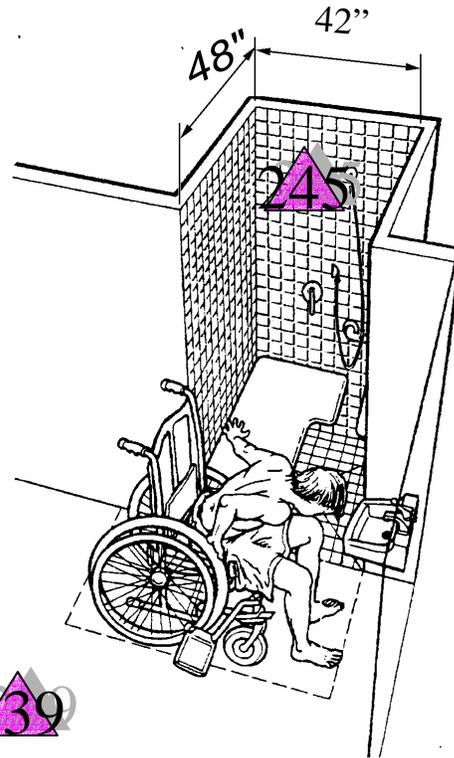
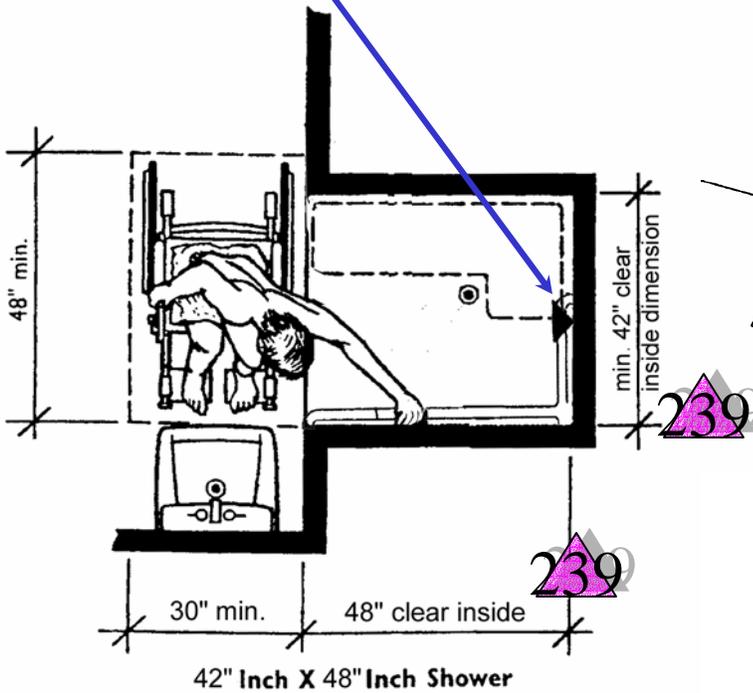
Approach Parallel to the Entry

Step #3:

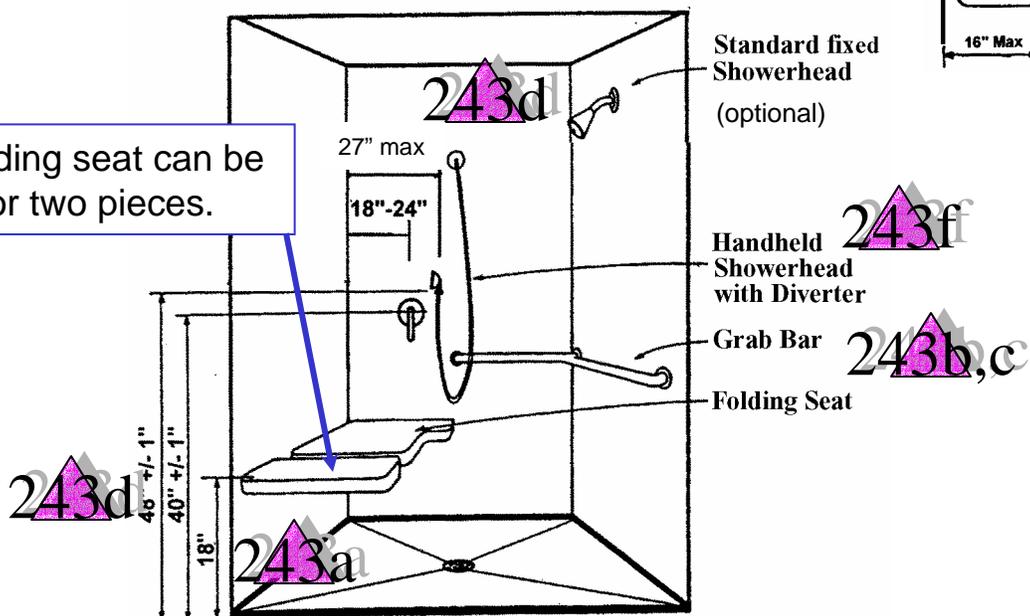
The long side of the folding seat shall always be perpendicular to the direction of the approach. (See next page).

California Showers for parallel approach

The controls and showers are to be mounted on the side wall adjacent to the seat and perpendicular with the entry.

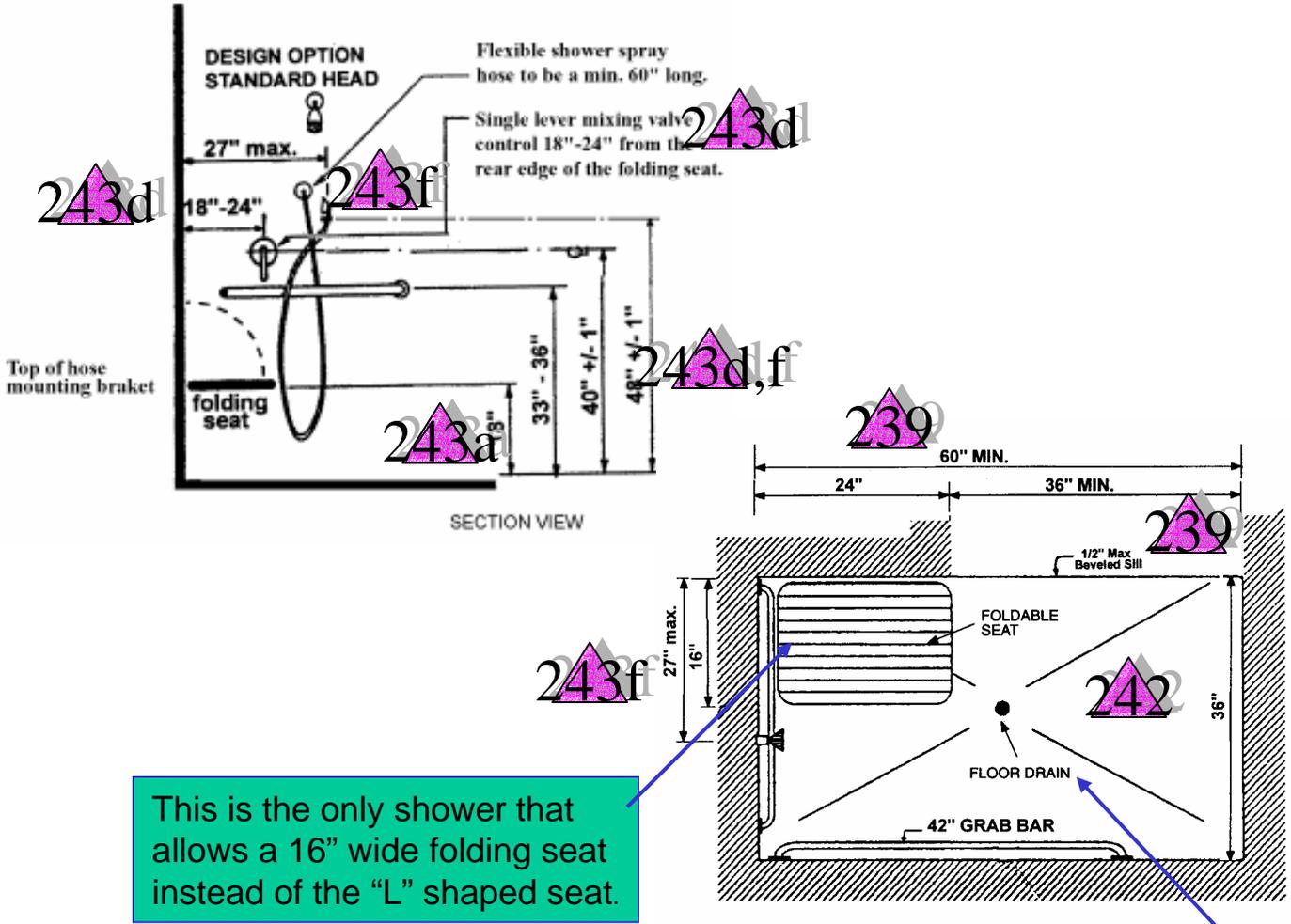


This folding seat can be of one or two pieces.



PERSPECTIVE OF ROLL-IN SHOWER—B
42" x 48" CALIFORNIA SIZE

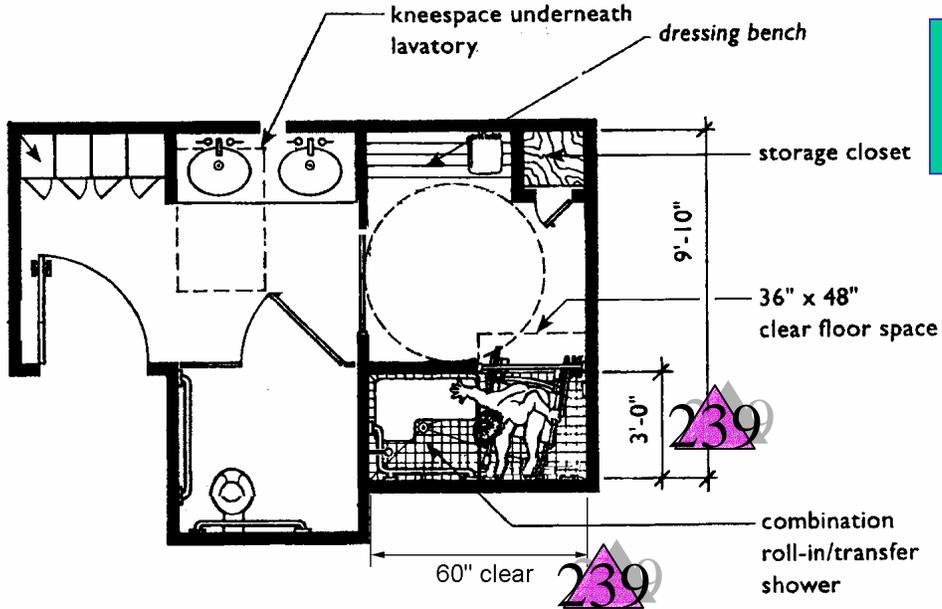
Commercial Showers for perpendicular approach



This is the only shower that allows a 16" wide folding seat instead of the "L" shaped seat.

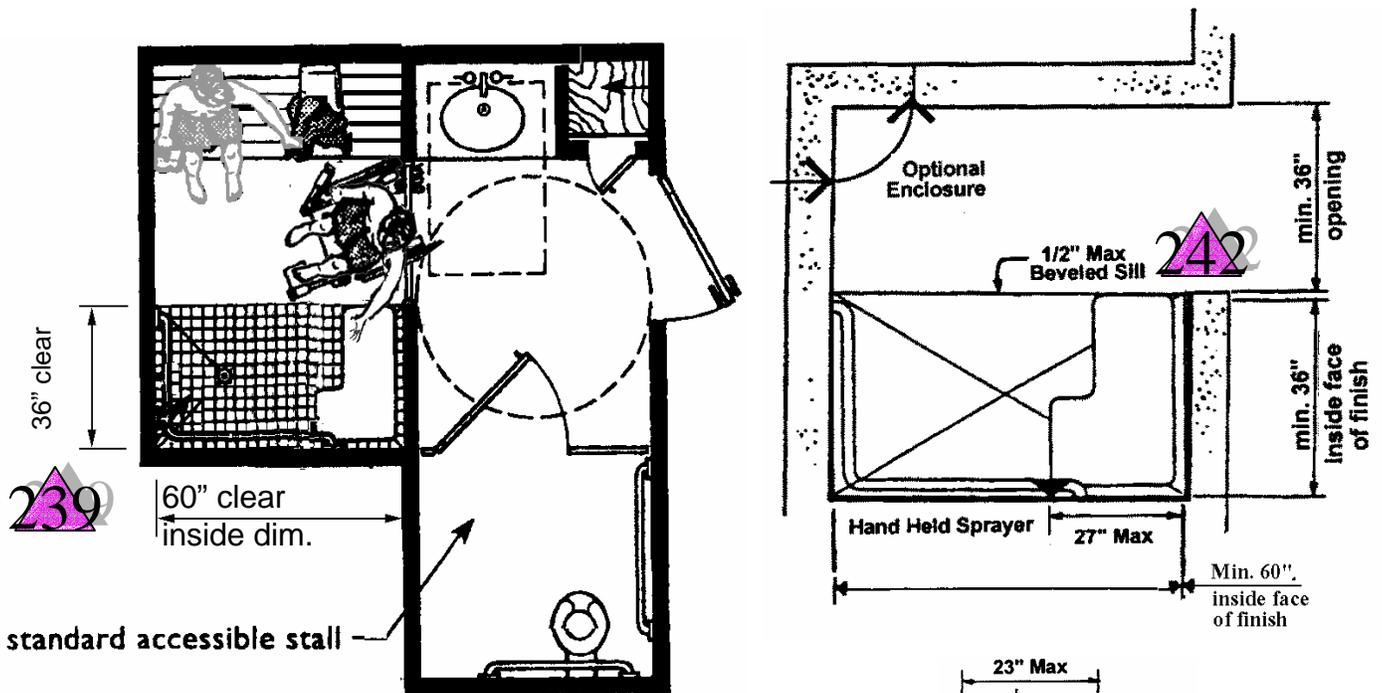
Floor drains do not have to be at the center of the shower floor.

FIGURE 11B -2D -ALTERNATIVE ROLL -IN

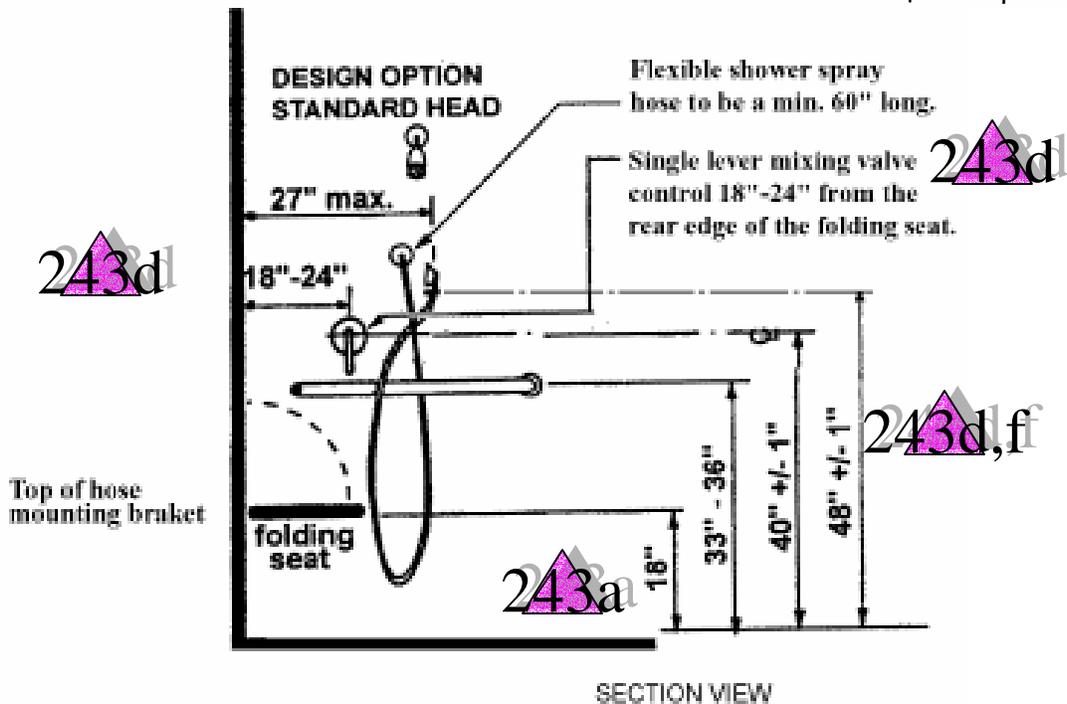
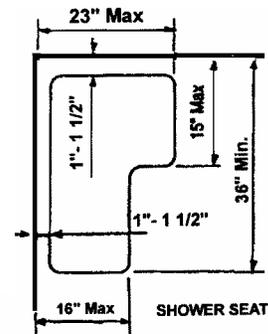


36" x 60" Commercial Showers

Commercial Showers for parallel approach



36" x 60" Commercial Shower



SECTION VIEW

Open Common Showers

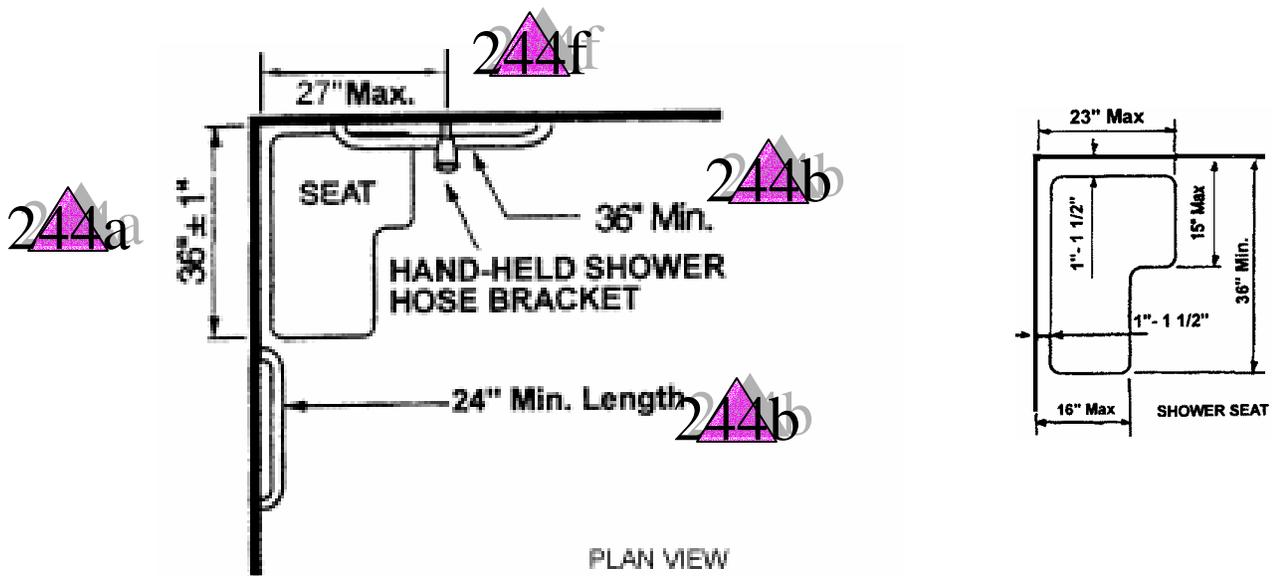
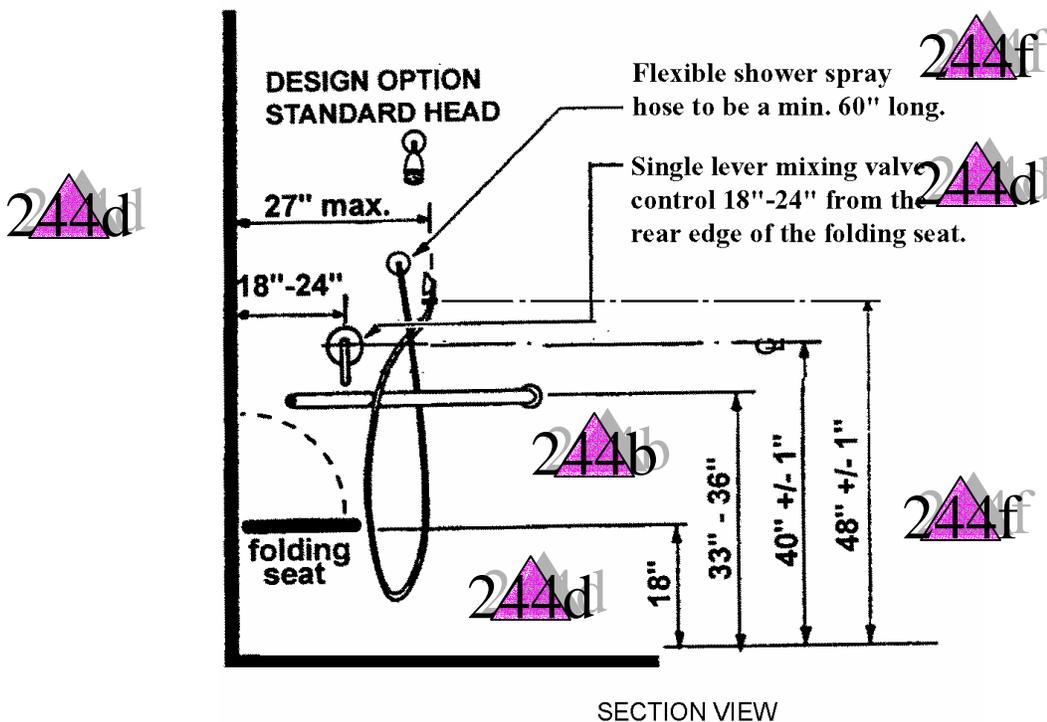


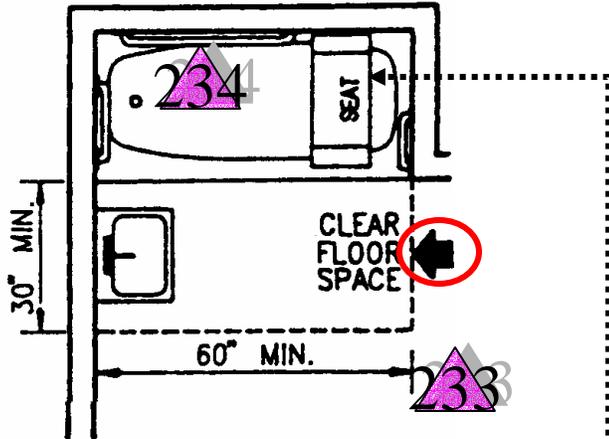
FIGURE 11B-2C -OPEN SHOWER



Commercial Bathtubs

(Select one of the following figures that best correspond to the building floor plan.)

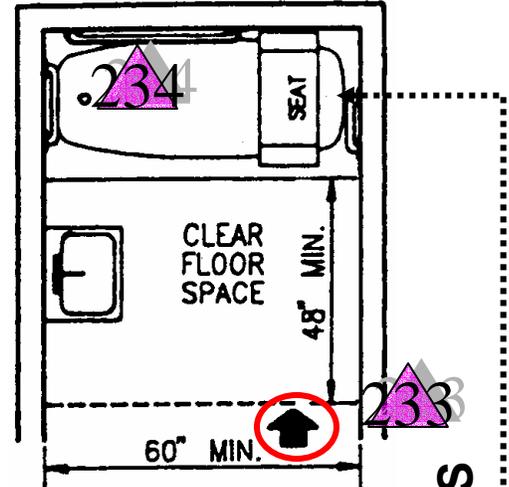
For tubs with parallel approach.



(b) WITH SEAT IN TUB
(with 3rd grab bar)

YES

For tubs with perpendicular approach.



(a) WITH SEAT IN TUB
(with 3rd grab bar)

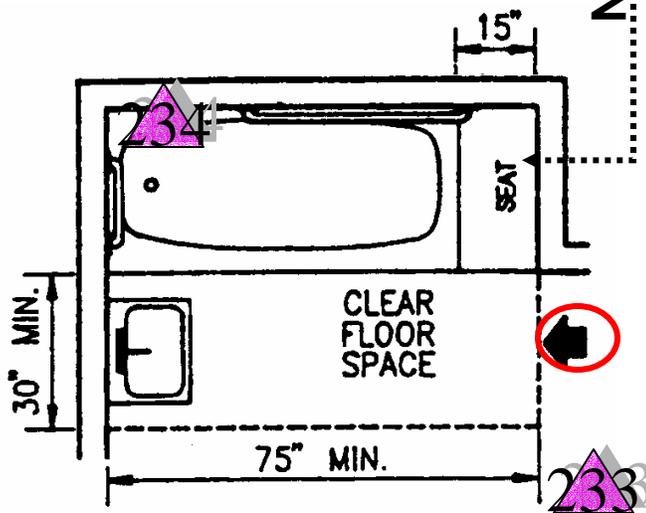
YES

Is there an
in-tub seat?

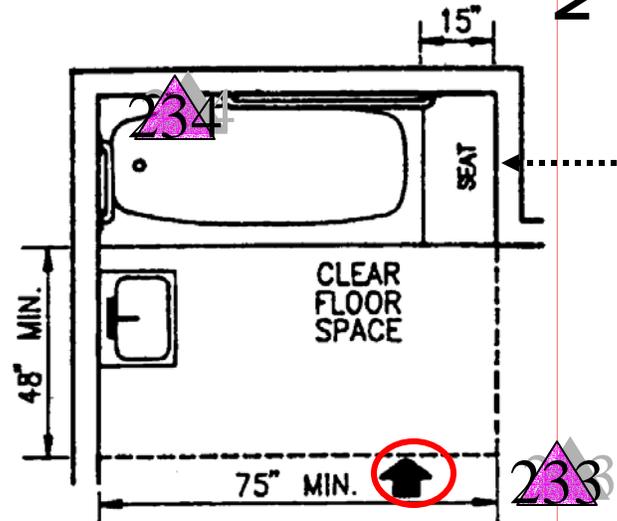
NO

Is there an
in-tub seat?

NO

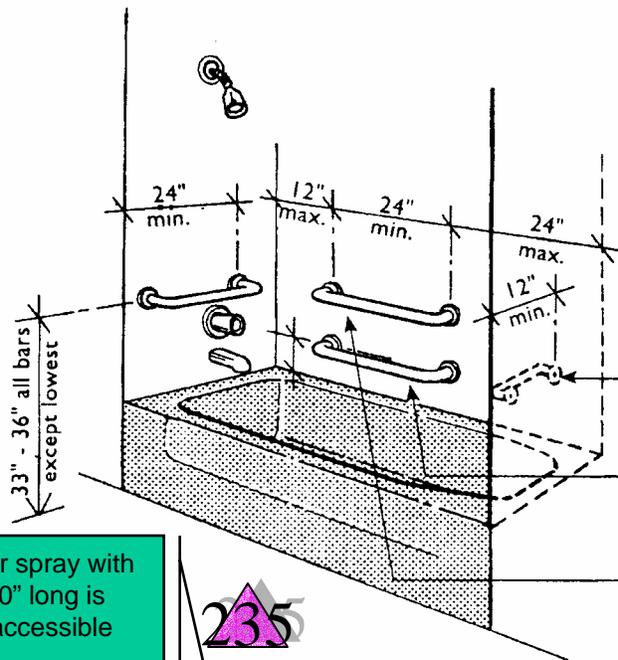


(c) WITH SEAT AT HEAD OF TUB
(without 3rd grab bar)



(c) WITH SEAT AT HEAD OF TUB
(without 3rd grab bar)

Commercial Bathtubs



234

This bar is omitted if there is a seat at the head of the tub.

the low bar is used by those who climb down into the tub

the higher level bars are used by people transferring into the tub and by those who stand to shower

A hand held shower spray with a hose at least 60" long is required with all accessible tubs.

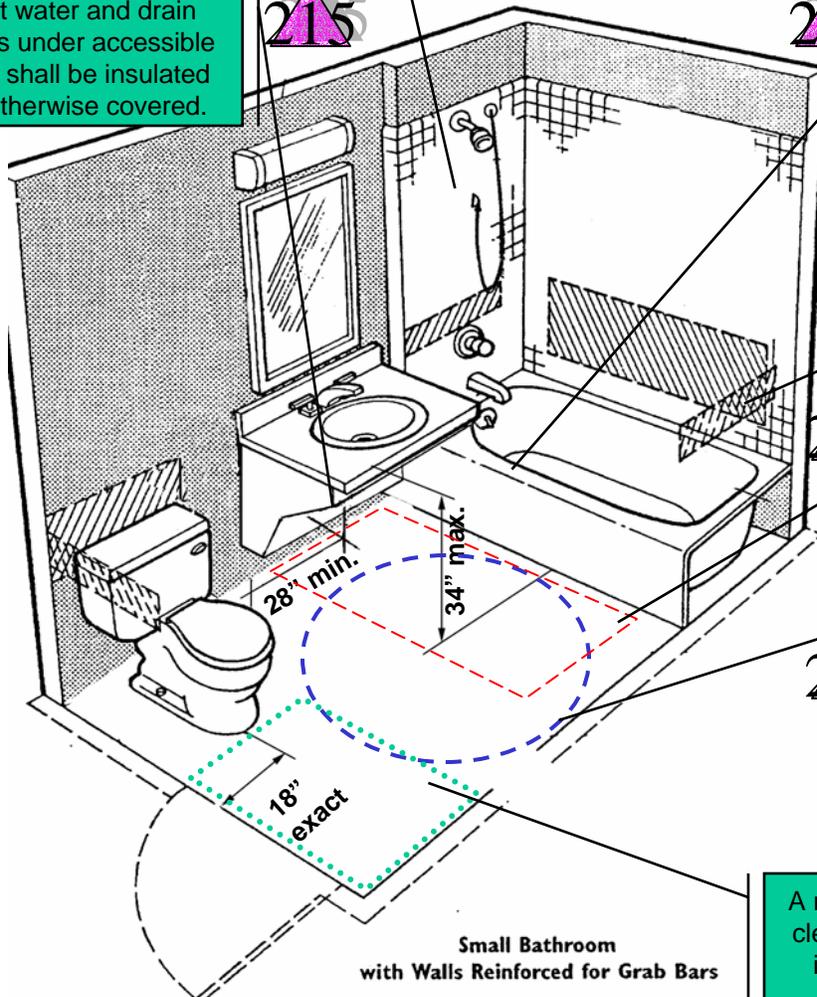
235

Hot water and drain pipes under accessible lavs shall be insulated or otherwise covered.

215

238

If enclosure are installed, they shall not obstruct controls or transfer into the tub. Enclosures shall not have tracks mounted on tub's rims.



234

Hatched areas denote locations of grab bars

233

60 x 48 clear space for perpendicular approach to a tub with an "in tub" seat.

200

A 5' circle is shown to depict an adequate amount of maneuvering space. A maximum of 8" encroachment is permitted beneath the sink.

A minimum of 36" x 48" clear space is required in front of the toilet.

199

Small Bathroom with Walls Reinforced for Grab Bars

Commercial Bathtubs

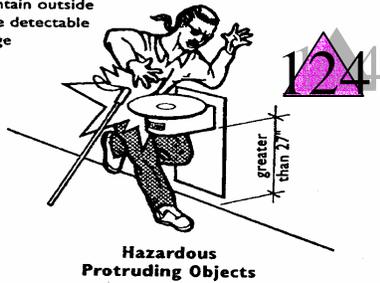
Flexible hose within a sanitary facility can greatly improve the accessibility of the tub.



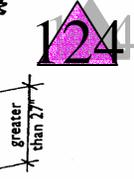
Grab bars and adequate maneuvering space in front of the water closet are provided to facilitate the use of the vanity.

Projections and Hazards

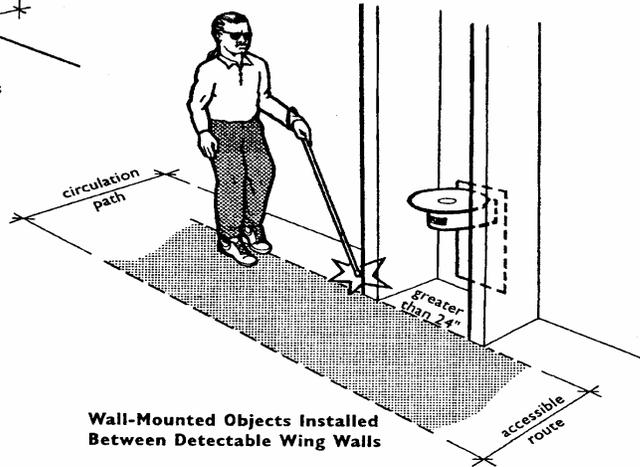
bottom edge of fountain outside cane detectable range



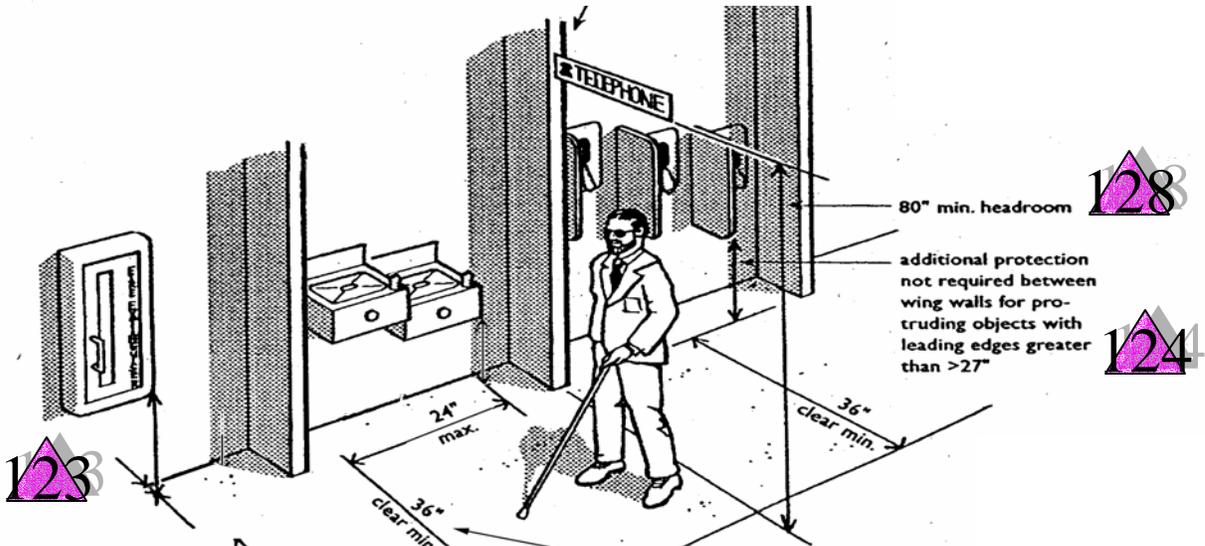
Hazardous Protruding Objects



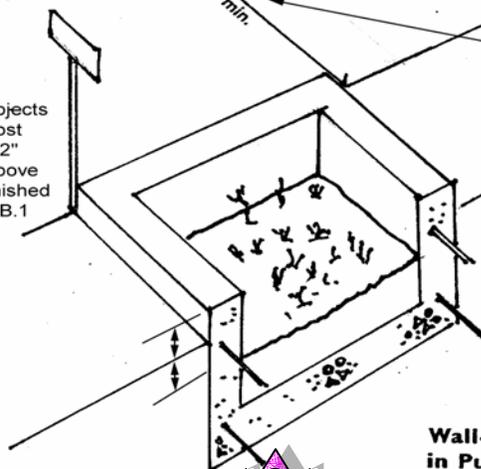
wing walls or other detectable warning barrier must not reduce accessible route



Wall-Mounted Objects Installed Between Detectable Wing Walls



Free standing objects mounted on a post may overhang 12" from 27" - 80" above the ground or finished floor. Sec. 1121B.1



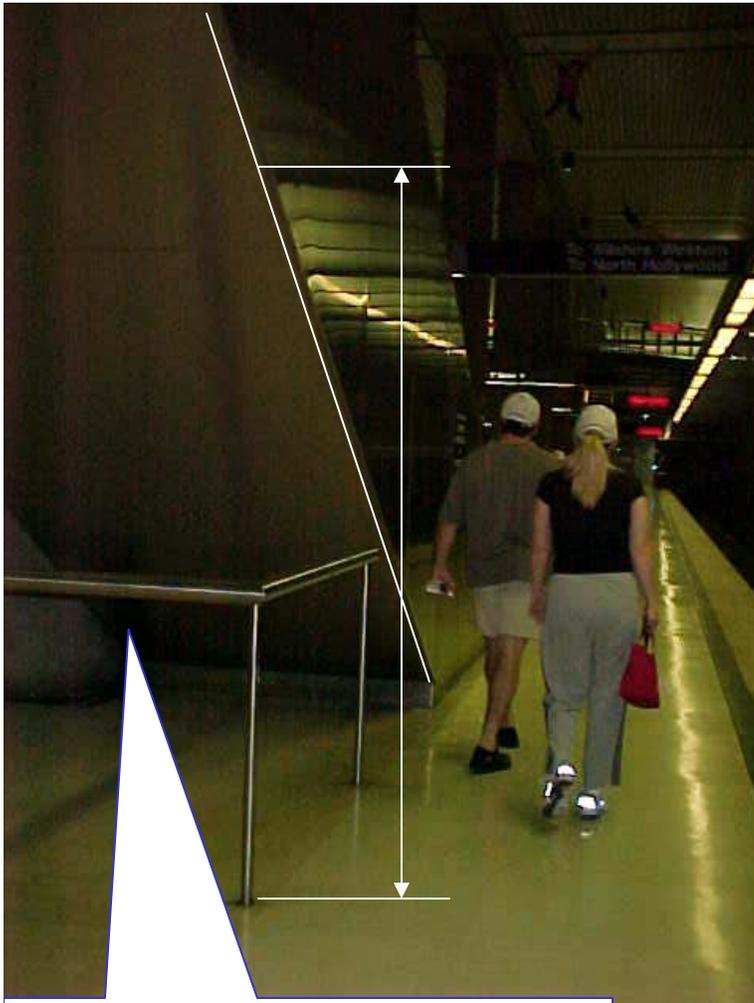
6" curb required if there is a vertical drop that exceeds 4 inches. or provide guardrails



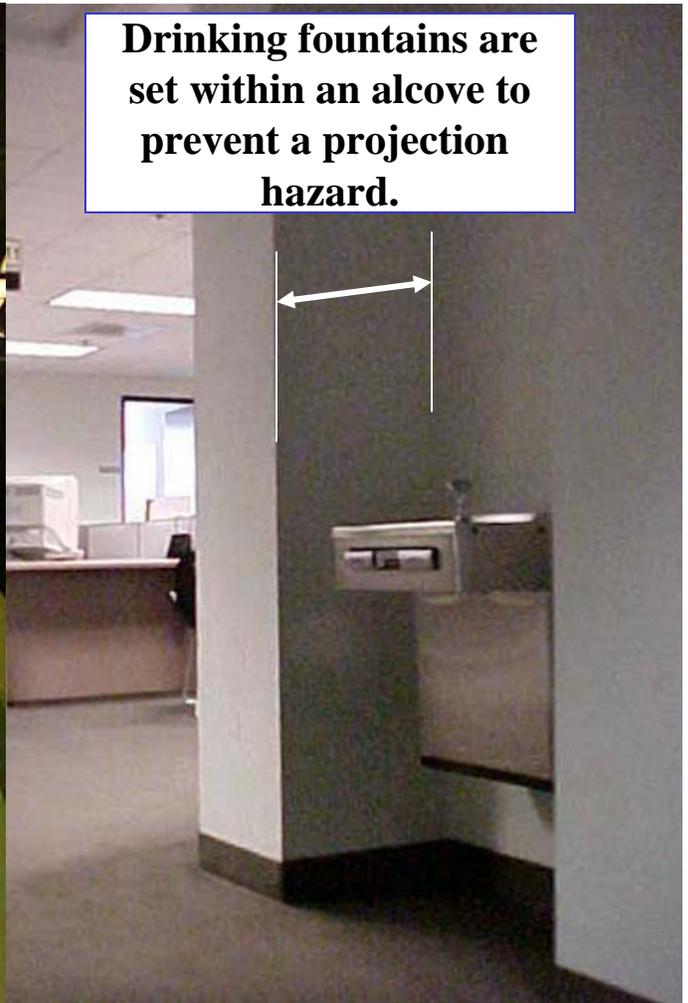
if the accessible route is reduced to less than 36" by a wall hung object, then the width of the object may be no wider than 24"

Wall-Hung and Other Commonly Found Items in Public and Common Use Spaces Located so They Are Not Hazardous Protruding Objects

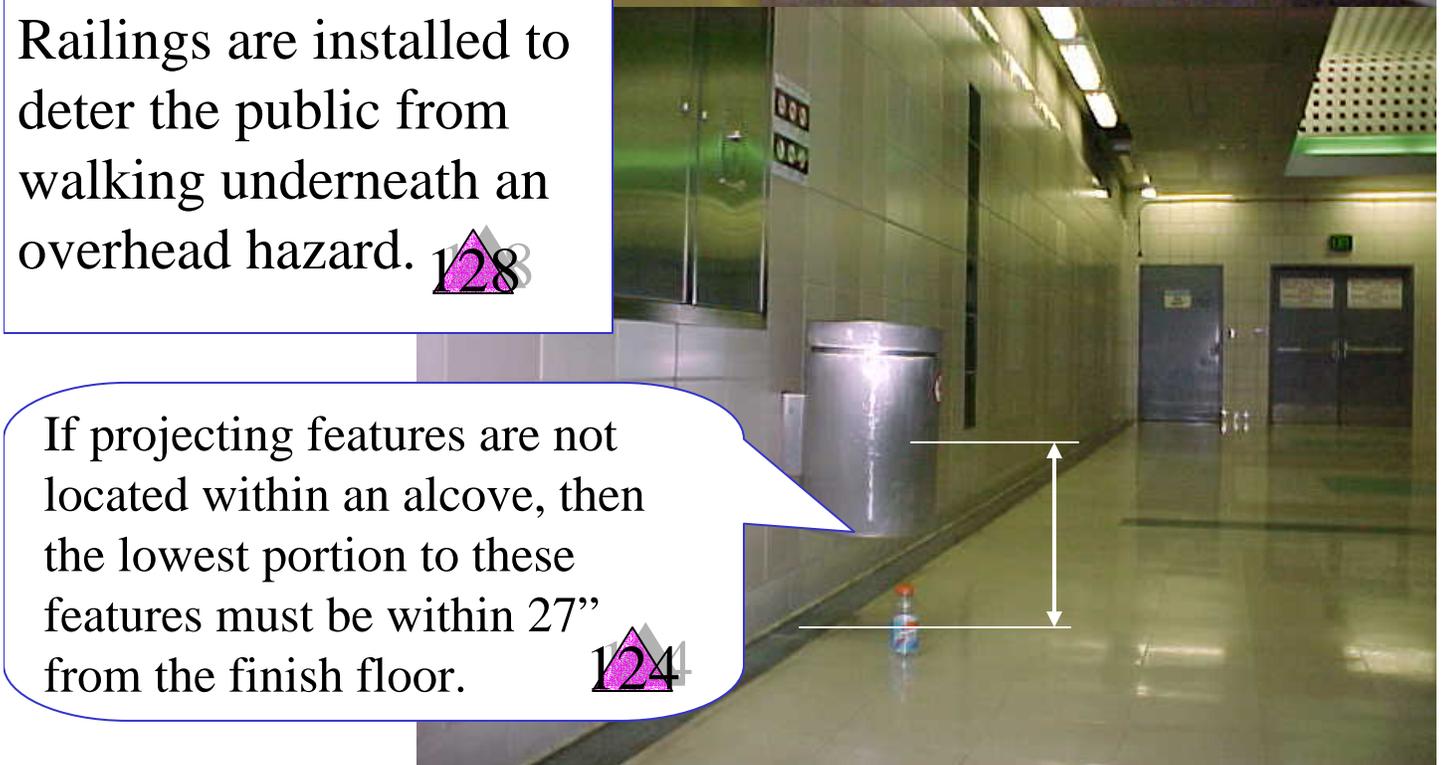
Projections and Hazards



Railings are installed to deter the public from walking underneath an overhead hazard. 128



Drinking fountains are set within an alcove to prevent a projection hazard.



If projecting features are not located within an alcove, then the lowest portion to these features must be within 27" from the finish floor. 124

Projections and Hazards

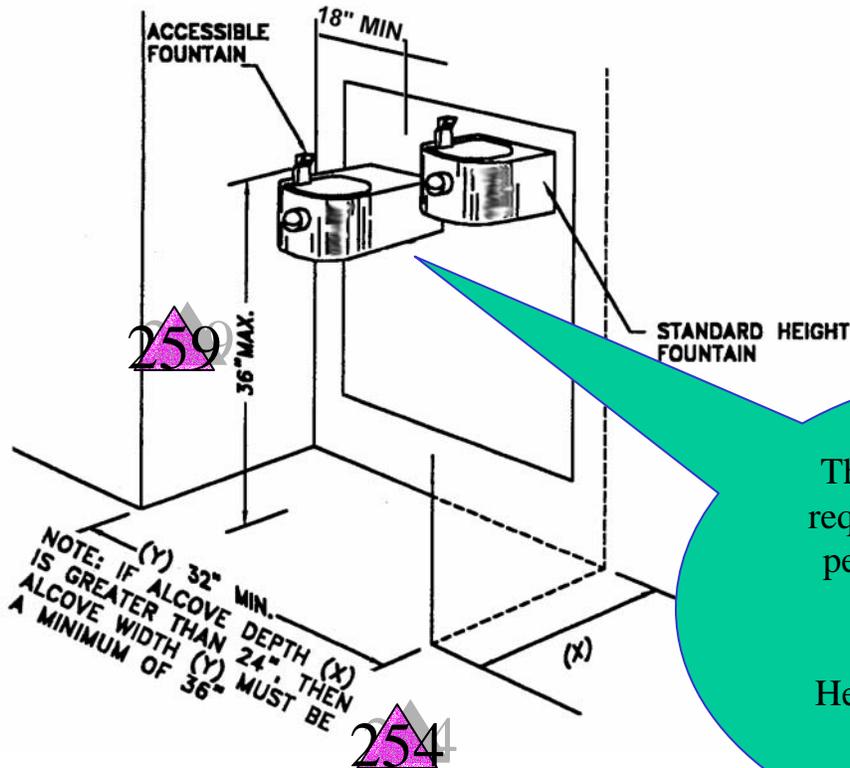


MetroLink Train Station Platform

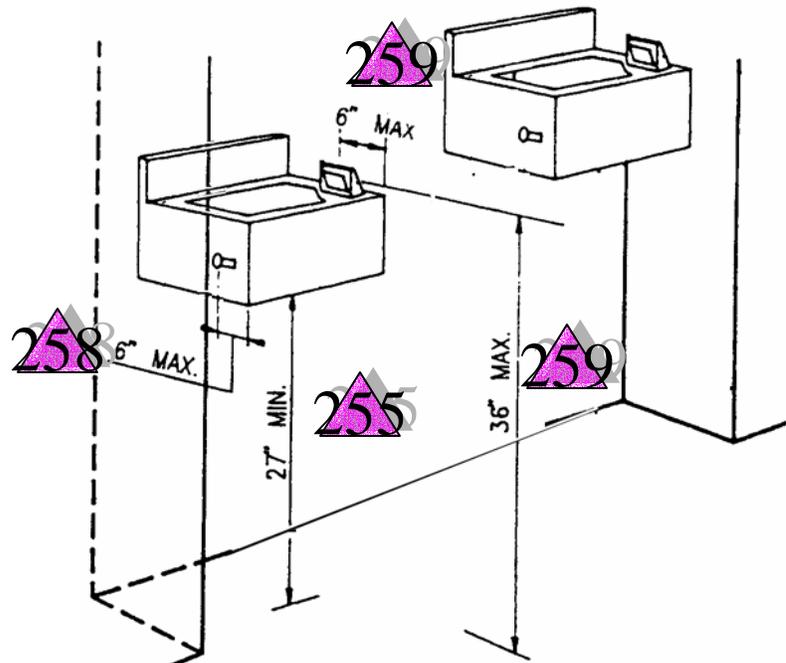


Loading Dock

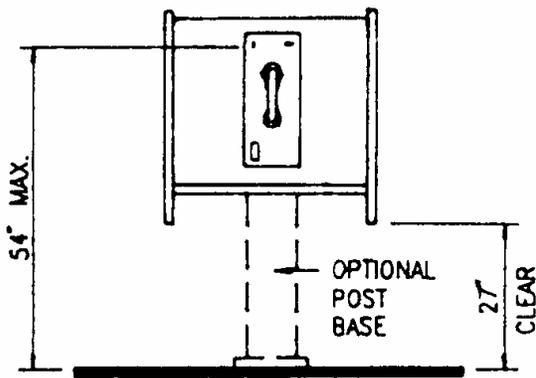
Drinking Fountains



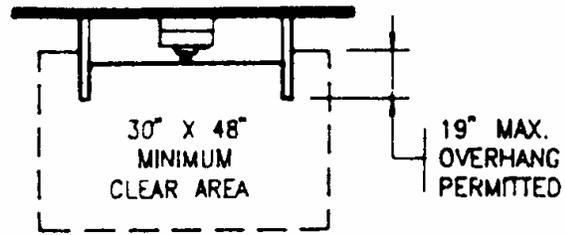
The drinking fountains are required to be accessible for persons using wheelchairs and persons who have difficulty stooping. Hence, hi and low drinking fountains.



264



ELEVATION



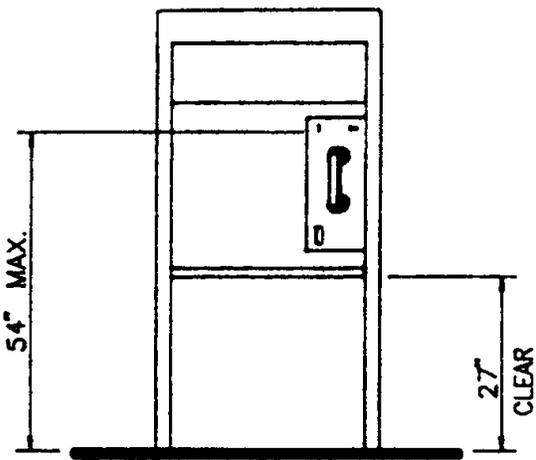
19" MAX.
OVERHANG
PERMITTED

268a

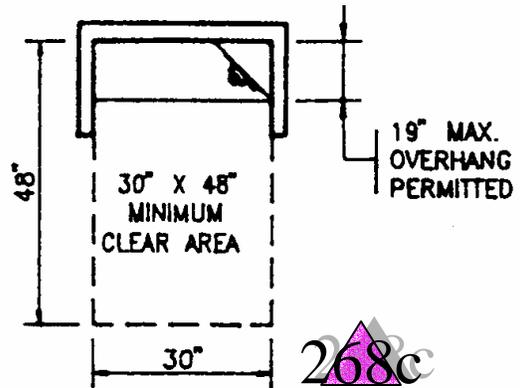
PLAN

(a) SIDE REACH ARRANGEMENT

265



ELEVATION

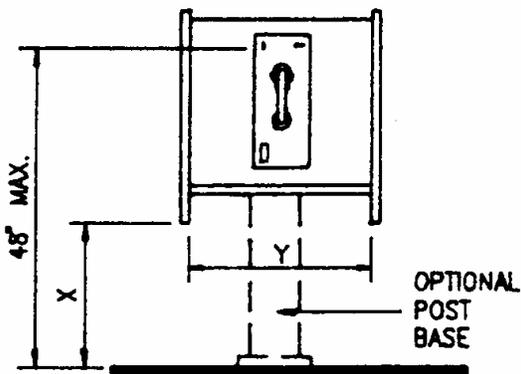


268c

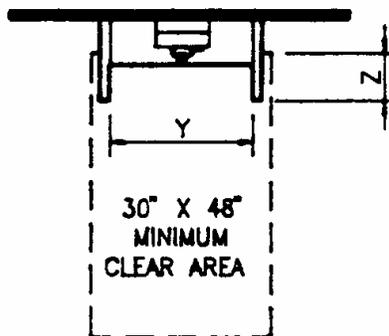
PLAN

(b) FULL HEIGHT ENCLOSURE

264



ELEVATION



NOTE: IF Z IS GREATER THAN 12 INCHES, THEN Y SHALL BE GREATER THAN 30 INCHES.

268b

PLAN

(c) FORWARD REACH ARRANGEMENT



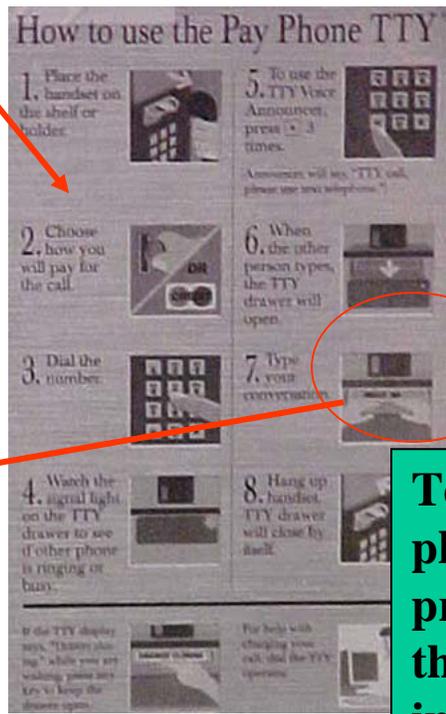
Max. 27" above the floor To prevent a projection hazard



Directional Signage for text type phones

27" Id

30 x 48 clear space



Text type phones are provided for the speech impaired.



ATMs

The 30" x 48" clear space for **SIDE** approach (see below for reach ranges for ATMs and accessory items.

362

The 30" x 48" clear space for **FRONT** approach (see below for reach ranges for ATMs and accessory items.

362



Mounting Height for **ONE** ATM Display Unit (side approach only) ^{3,4}

Angle of the screen (measured tilting away from the user)	Height of the centerline of the screen and other screen devices/ buttons ²	Depth of the buttons and screen (see measurement "D" on the diagram)
Vertical -30 deg.	52" maximum ¹	13.5" maximum
30 deg. -60 deg.	44" maximum	24" maximum
60 deg. -horizontal	34" maximum	24" maximum

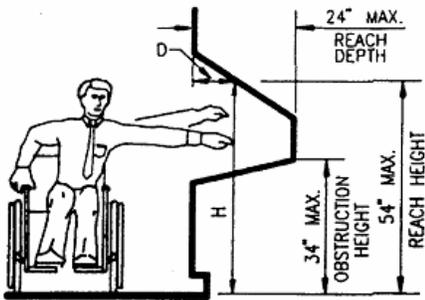
1. When two ATMs are provided, only one has to be one has to be height of 48" to it operable parts/ buttons see Section 1117B.7.4.2.
 2. Screen devices intended to be viewed by the user shall be positioned so it is readily readable (no glare on screen, etc.) for a person sitting in a wheelchair with an approximate eye level of 45 inches (Section 1117B.7.5)
 3. ATMs shall be accessible to the visually impaired see Section 1117B.7.6.
 4. For three or more ATMs, see next page.

Mounting Height for **ONE** ATM Display Unit (front approach only) ^{3,4}

Angle of the screen (measured tilting away from the user)	Height of the centerline of the screen and other screen devices/ buttons ²	Depth of the buttons and screen (see measurement "D" on the diagram)
Vertical -30 deg.	48" maximum ¹	20.5" maximum
30 deg. -60 deg.	44" maximum	24" maximum
60 deg. -horizontal	34" maximum	24" maximum

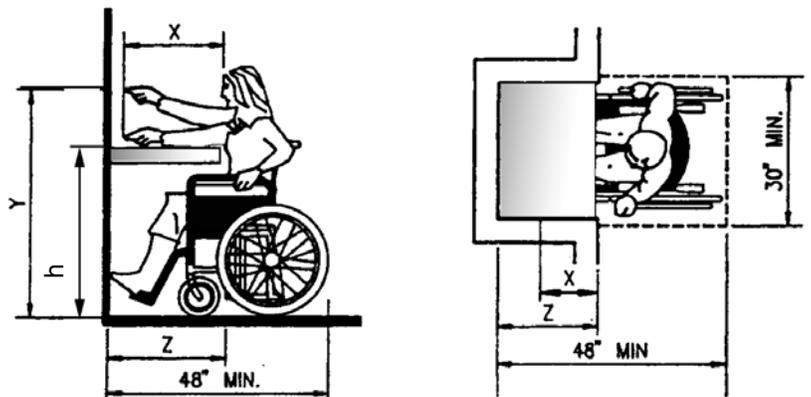
1. When two ATMs are provided, only one has to be one has to be height of 48" to it operable parts/ buttons see Section 1117B.7.4.2.
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 3. ATMs shall be accessible to the visually impaired see Section 1117B.7.6.
 4. For three or more ATMs, see next page.

Reach Range Details for Accessory Items (i.e. envelopes, trash bins, etc..)



WHEN D = 10"	OR LESS,	H = 54" MAX.
WHEN D = 11"		H = 53.5" MAX.
WHEN D = 12"		H = 53.0" MAX.
WHEN D = 13"		H = 52.5" MAX.
WHEN D = 14"		H = 51.5" MAX.
WHEN D = 15"		H = 51.0" MAX.
WHEN D = 16"		H = 50.5" MAX.
WHEN D = 17"		H = 50.0" MAX.
WHEN D = 18"		H = 49.5" MAX.
WHEN D = 19"		H = 49.0" MAX.
WHEN D = 20"		H = 48.5" MAX.
WHEN D = 21"		H = 47.5" MAX.
WHEN D = 22"		H = 47.0" MAX.
WHEN D = 23"		H = 46.5" MAX.
WHEN D = 24"		H = 46.0" MAX.

Reach Range Details for Accessory Items (i.e. envelopes, trash bins, etc...)



"Z" shall be greater than or equal to "X".
 When "X" is less than 20", then "Y" shall be 48" max.
 When "X" is 20" to 25", then "Y" shall be 44" max.
 "h" shall not be greater than 34", and the height of the knee space clearance shall not be less than 29".

DATE: August 17, 1998
TO: All Disabled Access Section Staff
FROM: Mike Wood, Supervisor Disabled Access Section
SUBJECT: **AISLES WIDTH IN RETAIL STORE**

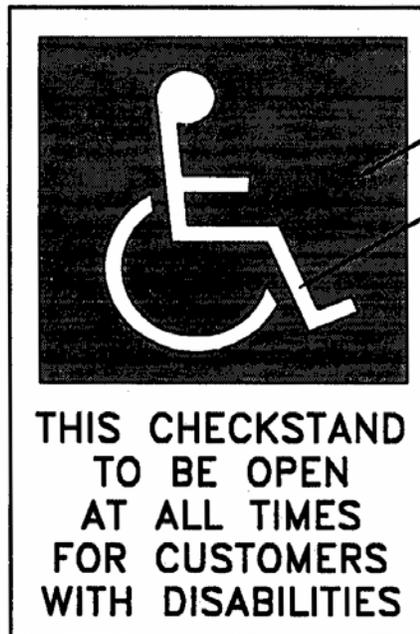
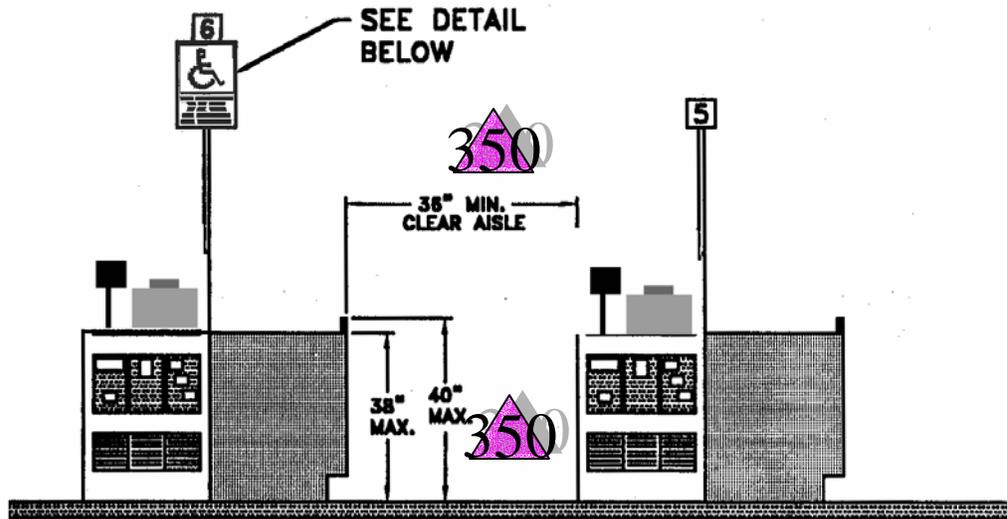
Section 1014.2a very clearly requires a minimum of 36" for the aisle width. The applicant is arguing that Section 1014.2.1 allows 24". The problem with his argument is that DSA did not adopt Section 1014.2.1, but instead, amended that Section with their own Section 1014.2a.

The following pertains to aisles in stockrooms and storage areas only and is Michael's response to my call:

Michael left a subsequent message on my telephone that 36" is required. He has, however, allowed an aisle to narrow down to 32" if it was no longer than 4' and down to 30" if it was no longer than 18". He has also allowed an aisle up to 8' long to also narrow down to 32" if it was accessible from both ends.

His ideas are ok and we should allow this.

Mike



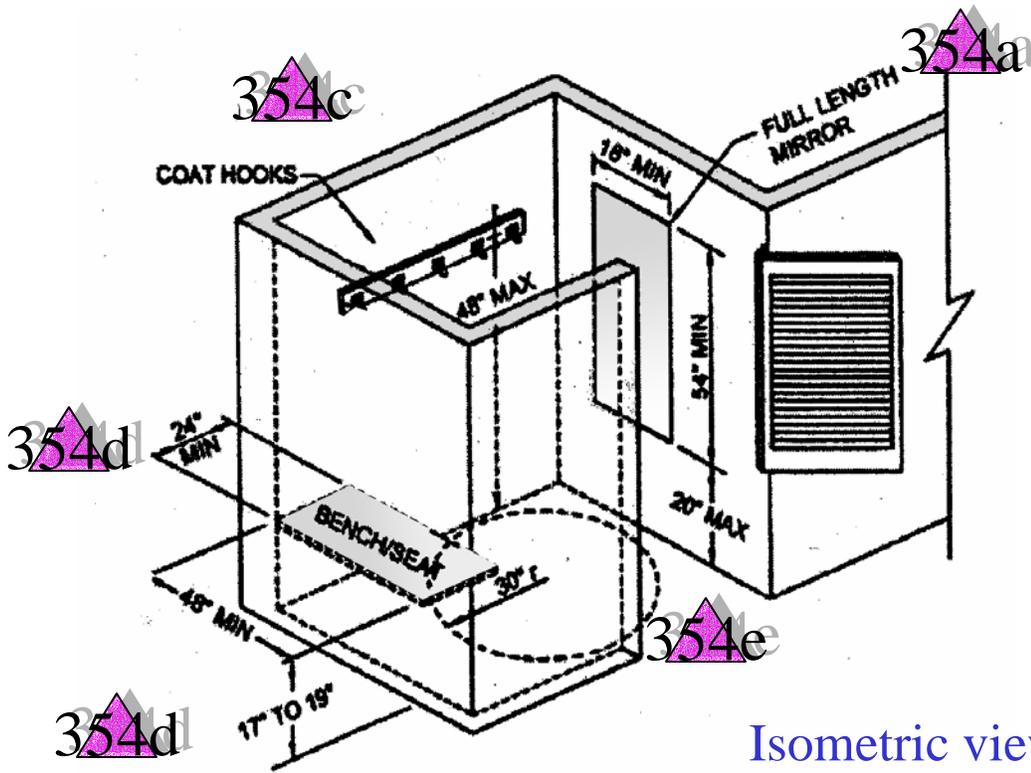
BLUE BACKGROUND

WHITE

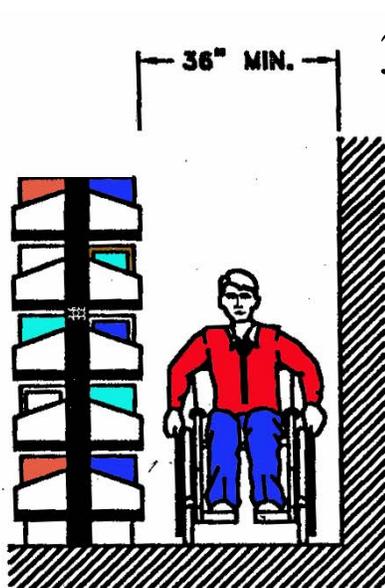
NOTE: LETTERING MUST MEET REQUIREMENTS FOR ACCESSIBLE SIGNAGE

351

See Table 11B-2 to determine the number of accessible check stands required for the project.

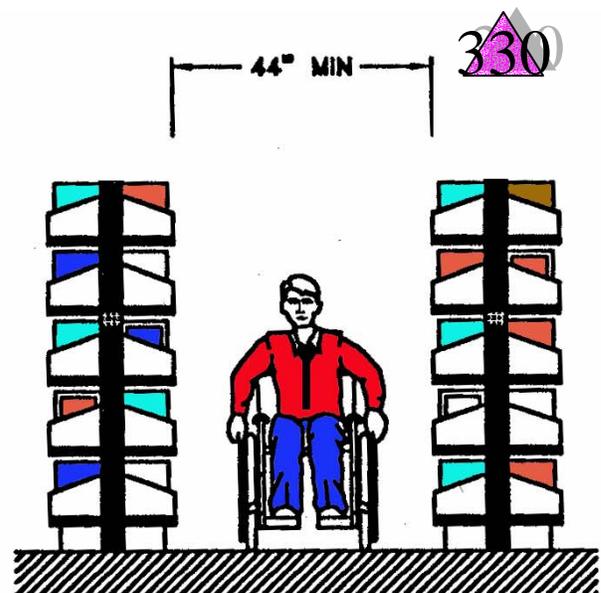


Isometric view of an accessible fitting room



AISLES THAT SERVE ONE SIDE ONLY

LIBRARY



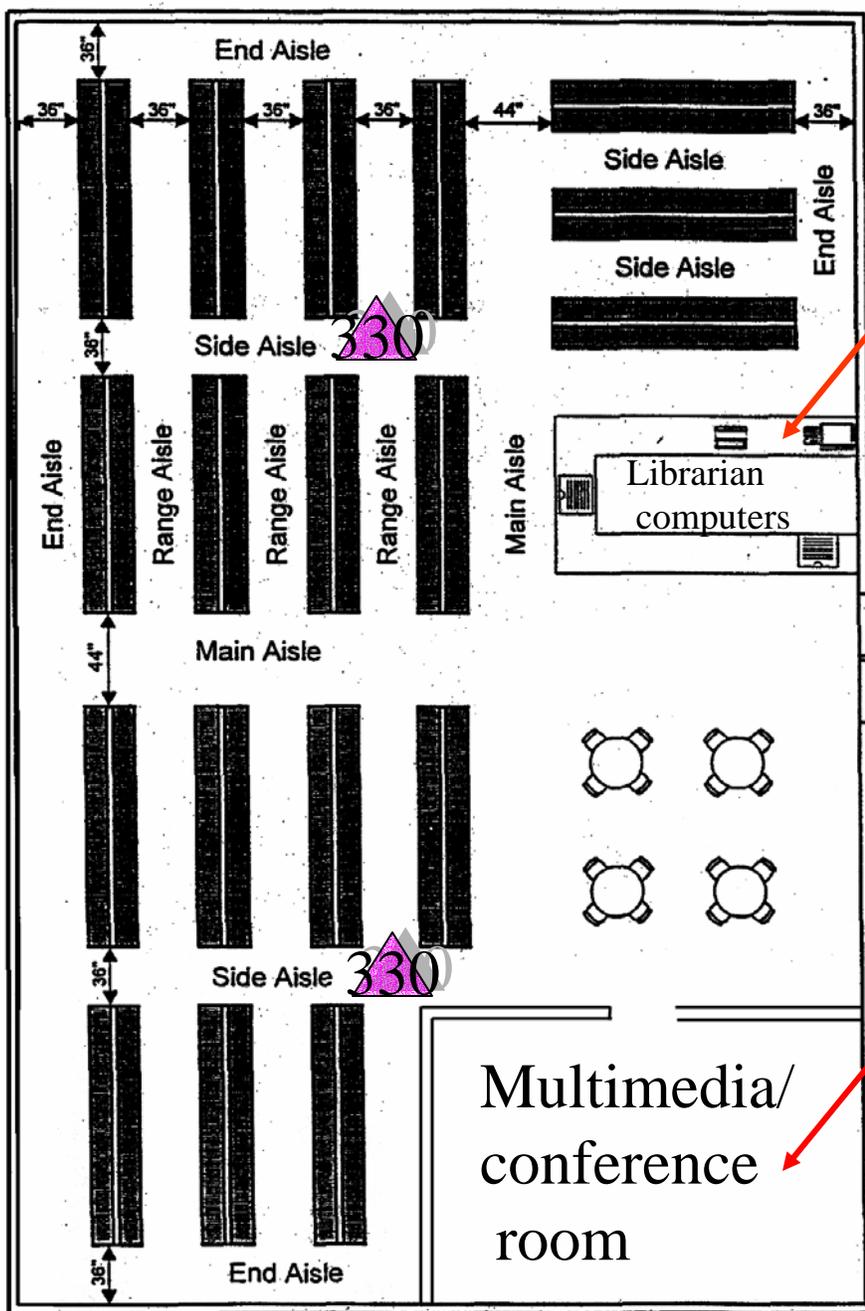
AISLES THAT SERVE BOTH SIDES

In existing buildings (Sec. 1106B.4.2, Excep. #1):

1. 15% or less of the total amount of library shelving may be located on an inaccessible mezzanine level.
2. Book stacks that are restricted to employee use are exempt from these accessibility standards.

LIBRARY OPEN BOOK STACKS

Aisle Widths - Section 1106B.4



A minimum of 5% (but not less than one) of each type of use at fixed counter locations are to accessible. (34" max. counter height and adequate knee space clearance).

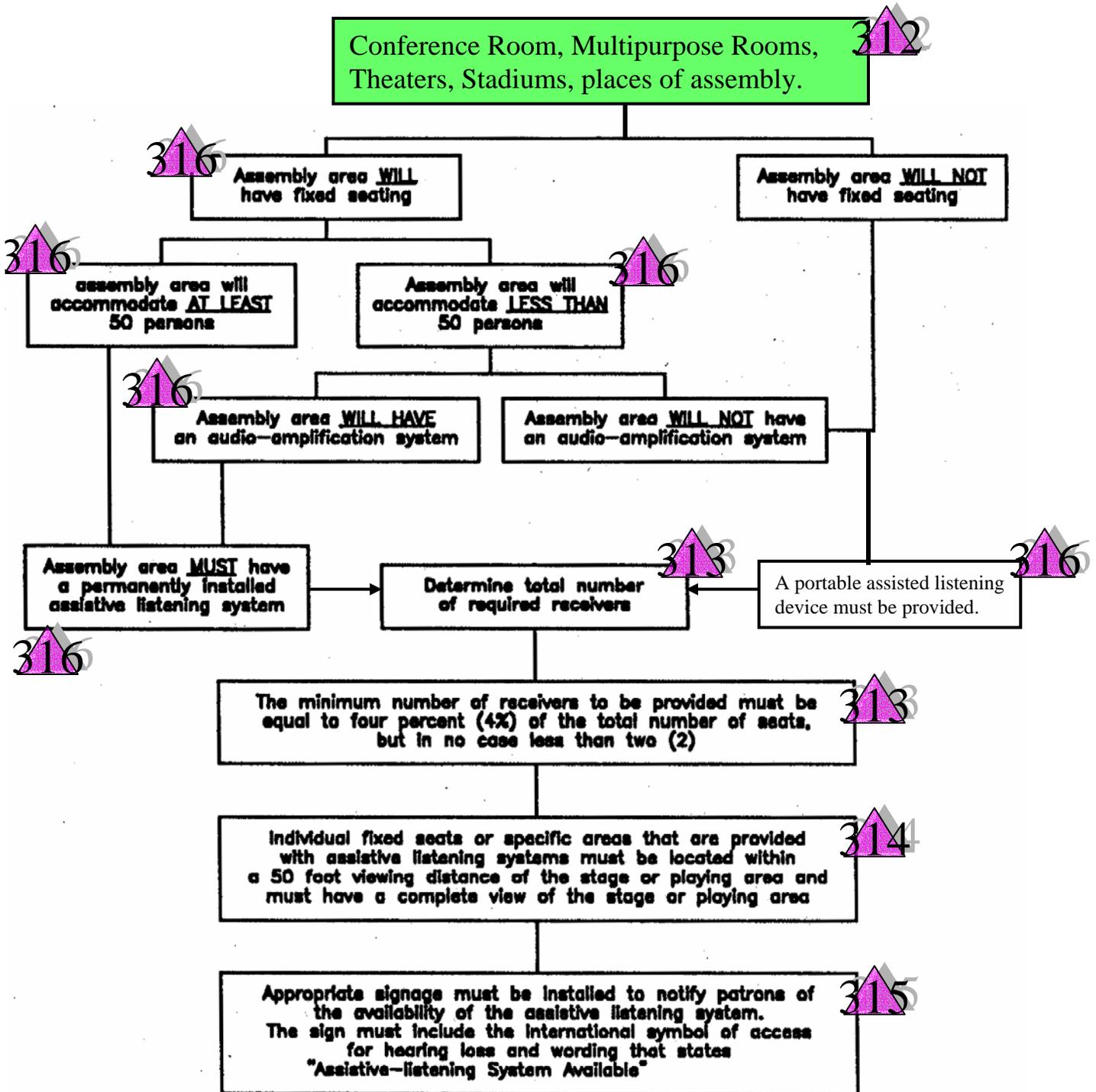
167

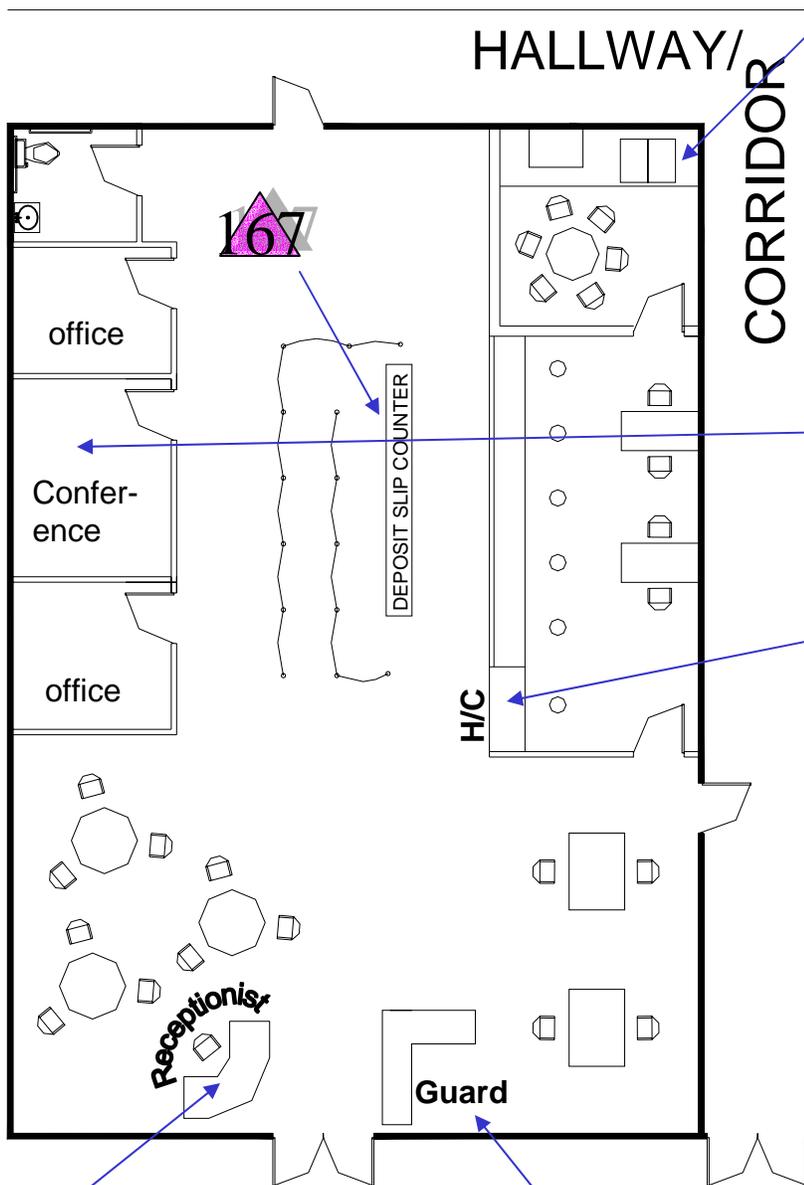
Assistive - listening systems are required for assembly area, conference room and meeting rooms. See next page.

312

FLOOR PLAN

Assistive Listening Devices



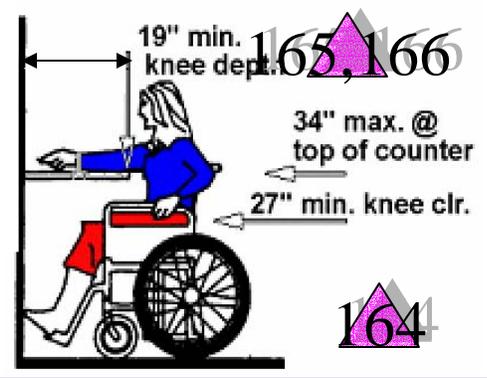


Employee break room needs accessible maneuvering space, sinks & counters cannot exceed 34" high. **160**

See next page for corridors and obstruction clearances along the path of travel.

Conference rooms may be required to have assisted listening devices. See page II 32 for more details. **312**

5% of all counters (that contains more than one transaction) shall be made accessible. Counters on (the customer side) shall have a maximum height of 34" with the appropriate knee space clearances (see below).



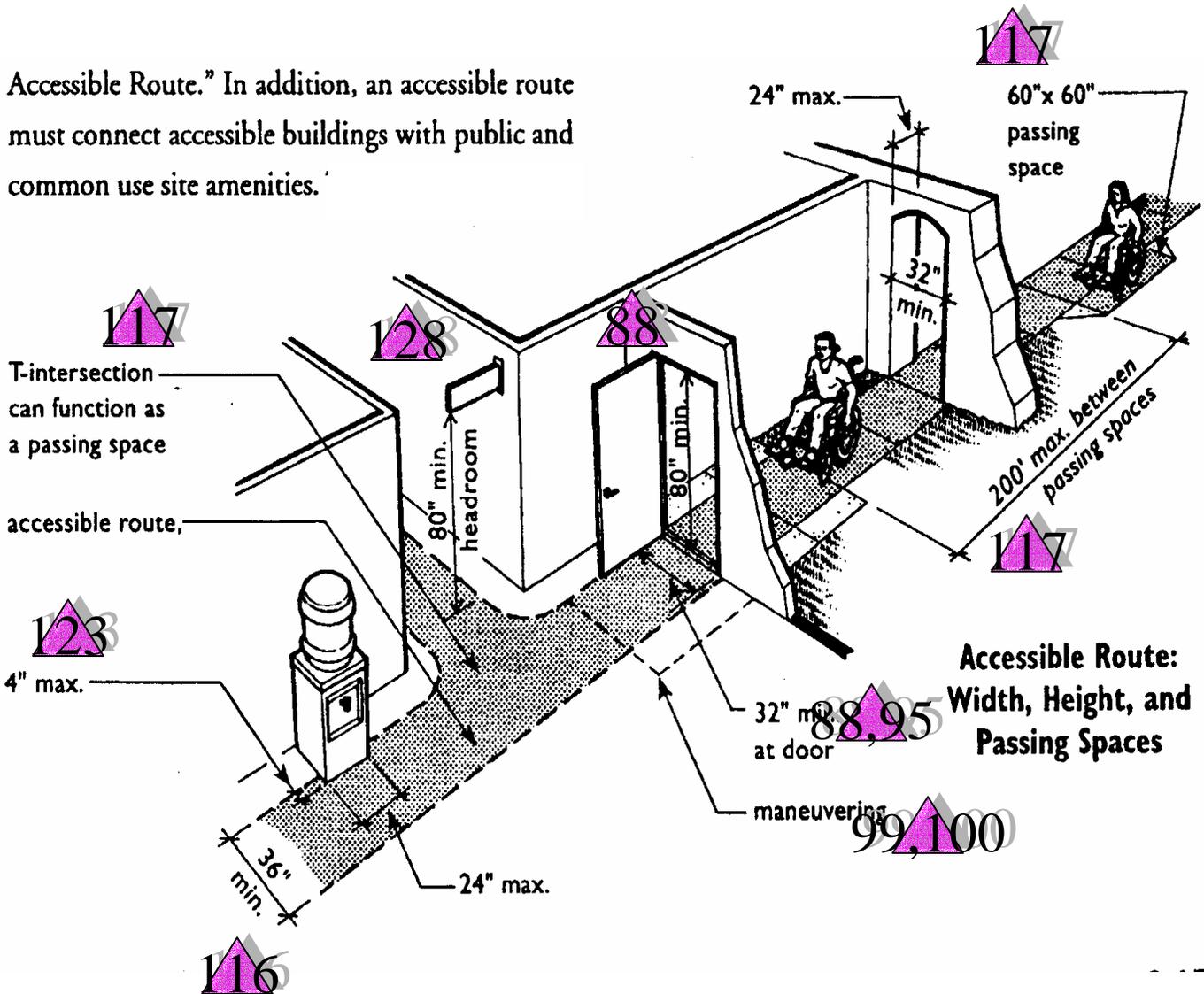
Receptionist tables are to be a maximum height of 34". Knee clearance is not required if all able-body patrons that arrive at the reception desk and conduct their business standing up. **167**

Guard booths are considered employee workstations and are not required to be accessible, however, a 36" clear path and a 32" entry way must be provided. See page II 35. **161**

Only the specified areas as outlined in Sec. 1105B.3.5 are to be made accessible when designing **law enforcement facilities, fire departments, and courtrooms** **373-376**

Corridors/ Hallways

Accessible Route.” In addition, an accessible route must connect accessible buildings with public and common use site amenities.

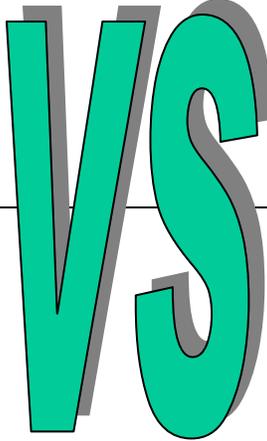


Employee Work Space

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

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

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

<p><u>General Employee Areas</u> are "those areas commonly used by multiple employees, such as restrooms, break rooms, conference and meeting space, etc." Even when these areas are restricted for employee use only, they must comply with Title 24 accessibility requirements.</p>		<p><u>Specific Work Stations</u> is intended to mean "places where individuals do their work, such as a chef's chopping block in a commercial restaurant or a computer terminal in an office." These work stations are not required to be accessible themselves, except that aisle and floor and level requirements must be met and entryways must be at least 32" in clear width.</p>
<p>For example:</p> <ul style="list-style-type: none"> ≡ conference rooms ≡ employee break rooms ≡ concession and refreshment sales areas. 		<p>For example:</p> <ul style="list-style-type: none"> ≡ D.J. Booths ≡ Rooms that contain: <ul style="list-style-type: none"> surgery rooms recording studio booths small theater projection rooms (Sec. 1116B.2.3) ≡ Small waitress stations ≡ Hazardous material storage equipment use by specially trained individuals:

Restaurant

Each dining, banquet and bar area shall have at least one wheelchair space for each 20 restaurant seats.

Condiment section area shall be within reach ranges. See next page.



Flip up counters can not be used as an accessible seating location. See next page.

Kitchen areas and walk-in freezers are not required to be accessible. However, a minimum 36" clear path is required to the entrance of the freezer.



Accessible seat at the bar shall not have partitions to obstruct the patron's view of the bar area. See next page.

Accessible seats shall be integrated with general seating to avoid having one area specifically highlighted as the area for persons with disabilities.



At least 5% of the seating in all functional areas is to be accessible. See next page.



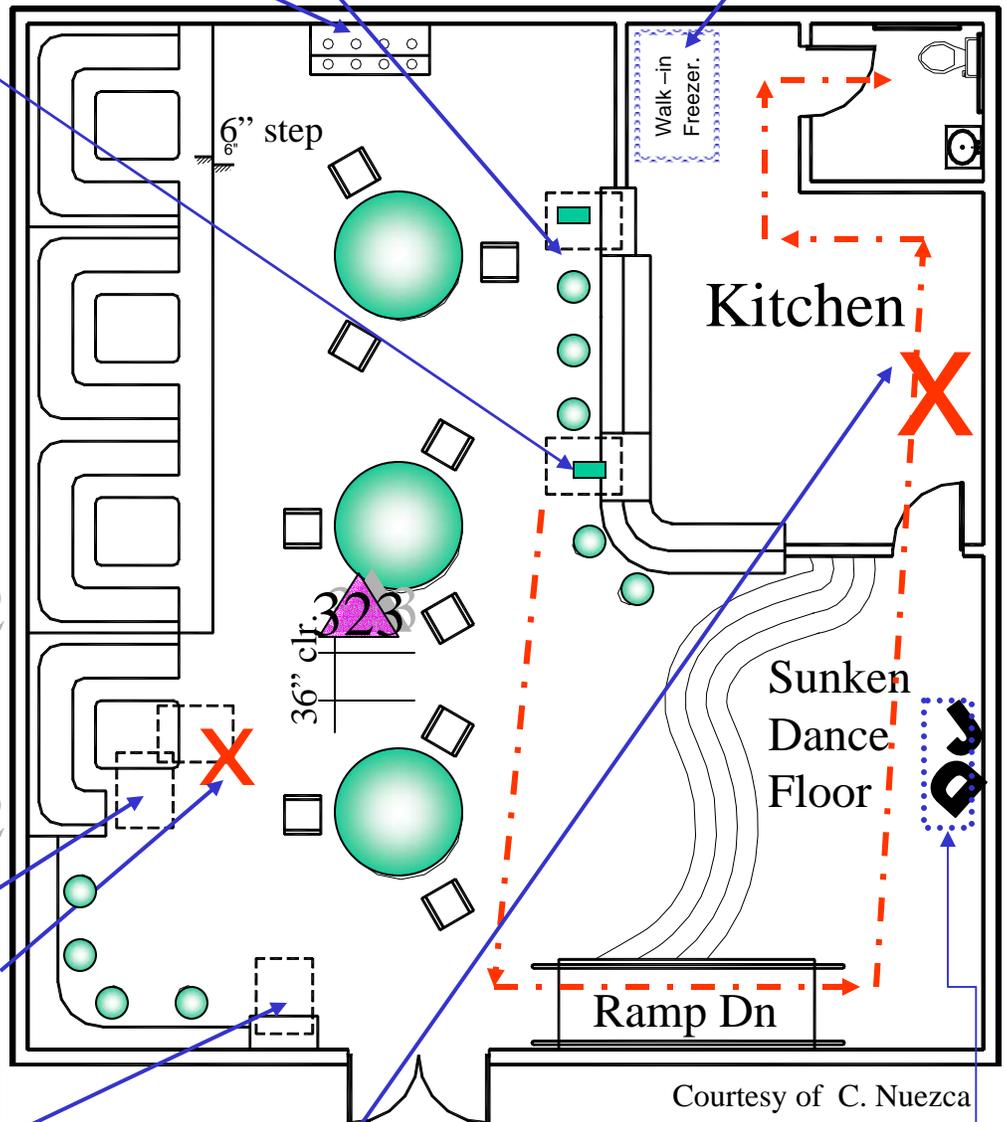
Accessible seats can not be located within the aisle area.

Bar seating having a window view shall be accessible.



Path of travel to the restrooms cannot pass thru the kitchen, see page I 27.

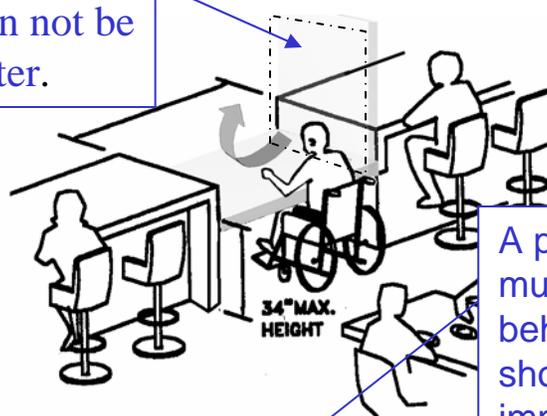
DJ booth is considered an employee work space and is not required to be accessible, however, it should be on a level floor with a minimum 36" wide pathway. See page II 35.



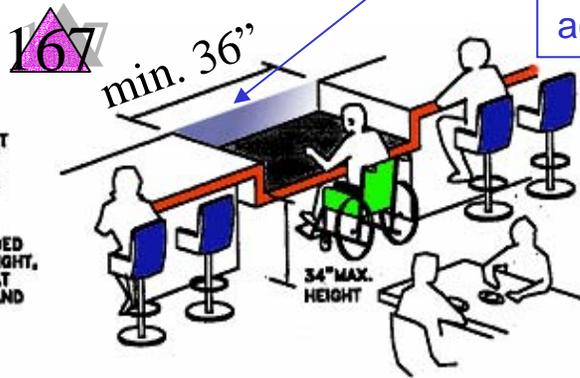
Courtesy of C. Nuezca

Restaurant

An accessible seat can not be located at a flip counter.



A person in a wheelchair must be able to see behind the counter. There should not be any obstruction immediately in front of the accessible seat.



WHERE FOOD OR DRINK IS SERVED AT COUNTERS EXCEEDING 34" IN HEIGHT FOR CONSUMPTION BY CUSTOMERS SEATED ON STOOLS OR STANDING AT THE COUNTER, A PORTION OF THE MAIN COUNTER WHICH IS A MINIMUM OF 80" IN LENGTH SHALL BE PROVIDED WHICH IS A MAXIMUM OF 34" IN HEIGHT, AND PROVIDES KNEE CLEARANCE THAT IS AT LEAST 27" HIGH, 19" DEEP, AND 30" WIDE.

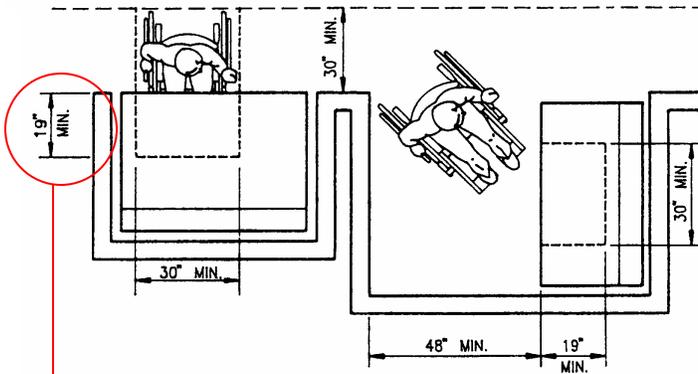
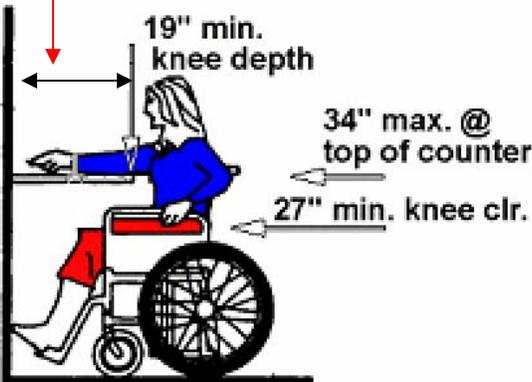
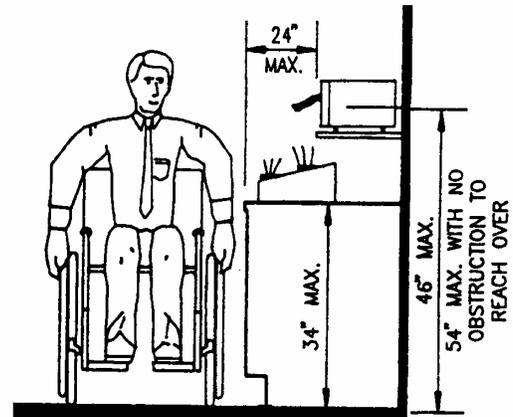
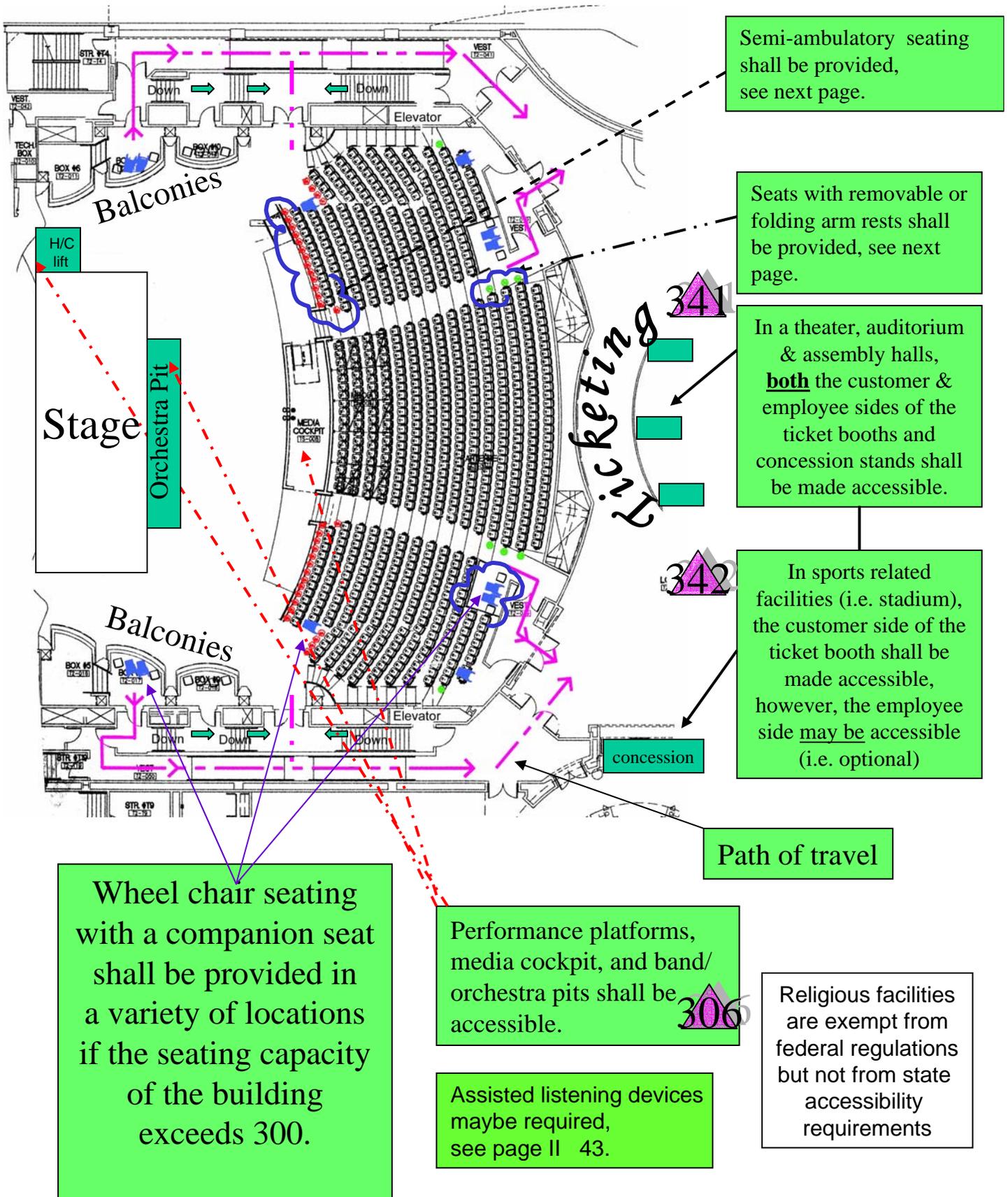


FIGURE 11B-13—MINIMUM CLEARANCES FOR SEATING AND TABLE



Reach range details at the condiment table provides important information to the woodwork fabricators.



Semi-ambulatory seating shall be provided, see next page.

Seats with removable or folding arm rests shall be provided, see next page.

In a theater, auditorium & assembly halls, **both** the customer & employee sides of the ticket booths and concession stands shall be made accessible.

In sports related facilities (i.e. stadium), the customer side of the ticket booth shall be made accessible, however, the employee side may be accessible (i.e. optional)

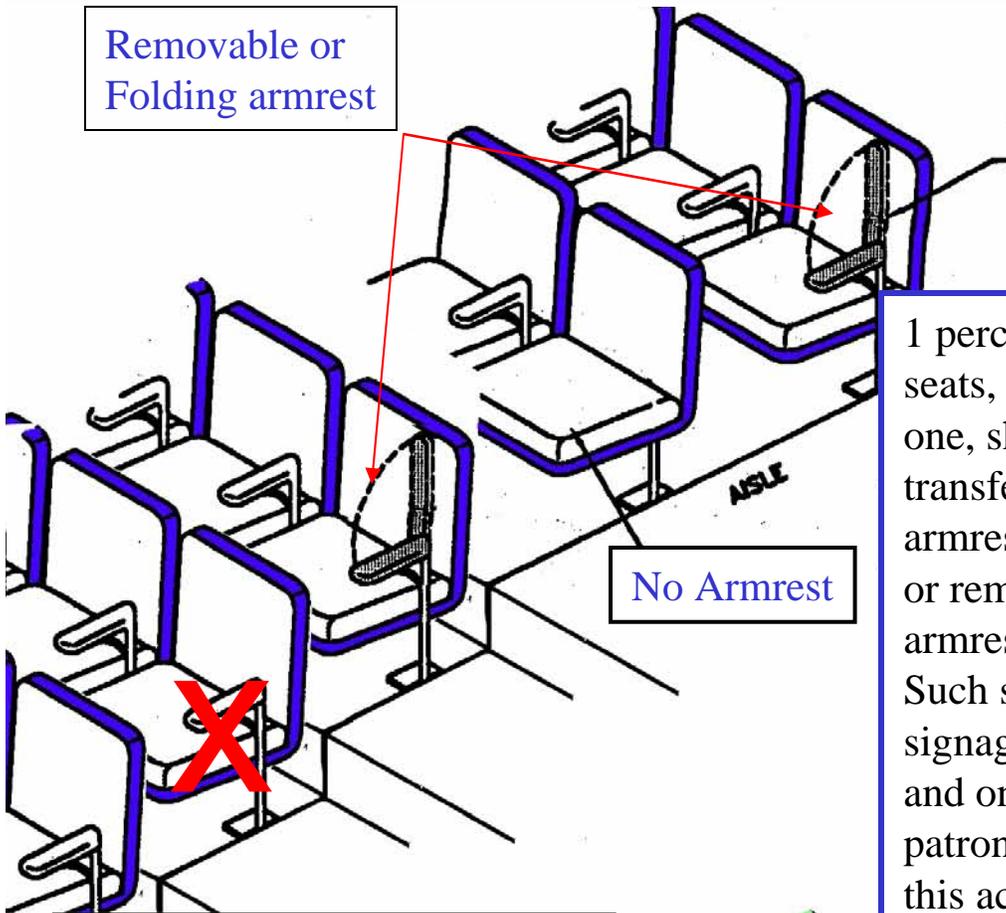
Path of travel

Wheel chair seating with a companion seat shall be provided in a variety of locations if the seating capacity of the building exceeds 300.

Performance platforms, media cockpit, and band/orchestra pits shall be accessible.

Assisted listening devices maybe required, see page 11 43.

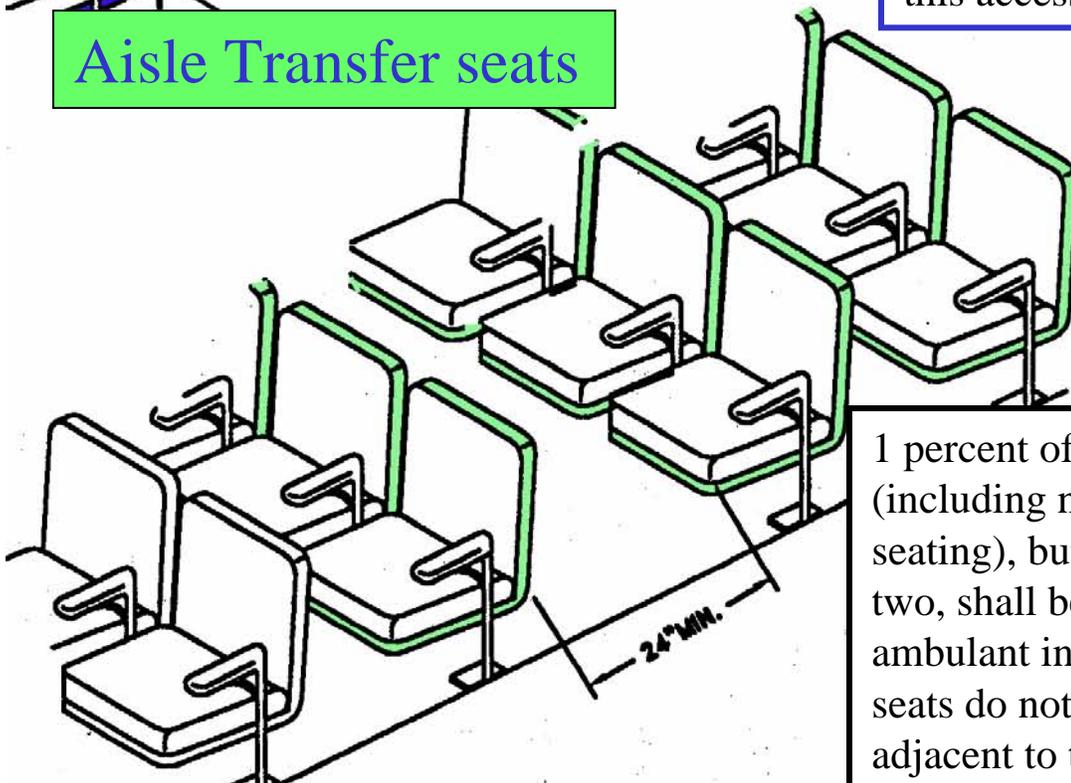
Religious facilities are exempt from federal regulations but not from state accessibility requirements



297

1 percent of all fixed seats, but not less than one, shall be an aisle transfer seat with no armrest (on the aisle side), or removable or folding armrests (on the aisle side). Such seating shall have signage at the ticket office and on each seat notifying patrons of the availability of this accessible option.

Aisle Transfer seats

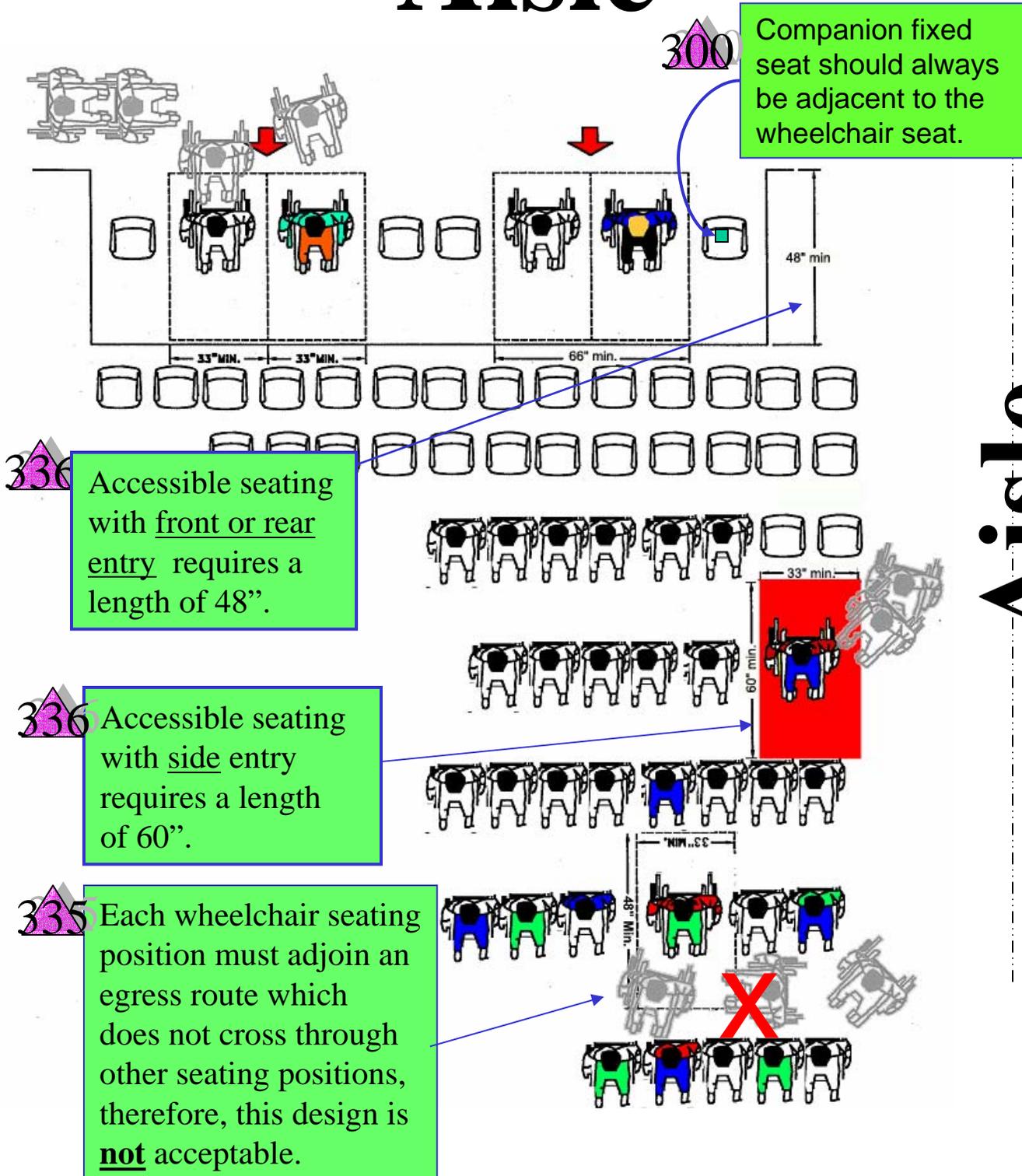


304

1 percent of the total seating (including non-fixed seating), but not less than two, shall be for semi-ambulant individuals (these seats do not have to be adjacent to the aisle way).

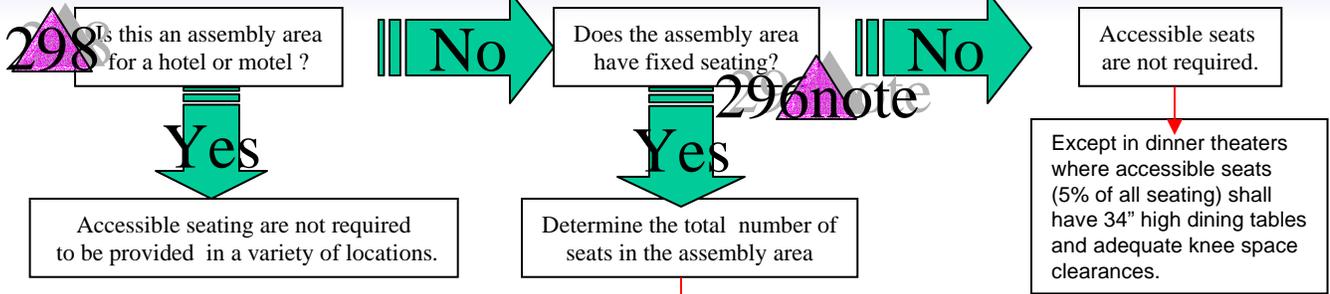
Semiambulant Seats

Aisle

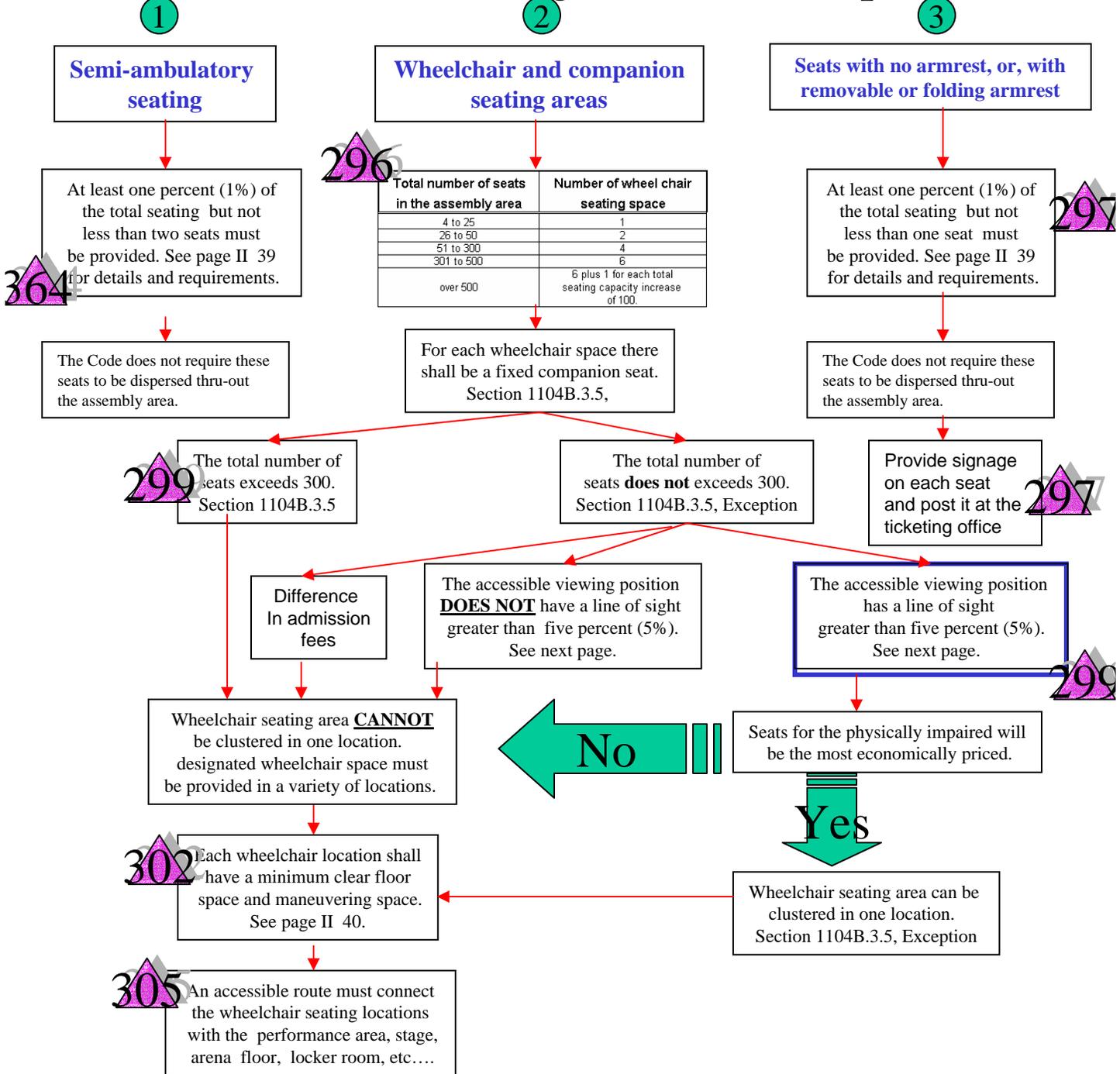


Aisle

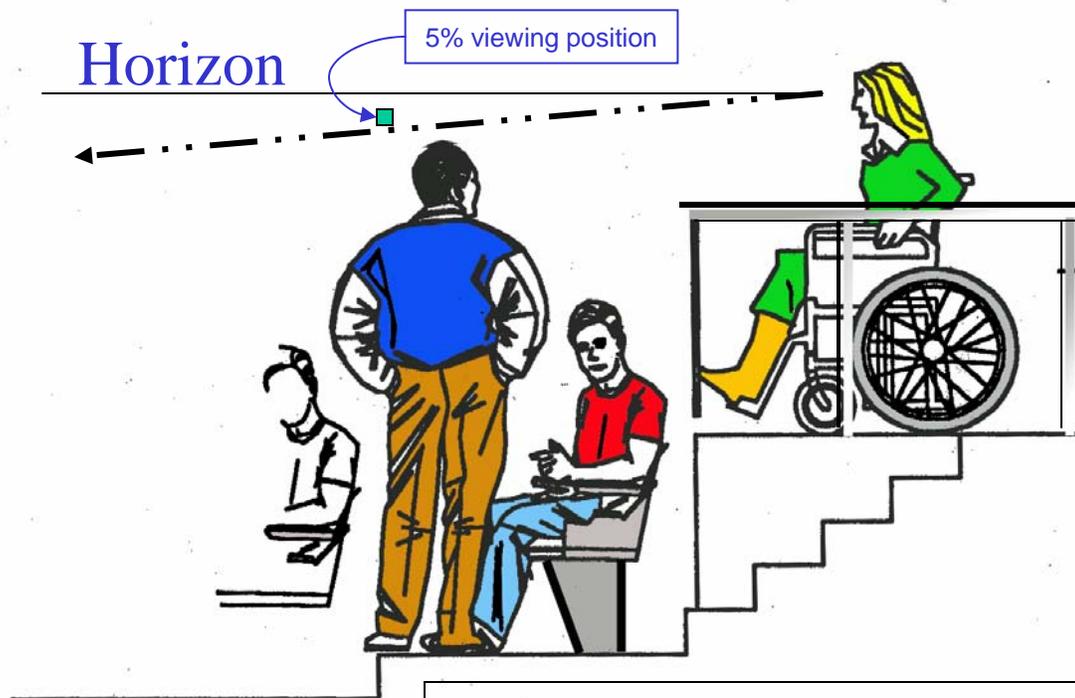
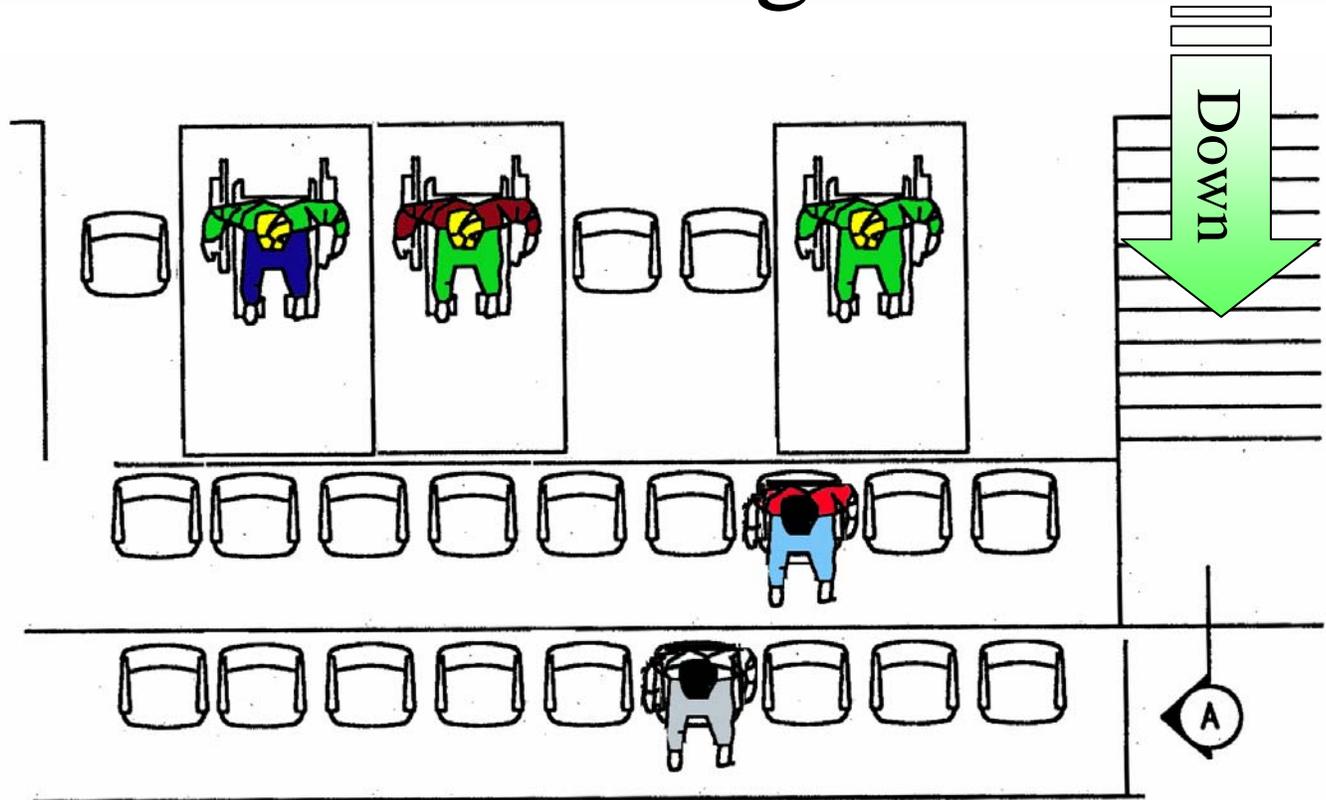
Accessible Seating in an Large Assembly Areas



Check all of the following items for compliance



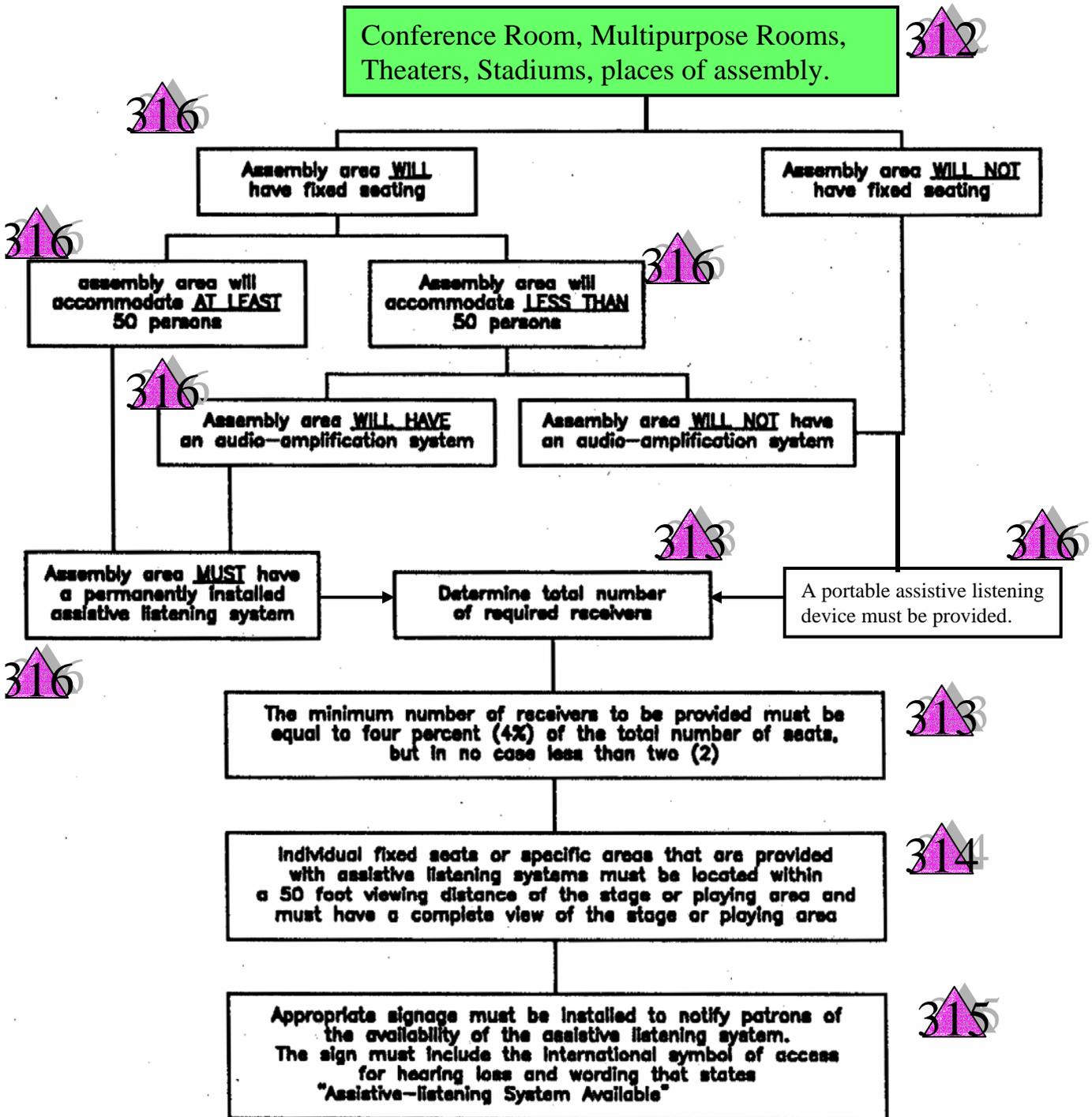
Line of Sight

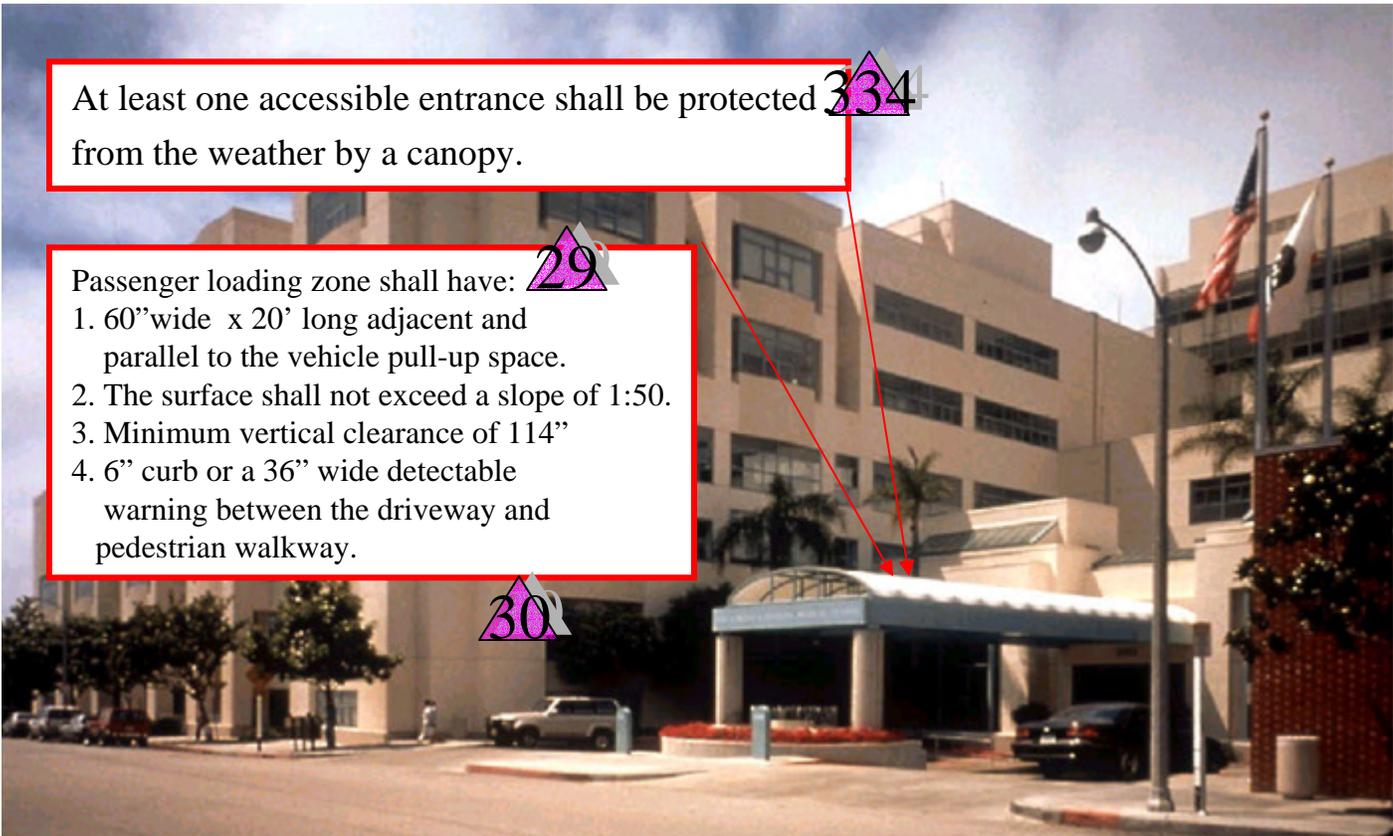


Section A

Where the seating capacity of the assembly area does not exceed 300, accessible viewing positions may be clustered in one location with sight lines sloping greater than 5%.
Section 1104B.3.5, Exception.

Assisted Listening Devices





At least one accessible entrance shall be protected **334** from the weather by a canopy.

- Passenger loading zone shall have: **29**
1. 60" wide x 20' long adjacent and parallel to the vehicle pull-up space.
 2. The surface shall not exceed a slope of 1:50.
 3. Minimum vertical clearance of 114"
 4. 6" curb or a 36" wide detectable warning between the driveway and pedestrian walkway.

30

Parking

1129B.2 Less Than Five Spaces. When less than five parking spaces are provided at buildings and facilities subject to these regulations, one shall be 14 feet (4267 mm) wide and lined to provide a 9-foot (2743 mm) parking area and a 5-foot (1524 mm) loading and unloading area. However, there is no requirement that the space be reserved exclusively or identified for use by persons with disabilities only.

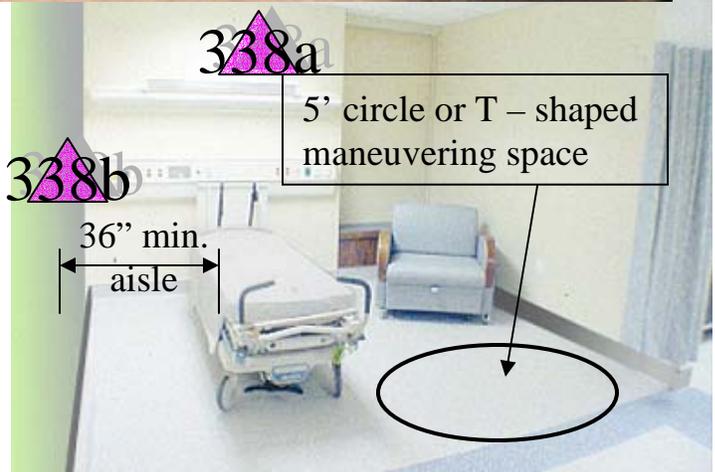
1129B.3 Medical Care Outpatient Facilities. At facilities providing medical care and other services for persons with mobility impairments, parking spaces complying with this section shall be provided in accordance with Table 11B-6 except as follows:

1. **Outpatient units and facilities.** Ten percent of the total number of parking spaces provided serve each such outpatient unit or facility.
2. **Units and facilities that specialize in treatment or services for persons with mobility impairment.** Twenty percent of the total number of parking spaces provided serve each such unit or facility.

See next page for definition

TABLE 11B-6—SPACES REQUIRED
Establishes the number of accessible parking spaces required.

TOTAL NUMBER OF PARKING SPACES IN LOT OR GARAGE	MINIMUM REQUIRED NUMBER OF SPACES
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1,000	**
1,001 and over	**



338a

5' circle or T – shaped maneuvering space

338b

36" min. aisle

Typical patient room layout; restrooms shall comply with 1115B (See Page).

Type of facilities	% of patient room to be accessible
Long-term care	50%
General purpose hospital, psychiatric, detoxification	10%
Rehabilitation facilities for mobility challenged	100%

335-337

NOTE: Surgery rooms and rooms that contain equipments for specially trained employees are exempt from accessibility requirements. (i.e. CAT –Scan machines rooms, Intensive Care Unit, etc.)

Parking for Medical Bldg.

Since the L.A. Building Code does not have a definition for outpatient facility, The Disabled Access Section will adopt the following interpretation published by the federal government describing the intent of "outpatient facilities" as it relates to accessible parking stalls.

62304 Federal Register / Vol. 64, No. 220 / Tuesday, November 16, 1999 / Proposed Rules

CHAPTER 2: SCOPING REQUIREMENTS

AMERICANS WITH DISABILITIES ACT: SCOPING

Table 208.2 Accessible Parking Spaces

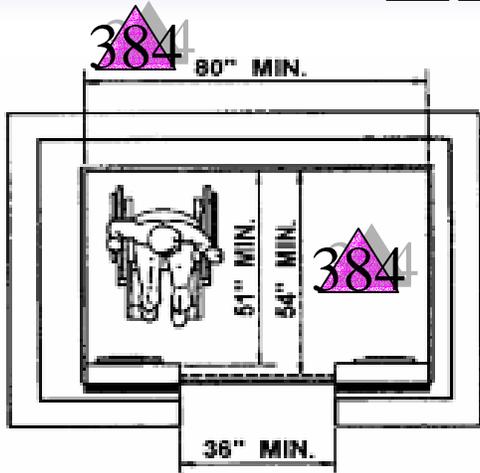
Total Number of Parking Spaces Provided in Lot	Minimum Required Number of Accessible Parking Spaces
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

208.2.1 Hospital Outpatient Facilities. Ten percent of patient and visitor parking spaces provided to serve hospital outpatient *facilities* shall be *accessible*.

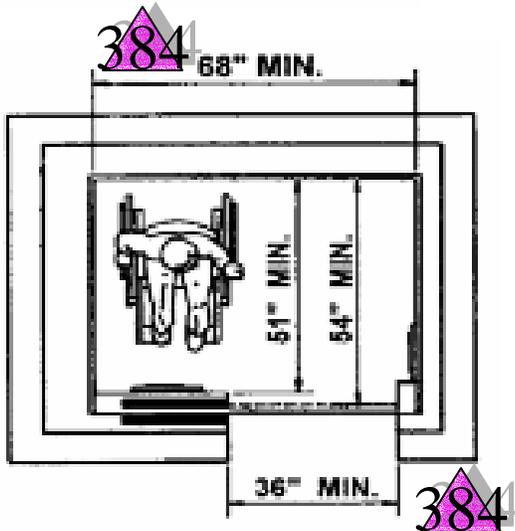
Advisory 208.2.1

The term "outpatient facility" is not defined in this document but is intended to cover *facilities* or units that provide regular and continuing medical treatment without an overnight stay, and that are located in hospitals. Doctors' offices, independent clinics, or other *facilities* not located in hospitals are not considered hospital outpatient *facilities* for purposes of this document.

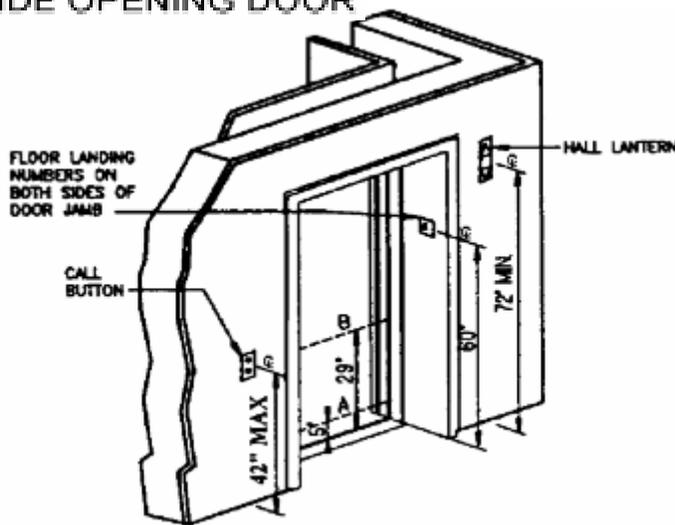
208.2.2 Rehabilitation Facilities and Outpatient Physical Therapy Facilities. Twenty percent of patient and visitor parking spaces provided to serve rehabilitation *facilities* and outpatient physical therapy *facilities* shall be *accessible*.



CENTER OPENING DOOR



SIDE OPENING DOOR



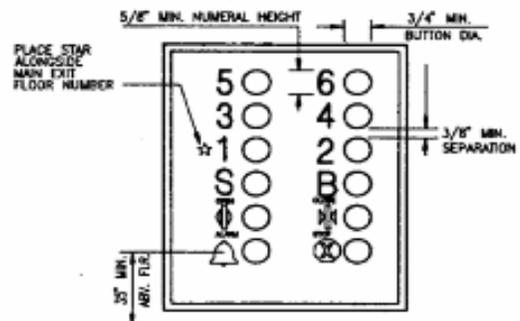
MINIMUM DIMENSIONS
OF ELEVATOR CARS
FIGURE 30-A

SECTION 1103B

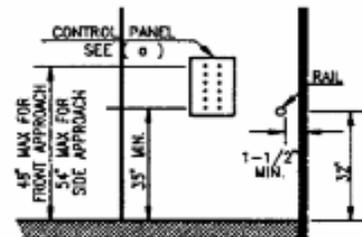
In new construction of buildings and only where elevators are required, pursuant to Section 1103B.1, and which exceed 10,000 square feet on any floor, an accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet of travel of each stairs and each escalator. In existing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

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

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



(a) ELEVATOR CONTROL
PANEL DETAILS



(b) MAXIMUM INSTALLATION HEIGHTS
ABOVE CAB FLOOR
ELEVATOR CONTROL PANEL

Wheelchair Lifts

Lifts can only be installed in these locations

Additionally, lifts may be provided as part of an accessible route only for the following conditions:

1116B.2.1 To provide an accessible route to a performing area in an assembly occupancy, or to a speaking area or similar place (such as a dais for "head table") in an assembly or Group B Occupancy.

1116B.2.2 To comply with the wheelchair viewing position line-of-sight and dispersion requirements of Section 1104B.3.5.

1116B.2.3 To provide access to incidental occupiable spaces and rooms which are not open to the general public and which house no more than five persons, including, but not limited to, equipment control rooms and projection booths.

1116B.2.4 To provide access where existing site constraints or other constraints make use of a ramp or an elevator infeasible.



1116B.3 Special Access (Wheelchair) Lifts. Special access (wheelchair) lifts shall not be used as a component of an exit component in an egress system.

EXCEPTION: When provided as a means of egress component per Section 1116B.2.2 the specialty access lift is permitted to be part of an accessible exit component when:

1. The building has a supervised automatic sprinkler system.
2. The area served by the special access lift does not serve more than 4 wheelchair viewing positions.
3. The length of the common path of travel to a point where the occupant has a choice of two directions to an exit shall not exceed 30 feet (9144 mm). The length of the common path of travel shall include the vertical travel distance of the lift.
4. The special access lift is provided with standby power or with self-recharging battery power that provides sufficient power to operate all platform lift functions for a minimum of 5 (five) upward and downward trips.

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

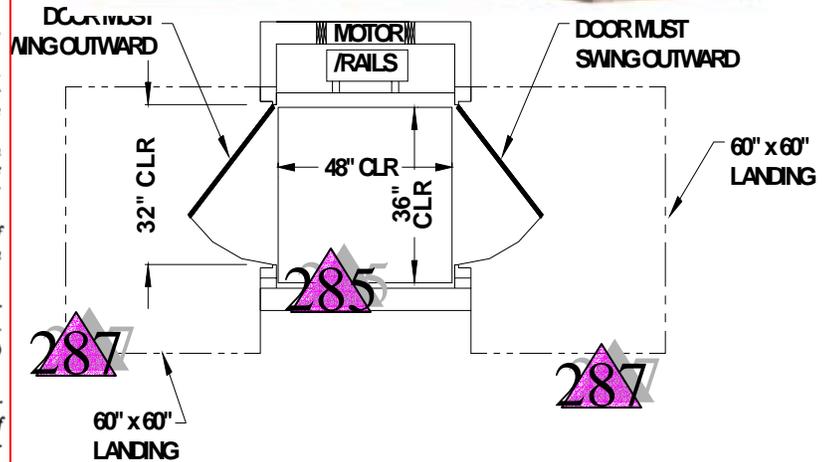
1116B.3.2 Platform lifts shall be provided with standby power or with self-rechargeable battery power that provides sufficient power to operate all platform lift functions for a minimum of 5 (five) upward and downward trips.

1116B.3.3 When used to comply to Section 1116B.2.2 wheelchair viewing position line-of-sight and dispersion requirements of Chapter 11B and the maximum distance to a point where the occupant has a choice of two directions of travel to an exit shall not exceed 30 feet (9144 mm) from the point where the wheelchair occupant is seated. Where a platform lift is used as the accessible means of egress, the maximum distance shall include the vertical travel distance of the platform lift.

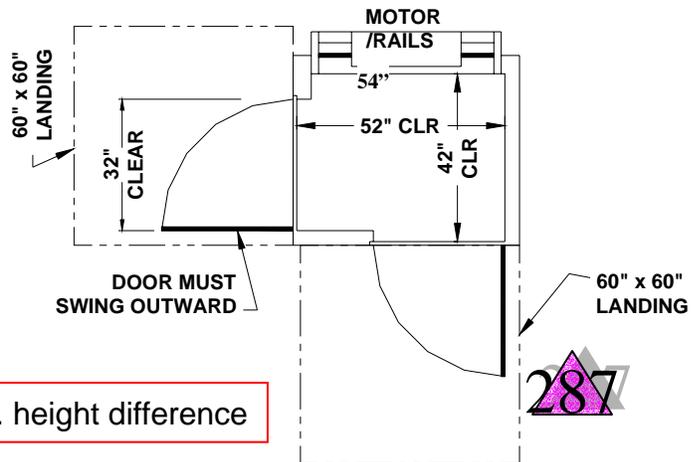
Lifts can be installed under the following conditions

SECTION 1103B

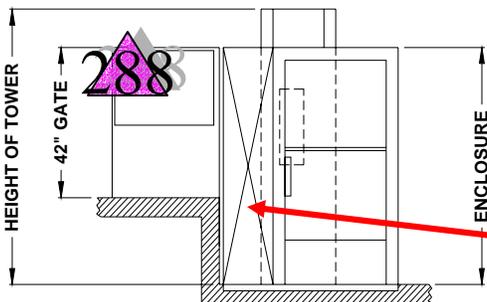
In new construction of buildings and only where elevators are required, pursuant to Section 1103B.1, and which exceed 10,000 square feet on any floor, an accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet of travel of each stairs and each escalator. In existing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



**HANDICAP LIFT - TOP VIEW
FRONT AND BACK ACCESS**



**HANDICAP LIFT - TOP VIEW
FRONT AND SIDE ACCESS**



ELEVATION

12' max. height difference

Accessibility in Apartments, Hotels, Motels and Other Residential Facilities



Chapter 11A	Chapter 11B
<ul style="list-style-type: none"> •New privately funded apartment 3 units or more. •New publicly funded apartment 1 unit or more. •Existing private apartments are exempt. 	<p>As listed in Sec. 1111B.4:</p> <ul style="list-style-type: none"> •Existing publicly funded apartments 3 units or more.
<ul style="list-style-type: none"> •Private dormitory ² •Private homeless shelter 	<ul style="list-style-type: none"> •Public dormitory ¹ •Public homeless shelter
<p>No requirements for hotels & motels</p>	<p>Hotels & motels, inns, halfway houses.</p>
<p>New artist -in -residence (max. 2 artist) & adaptive reuse with no employees and not open to the public.</p>	<p>No requirements for artist –in -residence.</p>

1. Sec. 205 Dormitory is a room occupied by more than two guests. (DSA/AC).
2. Sec. 205 Dormitory is a room occupied by more than two persons. (HCD1/AC)



ADAPTIVE REUSE CONSTRUCTION GUIDELINES FOR THE CITY OF LOS ANGELES

April 15, 2002

INTRODUCTION

This information bulletin was developed by the Mayor's Office of Economic Development/LA's Business Team, the Los Angeles Department of Building and Safety (LADBS) and the Los Angeles Fire Department (LAFD), to provide construction requirements for redeveloping existing buildings in accordance with the Adaptive Reuse Ordinance (ARO). This ordinance was established to realize the

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ADAPTIVE REUSE CONSTRUCTION GUIDELINES

Electrical Code

- Installation of new electrical distribution systems and wiring shall comply with the residential requirements of the current code for the residential portions of the units. The commercial portions shall be designed based on industrial/commercial lofts.
- Installation of new electrical wiring shall comply with the requirements of the current code.
- Outlet locations may be based on the intended use and occupancy.

Mechanical Code

- New elevators shall comply with the requirements of the current code.
- Freight elevators shall not be used as passenger elevators.
- Existing elevators are exempt from complying with the requirements of the current code unless retroactive provisions of the State Elevator Safety Order apply.
- New plumbing work shall comply with the current code.
- New HVAC work shall comply with the current code.
- Except for the smoke evacuation, if door holders are used in the subdivided corridors, and the air moving equipment shuts down upon detection of smoke in the corridor, the air inlets and outlets are not required in each section of a corridor.
- For ventilation purposes, the corridor will be considered as one despite any intermediate doors.
- Mechanical ventilation is not required for existing light courts with openable windows.
- Corridors shall have their own independent heating and cooling unit or natural or mechanical ventilation. Units supplying the corridor shall not communicate with any other areas.

Disabled Access

The following is based on current research by LADBS:

- Conversion of existing buildings to privately-owned residential use does not trigger disabled access requirements in the residential use area. The portion of the building utilized for work use requires disabled access if there are employees or if that portion of the building is open to the general public.

FIRE AND LIFE SAFETY PROVISIONS

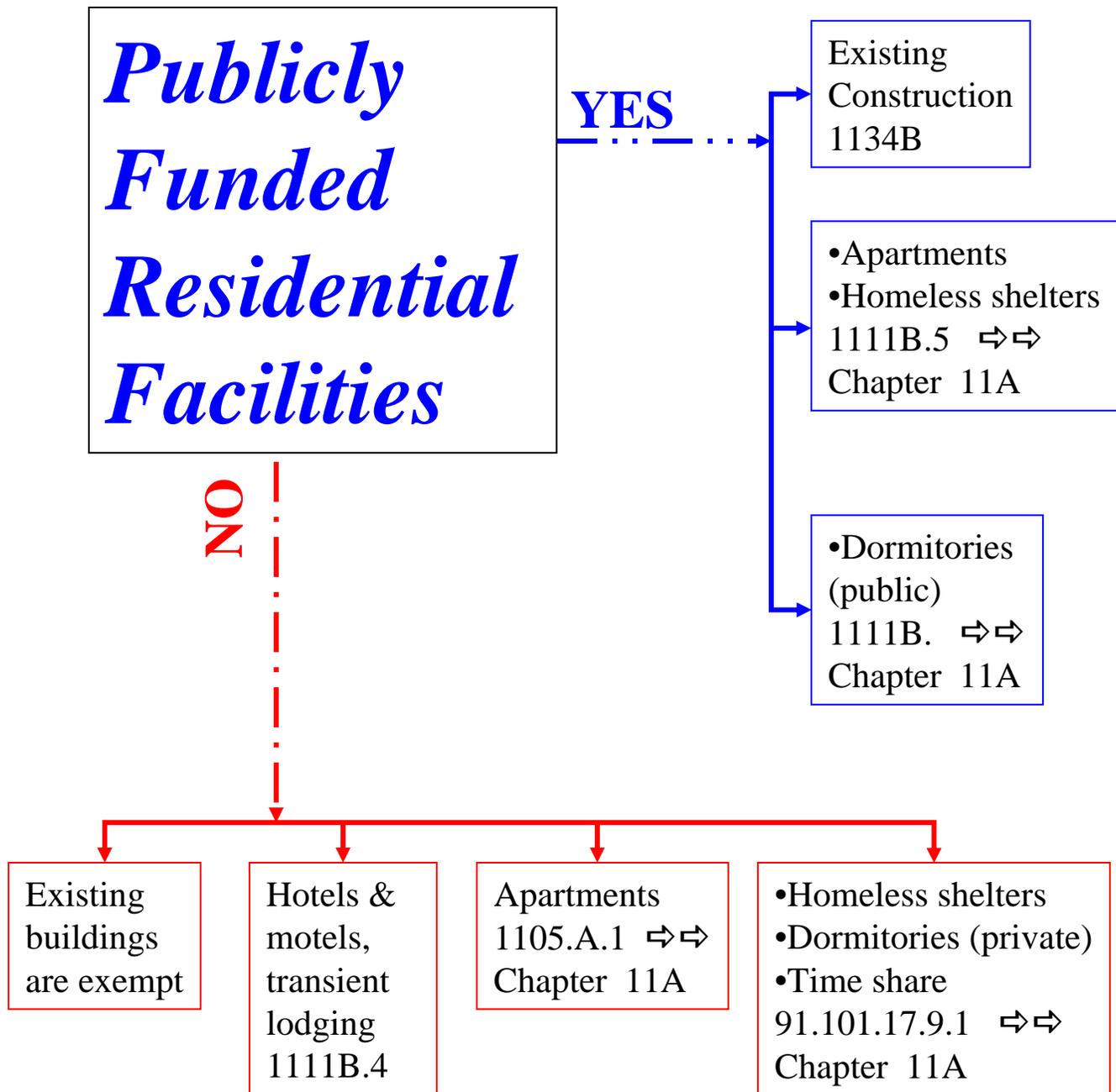
- If any portion of a building is used for ARO units, then the entire building shall comply with all of the Fire/Life Safety requirements.
- This bulletin shall not authorize the reduction of existing fire and life safety elements of a building, where such elements provide a greater level of protection than the minimum requirements established by this bulletin.

Exiting System

- Corridors and shaft enclosures shall comply with the current code.
- Existing dead end corridors exceeding the 20-foot maximum shall be provided with a single vestibule for a maximum overall length of 40 feet (20 feet maximum on each side of the vestibule).
- When two or more exits are required, one required exit may be the existing fire escape, provided the other exit(s) conform to the code.
- Egress/exit lightings, exit signs, low level exit signs and floor level exit paths shall comply with the current code.
- Exit stairways are allowed to pass thru the first floor elevator lobby provided the elevator doors are provided with a smoke sealed and 90 minute rated door. The 90 minute rated door is not required if there is more than one protected and enclosed stairwell exit.

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.

Applicability Flow Chart



Apartments

A. Newly Constructed Multi-Family Dwellings

Access and adaptability requirements apply to **newly constructed -privately funded**¹, multi-family dwelling units as follows:

1. Apartment buildings with three or more dwelling units.
2. Condominiums with four or more dwelling units.
3. Lodging houses ², when used as a residence with three or more guest rooms.
4. Congregate residences ²
5. Dwellings with three or more efficiency units ² or Section 17958.1 of the California Health and Safety Code.
6. Shelters for the homeless, not otherwise subject to the disabled access provisions of the Division of the State Architect, Access Compliance (DSA/AC).
7. Dormitories with three or more guest rooms ²
8. Time –share dwellings with three or more units, except for condominiums covered in item#2 above.
9. Other Group R Occupancies in covered multifamily dwellings which are regulated by the Office of the State Fire Marshal. (See Section 101.17.14).

Footnote:

1. Sec. 1102.A.14, Newly Constructed is a building that has never before been used or occupied for **any purpose**.
2. As defined in Chapter 2 of the 2002 Los Angeles California Building Code.

B. Alterations & Repairs to an Existing Multifamily Dwellings

- Existing **privately –funded** multifamily dwellings are exempt from accessibility requirements provided, that the scope of the project does not remove any existing accessibility features. (For example: removing an existing wheelchair lift is prohibited).
- Existing **publicly –funded** multifamily dwellings are **not exempt** from accessibility requirements and are subject to the regulations under Sec. 1134B.

C. Addition to an Existing Multifamily Dwellings

- The following shall comply with the accessibility requirements:
 1. Only the new ground floor units in a non-elevator building.
 2. All new units in an elevator building.

D. Change of Use into a Multi-Family Dwellings

- The conversion of nonresidential buildings into apartments, condominiums, time share units, privately funded shelters for homeless persons, dormitories and other types of dwelling containing sleeping accommodations with common toilet or cooking facilities is **exempt** from these regulations

Each building on a building site shall be considered separately when determining applicability of these regulations (Section 1119A.1). (i.e. a group of privately funded duplexes built on one lot is exempt from accessibility compliance unless it is publicly funded).

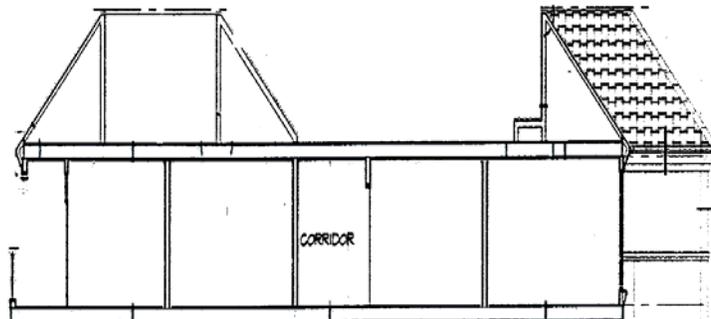
Definition:

1. Accessibility-is the combination of various elements in a building or area which allows access, circulation and the full use the building and facilities by persons with physical disabilities.

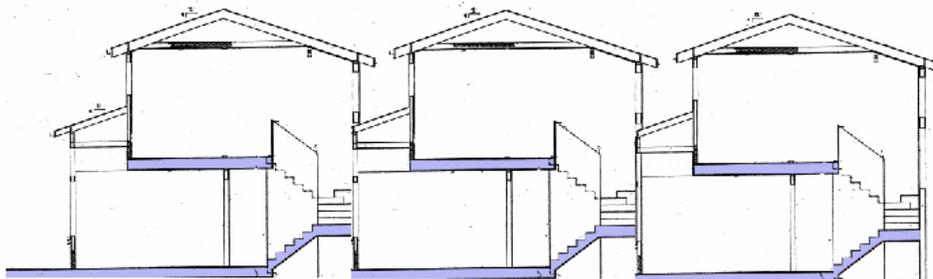
2. Adaptable Dwelling Unit- is an accessible dwelling unit within a covered multifamily building as designed with elements and spaces allowing the dwelling unit to be adapted or adjusted to accommodate the user.

See Section 1109A and 1112A.

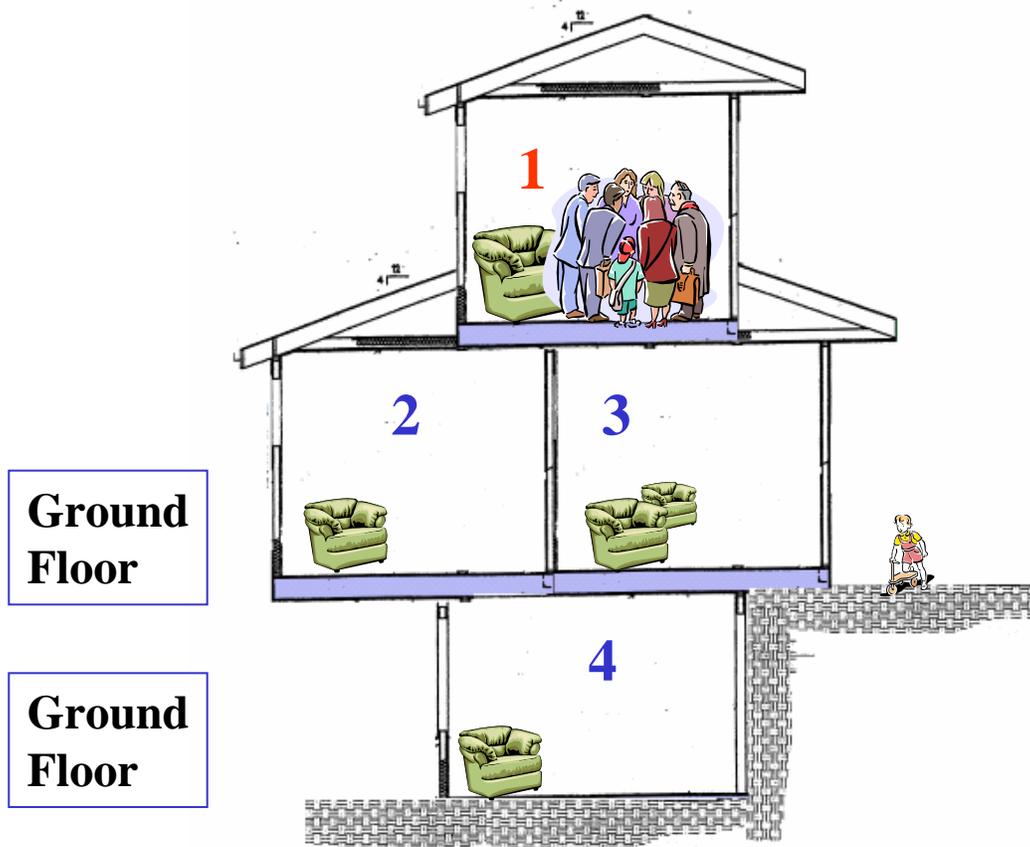
3. Flat Units are single story units.



4. Townhouse Units are a multistory dwelling unit.



NOTE! "Townhouse" type units do not pertain to the type of ownership but rather the layout of the dwelling unit. (These units must have an interior staircase).



Ground Floor is the floor of a building with a building entrance on an accessible route. A building may have one or more ground floor. Where the first floor containing dwelling units in a building is above grade, all units on that floor must be served by a building entrance on an accessible route. This floor will be considered to be the ground floor.

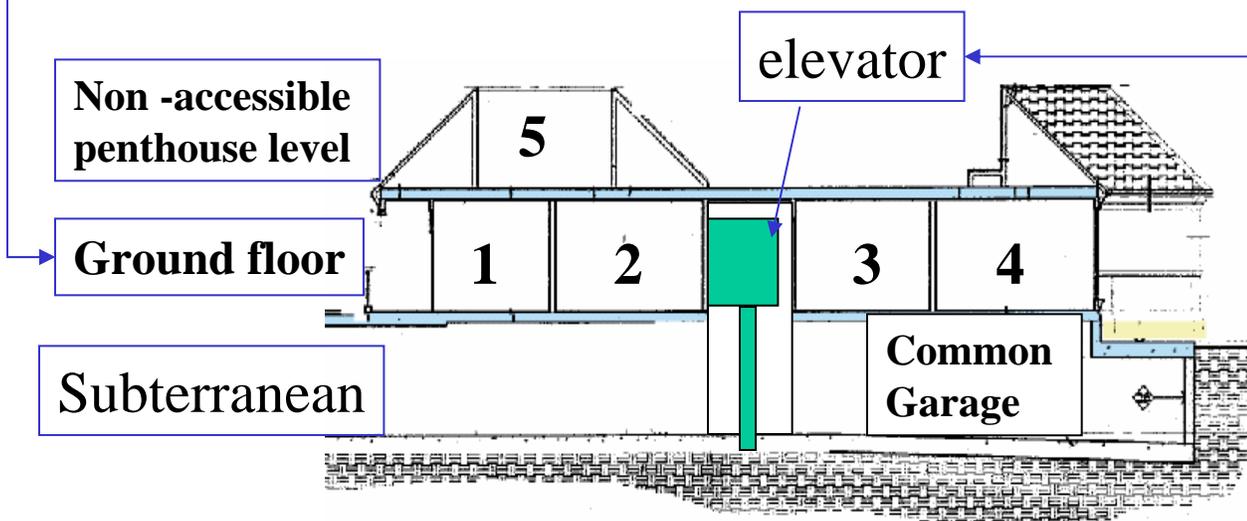
Applicability

Follow these steps to determine which units are to be adaptable.

1. Determine the ground floor level (the first floor containing dwelling units above grade). A buildings can have multiple ground floors (see previous page).

2. All ground floors are required to be accessible with the exception of townhouse units (i.e. need an elevator, ramps, or a level path).

3. An elevator must be installed to provide access from the subterranean level to the ground floor units.



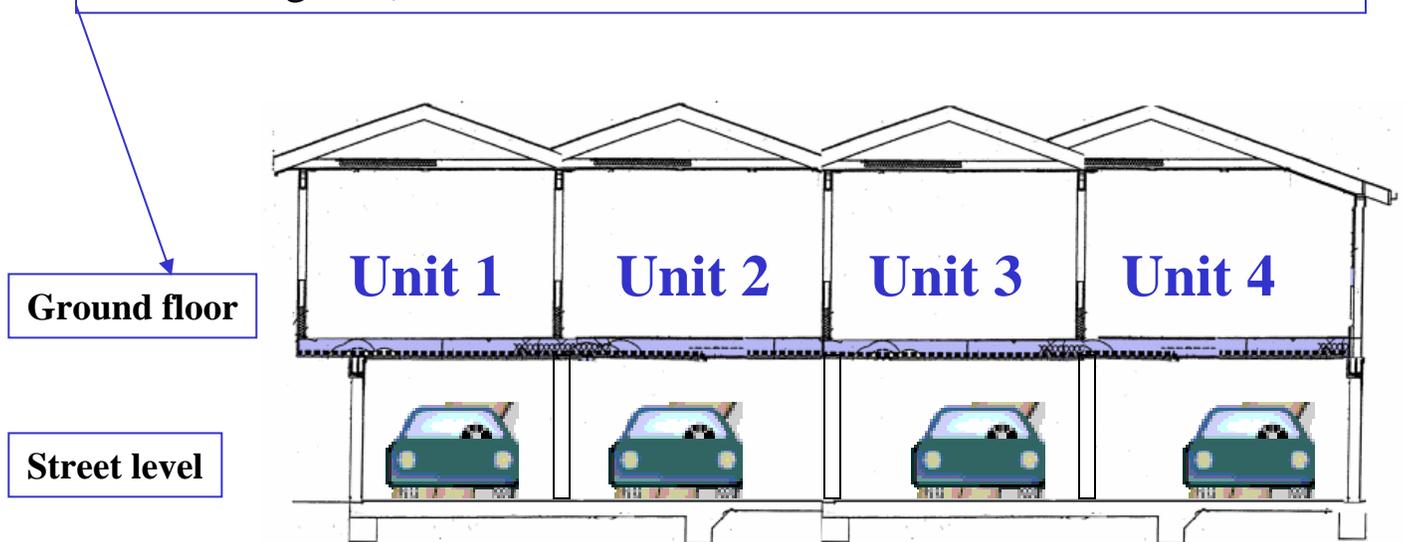
NOTE! If the elevator would continue to the penthouse level Unit 5 would have to be adaptable.
(ELEVATORS CREATE MULTIPLE GROUND FLOORS).

Carriage Units

Carriage Units –units that are located above private garages serving the units.

Step #1 identify the ground floor level.

This must be the ground floor level (the dwelling unit that is closest to grade).



Step #2 provide an accessible path to the ground floor units.

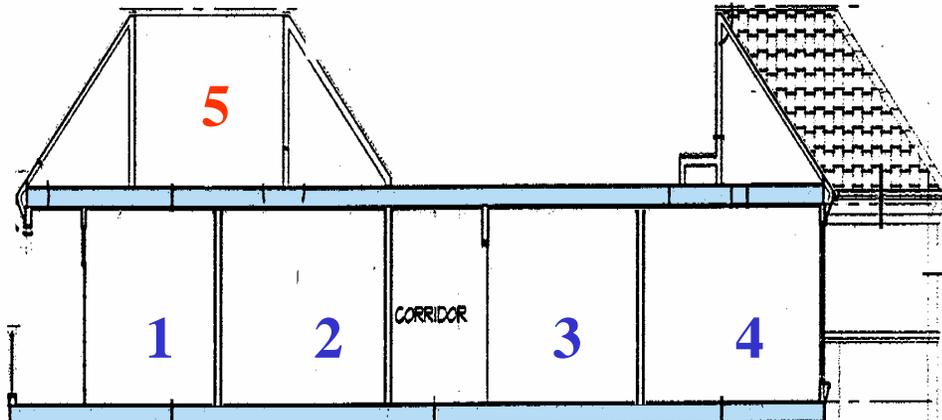
An elevator or ramp must be installed to provide access from the subterranean level to the ground floor units.

Exempt: 1,2,3,4
Adaptable: none

Flat Units

All ground floor "flat units" must be accessible and adaptable.

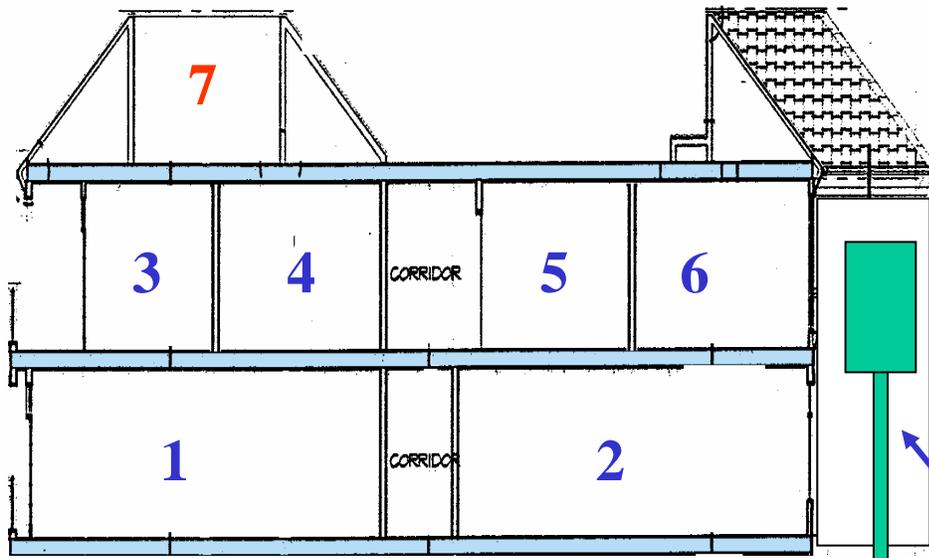
Ground
floor



Exempt: 5
Adaptable: 1,2,3,4

Ground #2
Floor in an
Elevator bldg.

Ground
floor



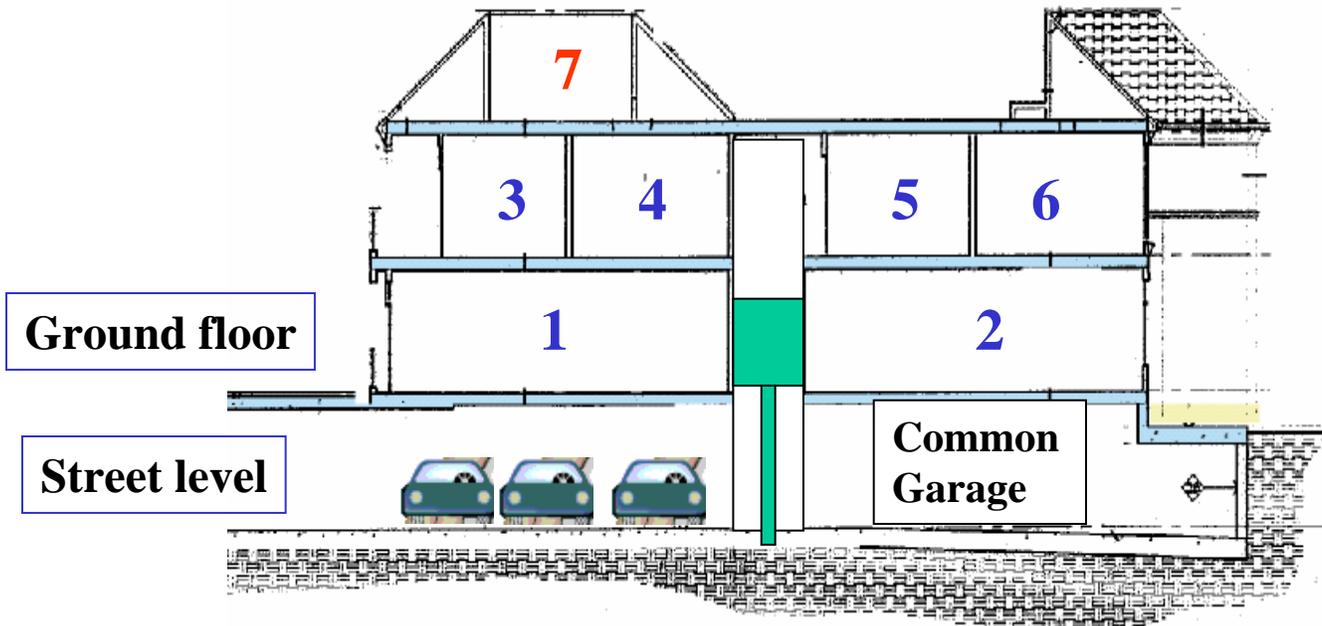
Staircase or elevator
to the 2nd floor.

Elevators create multiple ground floors.

Elevators Building :
Exempt: 7
Adaptable : 1,2,3,4,5,6

Non-elevator Building
Exempt: 3,4,5,6,7
Adaptable : 1,2

Review



1. Determine the ground floor level (the level that is closest to grade).

Unit 1 & 2 are closest to grade.

2. All ground floors are required to be accessible. (i.e. need an elevator, ramps, or a level path).

An elevator must be installed to provide access to Unit 1 & 2.

3. Elevators create multiple ground floors. Which ever level the elevator stops, that level would also become a ground floor.

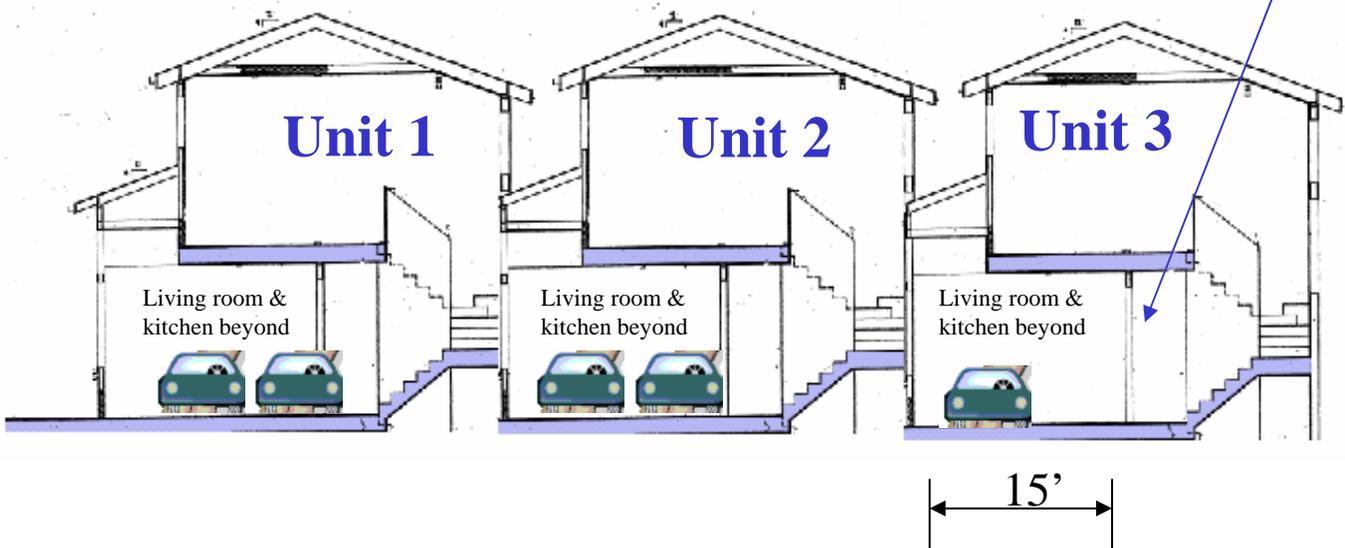
Therefore, units 3,4,5 & 6 shall be accessible.

Unit 7 is exempt.

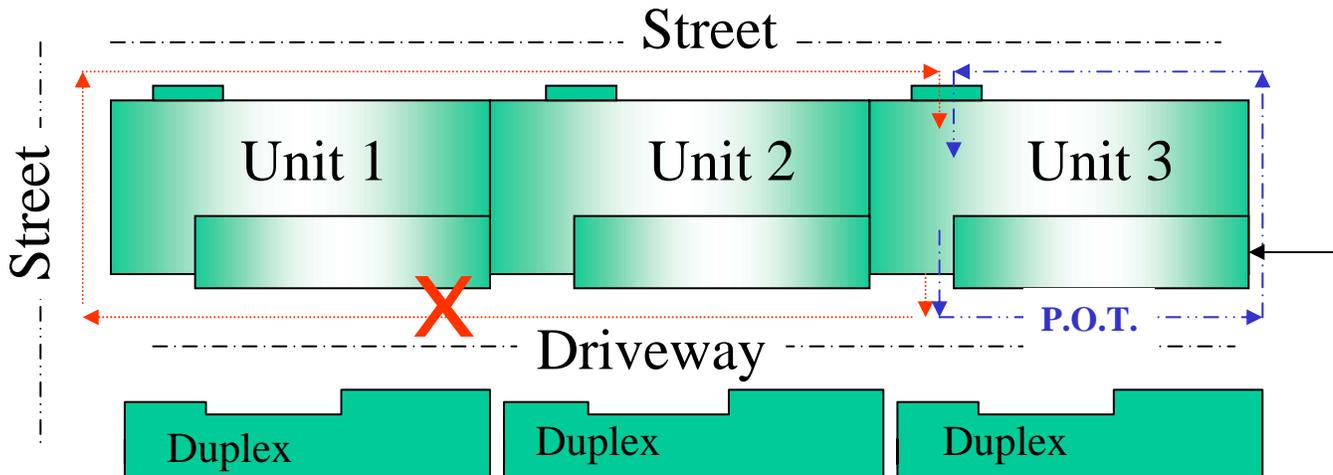
Units with Private Garages

8'-2" headroom clearance is not required in a private garage if:

If the finish floor of the house is not leveled with the garage, a person with disabilities can exit the garage and enter the unit's front door from the driveway. This path of travel shall be leveled and shall not process behind parked cars. See next page.



Exempt: 1, 2,3
Adaptable: none



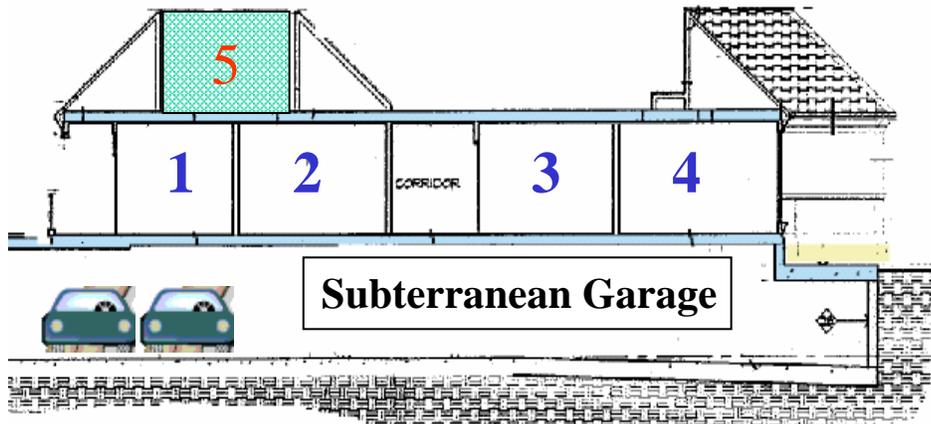
If the finish floor of the house is not leveled with the garage, a person with disabilities can exit the garage and enter from the front door. This path of travel shall be leveled and shall not process behind parked cars.

Apartments: Flat unit- Addition

Additional unit to an existing apartment is required to be adaptable if:

1. It creates new ground floor area (see page III7) **and**
2. Creates a new unit

Ground floor

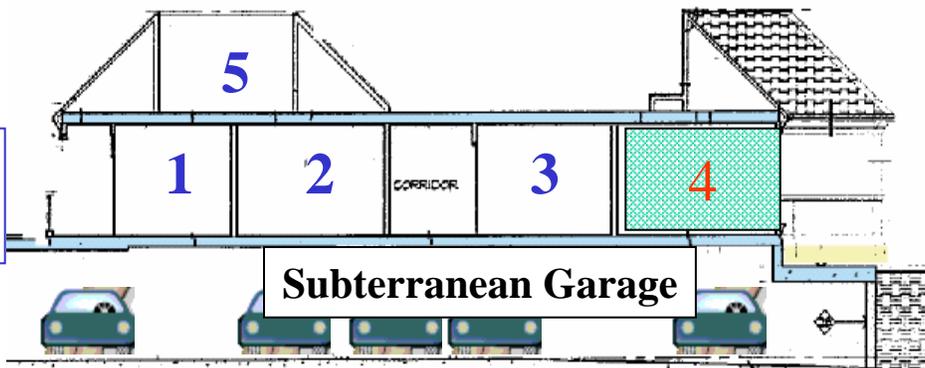


Comments: no elevator, therefore, no new ground floor unit

-  -addition
-  -existing

Exempt: 1,2,3,4,5
Adaptable: none

Ground floor



Comments: no elevator, however, one new ground floor unit

-  -addition
-  -existing

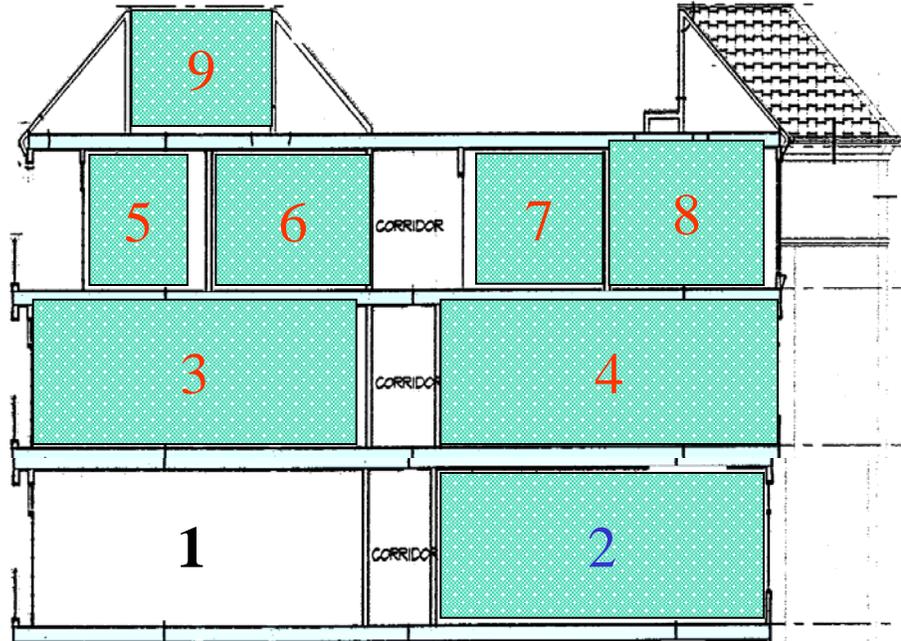
Exempt: 1,2,3,5
Adaptable: 4

Apartments: Flat unit- Addition

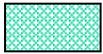
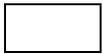
Not a ground
Floor

Not a ground
Floor

Ground
floor



Comments: no elevator, however,
one new ground floor unit

	-addition
	-existing

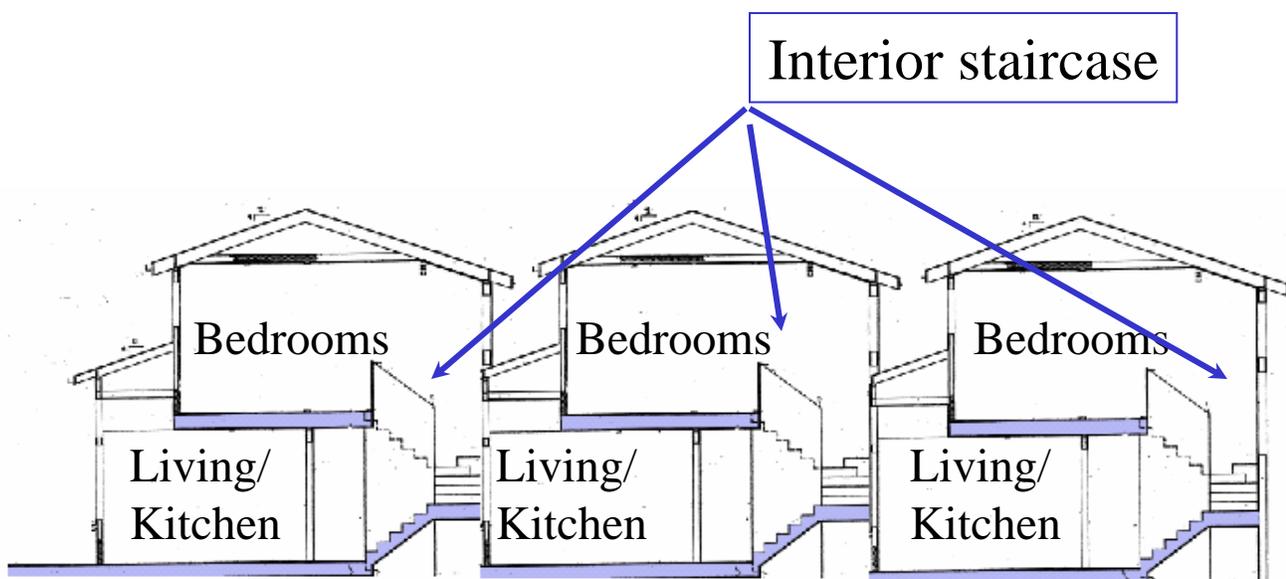
Exempt: 1,3,4,5,6,7,8,9
Adaptable: #2

Definition of a Townhouse Type Units

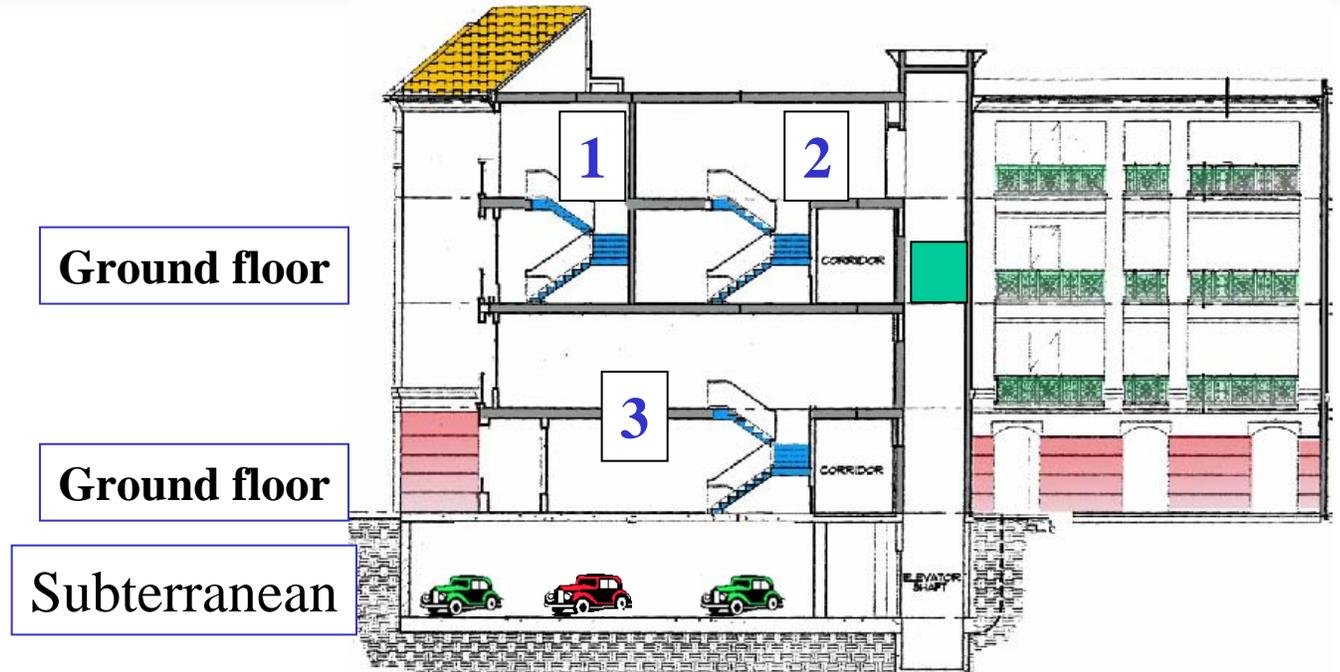
Townhouse type units are considered multistory dwelling units.

Multistory dwelling unit is a dwelling unit with finished living space located on one floor and the floor or floors immediately above or below it.

Townhouse type units with all its accessory use (i.e. pools, rec. rooms, gym, parking, etc...) are exempt if they are not within an elevator building (see next page).



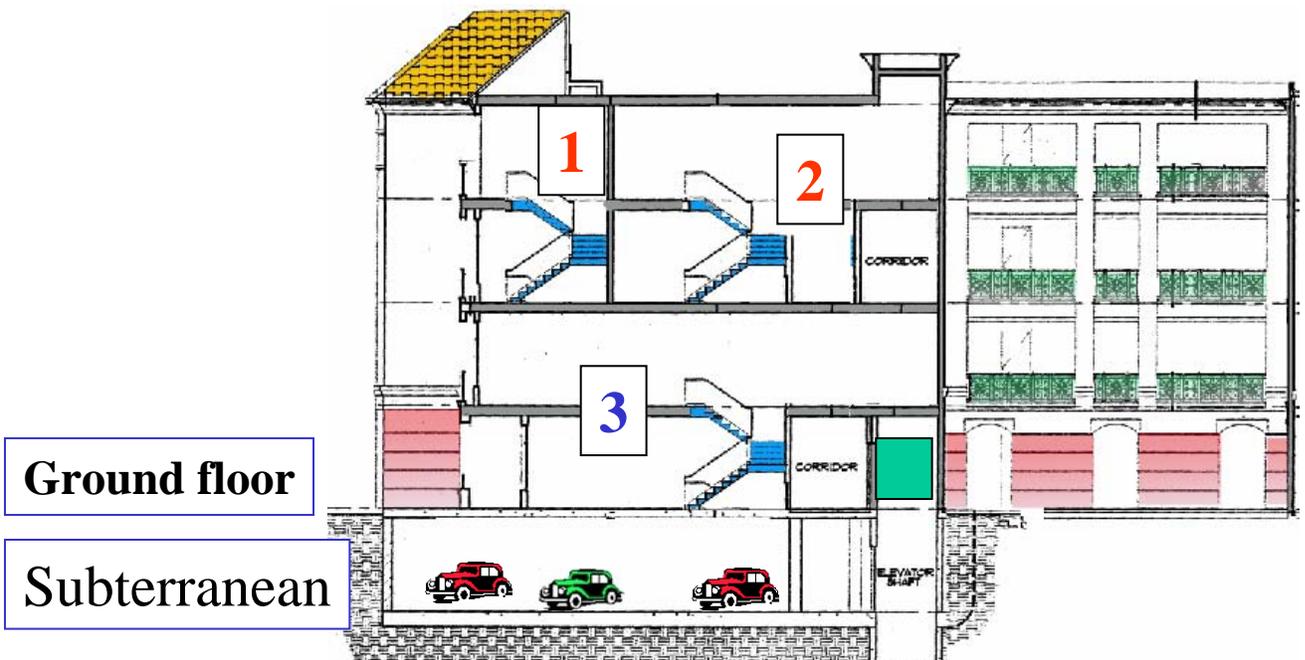
If a townhouse is located **within an elevator building**, the primary entry floor shall contain a bathroom or powder room usable to a person in a wheelchair (see next page).



The elevator provides access to two levels.*

Exempt: none

Adaptable powder room: 1,2,3

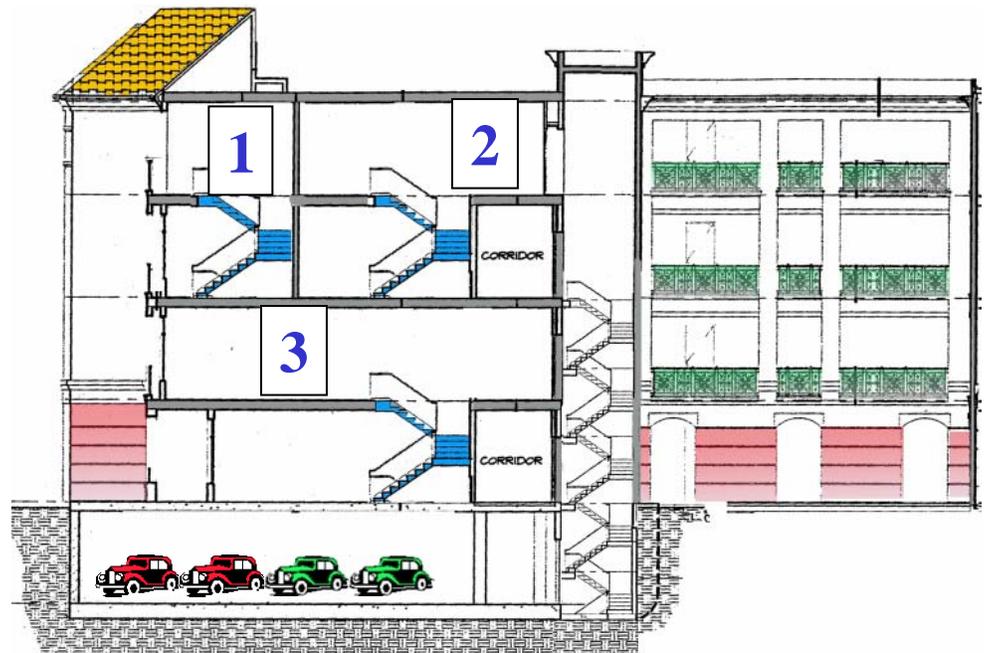


The elevator provides access to only one level.*

Exempt: 1,2

Adaptable powder room: 3

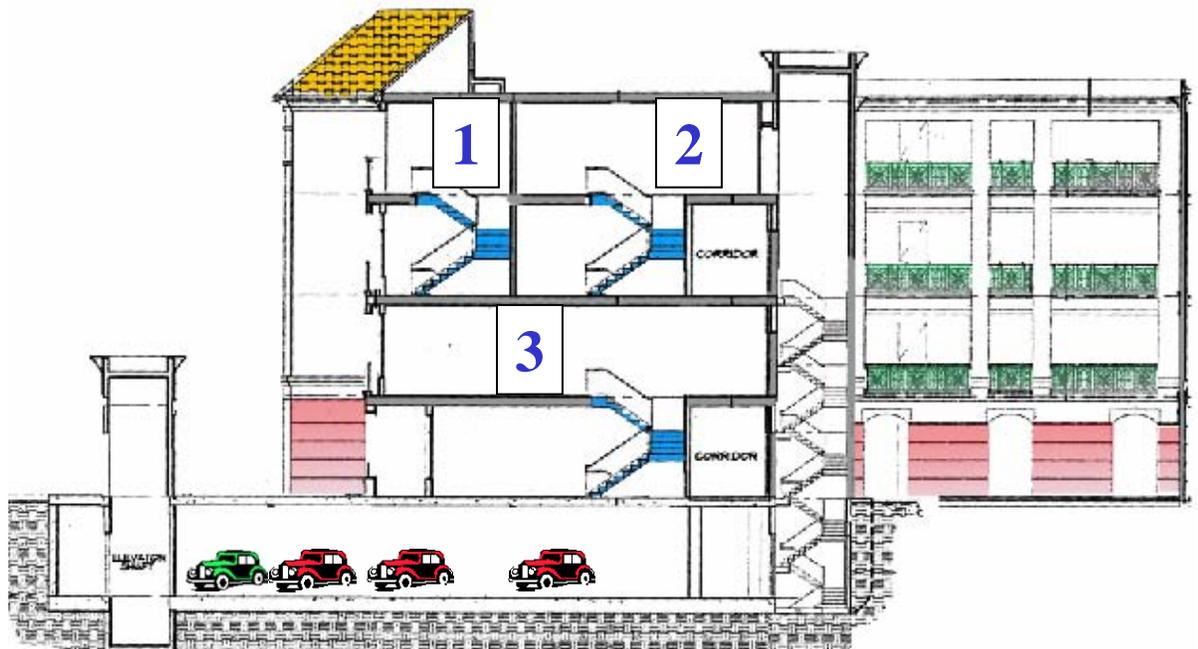
*need to provide a path of travel from the accessible parking stalls.



Stairway leads from the garage to all the units

Exempt: 1,2,3

Adaptable powder room: none

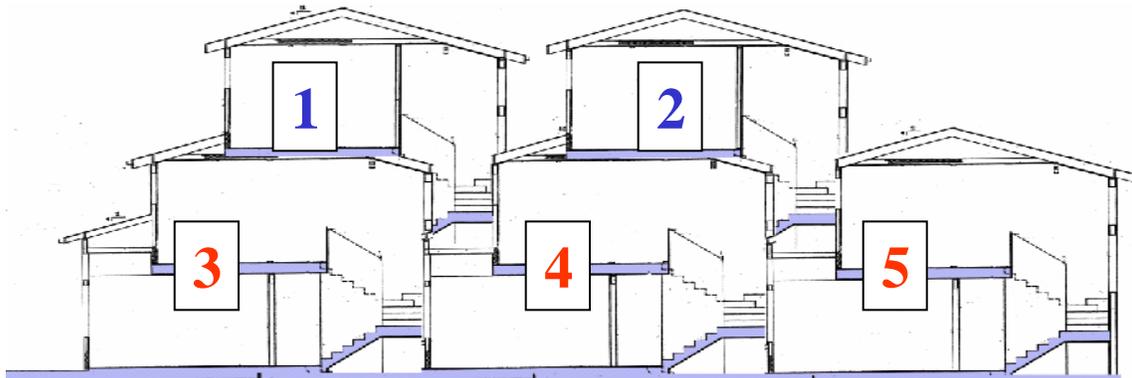


Elevator that leads to the exterior portion of the building, is not considered an elevator building since it only provides access to ground floor level.

Exempt: 1,2,3

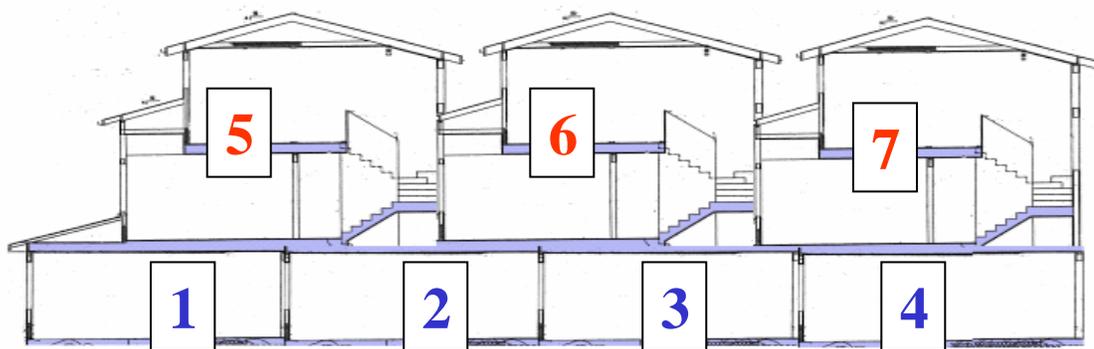
Adaptable powder room: none

Flat Units with Townhouse



The exempt multi-story townhouse type unit does not establish the ground floor. Therefore, units #1 & #2 are considered ground floor units (i.e. provide an elevator or ramp).

Exempt: 3, 4, 5
Adaptable: 1, 2

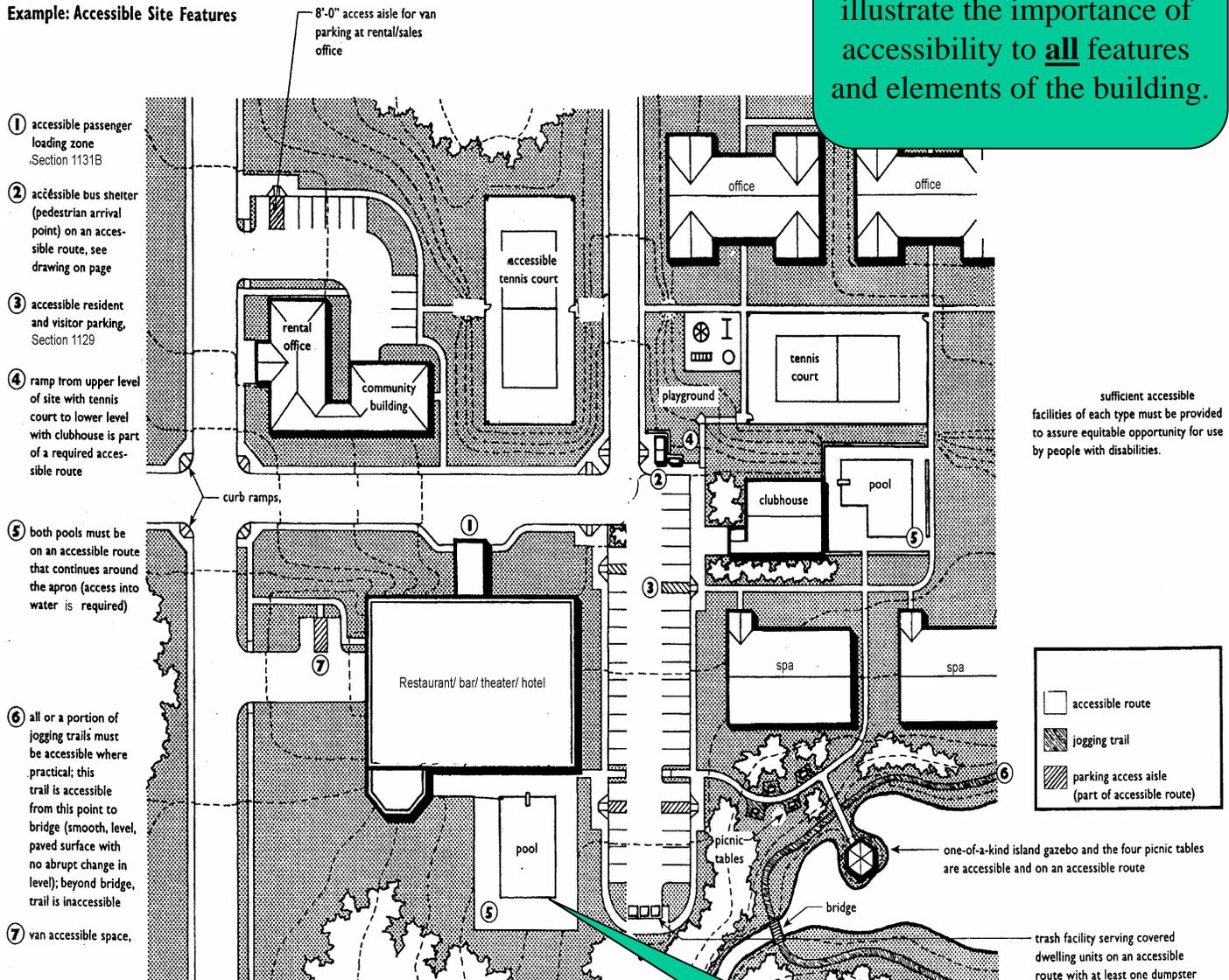


#5, #6, & #7 are townhouse units located above “flat units”. These townhouse units are exempt since this is not an elevator building.

Exempt: 5, 6, 7
Adaptable: 1, 2, 3, 4

Site Development

Example: Accessible Site Features



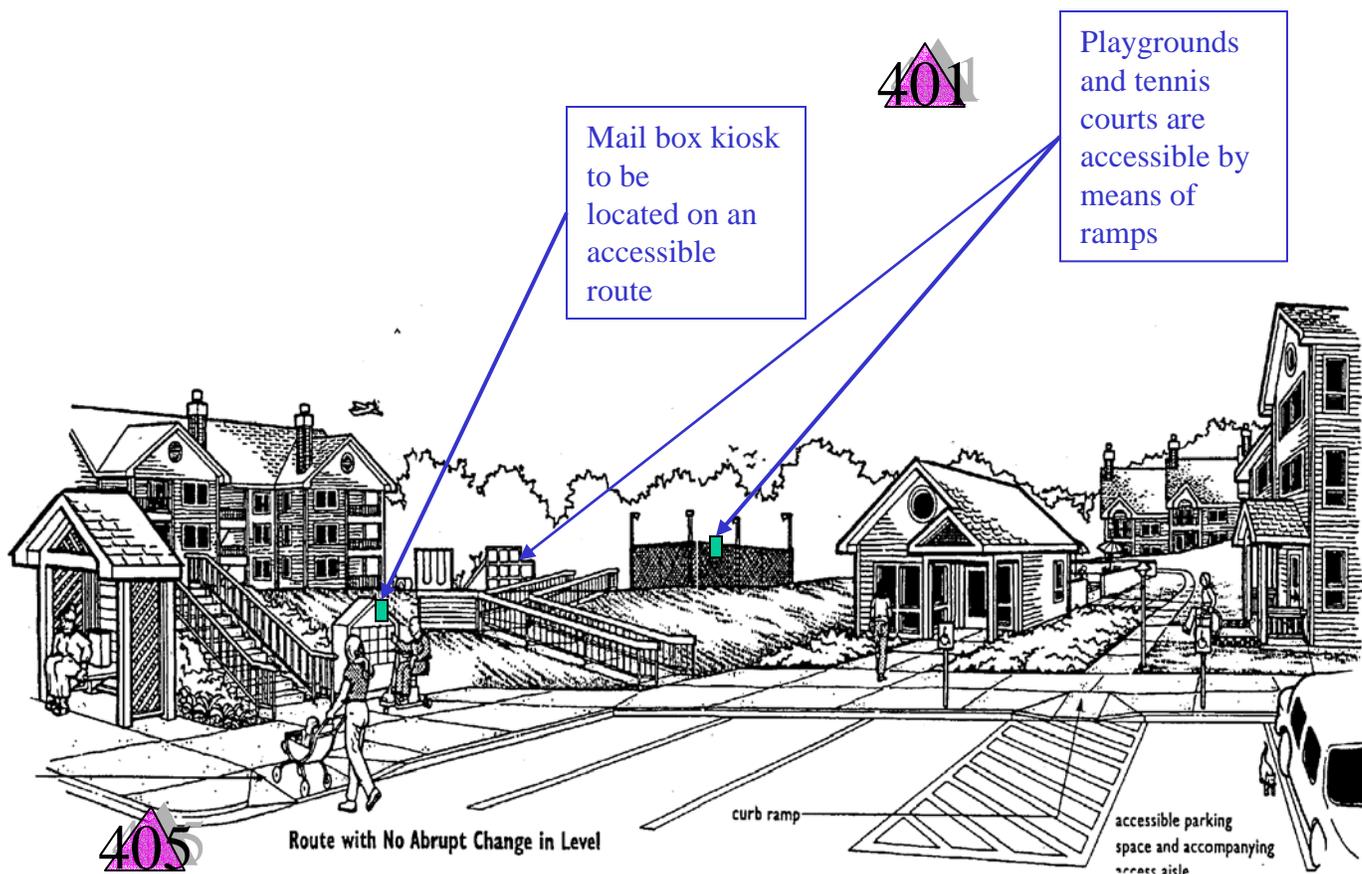
These details are shown to illustrate the importance of accessibility to **all** features and elements of the building.

sufficient accessible facilities of each type must be provided to assure equitable opportunity for use by people with disabilities.

See page III 25 for additional pool requirements.

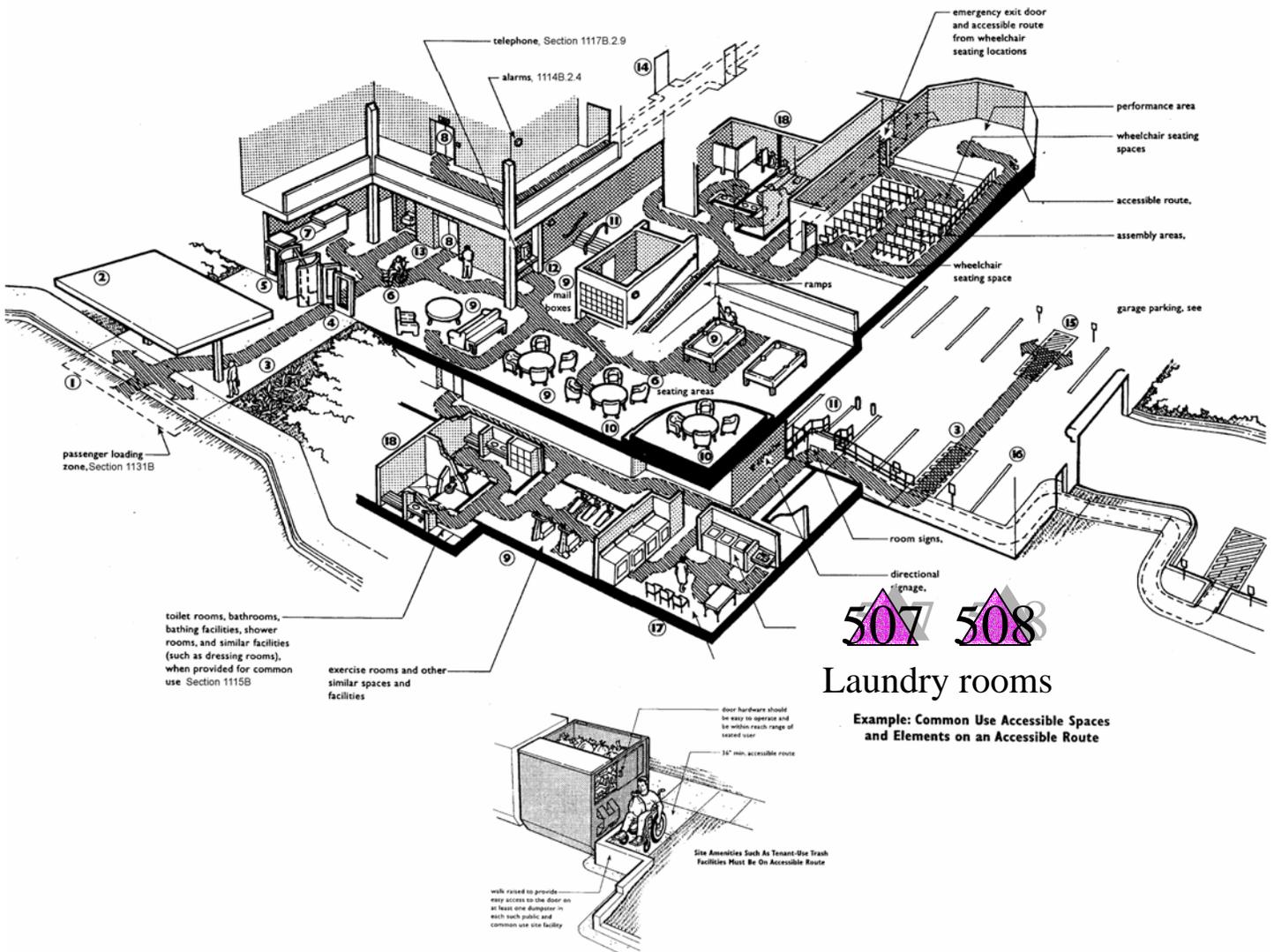
Each building on a building site shall be considered separately when determining applicability of these regulations (Section 1119A.1). (i.e. a group of privately funded duplexes built on one lot are exempt from accessibility compliance).

These details are shown to illustrate the importance of accessibility to **all** features and elements of the building.

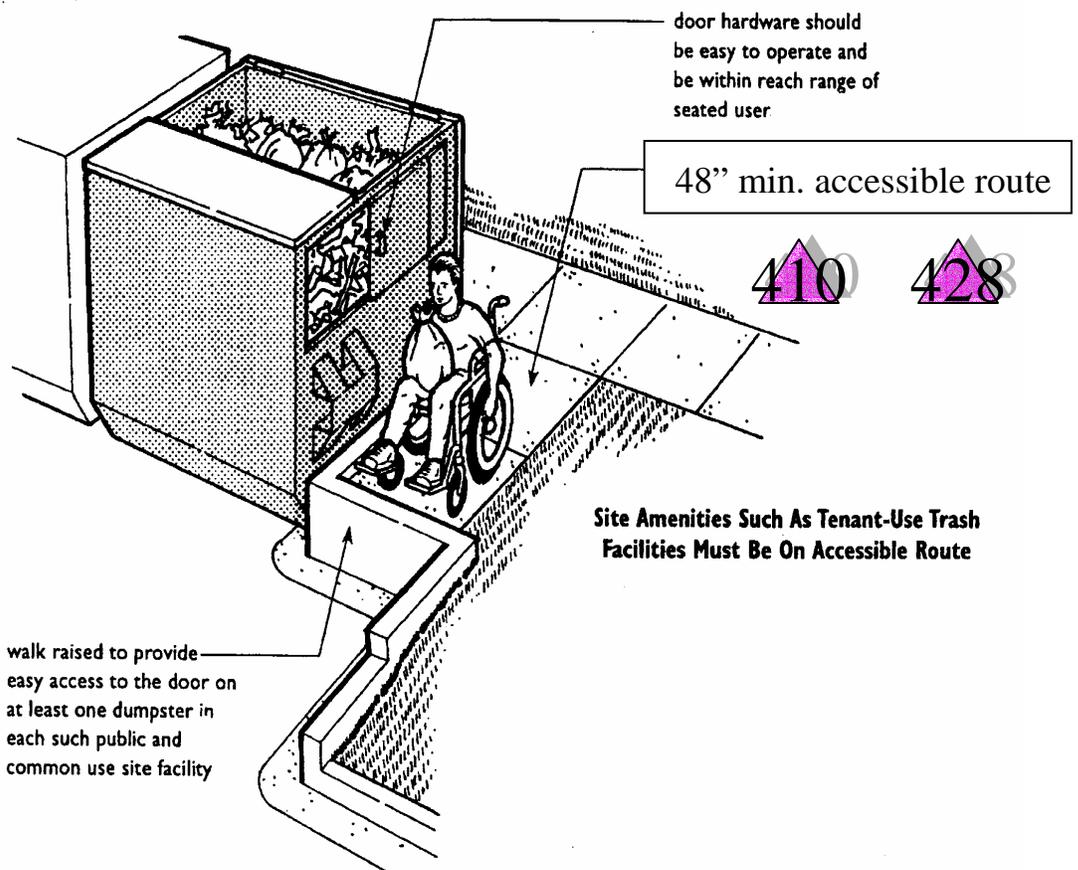


For buildings without the elevator and steep sites, check design criteria in Section 1119A for Site Analysis Test No.1, 2 or 3.

These details are shown to illustrate the importance of accessibility to **all** features and elements of the building.



These details are shown to illustrate the importance of accessibility to all features and elements of the building.



These details are shown to illustrate the importance of accessibility to all features and elements of the building.

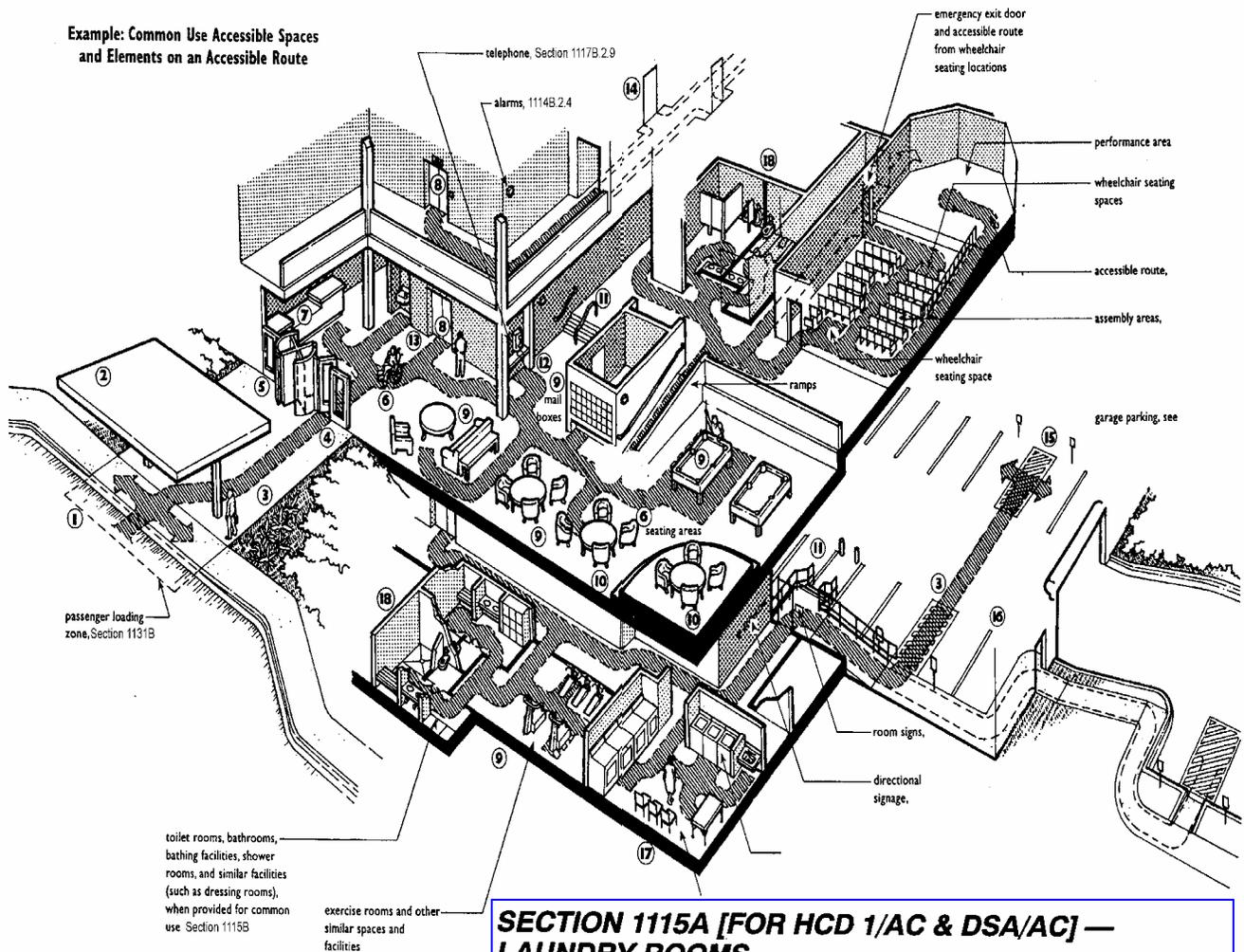
SECTION 1110A [FOR HCD 1/AC & DSA/AC] — ELEVATORS AND SPECIAL ACCESS (WHEELCHAIR) LIFTS

1110A.1 [For HCD 1/AC & DSA/AC] Elevators. Elevators provided in covered multifamily buildings shall be accessible and comply with Chapter 11A, and Title 24, Part 7, of the California Code of Regulations.

EXCEPTION: Private elevators serving only one dwelling unit.

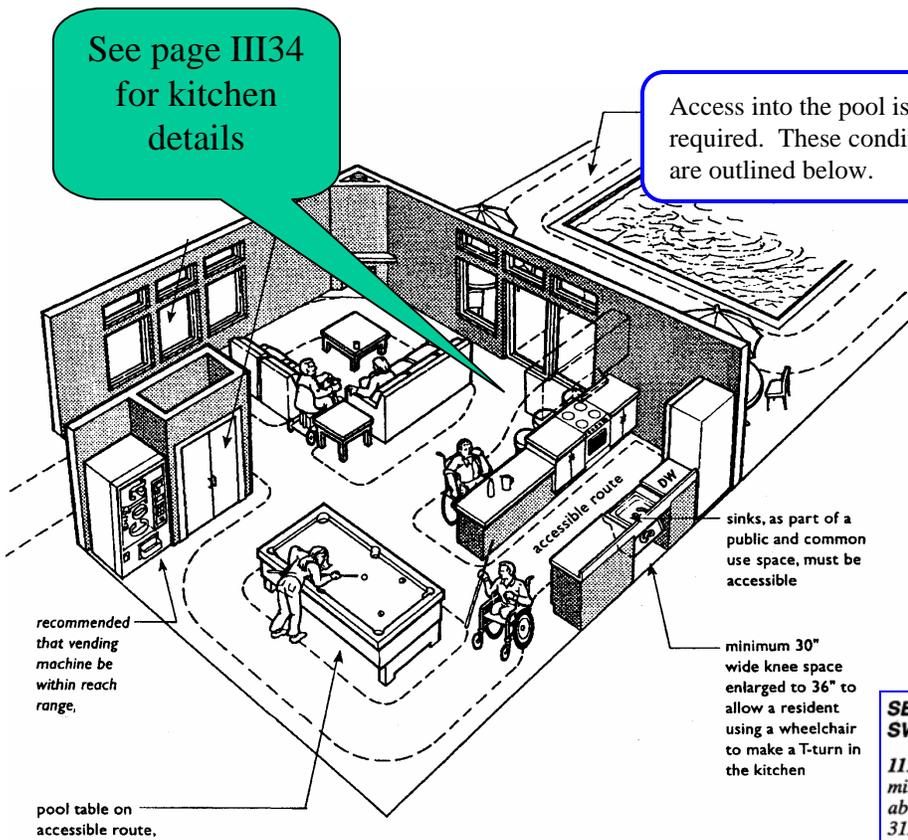
See page III 26-27 for more information.

Example: Common Use Accessible Spaces and Elements on an Accessible Route



SECTION 1115A [FOR HCD 1/AC & DSA/AC] — LAUNDRY ROOMS

1115A.1 [For HCD 1/AC & DSA/AC] General. If clothes-washing machines and clothes dryers are provided in covered multifamily buildings or dwelling units, at least one of each type of appliance shall be provided in each laundry area. Laundry rooms serving covered multifamily dwellings are not required to have front-loading clothes washers. Where front-loading clothes washers are not provided, management shall provide assistive devices, on request, if necessary to permit a resident to use a top-loading clothes washer.



Accessible Elements and Features of a Public and Common Use Clubhouse

Public and common use kitchens must be usable and at least meet the requirements

This type does **not** comply:

1. No rigid seat
2. No unassisted operation
3. No armrest
4. No seat belts



516



This type does **not** comply:

1. No armrest
2. No occupant seat restraint

SECTION 1113A [FOR HCD 1/AC & DSA/AC] — SWIMMING POOLS/DRINKING FOUNTAINS

1113A.1 [For HCD 1/AC & DSA/AC] Swimming Pools. Swimming pools required to be accessible to persons with physical disabilities shall comply with the provisions of Chapters 11B and 31B [FOR DHS].

SECTION 1104B.4.3, ITEM #4 PARTICIPATION AREAS

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

4.1 Have a seat that meets all of the following:

- 4.1.1 The seat must be rigid;
- 4.1.2 The seat must be not less than 17 inches (423 mm) and not more than 19 inches (483 mm), inclusive of any cushioned surface that might be provided, above the pool deck;
- 4.1.3 The seat must have two armrests. The armrest on the side of the seat by which access is gained shall be either removable or fold clear of the seat;
- 4.1.4 The seat must have a back support that is at least 12 inches (305 mm) tall;
- 4.1.5 The seat must have an occupant restraint for use by the occupant of the seat, and the restraint must meet the standards for operable controls in compliance with Section 1117B.6-4.

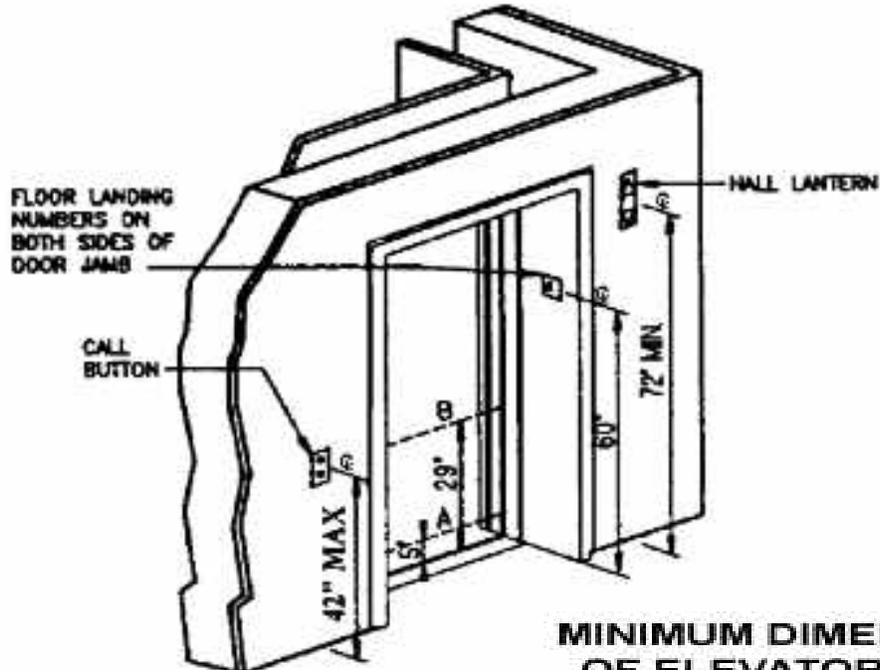
4.2 Be capable of unassisted operation from both the deck and water levels.

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

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

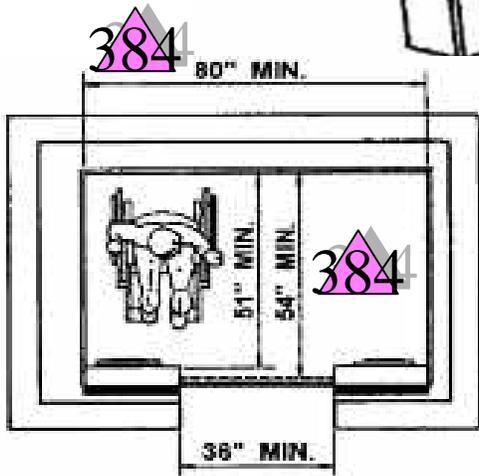
4.5 Be positioned so that, if the pool has water of different depths, it will place the operator into water that is at least three feet (914 mm) deep.

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

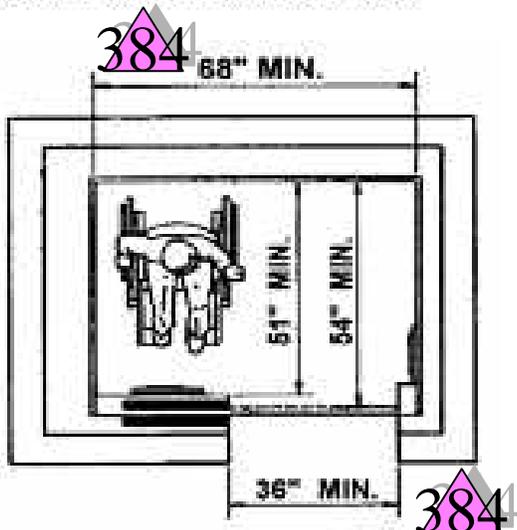


**MINIMUM DIMENSIONS OF ELEVATOR CARS
FIGURE 30-A**

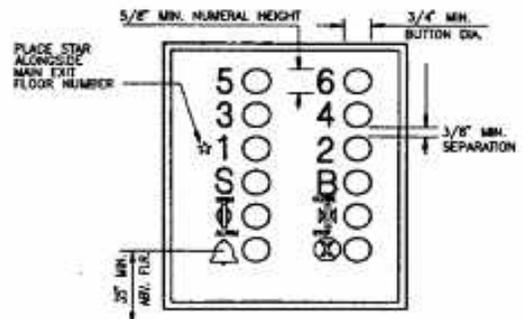
For elevator requirements, please refer to 1110A



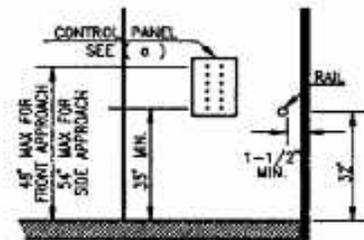
CENTER OPENING DOOR



SIDE OPENING DOOR



(a) ELEVATOR CONTROL PANEL DETAILS

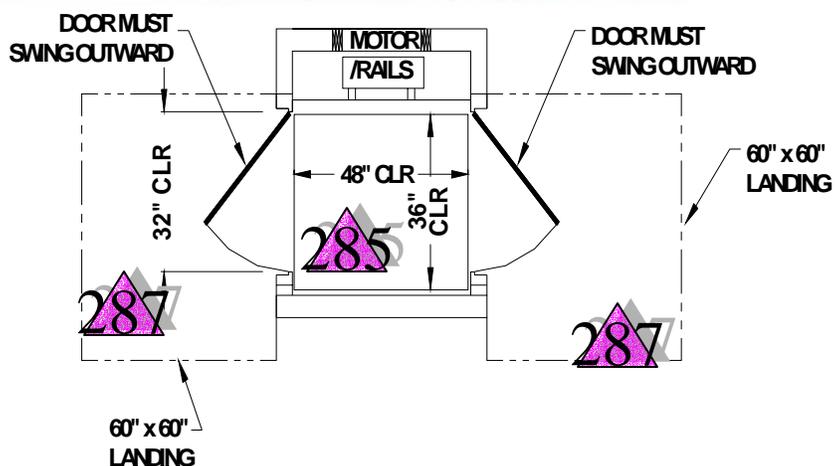


(b) MAXIMUM INSTALLATION HEIGHTS ABOVE CAB FLOOR
ELEVATOR CONTROL PANEL

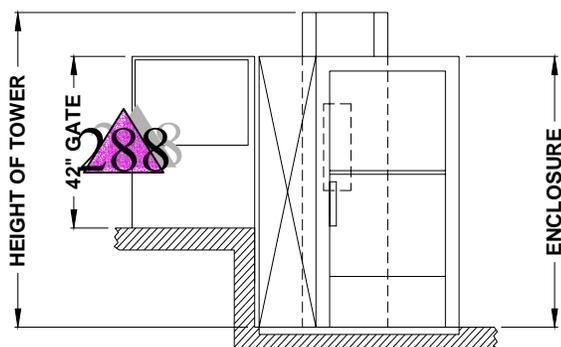
Handicap Lifts



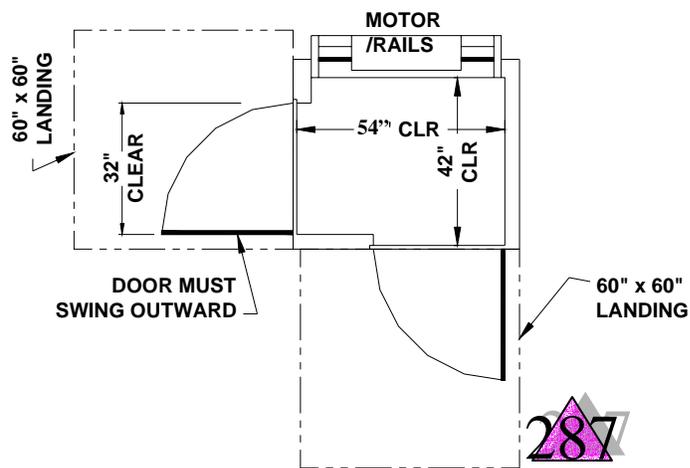
Lift mounted to stairways is not acceptable because it does not have the “sufficient size to accommodate large motorized wheelchairs”



**HANDICAP LIFT - TOP VIEW
FRONT AND BACK ACCESS**



ELEVATION



**HANDICAP LIFT - TOP VIEW
FRONT AND SIDE ACCESS**

Handicap Lifts

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DEPARTMENT OF GENERAL SERVICES

STATE OF CALIFORNIA

PETE WILSON, GOVERNOR



Office
of the
State
Architect

Street, 5th Floor, Sacramento 95814

(916)445-5753

OCT 22 RECEIVED
OCT 22 RECEIVED

October 20, 1992

Mr. Neil Chaitin
Hankin Specialty Equipment, Inc.
72 Otis Street
San Francisco, CA 94103-1236

Dear Mr. Chaitin:

90° TURN CHAIR LIFTS

Thank you for your letter dated October 16, 1992. After reviewing platform size requirements for 90° turn chair lift, we feel that 42"x 54" would be the minimum acceptable dimension. Any approved mechanical system can be used if it satisfies the code requirements.

Please, feel free to contact this office if you need further help.

Sincerely,

Saher Yassa, AIA
Access Compliance

SY:dbchaitin.sy

Apartment Parking

PARKING THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

SECTION 1118A [FOR HCD 1/AC & DSA/AC] — PARKING FACILITIES

1118A.1 [For HCD 1/AC & DSA/AC] Accessible Parking Required. Accessible parking spaces shall be located on the shortest possible accessible route of travel to an accessible building entrance. In facilities with multiple accessible building entrances with adjacent parking, accessible parking spaces shall be dispersed and located near the accessible entrances. When practical, the accessible route of travel shall not cross lanes for vehicular traffic. When crossing vehicle traffic lanes is necessary, the route of travel shall be designated and marked as a crosswalk.

Each lot or parking structure where parking is provided for clients, guests, employees or residents shall provide accessible parking as required by this section. In separate parking structures or lots that do not serve a particular building, parking spaces for physically disabled people shall be located on the shortest possible circulation route to an accessible pedestrian entrance of the parking facility.

If assigned parking is provided at covered multifamily building sites, designated accessible parking at the dwelling unit shall be provided on request of residents with physical disabilities on the same terms and with the full range of choices (e.g., surface parking or garage) provided for other residents, with accessible parking on a route accessible to wheelchairs for at least 2 percent of the covered dwelling units. Signage is not required. When visitor parking is provided, a minimum of 5 percent of the visitor parking shall provide access to grade-level entrances of multifamily dwellings and accessible parking at facilities (e.g., swimming pools) that serve accessible buildings. Visitor parking spaces shall be provided with signage as required by Section 1118A.5. Such sign shall not be blocked from view by a vehicle parked in the space.

1118A.2 [For HCD 1/AC & DSA/AC] Parking Structures. All entrances to and vertical clearances within parking structures shall have a minimum vertical clearance of 8 feet 2 inches (2489 mm) where required for accessibility to parking spaces for persons with physical disabilities.

EXCEPTION: Private garages are exempt from the 8-foot 2-inch (2489 mm) minimum height requirement. Covered parking spaces and parking spaces in common areas shall provide a minimum of 8 feet 2 inches (2489 mm) vertical clearance.

423 424

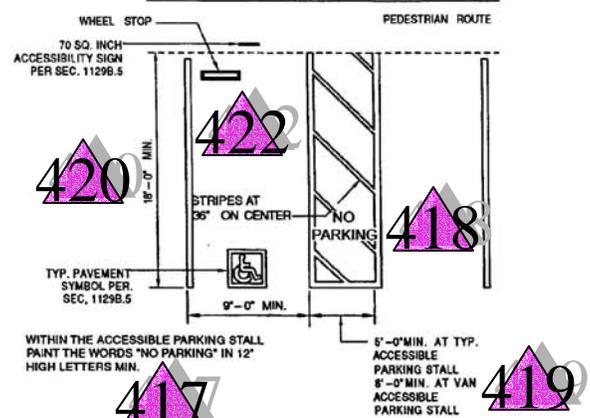


FIGURE 11B -18B SINGLE PARKING STALLS (visitor parking)

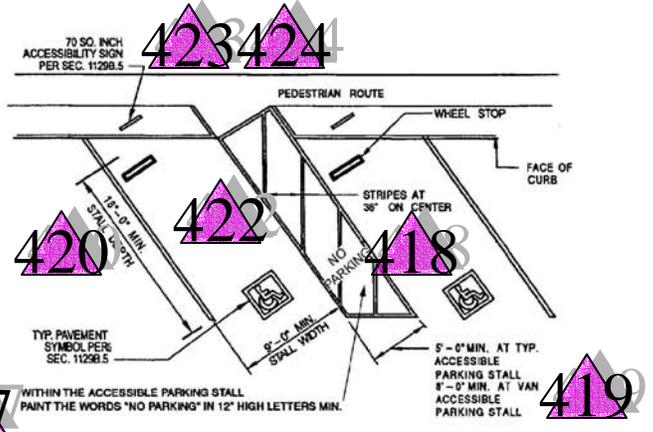


FIGURE 11B -18C -DIAGONAL PARKING STALLS (visitor parking)

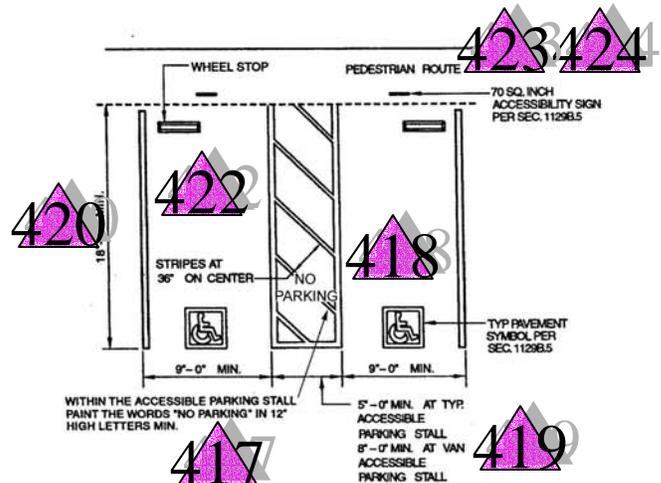
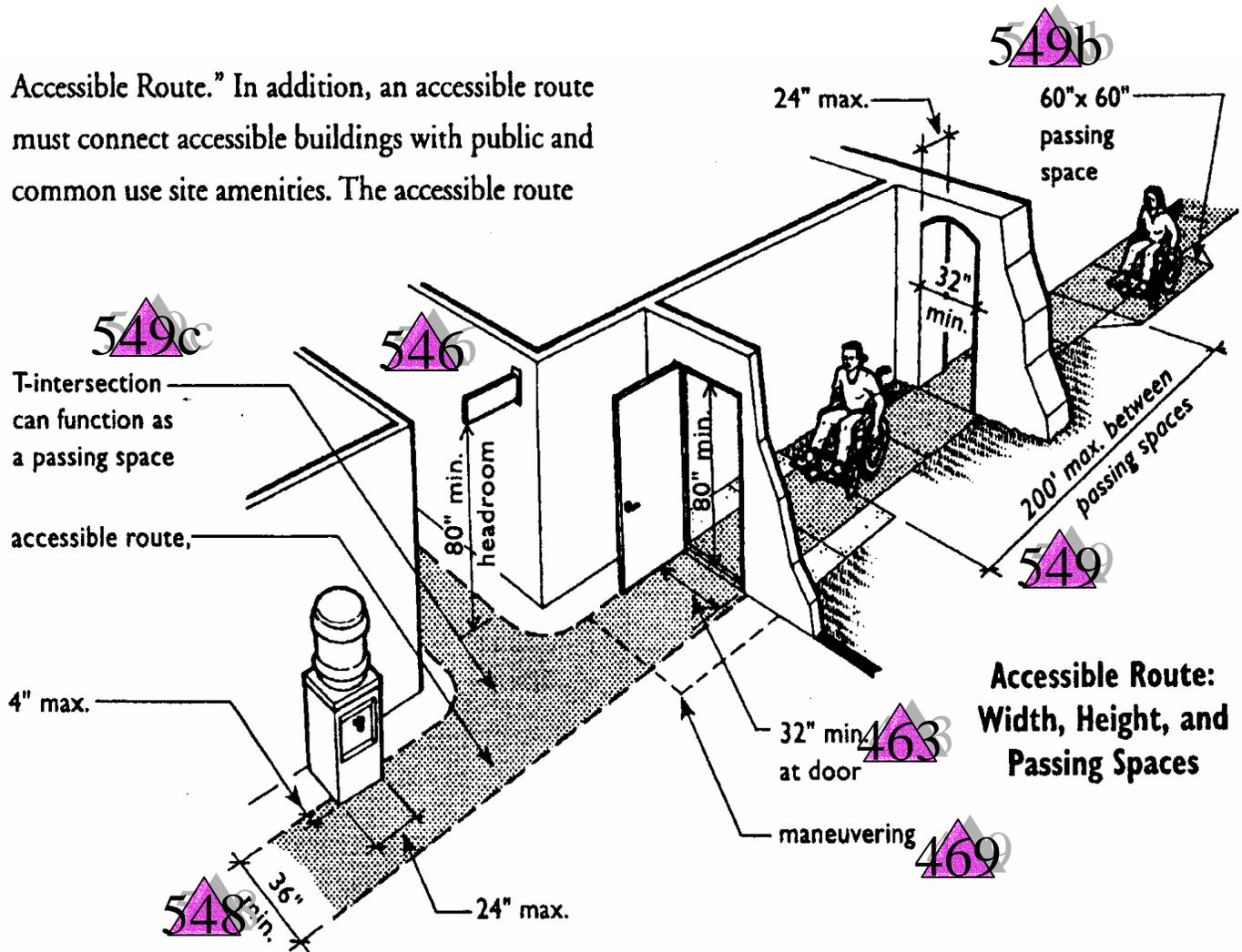


FIGURE 11B -18A DOUBLE PARKING STALLS (visitor parking)

Accessible Route.” In addition, an accessible route must connect accessible buildings with public and common use site amenities. The accessible route



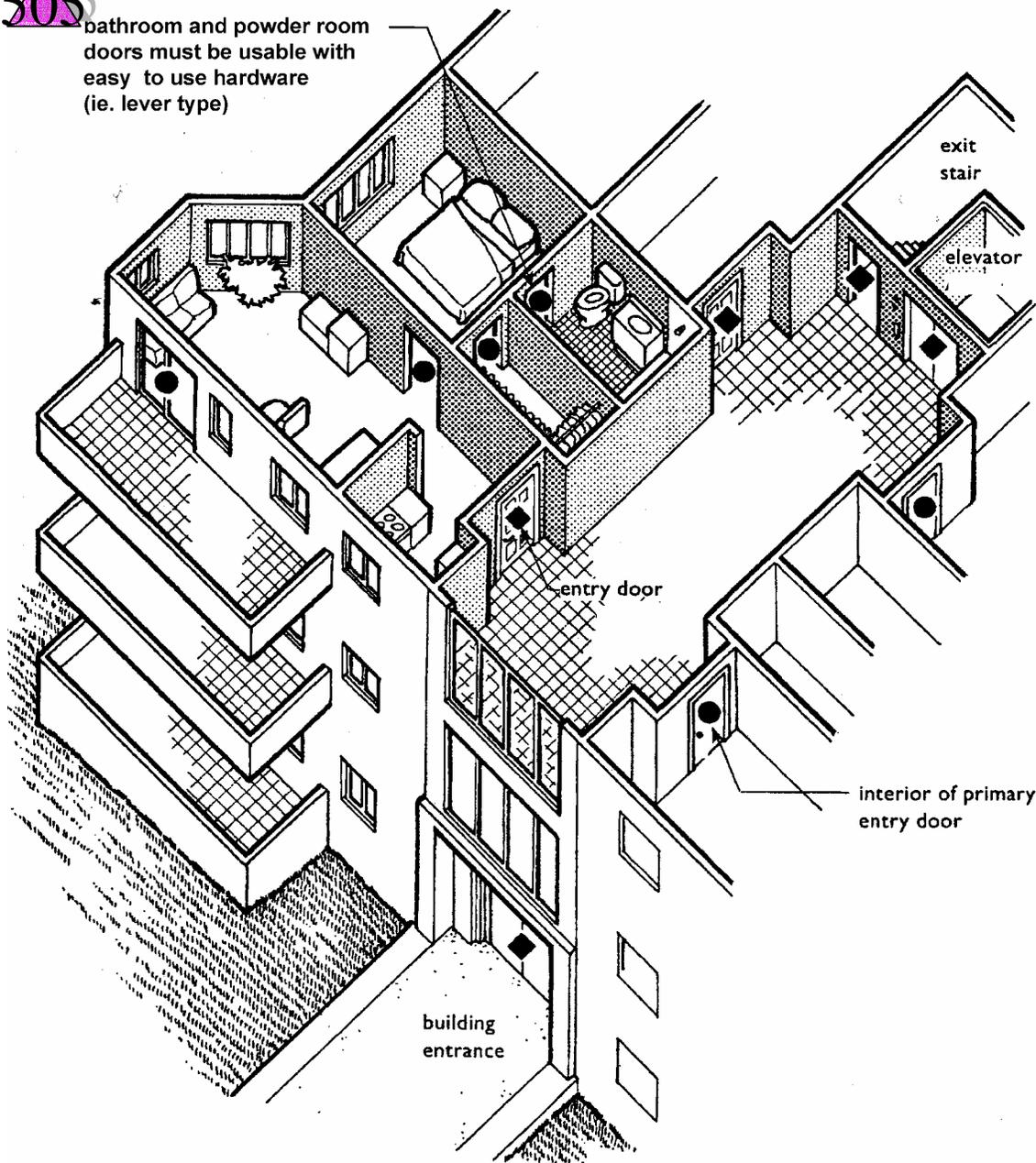
These details are shown to illustrate the importance of accessibility to all features and elements in the building.

Doors and Landings

- 463** ◆ **accessible doors** (in public and common use spaces and on public side of dwelling unit entry door)
- must provide 36" minimum clear width
 - * door hardware that does not require grasping or pinch (ie. lever type)

- 464** ◆ **usable doors** (within interior of dwelling unit)
- must provide 32" nominal clear width

- 505** bathroom and powder room doors must be usable with easy to use hardware (ie. lever type)



**Accessible and Usable Doors
in Buildings Containing Covered Dwelling Units**

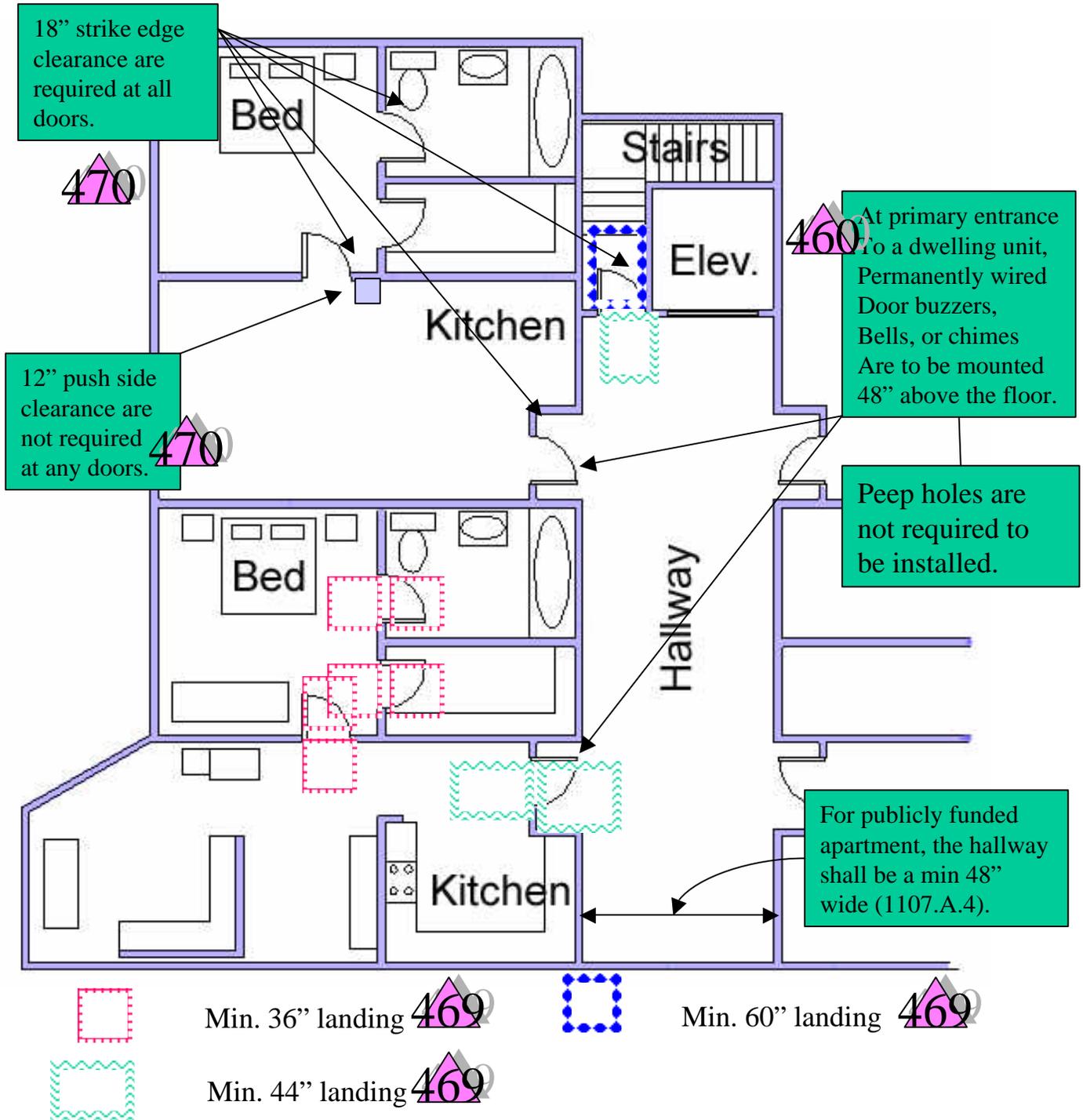
Apartment Doors and Landings

Section 1108A (SFM & DSA/AC; not adopted by HCD1/AC)

(This is **ONLY** applicable to publicly funded apartments)

–All required exits are to be accessible, since an elevator provides access to the 2nd floor, it also creates a trap for a disabled occupant, since the elevators are programmed to return to the ground floor

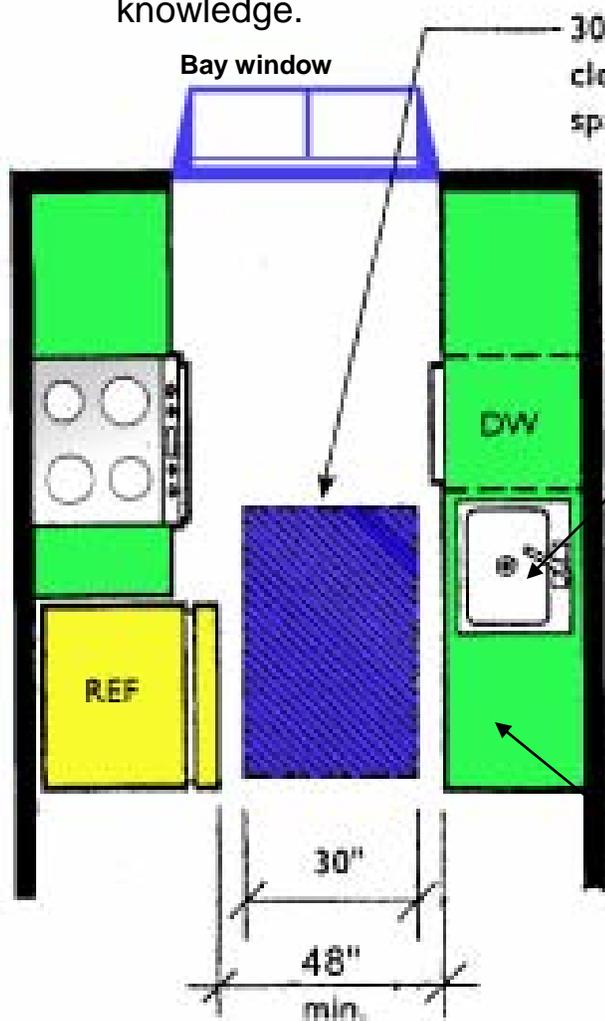
during a fire. For this reason, every **new** elevator building must have a SUPERVISED sprinkler system or a fire rated, area of evacuation assistance (AEA). Typically, AEA's is located in a stair shaft and is situated to not create an obstruction for occupants exiting the stairway.



Kitchen Layouts

All kitchens in covered units must have:

1. Lever, push-type or electronically controlled faucets (see page III 37)
2. 30" x 48" clear access to all fixtures and appliances
3. Parallel approach to the range or cooktop
4. Parallel or perpendicular approach to the oven, dishwasher refrigerator/ freezer and trash compactor
5. Lower shelves shall be no more than 48" in height
6. Base cabinets directly under kitchen sink area, including toe-board and shelving, shall be removable to without the use of specialized tools or knowledge.



7. 5% of all privately and publicly funded apartment houses, dormitories, and transient lodging units must have repositionable sinks and 30" counters unless exempted otherwise (see below).

Sinks:

1. 30" wide repositionable sinks **and**
2. Removable underneath cabinets **and**
3. Finish floor to continue beneath the sink.

475

Counters:

1. 30" wide repositionable counters **OR**
2. 30" wide stone/ tile counters **OR**
3. Two 15" wide bread boards

476

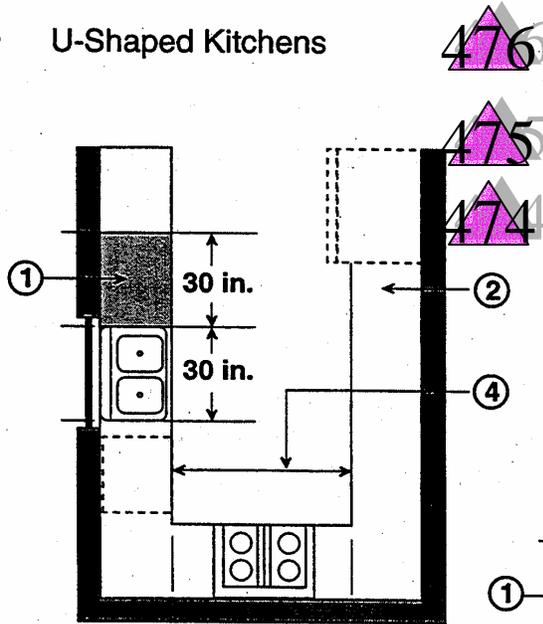
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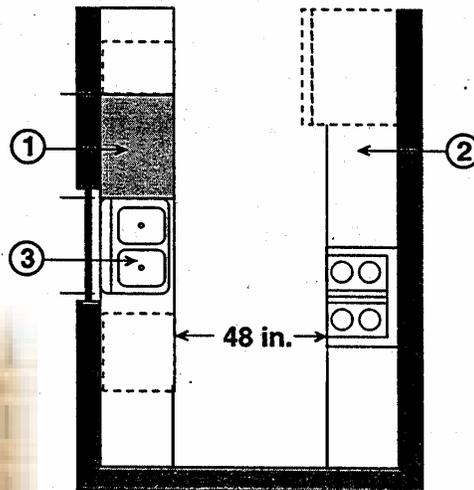
Both the repositionable sink and counter top can be integrated into one unit. Section 1112A.2.

Kitchens

- U-Shaped Kitchens



1. Repositionable counter tops
2. Standard counter top
3. Repositionable sink
4. Min. 5' clear for "U" type kitchens with features at the end of the kitchen (see page III36)



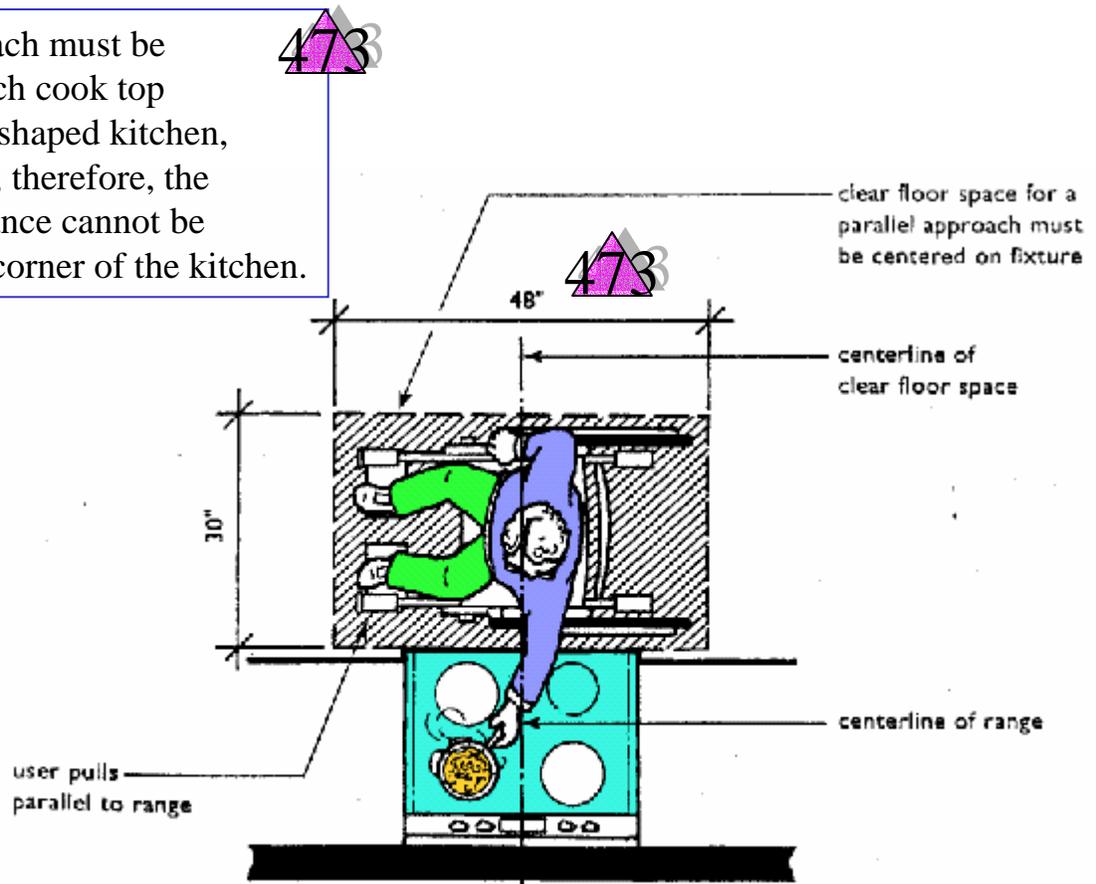
Repositionable Sinks



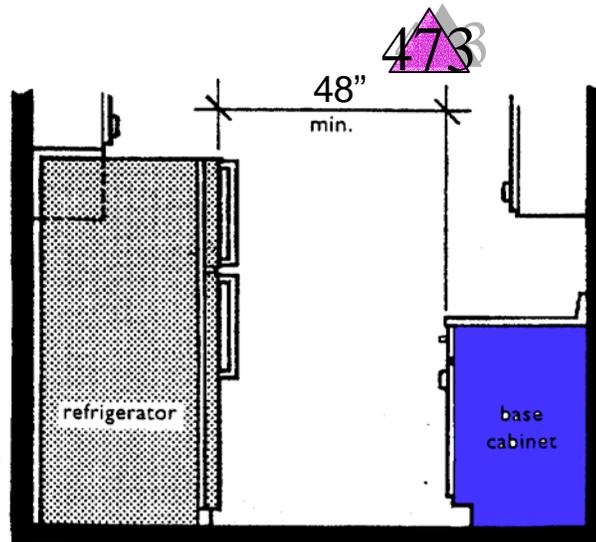
Cabinets with Retractable Doors

Clearances at Appliance

Parallel approach must be provided at each cook top (except for U shaped kitchen, see next page), therefore, the cooking appliance cannot be located in the corner of the kitchen.



Space for Parallel Approach Required at Range and Cooktop



Minimum Clearance between Refrigerator and Opposing Base Cabinet

U-Shape Kitchen

U-SHAPED KITCHENS

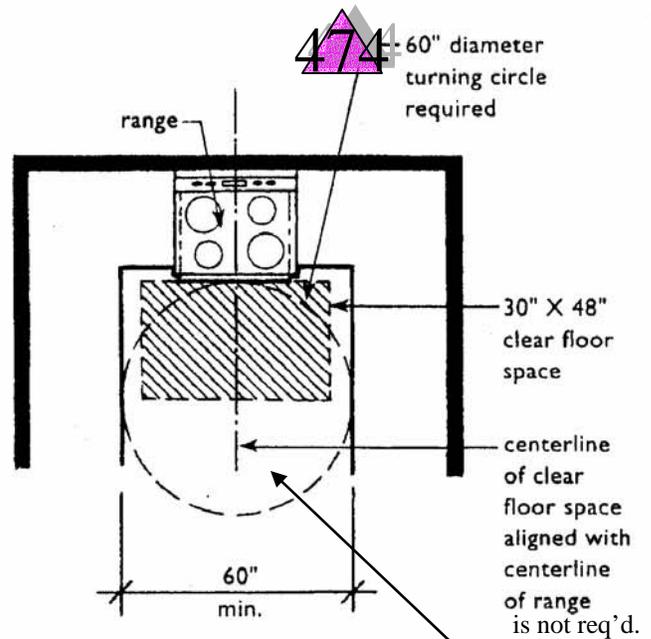
A 60-inch diameter turning circle is required in a U-shaped kitchen that has a range, or cooktop at its base. This turning diameter is necessary to provide adequate maneuvering space for a person using a wheelchair to approach and position themselves parallel to the appliance or fixture at the base of the U. Any appliances, such as refrigerators and ranges (excluding door handles), that project beyond countertops and cabinets must not encroach upon this 60-inch diameter turning space.

In addition to the turning space, the kitchen must be arranged so there is a 30-inch x 48-inch clear floor space for a parallel approach centered on the sink, range, or cooktop.

When a sink, even a standard single basin sink, is at the bottom of the U and a dishwashing machine is planned to be included adjacent to the sink, the distance between the legs of the U must be greater than 60 inches to allow for a full centered approach at the sink. See the lower plan in the right column.

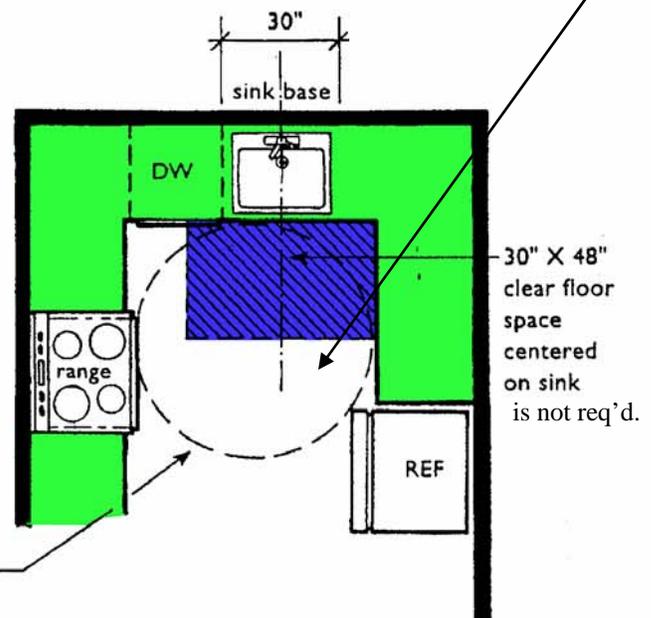
refrigerator must be selected and positioned so it does not encroach upon the 60" diameter turning circle or the clear floor space at the sink

60" diameter turning circle



60" Diameter Turning Circle when Sink (Only), Cooktop, or Range is at Bottom of U-Shaped Kitchen

Fixtures shall be provided to allow a parallel approach, or the base cabinets shall be removable at that location to a height of 27 inches above the floor to allow knee space for a forward approach.



Sink and Dishwasher at Bottom of U-Shaped Kitchen Increases Room Width

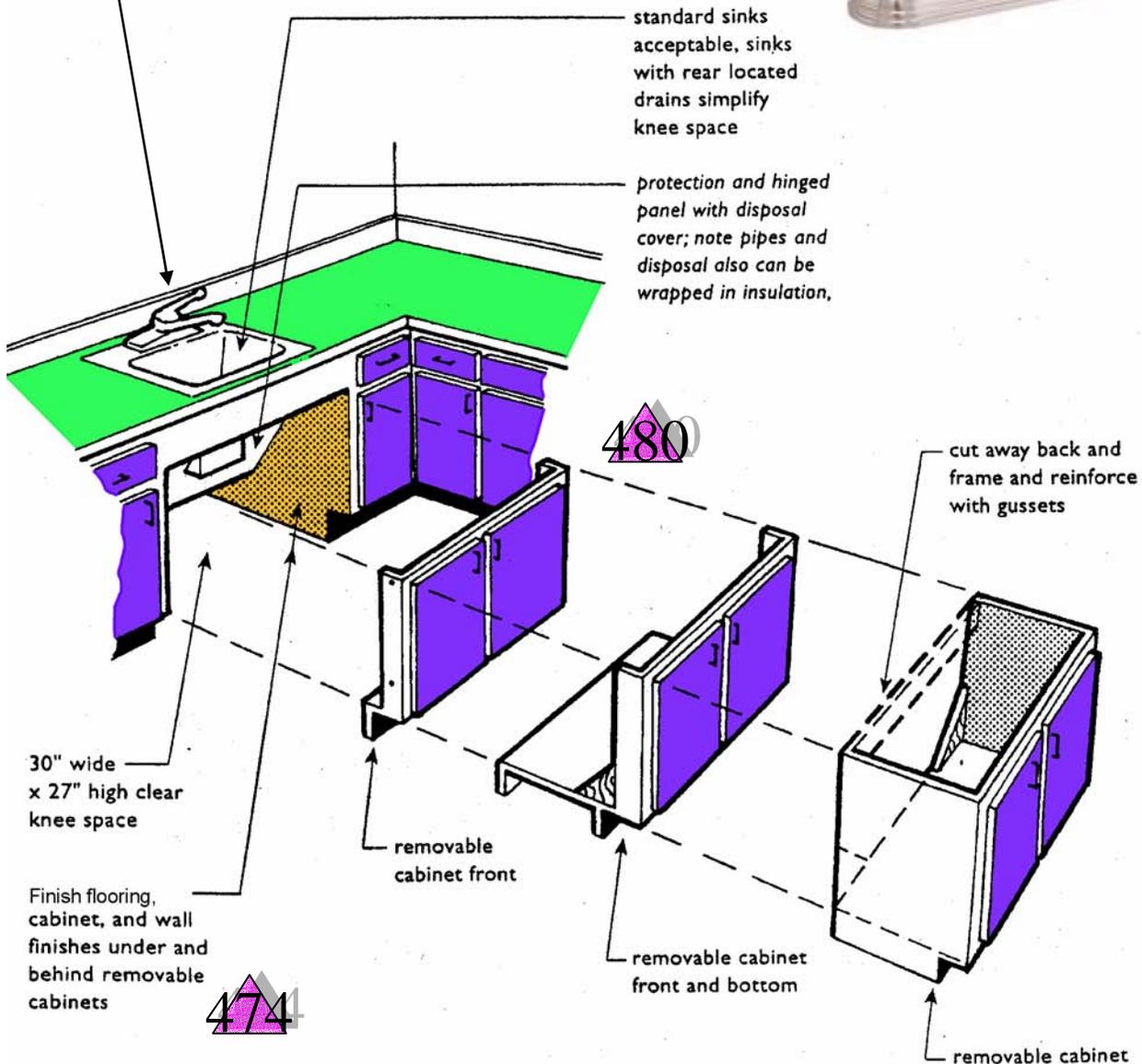
Removable Cabinets



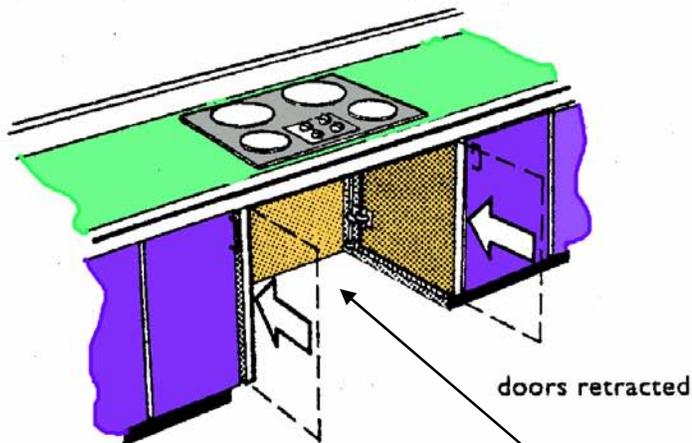
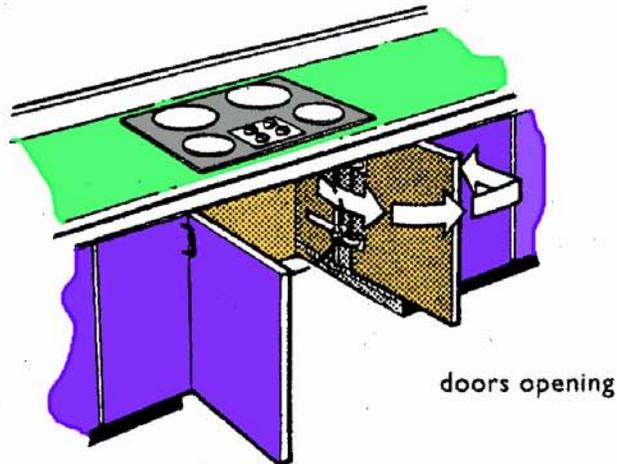
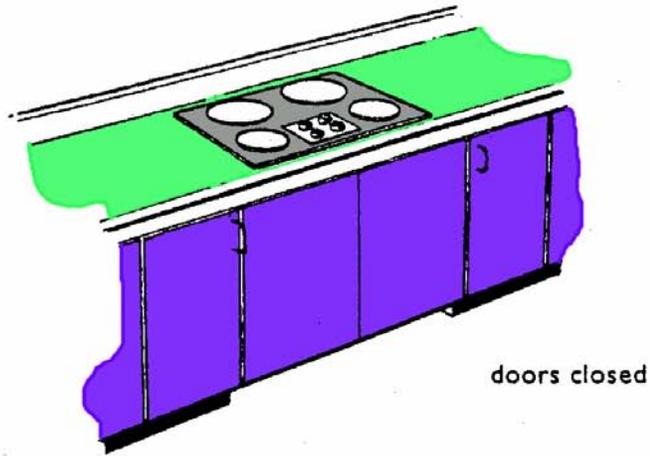
These types of faucets are not acceptable.

Faucet controls shall be operable with one hand and shall not require tight grasping, pinching or grasping.

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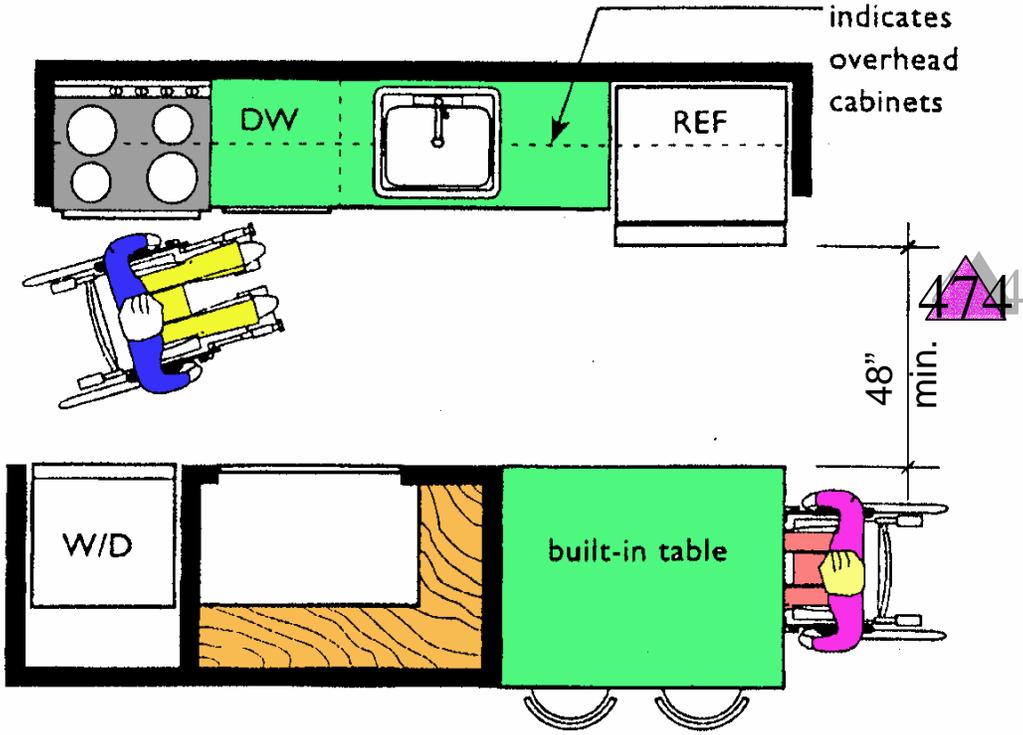
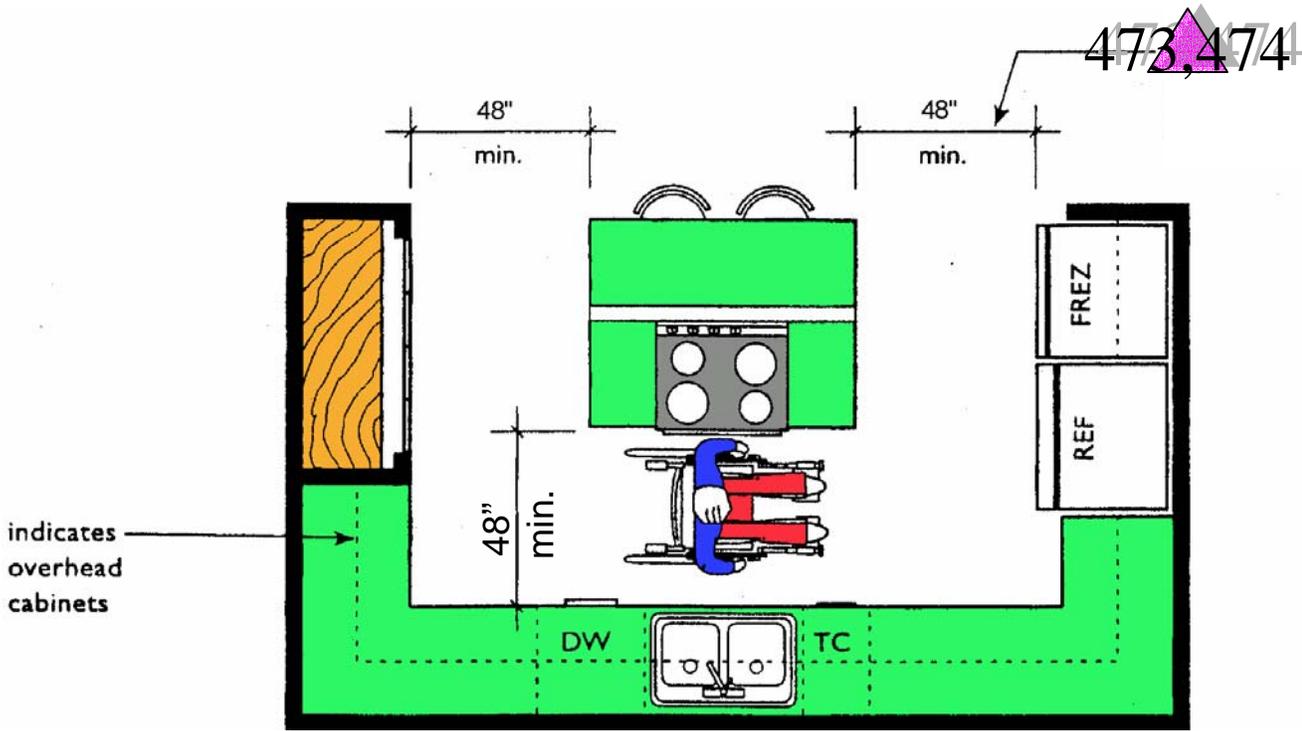
Removable Cabinets



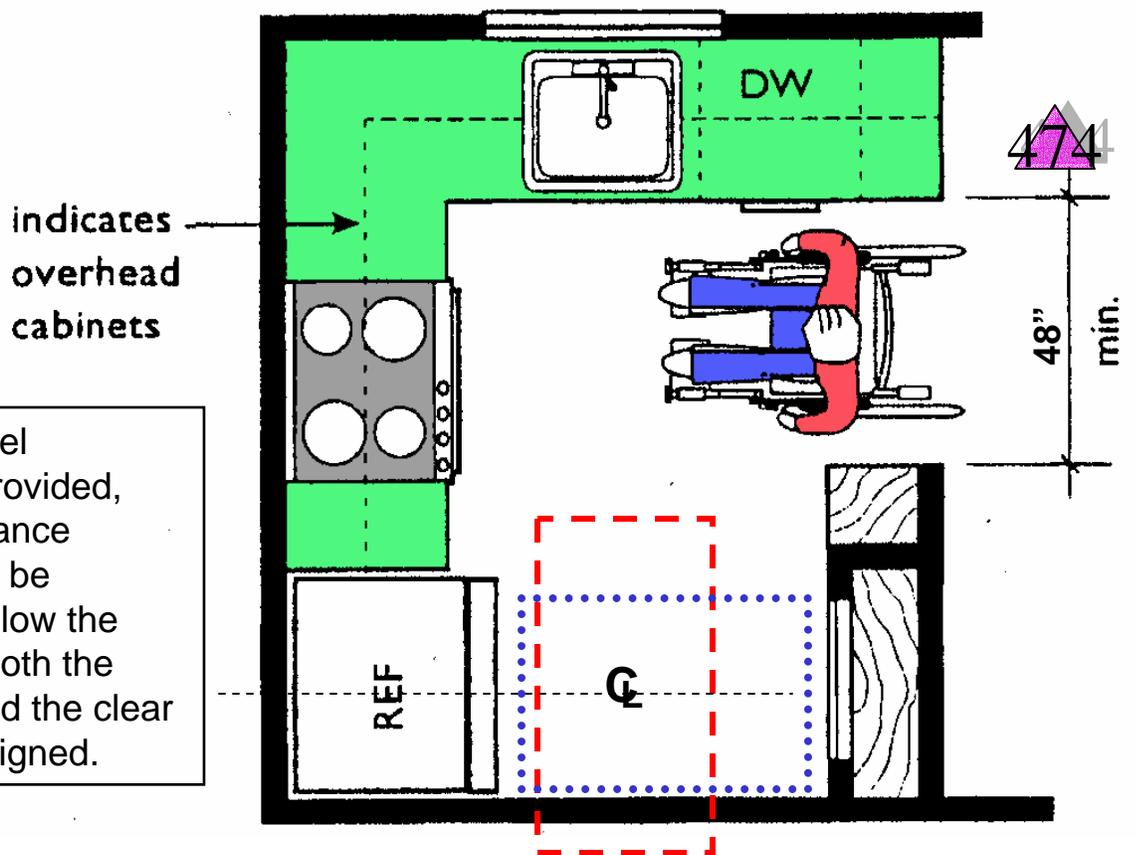
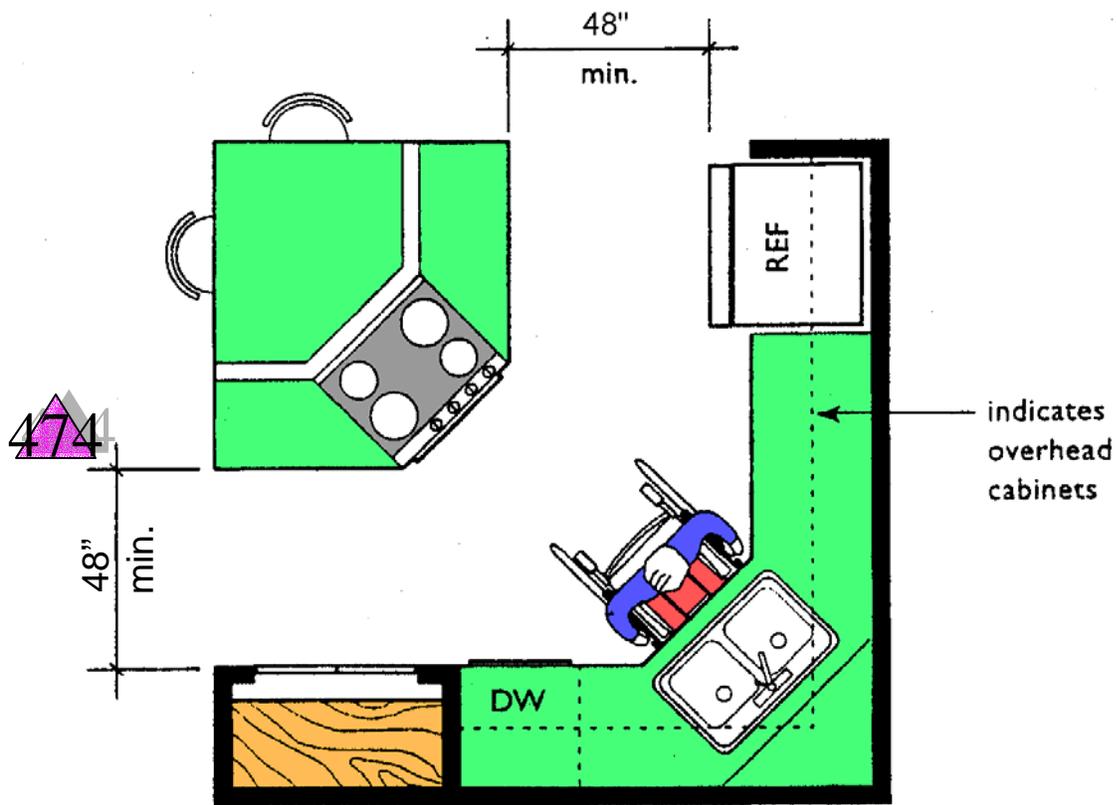
Finish flooring to continue below

**Use of Self-Storing Door Hardware
to Expose Knee Space**

Typical Kitchen Layout



Typical Kitchen Layout



If only a parallel approach is provided, then the appliance would need to be relocated to allow the centerline of both the refrigerator and the clear space to be aligned.

Apartment Bathrooms

Use this table when the building is designed to have **ALL** bathrooms to be adaptable

Table 1109A.2-1

Use this table when all bathrooms are complying bathrooms.

1.	Bathroom entrance doorways shall have an 18-inch (457 mm) clear space to the side of the strike edge of the door on the swing side of the door.
2.	Sufficient maneuvering space shall be provided for a person using a wheelchair or other mobility aid to enter and close the door, use the fixtures, reopen the door and exit. Doors may swing into the clear space at any fixture if the maneuvering space is provided. Maneuvering spaces may include any knee-space or toe-space available below bathroom fixtures.
3.	Where the door swings into the bathroom, there shall be a clear space [approximately 30 inches by 48 inches (762 mm by 1219 mm)] within the room to position a wheelchair or other mobility aid clear of the path of the door as it is closed and to permit use of fixtures.
4.	There shall be a minimum clear space 48 inches parallel by 30 inches perpendicular (1219 mm by 762 mm) to the side of a bathtub or bathtub-shower combination (measured from the foot of the bathtub) to provide for the maneuvering of a wheelchair and transfer to and from the bathing facilities, which may include the maneuverable area under the lavatory. EXCEPTION: Prior to July 1, 1994, condominium dwelling units may provide a minimum clear space 30 inches parallel by 48 inches perpendicular (762 mm by 1219 mm) to the side of a bathtub or bathtub-shower combination.
4.1.	A shower spray unit is not required in bathtubs.
5.	When a shower stall is provided in an accessible dwelling unit, at least one shower stall shall measure at least 42 inches wide by 48 inches (1067 mm by 1219 mm) deep with an entrance opening of at least 36 inches (914 mm). When a threshold (a recessed drop) is used, it shall be a maximum of 1/2 inch (12.7 mm) in height and have a beveled or sloped angle not exceeding 45 degrees from the horizontal. Maximum slope of the shower floor shall be 1/2 inch (12.7 mm) per foot in any direction and shall slope toward the rear to a drain located within 6 inches (152 mm) of the rear wall. The floor surfaces shall be of Carborundum or grit-faced tile or of material providing equivalent slip resistance.
5.1.	Doors and panels of shower and bathtub enclosures shall be substantially constructed from approved, shatter-resistant materials. Hinged shower doors shall open outward. Glazing used in doors and panels of shower and bathtub enclosures shall be fully tempered, laminated safety glass or approved plastic. When glass is used, it shall have minimum thickness of not less than 3/8 inch (3 mm) when fully tempered, or 1/2 inch (6 mm) when laminated, and shall pass the test requirements of this part, Chapter 24 Glass and Glazing. Plastics used in doors and panels of showers and bathtub enclosures shall be of a shatter-resistant type.
6.	Walls must be reinforced to support grab bars as required by Section 1109A.5.
7.	Space requirements for the installation of water closets shall be as specified in Section 1109A.3.
8.	Structural reinforcements for future grab bar installation shall be as specified in Section 1109A.5.
9.	Vanities and lavatories shall be installed with the centerline of the fixture a minimum of 18 inches (457 mm) horizontally from an adjoining wall or fixture. The top of the fixture rim shall be a maximum of 34 inches (864 mm) above the finished floor. Cabinets under lavatories are acceptable provided the bathroom has space to allow a parallel approach by a person in a wheelchair and the lavatory cabinets are designed with adaptable knee space. Knee space shall be provided as follows: 1. The knee space shall be at least 30 inches (762 mm) wide and 8 inches deep (203 mm). 2. The knee space shall be at least 29 inches (737 mm) high at the front face and reducing to not less than 27 inches (686 mm) at a point 8 inches (203 mm) back from the front edge. 3. The knee space required in this section shall be provided by one of the following: A. The space beneath the lavatory is left clear and unobstructed. B. Any cabinet beneath the lavatory is removable without the use of specialized knowledge or specialized tools or C. Doors to the cabinet beneath the lavatory are removable or openable to provide the required unobstructed knee space. Toe space shall be provided as follows: 1. Shall be at least 30 inches (762 mm) wide and centered on the lavatory. 2. Shall be at least 17 inches (432 mm) deep, measured from the front edge. 3. Shall be at least 9 inches (229 mm) high from the floor. In each such case, the finish floor beneath the lavatory shall be extended to the back of the wall.



The designer has an option of making all or just one bathroom to be adaptable.

Use this table when only one complying bathroom is designed to be accessible.

Table 1109A.2-2

Use this table when only one complying bathroom is provided. If Table 1109A.2-2 is used, all other bathrooms and powder rooms within the dwelling unit shall be on an accessible route with usable entry doors.

1.	Bathroom entrance doorways shall have an 18-inch (457 mm) clear space to the side of the strike edge of the door on the swing side of the door.
2.	Sufficient maneuvering space shall be provided for a person using a wheelchair or other mobility aid to enter and close the door, use the fixtures, reopen the door and exit. Doors may swing into the clear space at any fixture if the maneuvering space is provided. Maneuvering spaces may include any knee-space or toe-space available below bathroom fixtures.
3.	Where the door swings into the bathroom, there shall be a clear space [approximately 30 inches by 48 inches (762 mm by 1219 mm)] within the room to position a wheelchair or other mobility aid clear of the path of the door as it is closed and to permit use of fixtures.
4.	Where the door swings out, a clear space is provided within the bathroom for a person using a wheelchair or other mobility aid to position the wheelchair such that the person is allowed use of fixtures. There also shall be clear space to allow persons using wheelchairs to reopen the door to exit.
5.	There shall be a minimum clear space 48 inches parallel by 30 inches perpendicular (1219 mm by 762 mm) to the side of a bathtub or bathtub-shower combination (measured from the foot of the bathtub) to provide for the maneuvering of a wheelchair and transfer to and from the bathing facilities, which may include the maneuverable area under the lavatory.
5.1.	A shower spray unit is not required in bathtubs.
6.	When a shower stall is provided in an accessible dwelling unit, at least one shower stall shall measure at least 42 inches wide by 48 inches deep (1067 mm by 1219 mm) with an entrance opening of at least 36 inches (914 mm). When a threshold (a recessed drop) is used, it shall be a maximum of 1/2 inch (12.7 mm) in height and have a beveled or sloped angle not exceeding 45 degrees from the horizontal. Maximum slope of the shower floor shall be 1/2 inch (12.7 mm) per foot in any direction and shall slope toward the rear to a drain located within 6 inches (152 mm) of the rear wall. The floor surfaces shall be of Carborundum or grit-faced tile or of material providing equivalent slip resistance.
6.1.	Doors and panels of shower and bathtub enclosures shall be substantially constructed from approved, shatter-resistant materials. Hinged shower doors shall open outward. Glazing used in doors and panels of shower and bathtub enclosures shall be fully tempered, laminated safety glass or approved plastic. When glass is used, it shall have minimum thickness of not less than 3/8 inch (3 mm) when fully tempered, or 1/2 inch (6 mm) when laminated, and shall pass the test requirements of this part, Chapter 24 Glass and Glazing. Plastics used in doors and panels of showers and bathtub enclosures shall be of a shatter-resistant type.
7.	Walls must be reinforced to support grab bars as required by Section 1109A.5.
8.	Space requirements for the installation of water closets shall be as specified in Section 1109A.3.
9.	Structural reinforcements for future grab bar installation shall be as specified in Section 1109A.5.
10.	When both tub and shower fixtures are provided in the bathroom, at least one shall be made accessible. When two or more lavatories in a bathroom are provided, at least one shall be made accessible.
11.	Toilets shall be located within bathrooms in a manner that permits a grab bar to be installed on one side of the fixture. In locations where toilets are adjacent to walls or bathtubs, the center line of the fixture shall be a minimum of 18 inches (457 mm) from the finished surface of adjoining walls, vanities or from the edge of a lavatory.
12.	Vanities and lavatories shall be installed with the centerline of the fixture a minimum of 18 inches (457 mm) horizontally from an adjoining wall or fixture. The top of the fixture rim shall be a maximum of 34 inches (864 mm) above the finished floor. Cabinets under lavatories are acceptable provided the bathroom has space to allow a parallel approach by a person in a wheelchair and the lavatory cabinets are designed with adaptable knee space. Knee space shall be provided as follows: 1. The knee space shall be at least 30 inches (762 mm) wide and 8 inches deep (203 mm). 2. The knee space shall be at least 29 inches (737 mm) high at the front face and reducing to not less than 27 inches (686 mm) at a point 8 inches (203 mm) back from the front edge. 3. The knee space required in this section shall be provided by one of the following: A. The space beneath the lavatory is left clear and unobstructed. B. Any cabinet beneath the lavatory is removable without the use of specialized knowledge or specialized tools or C. Doors to the cabinet beneath the lavatory are removable or openable to provide the required unobstructed knee space. Toe space shall be provided as follows: 1. Shall be at least 30 inches (762 mm) wide and centered on the lavatory. 2. Shall be at least 17 inches (432 mm) deep, measured from the front edge. 3. Shall be at least 9 inches (229 mm) high from the floor. In each such case, the finish floor beneath the lavatory shall be extended to the back of the wall.

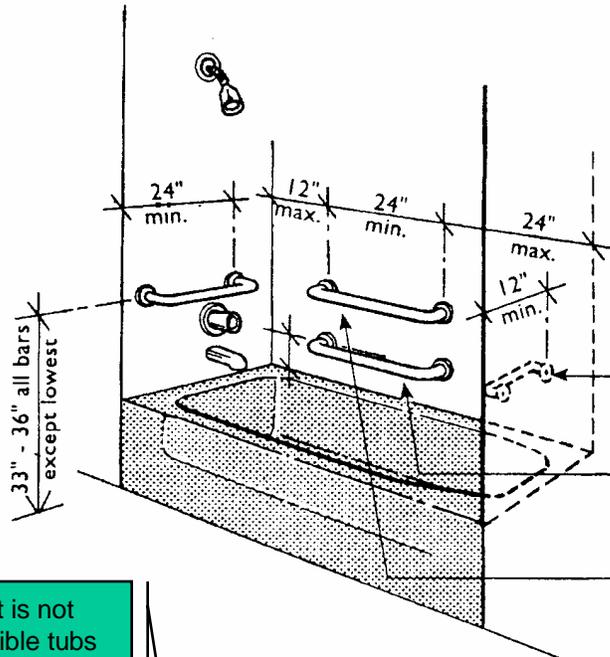
In addition to the requirements of Table 1109A.2-2, all bathrooms shall conform to the following general accessibility requirements:

1. Minimum 36" wide accessible route within each bathroom.
2. Wall reinforcement for future grab bar installations consistent with Section 1109A.
3. General door width and strike side.
4. Title 24, Part 3, Calif. Elect. Code

Most designers prefer this option. This will be the option that is discussed in this lecture.

Apartment Bathtubs

A bathtub may be installed without surrounding walls provided the reinforced areas Allow floor mounted grab bars. 1109A.7



Grab bars are shown for references, these items are not required to be installed.

498 499 500

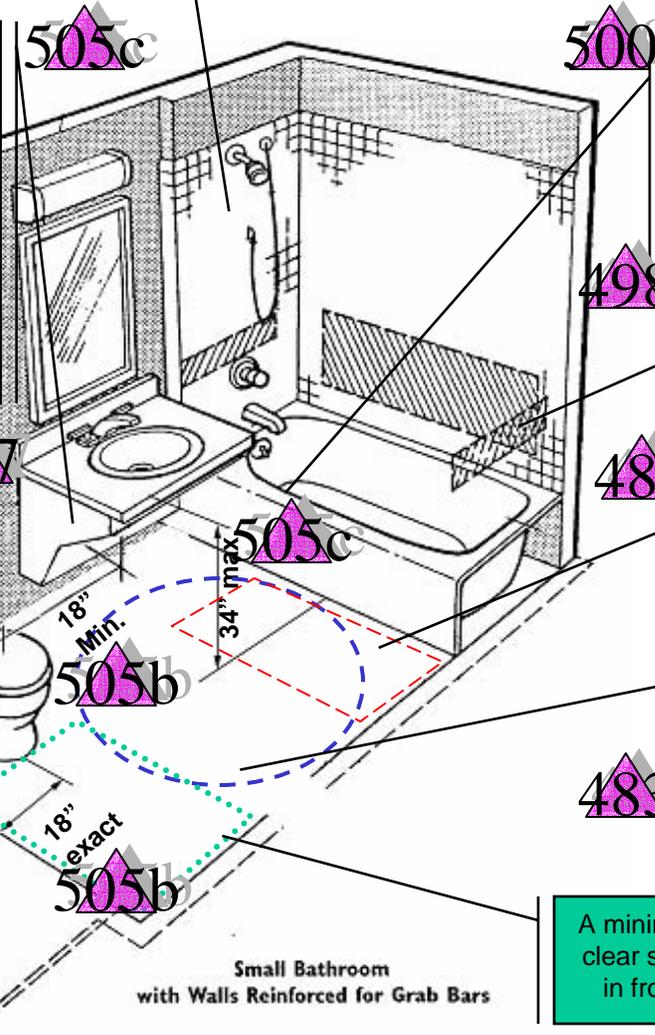
this bar is omitted if a built-in transfer seat is installed

the low bar is used by those who climb down into the tub

the higher level bars are used by people transferring into the tub and by those who stand to shower

A shower spray unit is not required in an accessible tubs Table 1109A.2-2, #5

Hot water and drain pipes under accessible lavs shall be insulated or otherwise covered. Removable cabinets with adequate knee space are acceptable, provided the bathroom has space to allow for parallel approach by a person in a wheelchair.



If enclosures are installed, they shall not obstruct controls or transfer into the tub. Enclosures shall not have tracks mounted on tub's rims.

Hatched areas denote locations of grab bars

30 x 48 clear space (48" must be parallel to tub)

A 5' circle is shown to depict an adequate amount of maneuvering space. A max. of 8" encroachment beneath the sink is permitted.

A minimum of 36" x 48" clear space is required in front of the toilet.

Small Bathroom with Walls Reinforced for Grab Bars

Hotels/ Motels/

Transient Lodging

Hotels/ Motels/ Transient Lodging

Restrooms

Kitchens

Misc.

See Table 11B-3 below for the min. number of restrooms that must comply with:

1. Doors shall not swing into the floor space required for any fixtures
2. All fixtures and controls shall be on an accessible route.
3. There must be a 30 x 60 clear floor space within the restroom.
4. Lavatory and/or mirror shall comply with Sec. 1115B.9.
5. Tubs and showers shall comply with Sec. 1115B.6.1.
6. Toilets stall shall comply with Sec. 1109A.3 (min. toilet seat height of 15")
7. Water closet shall comply with Sec. 1115B.
8. Controls and dispensers, Sec. 1111B.4.6.5

1111B.4.4 Kitchen facilities. When accommodations are provided with kitchen units, accessible kitchens shall be provided to those accommodations required to be accessible in conformance with Table 11B-3, and shall meet the requirements of section 1112A (see page III 33).

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

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

560

Bathrooms beyond those specified in Table 11B-3 shall comply with:

1. All bathroom fixtures are in a location that allows a person in using a wheelchair measuring 30 x 48 to touch all the fixtures. (No maneuvering space is required).
2. All bathrooms entrance doors have a clear width of 32" and shall be either sliding door or swing in the direction or egress.

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

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

557

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

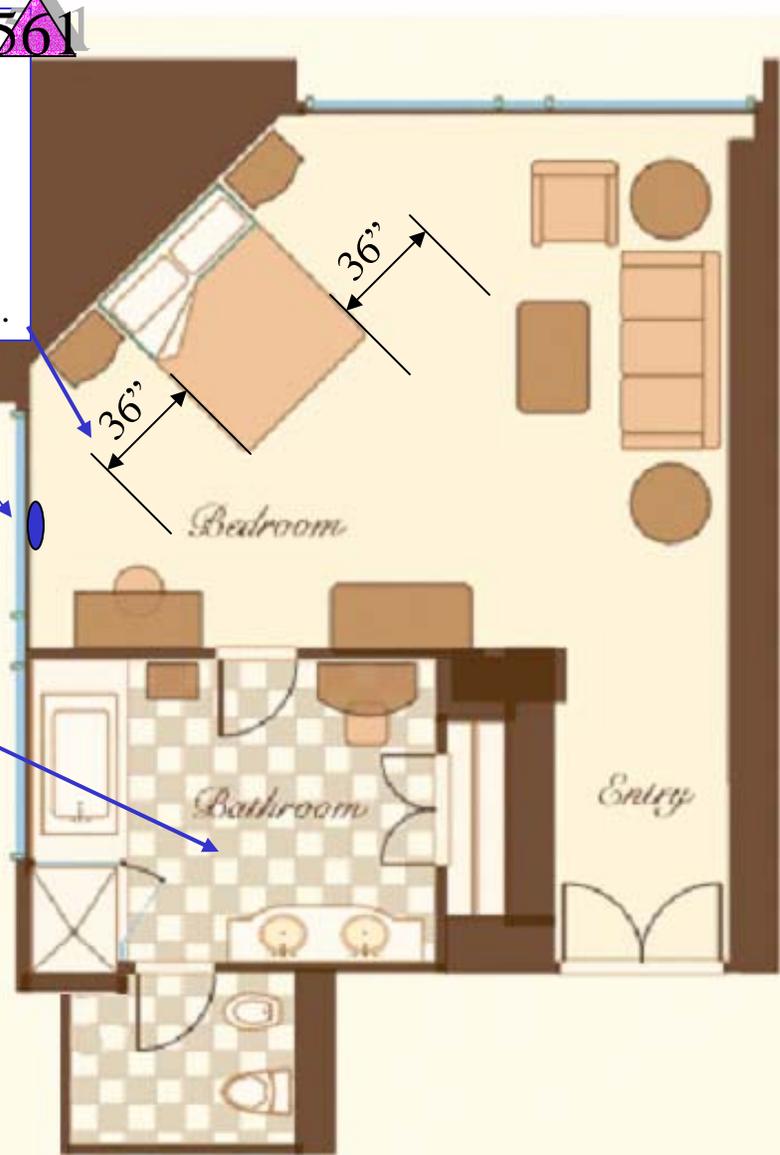
All accessible sleeping rooms shall have a 36" clear width maneuvering space located along both sides of the bed, except that where two beds are provided a 36" wide space can be located between the beds.

561

Visual alarm (strobe lights) that is connected to the building emergency alarm system

567

Bathrooms shall be designed in accordance with Section 1111B.4.6. Private dorms are not subject to Chapter 11B



567c

Electrical outlet for text phone.

Telephone with volume control that is capable of 12dbA to 18dbA above normal.

567c

Visual notification device for door bells and telephone rings.

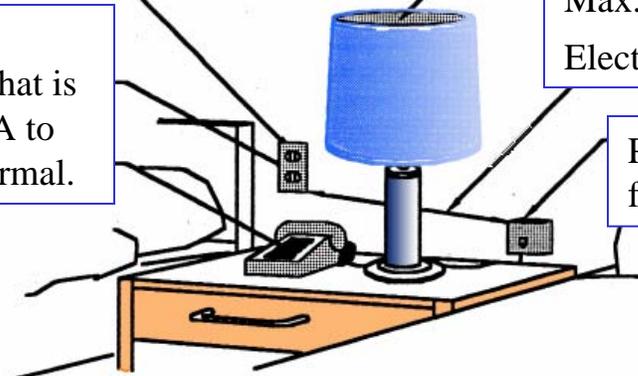
567b

Max. 48" separation between Electrical outlet and phone jack.

567

Phone connections for text phones.

567c



APPENDIX A
Code Sections for
Accessibility in the
Commercial
Buildings

SITE DEVELOPMENT & ACCESSIBLE ROUTE OF TRAVEL

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

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

ACCESSIBLE PARKING

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

8. Provide ____ disabled parking spaces as required by Table 11B-7 (see next column) for _____ parking lot/structure. (1129B.1)
9. At facilities providing medical care and other services for persons with mobility impairments, parking spaces complying with Section 1129B shall be provided in accordance with Table 11B-7 except as follows: (1129B.3)
 - a. Outpatient units and facilities: 10% of the total number of parking spaces provided serving each such outpatient unit or facility. (1129B.3.1)

- b. Units and facilities that specialize in treatment or services for persons with mobility impairments: 20% of the total number of parking spaces provided serving each such unit or facility. (1129B.3.2)
- 10. Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance (as near as practical to an accessible entrance). (1129B.1)
- 11. In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility. (1129B.1)

TABLE 11B-7

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

- 12. In buildings with multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located closest to the accessible entrances. (1129B.1)
- 13. Where single accessible parking spaces are provided, they shall be 14' wide and outlined to provide a 9' parking area and a 5' loading and unloading access aisle on the passenger side of the vehicle. **The word "NO PARKING" shall be painted on the ground within each five-foot loading and unloading access aisles. This notice shall be painted in white letters not less than 12 inches high and located so that it is visible to traffic enforcement officials.** (1129B.4.1, Fig 11B-18B)
- 14. When more than one accessible parking space is provided, in lieu of providing a 14' wide space for each parking space, two spaces can be provided within a 23' wide area lined to provide a 9' parking area on each side of a 5' loading and unloading access aisle in the center. **The word "NO PARKING" shall be painted on the ground within each five-foot loading and unloading access aisles. This notice shall be painted in white letters not less than 12 inches high and located so that it is visible to traffic enforcement officials.** (1129B.4.1, Fig 11B-18A & C)
- 15. One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96" wide minimum **placed on the side opposite the driver's side when the vehicle is going forward into the parking space** and shall be designated "van accessible". All such spaces may be grouped on one level of a parking structure. (Fig. 11B-18B, 1129B.4.2)

16. When less than 5 parking spaces are provided at buildings and facilities subject to these regulations, one shall be 14' wide and lined to provide a 9' parking area and a 5' loading and unloading area. However, there is no requirement that the space be reserved exclusively or identified for use by persons with disabilities only. (1129B.2)
17. The minimum length of an accessible parking space shall be 18'. (1129B.4.1, Fig 11B-18A, B & C)
18. Accessible parking spaces shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own. **Ramp shall not encroach into any accessible parking space or the adjacent access aisle. The maximum cross slope in any direction for both parking space and access aisle shall not exceed 2 % slope.** (1129B.4.3)
19. Surface slopes of accessible parking spaces shall be the minimum possible and shall not exceed 1 unit vertical to 50 units horizontal. (1129B.4.4)
20. All entrances to and exits from a building and vertical clearances within parking structures shall have a minimum vertical clearance of 8'-2" to any beam, ceiling, pipe etc., where required for accessibility to accessible parking spaces. (1130B)
21. In each parking area, a bumper or curb shall be provided and located to prevent encroachment of cars over the required width of walkways. (1129B.4.3., Fig 11B-18A, B & C)
22. Pedestrian ways which are accessible to people with disabilities shall be provided from each accessible parking space to related facilities, including curb cuts or ramps as needed. (1129B.4.3, Fig 11B-18A, B & C)
23. Curb ramps shall not encroach into any parking space, with the exception of a transition ramp from a loading/unloading area to an adjacent walk/sidewalk. The transition ramp shall be a minimum of 48" in width, a maximum of 60" in length, with a maximum slope of 1:12 and with flared side slopes of 1 vertical to 10 horizontal maximum. (1129B.4.3, Fig 11B-18A, B & C)
24. Each parking space reserved for persons with disabilities shall be identified by a reflectorized sign permanently posted immediately adjacent to and visible from each stall or space, consisting of a profile view of a wheelchair with occupant in white on dark blue background. The sign shall not be smaller than 70 square inches in area and, when in a path of travel, shall be posted at a minimum height of 80" from the bottom of the sign to the parking space finished grade. (1129B.5, Fig 11B-18A, B & C)
25. Signs to identify accessible parking spaces may also be centered on a wall at the interior end of the parking space at a minimum height of 36" from the parking space finished grade, ground or sidewalk. (1129B.5)
26. Van accessible parking spaces shall have an additional sign stating "Van Accessible" mounted below the symbol of accessibility. (1129B.5)
27. An additional sign shall also be posted, in a conspicuous place, at each entrance to off-street parking facilities, or immediately adjacent to and visible from each stall or space. The sign shall be not less than 17" by 22" in size with lettering not less than 1" in height, which clearly and conspicuously states the following: (1129B.5)

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

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

28. The surface of each accessible parking space or stall shall have a surface identification duplicating either of the following schemes: (1129B.5, Fig 11B-18A, B & C)
- a. By outlining or painting the stall or space in blue and outlining on the ground in the stall or space in white or suitable contrasting color a profile view depicting a wheelchair with occupant;
- OR
- b. By outlining a profile view of a wheelchair with occupant in white on blue background. The profile view shall be located so that it is visible to a traffic enforcement officer when a vehicle is properly parked in the space and shall be 36" high by 36" wide.

PASSENGER DROP-OFF & LOADING ZONES

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

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

34. Where provided, provide bus stop shelters installed so as to permit a wheelchair user to enter the shelter and access a clear floor area of 30" by 48", completely within the shelter. Bus stop shelters shall connect to an accessible route and to bus stop pads. (1131B.4)

WALKS & SIDEWALKS

35. Walks and sidewalks shall have a continuous common surface, not interrupted by steps or by abrupt changes in level exceeding 1/2". (1133B.7.1)
36. Walks and sidewalks shall be 48" minimum in width . (1133B.7.1, Fig 11B-27(A))
37. When changes in level not exceeding 1/2" occur, they shall be beveled with a slope no greater than 1:2, except that level changes not exceeding 1/4" may be vertical. (1133B.7.4, Fig 11B-5E(c) & (d))
38. Abrupt changes in level along any accessible route exceeding 1/2" shall comply with the requirements for curb ramps. (1133B.7.4)
39. Walk and sidewalk surfaces shall be slip-resistant as follows: (1133B.7.1)
- a. Surfaces with a slope of less than 6% gradient shall be at least a slip -resistant as that described as a medium salted finish. (1133B.7.1.1)
 - b. Surfaces with a slope of 6% or greater gradient shall be slip-resistant. (1133B.7.1.2)
40. When the slope in the direction of travel of any walk exceeds 1 vertical to 20 horizontal, it shall comply with the provisions of Section 1133B.5 as a pedestrian ramp. (1133B.5)
41. Walk and sidewalk surface cross slopes shall not exceed 1/4" per foot. (1133B.7.1.3)
42. All walks with continuous gradients shall have level areas at least 5' in length at intervals of at least every 400'. (1133B.7.6)
43. Walks shall be provided with a level area not less than 60" by 60" at a door or gate that swings toward the walk, and not less than 48" wide by 44" deep at a door or gate that swings away from the walk. (1133B7.5., Fig 11B-26)
44. Level area of walk shall extend 24" to the side of the strike edge of a door or gate that swings toward the walk. (1133B.7.5)
45. Walks, sidewalks, and pedestrian ways shall be free of gratings whenever possible. For gratings located in the surface of any of these areas, grid openings in gratings shall be limited to 1/2" in the direction of traffic flow. If gratings have elongated openings, they shall be placed so that the long dimension is perpendicular to the dominant direction of travel. (1133B7.2, Fig 11B-7B(a))

CURB RAMPS

- NOTE: Curb Ramp is defined as a sloping pedestrian way, intended for pedestrian traffic, which provides access between a walk or sidewalk to a surface located above or below an adjacent curb face.
- NOTE: Curb Ramps shall be constructed where a pedestrian way crosses a curb. The preferred and recommended location for curb ramps is in the center of the crosswalk or each street corner. Where it is necessary to locate a curb ramp in the center of the curb return and the street surfaces are marked to identify pedestrian crosswalks, the lower end of the curb ramp shall terminate within such crosswalk areas. Sec 1127B.5.1 Fig 11B-19 through 11B-23
46. Provide a curb ramp at _____ (1127B.5.1)
 47. Curb ramps shall be a minimum of 4' in width and shall lie, generally, in a single sloped plane, with a minimum of surface warping and cross slope. (1127B.5.2)
 48. The slope of curb ramps shall not exceed 1 vertical to 12 horizontal. (1127B.5.3)
 49. Transitions from ramps to walks, gutters, or streets shall be flush and free of abrupt changes, except that the lower end of each curb ramp shall have a ½" lip beveled at 45 degrees. (1127B.5.3 & 5)
 50. Maximum slopes of adjoining gutters, road surface immediately adjacent to the curb ramp or accessible route, shall not exceed 1:20 within 4' of the top and bottom of the curb ramp. The slope of the fanned or flared sides of curb ramps shall not exceed 1 vertical to 10 horizontal. (1127B.5.3)
 51. A level landing 4' deep shall be provided at the upper end of each curb ramp over its full width to permit safe egress from the ramp surface, or the slope of the fanned or flared sides of the curb ramp shall not exceed 1 vertical to 12 horizontal. (1127B.5.4)
 52. The surface of each curb ramp and its flared sides shall be stable, firm, and slip-resistant and shall be of contrasting finish from that of the adjacent sidewalk. (1127B.5.6)
 53. All curb ramps shall have a grooved border 12" wide at the level surface of the sidewalk along the top and each side approximately 3/4" on center. All curb ramps constructed between the face of the curb and the street shall have a grooved border at the level surface of the sidewalk. (1127B.5.7, Fig. 11B-19C & 11B-20GH)
 54. A curb ramp shall have a detectable warning that extends the full width and depth of the curb ramp inside the grooved border when the ramp slope is less than 1 vertical to 15 horizontal. Detectable warnings shall consist of raised truncated domes with a diameter of nominal 0.9" at the base tapering to 0.45" at the top, a height of nominal 0.2", and a center-to-center spacing of nominal 2.35", in compliance with Figure 11B-23. "Nominal", as used here, shall be in accordance with Section 12-31-102, State Referenced Standards Code. The detectable warning shall contrast visually with adjoining surfaces, either light-on-dark or dark-on-light. The material used to provide contrast shall be an integral part of the walking surface. The domes may be constructed in a variety of methods, including cast-in-place or stamped, or may be part of a prefabricated surface treatment. **Only approved DSA/AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations, Title 24, Part 1, Articles 2, 3, and 4.** (1127B.5.8)

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

PEDESTRIAN GRADE SEPARATIONS (OVERPASSES AND UNDERPASSES)

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

RAMPS (EXTERIOR OR INTERIOR)

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

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

68. The width of the landing shall extend 24" past the strike edge of any door or gate for exterior ramps and 18" past the strike edge for interior ramps. (1003.3.4.4, Fig 11B-38 & 39)
69. All ramp landings shall be level with maximum slope in any direction not to exceed 2 % slope. (1133B.5.4.1)
70. At bottom and intermediate landings, the width shall be at least the same as required for the ramp. (1133B.5.4.5, Fig 11B-38 & 39)
71. Intermediate landing at a change of direction in excess of 30 degrees and bottom landings shall have a dimension in the direction of ramp run of not less than 72" to accommodate the handrail extension. (1133B.5.4.6, Fig 11B-38)
72. Other intermediate landings shall have a dimension in the direction of ramp run of not less than 60". (1133B.5.4.7, Fig 11B-38)
73. Handrails are required on ramps that provide access if the ramp slope exceeds 1' rise in 20' of horizontal run, except that at exterior door landings, handrails are not required on ramps less than 6" rise or 72" in length. (1133B.5.5.1)
74. Handrails shall be placed on each side of each ramp, shall be continuous the full length of the ramp, shall be 34" to 38" above the ramp surface, shall extend a minimum of 1' beyond the top and bottom of the ramp, and the ends shall be returned. (1133B.5.5.1, Fig 11B-27(b) & (c))
75. The grip portion of handrails shall be not less than 1-1/4" nor more than 1-1/2" nominal diameter, or the shape shall provide an equivalent gripping surface, and all surfaces shall be smooth with no sharp corners. Handrails shall not rotate within their fittings. (1133B.5.5.1, Fig 11B-36)
76. Handrail projecting from a wall shall have a space of 1-1/2" between the wall and the handrail. (1133B.5.5.1, Fig 11B-36)
77. Handrails may be located in a recess if the recess is a maximum of 3" deep and extends at least 18" above the top of the rail. (1133B.5.5.1, Fig 11B-36)
78. Any wall or other surface adjacent to handrails shall be free of sharp or abrasive elements. Edges shall have a minimum radius of 1/8". (1133B.5.5.1, Fig 11B-36)
79. Where the ramp surface is not bounded by a wall or fence and the ramp exceeds 10' in length, the ramp shall comply with one of the following requirements. (1133B.5.6, Fig 11B-27(A & B))
- a. A guide curb a minimum of 2" in height shall be provided at each side of the ramp; (1133B.5.6.1)
- OR
- b. A wheel guide rail shall be provided, centered 3"± 1" above the surface of the ramp. (1133B.5.6.2)

80. **Where the extension of the handrail in the direction of the ramp run would create a hazard, the termination of the extension shall be made either rounded or returned smoothly to floor, wall or post or the extension on the handrail may be turned 90 degrees to the run of the ramp.**
(1133B.5.5.1.1, 1133B.4.2.4)
81. **Ramps more than 30" above the adjacent ground shall be provided with guardrails as required by section 1133B.5.7 and 1003.3.4.6. Such guardrail shall be continuous from the top of the ramp to the bottom of the ramp.**
(1133B.5.7)

ENTRANCES & EXITS

- NOTE: Exit as defined is "a continuous and unobstructed means of egress to a public way and shall include intervening aisles, doors, doorways, gates, corridors, exterior exit balconies, ramps, stairways, smokeproof enclosures, horizontal exits, exit passageways, exit courts, and yards".
- NOTE: Public Way as defined is "any street, alley or similar parcel of land essentially unobstructed from the ground to the sky which is deeded, dedicated, or otherwise permanently appropriated to the public for public use and having a clear width of not less than 10 feet."
(1002)
- NOTE: For the purposes of Title 24, the use of the term Exit Door in Section 1003.3.1 applies to all doors that provide access, that is, entrances, passage doors, etc.
82. All entrances and all exterior ground floor exit doors to buildings and facilities shall be made accessible to persons with disabilities.
(1133B.1.1.1)
83. Elevators or escalators shall not be used as a required exit.
(1003.2)
84. Revolving doors shall not be used as a required entrance for persons with disabilities.
(1003.3.1.2)
85. During periods of partial or restricted use of a building or facility, the entrances used for primary access shall be accessible to and usable by persons with disabilities. (1133B.1.1.1.3)
86. Recessed doormats shall be adequately anchored to prevent interference with wheelchair traffic.
(1133B.1.1.1.3, Fig 11B-25)
87. All gates, including ticket gates, shall meet all applicable accessibility specifications of doors.
(1133B.1.1.1.4)
88. Every required exit doorway which is located within an accessible path of travel shall be **capable of opening at least 90 degrees, shall have a minimum clear opening of 32"**, and shall be of a size as to permit the installation of a door not less than 3' in width and not less than 6'-8" in height.
(1133B.1.1.1.1, 1133B2.2)
89. The space between two consecutive door openings in a vestibule, serving other than a required exit stairway, shall provide a minimum of 48" of clear space from any door opening into such vestibule when the door is positioned at an angle of 90 degrees from its closed position. Doors in a series shall swing either in the same direction or away from the space between the doors. See Figures 11B-30 & 31 for strike edge clearance.
(1133B.2.4.4)

90. In existing stairways where there is no landing, doors shall be conspicuously marked with a sign stating "Danger! Stairway--No Landing" or equivalent wording and there shall be adequate illumination. (1004.9.2.1.a(5))

DOORS

91. Manually operated edge- or surface-mounted flush bolts and surface bolts are prohibited. When exit doors are used in pairs and approved automatic flush bolts are used, the door leaf having the automatic flush bolts shall have no door knob or surface-mounted hardware. The unlatching of any leaf shall not require more than one operation. (1003.3.1.7)
92. Latching and locking doors that are hand activated and which are in a path of travel shall be operable with a single effort by lever type hardware, by panic bars, push-pull activating bars, or other hardware designed to provide passage without requiring the ability to grasp the opening hardware. (1133B.2.5.1)
93. Doors to individual hotel or motel units shall operate similarly, to above, except that when bolt and unlatching operation is key operated from corridor or exterior side of unit door, large bow keys 2" (full bow) or 1-1/4" (half bow) shall be provided in lieu of lever type hardware on the corridor side. Separate deadlock activation on room side of corridor doors in hotels or motels shall have lever handle or large thumb turn in an easily reached location. (1133B.2.5.1)
94. Hand-activated door opening hardware shall be centered between 30" and 44" above the floor. (1133B.2.5.1)
95. When installed, exit doors shall be capable of opening so that the clear width of the exit is not less than 32". (1133B.1.1.1.1, Fig 11B -5B & 11B-33)
96. For hinged doors, the opening width shall be measured with the door positioned at an angle of 90 degrees from its closed position. (1133B.2.3, Fig 11B-33(a))
97. Where a pair of doors is utilized, at least one of the doors shall provide a clear, unobstructed opening width of 32" with the leaf positioned at an angle of 90 degrees from its closed position. (1133B.2.3.1)
98. When an automatic door operator is utilized to operate a pair of doors, at least one of the doors shall provide a clear, unobstructed opening width of 32" with the door positioned at an angle of 90 degrees from its closed position. (1133B.2.3.2)
99. Minimum maneuvering clearances at doors shall be as shown in Figure 11B-26. The floor or ground area within the required clearances shall be level and clear. (1133B.2.4.2)
100. There shall be a level and clear floor or landing on each side of a door. The level area shall have a length in the direction of door swing of at least 60" and the length opposite the direction of door swing of 48" as measured at right angles to the plane of the door in the closed position. **Where the plane of the doorway is offset or located in an alcove a distance more than 8 inches measured from the plane of the doorway to the face of the wall, the door shall be provided with 60" maneuvering clearance for front approach.** (1133B.2.4.2 , 1133B.2.5.3, Fig 11B-26, Fig 11B-33)

101. The width of the level area on the side to which the door swings shall extend 24" past the strike edge of the door for exterior doors and 18" past the strike edge for interior doors. **Where the door is recessed or located in an alcove, the projection distance allowed to project into the required door strike clearance measured from the face of the wall to the face of the door is limited to 8".** (1133B.2.4.3, 1133B.2.4.5, Fig 11B-33(a))
102. Provide clear space of 12" past strike edge of the door on the opposite side to which the door swings if the door is equipped with both a latch and a closer. (Fig 11B-26(a))
103. The floor or landing shall be not more than 1/2" lower than the threshold of the doorway. (1133B.2.4.1)
104. Where the door opens into a stair of a smoke proof enclosure, the landing need not have a length of 60". (1004.9.2.3a)
105. The bottom 10" of all doors except automatic and sliding shall have a smooth, uninterrupted surface to allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition. Where narrow frame doors are used, a 10" high smooth panel shall be installed on the push side of the door, which will allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition. (1133B.2.6, Fig 11B-29)
106. Maximum effort to operate exterior and interior doors shall not exceed 5 pounds, with such pull or push effort being applied at right angles to hinged doors and at the center plane of sliding or folding doors. Compensating devices or automatic door operators may be utilized to meet the above standards. When fire doors are required, the maximum effort to operate the door may be increased to the minimum allowable by the appropriate administrative authority, not to exceed 15 pounds. (1133B.2.5)
107. **When the door has a closer, then the sweep period of the closer shall be adjusted so that from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3" from the latch, measured to the landing edge of the door.** (1133B.2.5.1)
108. Where turnstiles and crowd control barriers are utilized in a facility for the purpose of providing fully controlled access, such as where an admission price is charged, a door or gate that is accessible to persons with disabilities shall be provided adjacent to or within a distance not to exceed 30' from each turnstile exit or entrance. This alternate passageway shall be maintained in an unlocked condition during business hours and the door or gate shall not activate a publicly audible alarm system. is posted stating The door or gate may be latched where all gates are restricted and controlled by an attendant and a sign "All gates are restricted and controlled by an attendant." The accessible door or gate shall provide the same use pattern. Where posts, rails, or other pedestrian controls are utilized to create crowd control aisles or lanes, a minimum aisle width not less than indicated in Figure 11B-5E (a) and (b) with 32" of clear opening. (1133B.2.3.4)

FLOORS AND LEVELS

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

109. In buildings and facilities, floors of a given story shall be a common level throughout, or shall be connected by pedestrian ramps, passenger elevators, or special access lifts. (1120B.1)

110. Ground and floor surfaces along accessible routes and in accessible rooms and spaces, including floors, walks, ramps, stairs, and curb ramps, shall be stable, firm, and slip-resistant. (1120B.2 & 1124B.1)
111. Changes in level up to ¼ inch may be vertical and without edge treatment. (1124B.2, Fig 11B-5E(c))
112. Changes in level between ¼ inch and ½ inch shall be accomplished by means of a ramp no steeper than 1 vertical to 2 horizontal. (1124B.2, Fig 11B-5E(d))
113. If carpet or carpet tile is used on a ground or floor surface, it shall be securely attached; have a firm cushion, pad or backing or no cushion or pad; and have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. The maximum pile height shall be 1/2". Exposed edges of carpet shall be fastened to floor surfaces and have trim along the entire length of the exposed edge. Carpet edge trim shall comply with Section 1124B.2. (1124B.3, Fig 11B-7B)
114. If gratings are located on floors, then they shall have spaces no greater than 1/2" wide in one direction. If gratings have elongated openings, they shall be placed so that the long dimension is perpendicular to the dominant direction of travel. (1124B.4, Fig 11B-7B)

CORRIDORS & AISLES

115. Every corridor serving an occupant load of 10 or more shall not be less than 44" in width. (1133B.3.1)
116. Corridors serving an occupant load of less than 10 shall not be less than 36" in width. (1133B.3.1)
117. Corridors which are located on accessible route and exceed 200' in length shall: (1133B.3.2, Fig 11B-34)
- a. Have a minimum clear width of 60";
 - OR
 - b. Have, at reasonable intervals, a 60" by 60 minimum wheelchair turning space or passing alcove; not to exceed 200'
 - OR
 - c. Have, at a central location, an intervening crossing or tee corridor, a minimum of 44" in width
118. Circulation aisles and pedestrian ways shall be sized according to functional requirements and in no case shall be less than 36" in clear width. (1105B.3.6.1)
119. Every portion of every building in which are installed seats, tables, merchandise, equipment, or similar materials shall be provided with aisles leading to an exit. (1133B.6.1)
120. Every aisle shall be not less than 3' wide if serving only one side, and not less than 3'-8" wide if serving both sides. (1133B.6.2)

HAZARDS AND PROTRUDING OBJECTS

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

STAIRWAYS

132. Stairways shall have handrails on each side, and every stairway required to be more than 88" in width shall be provided with not less than one intermediate handrail for each 88" of required width. Intermediate handrails shall be spaced approximately equally across the entire width of the stairway. (1003.3.3.6)

133. Each stairway adjacent to an area for evacuation assistance shall have a minimum clear width of 48" between handrails. (1114B.2.2.3)
134. Handrails shall be 34" to 38" above the nosing of the treads. (1133B.4.2.1, Fig 11B-35)
135. Handrails shall extend a minimum of 12" beyond the top nosing and 12" plus the tread width beyond the bottom nosing and ends shall be returned or terminate in newel posts or safety terminals. (1133B.4.2, Fig 11B-35 & 37)
136. Where the extension of the handrail in the direction of the stair run would create a hazard, the termination of the extension shall be made either rounded or returned smoothly to the floor, wall, or post. Where the stairs are continuous from landing to landing, the inner rail shall be continuous and need not extend out into the landing. (1133B.4.2.4, Fig 11B-37)
137. The handgrip portion of handrails shall be not less than 1-1/4" nor more than 1-1/2" in cross-sectional nominal dimension or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners. Gripping surfaces (top and sides) shall be uninterrupted by newel posts, other construction elements, or obstructions. Any wall or other surface adjacent to the handrail shall be free of sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch. (1133B.4.2.6.1, Fig 11B-36)
138. ***The orientation of at least one handrail shall be in the direction of the run of the stair nosing and, and shall not reduce the minimum required width of stairs. (1133B.4.2.6.2)***
139. Handrails projecting from a wall shall have a space of 1-1/2" between the wall and the handrail. Handrails may be located in a recess if the recess is a maximum of 3" deep and extends at least 18" above the top of the rail. Handrails shall not rotate within their fitting. (1133B.4.2.5, Fig 11B-36)
140. The upper approach and the lower tread of each stair shall be marked by a strip of clearly contrasting color at least 2" wide and not more than 4" wide placed parallel to and not more than 1" from the nose of the step or landing to alert the visually impaired. The strip shall be of material that is at least as slip resistant as the other treads of the stair. (1133B.4.4, Fig 11B-35)
141. Where stairways occur outside a building, the upper approach and all treads shall be marked by a strip of clearly contrasting color at least 2" wide and not more than 4" wide placed parallel to and not more than 1" from the nose of the step or landing to alert the visually impaired. The strip shall be of a material that is at least as slip-resistant as the other treads of the stair. A painted strip shall be acceptable. (1133B.4.4, Fig 11B-35)
142. All tread surfaces shall be slip-resistant. Weather exposed stairs and their approaches shall be designed so that water will not accumulate on walking surfaces. Treads shall have smooth, rounded, or chamfered exposed edges, and no abrupt edges at the nosing (lower front edge). (1133B.4.5.1, Fig 11B-35)
143. The nosing shall not project more than 1-1/2" past the face of the riser below. (1133B.4.5.2, Fig 11B-35)

144. Open risers are not permitted. On any given flight of stairs, all steps shall have uniform riser height and uniform tread widths consistent with 1006.3. Stair treads shall be no less than 11" deep, measured from riser to riser. Risers shall be sloped or the underside of the nosing shall have an angle not less than 60 degrees from the horizontal. (1133B.4.5.3, Fig 11B-35)
145. ***Approved Tactile stairway identification signs that comply with Section 1117B.5.1 shall be located at each floor level in all enclosed stairways in buildings two or more stories in height. The sign shall identify the stairway, indicate whether there is roof access, the floor level, and the upper and lower terminus of the stairway. The sign shall be located approximately 5' above the floor landing in a position which is readily visible when the door is in the open or closed position or, the sign shall be located approximately 5' above the floor landing immediately adjacent to the door on the strike side. Signs shall comply with the requirements of UBC Std. No. 10-2. (1133B.4.3)***

CONTROLS & OPERATING MECHANISMS

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

SPACE ALLOWANCE & REACH RANGES

152. The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30" by 48". The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object. Clear floor or ground space for wheelchairs may be a part of the knee space required under some objects. (1117B.2.3 & 1118B.4.1, Fig 11-B-5A)

153. One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair clear floor space. If a clear floor or ground space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided. (1117B.2.4 & 1118B.4.2, Fig 11-B-5A)
154. The space required for a wheelchair to make a 180 degree turn is a clear space of 60" diameter or a T-shaped space. (1118B.3, Fig 11B-12(a) & (b))
155. The minimum clear width required for a wheelchair to turn around an obstruction shall be 36" where the obstruction is 48" or more in length and 42" and 48" where the obstruction is less than 48" in length. (Fig 11B-5E)
156. The minimum clear width for single wheelchair passage shall be 32" at a point (24" maximum length) and 36" continuously. (1118B.1, Fig 11B-10)
157. The minimum width for two wheelchairs to pass is 60". (1118B.2, Fig 11B-11)
158. If the clear floor space only allows forward approach to an object, the maximum high forward reach allowed shall be 48". See Figure 11B-c(a). The minimum low forward reach is 15". If the high forward reach is over an obstruction, reach and clearances shall be as shown in Figure 11B-5C(b). (1118B.5)
159. If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54" and the low side reach shall be no less than 9" above the floor as shown in Figures 11B-5D(a) & (b). If the side reach is over an obstruction, the reach and clearances shall be as shown in Figure 11B-5D(c). (1118B.6)

EMPLOYEE WORK AREAS & WORK STATIONS

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

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

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

FIXED OR BUILT- IN SEATING, TABLES & COUNTERS

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

SIGNS & IDENTIFICATION

- NOTE: ***California's standards for signage are more stringent and are significantly larger and wider than Federal law, Americans with Disabilities Act (ADA) Section 4.30.*** (1117B.5)
- NOTE: The International Symbol of Accessibility shall be the standard used to identify facilities that are accessible to and usable by physically disabled persons as set forth in Title 24 and as specifically required in this Section. (1117B.5.8.1, Fig 11B-6)
168. The International Symbol of Accessibility shall consist of a white figure on a blue background. The blue shall be equal to Color No. 15090 in Federal Standard 595B. (1117B.5.8.1.1)
169. All building entrances that are accessible to and usable by persons with disabilities and at every major junction along or leading to an accessible route of travel shall be identified with a sign displaying the International Symbol of Accessibility and with additional directional signs, as required, to be visible to persons along approaching pedestrian ways. (1117B.5.8.1.2. & 1127B.3)
170. When permanent identification is provided for rooms and spaces ***of a building or site***, raised letters shall be provided and shall be accompanied by Braille in conformance with Section ***1117B.5.2*** through ***1117B.5.7***. Signs shall be installed on the wall adjacent to the latch outside of the door. Where there is no wall space on the latch side, including at double leaf doors, signs shall be placed on the nearest adjacent wall, preferably on the right. Mounting height shall be 60" above the finished floor to the centerline of the sign. Mounting location shall be determined so that a person may approach within 3" of signage without encountering protruding objects or standing within the swing of a door. (1117B.5.1.1, ***1117B.5.7***)
171. ***When signs direct to or give information about permanent rooms and space of a building or site, they shall comply with Sections 1117B.5.2, 1117B.5.3, 1117B.5.5, 1117B.5.6, 1117B.5.7. Means of egress signs and identification for visual exit signs, graphics, illumination, power source, tactile exit signage, tactile stair level identification and special egress control devices shall comply with Sections 1003.2.8.1, 1003.2.8.5, 1003.2.9, 1003.2.10 and 1003.3.1.10.*** (1117B.5.1.3)

172. When raised characters or symbols are used, they shall conform to the following: (1117B.5.5)
- a. Letters and numbers on signs shall be raised or recessed 1/32" minimum and shall be sans-serif uppercase characters accompanied by Grade 2 Braille. (1117B.5.5.1)
 - b. Raised characters or symbols shall be a minimum of 5/8" high (maximum of 2"). (1117B.5.5.2)
 - c. Pictorial symbol signs (pictograms) shall be accompanied by the verbal description placed directly below the pictogram. The outside dimension of the pictogram shall be a minimum of 6" in height. (1117B.5.5.3)
173. **Characters on signs** shall have a width-to-height ratio of between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10. (1117B.5.3)
174. Characters, symbols and their background **shall have a non-glare** finish. Characters and symbols shall contrast with their background, either light characters on a dark background or dark characters on a light background. (1117B.5.2)
175. Characters and numbers on signs shall be sized according to the viewing distance from which they are to be read. The minimum height is measured using an upper case X. Lower case characters are permitted. For signs suspended or projected above the finish floor in compliance with Section 1121B, the minimum character height shall be 3". (1117B.5.4)
176. Contracted Grade 2 Braille shall be used wherever Braille symbols are specifically required in other portions of these **Standards**. Dots shall be 1/10" on centers in each cell with 2/10" space between cells. Dots shall be raised a minimum of 1/40" above the background. (1117B.5.6)
177. Pole supported pedestrian traffic control buttons shall be identified with color coding consisting of a textured horizontal yellow band 2" in width encircling the pole, and a 1" wide dark border band above and below this yellow band. Color coding should be placed immediately above the control button. Control buttons shall be located no higher than 48" above the surface adjacent to the pole. (1117B.5.9)

ELECTRICAL

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

NOTIFICATION APPLIANCES FOR THE HEARING IMPAIRED

NOTE: If emergency warning systems are required, they shall activate a means of warning the hearing impaired.

(1114B.2.4)

181. Approved notification appliances for the hearing impaired shall be installed in accordance with the provisions of NFPA 72 in the following areas: (Ch 35, Sec 4-4.5)
- a. Restrooms
 - b. Corridors
 - c. Music practice rooms
 - d. Band rooms
 - e. Gymnasiums
 - f. Multipurpose rooms
 - g. Occupational shops
 - h. Occupied rooms where ambient noise impairs hearing of the fire alarm
 - i. Lobbies
 - j. Meeting rooms
 - k. Any other area for common use
182. Strobe signaling devices required for the hearing impaired shall be State Fire Marshall approved and listed. (7203(c))
183. Audible signals intended for operation in the public mode shall have a sound level of not less than 75dBA at 10' or more than 110dBA at the minimum hearing distance from the audible appliance. (Ch 35 Sec 4-3.2.1)
184. Audible signals intended for operation in the private mode shall have a sound level of not less than 45 dBA at 10' or more than 110dBA at the minimum hearing distance from the audible appliance. (Ch 35 Sec 4-3.3.1)
185. The flash rate shall not exceed 2 flashes per second nor be less than 1 flash every second throughout the listed voltage range of the appliance. (NFPA 72 Sec 4-4.2)
186. The light source color shall be clear or nominal white and shall not exceed 1000 candela (effective intensity). (NFPA 72 Sec 4-4.2.2)
187. Wall-mounted appliances shall be mounted such that the entire lens is not less than 80" and not greater than 96" above the finished floor. Ceiling-mounted appliances shall be installed per Table 4-4.4.1.1(b). (NFPA 72 Sec 4-4.4)
188. Notification appliances installed in rooms shall be spaced as follows: (NFPA 72 Sec 4-4.4.1)
- 1. Spacing shall be in accordance with Figure 4-4.4.1.1 and Tables 4-4.4.1.1(a) and (b). The separation between appliances shall not exceed 100'. (NFPA 72 Sec 4-4.4.1.1)

2. Visible notification appliances shall be installed in accordance with Table 4-4.4.1.1 (a), using one of the following: (NFPA 72 Sec 4-4.4.1.1)
 - A. A single visible notification appliance.
 - B. Two visible notification appliances located on opposite walls.
 - C. In rooms 80' x 80' or greater, where there are more than two appliances in any field of view, they shall be spaced a minimum of 55' from each other.
 - D. More than two visible notification appliances that flash in synchronization.

NOTE: *Where a room configuration is not square, the square room size that entirely encompasses the room or subdivides the room into multiple squares shall be used.*
(NFPA 72 Sec 4-4.4.1.3)

189. Appliances installed in sleeping areas shall comply with NFPA 75 Section 4-4.4.3.
190. Notification appliances installed in corridors shall be spaced as follows: (NFPA 72 Sec 4-4.4.2)
 - a. Table 4-4.4.2.1 shall apply to corridors not exceeding 20' in width. For corridors greater than 20' in width, refer to Figure 4-4.4.1.1 and Tables 4-4.4.1.1(a) and (b).
(NFPA 72 Sec 4-4.4.2)
 - b. Visual appliances shall be rated not less than 15 candela. (NFPA 72 Sec 4-4.4.2.1)
 - c. The visible appliances shall be located no more than 15' from the end of the corridor with a separation no greater than 100' between appliances. (NFPA 72 Sec 4-4.4.2.2)
 - d. Where there is an interruption of the concentrated viewing path, such as a fire door, an elevation change, or any other obstruction, the area shall be considered as a separate corridor.
(NFPA 72 Sec 4-4.4.2.2)

ADDITIONAL MISCELLANEOUS REQUIREMENTS

191. Qualified historical buildings shall comply with the State Historical Building Code, Part 8, Title 24, of the California Code of Regulations as printed in part 2, Chapter 34, Division II.
(1135B.1 & 1119B)

CLEANER AIR SYMBOL

192. ***Publicly funded facilities or any facilities leased or rented by State of California may have a "CLEANER AIR SYMBOL" to identify a room, facility and paths of travel that are accessible to and usable by people who are adversely impacted by airborne chemicals or particulate(s) and/or the use of electrical fixtures and/or devices. When used, the symbol shall comply Sections 1117B.5.11.1, 1117B.5.11.2 Ord. 1117B.5.11.3***

(1117B.5.11, Fig 11B-40)

SANITARY FACILITIES (GENERAL)

193. Sanitary facilities that serve buildings, facilities or portions of buildings or facilities that are required to be accessible by these standards shall conform to the requirements of Section 1115B.1. (1115B.1)
194. Where separate facilities are provided for non-disabled persons of each sex, separate facilities shall be provided for persons with disabilities of each sex also. Where unisex facilities are provided for persons without disabilities, at least one unisex facility shall be provided for persons with disabilities within close proximity to the non-accessible facility. (1115B.2, Fig 11B-1A)

	A	E	K
Toilet centering from wall	18"	15"*	12"*
Toilet seat height	17"-19"	15"	10"-12"
Grab bar height (side)	33"	27"*	20"-22"
Toilet paper in front of toilet	12" max	6" max*	6" max*
	Dimensions to top of seat		
Napkin disposal in front of toilet	12" max	12" max	N/A
Dispenser or mirror height	40" max	36" max	32" max
Lavatory/sink top height	34" max	29" max	24" max
Lavatory/sink knee clearance	27" min	24" min	19" min
Urinal lip height	17" max	15" max	13" max
Urinal flush handle height	44" max	37" max	32" max
Drinking fountain bubbler height	36" max	32" max	30" max
Drinking fountain knee clearance	27" min	24" min	22" min
Ramp/stair handrail height	34"-38"	27"	22"
* Deviates from code requirements and requires a written finding of hardship			

A = Adult dimensions (age 12 and over)
 E = Elementary dimensions
 K = Kindergarten and pre-school dimensions

195. Where facilities are to be used solely by small children, the specific heights may be adjusted to meet their accessibility needs. See Table above for suggested mounting heights. (1115B.3)

The dimensions are recommended by the Division of the State Architect, Office of Regulation Services. These recommendations are based on the federal "recommendations for Accessibility for Children in Elementary School" and other recognized publications on access for children.

196. Doorways leading to men's sanitary facilities shall be identified by an equilateral triangle 1/4" thick with edges 12" long and a vertex pointing upward. Women's sanitary facilities shall be identified by a circle 1/4" thick and 12" in diameter. (1115B.5)
197. Unisex sanitary facilities shall be identified by a circle 1/4" thick, 12" in diameter, with a 1/4" thick triangle superimposed on the circle and within the 12" diameter. (1115B.5)
198. Geometric (circle & triangle) symbols on sanitary facility doors shall be centered on the door at a height of 60" and their color and contrast shall be distinctly different from the color and contrast of the door. (1115B.5)

NOTE: See also Section 1117B.5.7 for additional signage requirements applicable to sanitary facilities.

SINGLE ACCOMMODATION SANITARY FACILITIES

NOTE: Single Accommodation Sanitary Facility is defined as "a room that has not more than one of each type of sanitary fixture, is intended for use by only one person at a time, has no partition around the toilet, and has a door that can be locked on the inside by the room occupant". (220)

199. There shall be sufficient space in the toilet room for a wheelchair measuring 30" wide by 48" long to enter the room and permit the door to close. (1115B.7.2)
200. There shall be in the room, a clear floor space of at least 60" in diameter, or a T-shaped space complying with Figures 11B-12(a) and (b). No door shall encroach into this space for more than 12" except for the panel door to any water closet compartment if there is one. (1115B.7.2, Fig 11B-1A)
201. The water closet shall be located in a space which provides a minimum 28" wide clear space from a fixture or a minimum 32" wide clear space from a wall at one side. The other side shall provide 18" from the centerline of the water closet to the wall. A minimum 48" clear space shall be provided in front of the water closet. (1115B.7.2, Fig 11B-1A)
202. All doors, fixtures, and controls shall be on an accessible route with a minimum clear width of 36" except at doors. If a person in a wheelchair must make a turn around an obstruction, the minimum clear width of the accessible route shall be as shown in Figure 11B-5E. (1115B.7.2)

MULTIPLE ACCOMMODATION SANITARY FACILITIES

NOTE: Multiple Accommodation Sanitary Facility is defined as "a room that has more than one sanitary fixture, is intended for the use of more than one person at a time, and which usually is provided with privacy compartments or screens shielding some fixtures from view". (214)

203. A clear space measured from the floor to a height of 27" above the floor, within the sanitary facility room, of sufficient size to inscribe a circle with a diameter not less than 60", or a clear space 56" by 63" in size, shall be provided for wheelchair maneuvering. Doors shall not swing into the floor space required for any fixture. Other than the door to the accessible **water closet** compartment, in any position may encroach into this space by not more than 12".
(1115B.7.1.1 & 1115B.7.1.2, Fig 11B-1B)
204. A water closet fixture located in a compartment shall provide a minimum 28" wide clear space from a fixture or a minimum 32" wide clear space from a wall at one side of the water closet. The other side of the water closet shall provide 18" from the centerline of the water closet to the wall. Grab bars shall not project more than 3" into these clear spaces. **The stall shall be minimum of 60" wide.**
(1115B.7.1.3, Fig 11B-1B)
205. A minimum 48" long clear space shall be provided in front of the water closet if the compartment has an end opening door (facing the water closet) and a minimum 60" long clear space shall be provided in front of the water closet if the compartment has a door located at the side. Grab bars shall not project more than 3" into these clear spaces.
(1115B.7.1.3, Fig 11B-1A & B)
206. Water closet compartment shall be equipped with a door that has an automatic-closing device, and shall have a clear, unobstructed opening width of 32" when located at the end and 34" when located at the side with the door positioned at an angle of 90 degrees from its closed position.
(1115B.7.1.4, Fig 11B-1A & B)
207. When standard compartment doors are used, with a minimum 9" clearance for footrests underneath and a self-closing device, clearance at the strike edge, as specified in Section 1133B.2.4.3, is not required.
(1115B.7.1.4)
208. The inside and outside of the compartment door shall be equipped with a loop or U-shaped handle immediately below the latch. The latch shall be flip-over style, sliding, or other hardware not requiring the user to grasp or twist.
(1115B.7.1.4)
209. Except for door opening widths and door swings, a clear unobstructed access not less than 44" shall be provided to water closet compartments designed for use by persons with disabilities and the space immediately in front of a water closet compartment shall be not less than 48" as measured at right angles to compartment door in its closed position.
(1115B.7.1.4, Fig 11B-1B)
210. Where six or more stalls are provided within a multiple accommodation toilet room, in addition to the standard accessible stall required above, at least one additional stall shall be 36" wide with an outward swinging self-closing door and parallel grab bars complying with Sections 1115B.8.2 through 1115B.8.4.
(1115B.7.1.5)

SANITARY FACILITY FIXTURES & ACCESSORIES

211. The height of accessible water closets shall be a minimum of 17" and a maximum of 19" measured to the top of a maximum 2" high toilet seat, except that 3" seats shall be permitted only in alterations where the existing fixture is less than 15" high.
(1115B.2.1)
212. A clear floor space 30" by 48" shall be provided in front of a lavatory to allow a forward approach. Such clear floor space shall adjoin or overlap an accessible route and shall extend into knee and toe space underneath the lavatory. A door swing shall not encroach into this clear space.
(1115B.9.1.1, 1115B.7.1.2, Fig 11B-1B)

213. Lavatories, when located adjacent to a side wall or partition shall, be a minimum distance of 18" to the center line of the fixture. **(1115B2.1.2.1, Fig 11B-1A)**
214. Lavatories that are designated to be accessible shall be mounted with the rim or counter edge no higher than 34" above the finished floor and with a vertical clearance measured from the bottom of the apron or outside bottom edge of the lavatory of 29", reducing to 27" at a point located 8" back from the front edge. Knee clearance below the lavatory shall extend a minimum of 30" in width by 17" in depth. Toe clearance shall be the same width and shall be a minimum of 9" high from the floor and a minimum of 17" deep from the front of the lavatory. **(1115B.2.1.2.1, Fig.11B-1D)**
215. Hot water and drain pipes under accessible lavatories shall be insulated or otherwise covered. There shall be no sharp or abrasive surfaces under lavatories. **(1115B.2.1.2.2)**
216. Where urinals are provided, at least one shall have a clear floor space 30" by 48" in front of the urinal to allow forward approach. **(1115B.9.4)**
217. Urinals shall be floor mounted or wall hung. Where one or more wall hung urinals are provided, at least one with a rim projecting a minimum of 14" from the wall and at a maximum of 17" above the floor shall be provided. **(1115B.2.1.1.1)**
218. Controls for water closet flush valves shall be mounted on the wide side of toilet areas. **(1115B2.1)**
219. Water closet and urinal flush valve controls, and faucet and operating mechanism controls, shall be operable with one hand, shall not require tight grasping, pinching, or twisting of the wrist, and shall be mounted no more than 44" above the floor. **(1115B2.1 #2, 1115B.2.1.1.2, 1115B.2.1.2.1)**
220. The force required to activate water closet and urinal flush valve controls, and faucet and operating mechanism controls, shall be no greater than 5 lbf. Electronic or automatic flushing controls are acceptable and preferable. **(1115B.2.1, 1115B.2.1.1.2, 1115B.2.1.2.1)**
221. Self-closing faucet control valves are allowed if the faucet remains open for at least 10 seconds. **(1115B.2.1.2.1)**
222. Mirrors shall be mounted with the bottom edge no higher than 40" from the floor. **(1115B.9.1.2)**
223. Where towel, sanitary napkins, waste receptacles, and other similar dispensing and disposal fixtures are provided, at least one of each type shall be located with all operable parts, including coin slots, within 40" from the finished floor. **(1115B.9.2)**
224. Toilet tissue dispensers shall be located on the wall within 12" of the front edge of the toilet seat and no lower than 19" from the floor. Dispensers that control delivery or that do not permit continuous paper flow shall not be used. **(1115B.9.3, Fig 11B-1A)**
225. Toilet room floors shall have a smooth, hard, non-absorbent surface such as Portland cement, concrete, ceramic tile or other approved material which extends upward onto the walls at least 5". Walls within water closet compartments and walls within 24" of the front and sides of urinals shall be similarly finished to a height of 48" and, except for structural elements, the materials used in such walls shall be a type which is not adversely affected by moisture. **(1115B.9.5)**

GRAB BARS

226. Grab bars shall be located on each side, or on one side and the back of the accessible toilet stall or compartment. (1115B.8.1, Fig 11B-1A,B &C)
227. Grab bars at the side shall be at least 42" long with the front end positioned 24" in front of the water closet stool and with the back end positioned no more than 12" from the rear wall. Grab bars at the back shall be not less than 36" long. (1115B.8.1, Fig 11B-1A,B, &C)
228. Grab bars shall be securely attached 33" above and parallel to the floor, except that where a tank-type toilet is used which obstructs placement at 33", the grab bar may be as high as 36". (1115B.8.1, Fig 11B-1A)
229. The diameter or width of the gripping surfaces of a grab bar shall be 1¼" to 1½" nominal or the shape shall provide an equivalent gripping surface. If grab bars are mounted adjacent to a wall, the space between the wall and the grab bars shall be 1½". (1115B.8.2, Fig 11B-1C)
230. The structural strength of grab bars, tub and shower seats, fasteners, and mounting devices shall meet the following specifications: (1115B.8.3)
- a. Bending stress in a grab bar or seat induced by the maximum bending moment from the application of a 250-lb point load shall be less than the allowable stress for the material of the grab bar or seat. (1115B.8.3.1)
 - b. Shear stress induced in a grab bar or seat by the application of a 250-lb point load shall be less than the allowable shear stress for the material of the grab bar or seat, and its mounting bracket or other support is considered to be fully restrained, then direct and torsional shear stresses shall not exceed the allowable shear stress. (1115B.8.3.2)
 - c. Shear force induced in fastener or mounting devices from the application of a 250-lb point load shall be less than the allowable lateral load of either the fastener or mounting device or the supporting structure, whichever has the smaller allowable load. (1115B.8.3.3)
 - d. Tensile force induced in a fastener by a direct tension force of a 250-lb point load, plus the maximum moment from the application of a 250-lb point load, shall be less than the allowable withdrawal load between the fastener and supporting structure. (1115B.8.3.4)
 - e. Grab bars shall not rotate within their fittings. (1115B.8.3.5)
231. The grab bar and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements. Edges shall have a minimum radius of 1/8". (1115B.8.4)

BATHING FACILITIES & LOCKERS

232. Where facilities for bathing are provided for the public, clients, or employees, including showers, bathtubs, or lockers, at least one such facility, and not less than 1% of all facilities shall be made accessible. (1115B.6)
233. Provide a clear floor space with minimum dimensions of ____ adjacent to bathtub. (1115B.6.1., Fig 11B-8)

234. Provide grab bars for bathtubs which comply with Section 1115B.8.2, 1115B.8.3, 1115B.8.4.
(1115B.6.1.3, Fig 11B-9A, Fig 11B-9B)
235. Bathtubs shall be provided with a shower spray unit having a hose at least 60" long that can be used as a fixed shower head or as a handheld shower.
(1115B.6.1.5, Fig 11B-9B)
236. Provide an in-tub seat or a seat at the head end of bathtubs which is mounted securely, does not slip during use, and is designed, including attachment, to meet the requirements of Section 1115B.8.3.
(1115B.6.1.2, Fig 11B-8 & 9B)
237. Faucets and other controls for bathtubs shall be located between top of tub and grab bar, shall be operable with one hand, and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds.
(1115B.6.1.4, Fig 11B-9B)
238. If provided, enclosures for bathtubs shall not obstruct controls or transfer from wheelchair onto bathtub seats or into tubs. Enclosures on bathtubs shall not have tracks mounted on their rims.
(1115B.6.1.6, 1506)
239. Showers shall be either 60" minimum in width between wall surfaces and 30" minimum in depth with a full opening width on the long side, or 42" in width between wall surfaces and 48" minimum in depth with an entrance opening of 42". As an alternative, showers 60" minimum in width may be 36" minimum in depth as long as the entrance opening width is a minimum 36".
(1115B.6.2.1, Fig 11B-2A, 2B & 2D)
240. Provide grab bars for compartment showers which comply with Section 1115B.8. (**Fig 11B-2A**)
241. When a threshold or recessed drop is permitted at compartment showers, it shall be a maximum of ½" in height and shall be beveled or sloped at an angle not exceeding 45 degrees from the horizontal.
(1115B.6.2.2, Fig 11B-2A & 2B)
242. The maximum slope of the floor shall be 2% in any direction. Where drains are provided, grate openings shall be a maximum of 1/4" and located flush with the floor surface.
(1115B.6.2.4.4)
243. The following compartment shower accessories shall be provided: (1115B.6.2.4.5)
- a. A folding seat, mounted 18" above the floor, and with a minimum space of 1" and a maximum space of 1-1/2" allowed between the edge of the seat and any wall. When folded, the seat shall not extend more than 6" from the mounting wall. *See Figures 11B-2A, 2B, & 2D for seat size and configuration.* (1115B.6.2.4.5.1, Fig 11B-2A, 2B, & 2D)
 - b. An L-shaped grab bar mounted between a minimum of 33" and a maximum of 36" above the shower floor and mounted on walls opposite and adjacent to the front edge of the seat, but not extended to include that portion of wall over the long side of the seat.
(1115B.6.2.4.5.2, Fig 11B-2A, 2B, & 2D)
 - c. Grab bars complying with the diameter, loading, and projection requirements of Sections 1115B.8.2 through 1115B.8.4.
(1115B.6.2.4.5.2)
 - d. Water controls of a single lever design located on the side wall of the shower adjacent to the seat and mounted at 40" ± 1" above the shower floor and with the centerline of the controls within a reach range of no less than 18" and no more than 24" from the rear edge

of the seat. The controls shall be operable with a maximum force of 5plf.

(1115B.6.2.4.1 , Fig 11B-2A, 2B, & 2D)

- e. A soap dish, when provided, located on the control wall at a maximum height of 40" above the shower floor and within reach limits from the seat. (1115B.6.2.4.6)
- f. A flexible hand-held shower unit with a hose at least 60" long provided within reach range of the seat at a distance not to exceed 27" horizontally, measured from the rear seat edge to the centerline of the mounting bracket. This unit shall be mounted at a maximum height of 48" \pm 1" above the shower floor. (1115B.6.2.4.2 , Fig 11B-2A & 2B)

244. The following open shower accessories shall be provided:

- a. A folding seat, mounted 18" above the floor, and with a minimum space of 1" and a maximum space of 1-1/2" allowed between the edge of the seat and any wall. When folded, the seat shall not extend more than 6" from the mounting wall. See Figure 11B-2C for seat size and configuration. (1115B.6.2.4.5.1 & 1115B.6.3. Fig 11B-2C)
- b. The shower located in a corner with an L-shaped or two grab bars, a minimum of 24" in length and a minimum of 36" in length, with the 36" grab bar located on the wall having the shower head and controls, but not extended to include that portion of wall over the long side of the seat. Grab bars shall be mounted between a minimum of 33" and a maximum of 36" above the shower floor. (1115B.6.2.4.5.2 & 1115B.6.3. Fig 11B-2C)
- c. Grab bars complying with the diameter, loading, and projection requirements of Sections 1115B.8.2 through 1115B.8.4. (1115B.6.2.4.5.2)
- d. Water controls of a single lever design located on the side wall of the shower adjacent to the seat and mounted at 40" \pm 1" above the shower floor, and the centerline of the controls shall be within a reach range of no less than 18" and no more than 24" from the rear edge of the seat. The controls shall be operable with a maximum force of 5plf. (1115B.6.2.4.1 , Fig 11B-2C)
- e. A soap dish, when provided, shall be located on the control wall at a maximum height of 40" above the shower floor, and within reach limits from the seat. (1115B.6.2.4.6)
- f. A flexible hand-held shower spray unit with a hose at least 60" long provided within reach range of the seat at a distance not to exceed 27" horizontally measured from the rear seat edge to the centerline of the mounting bracket. This unit shall be mounted at a maximum height of 48" \pm 1" above the shower floor. (1115B.6.2.4.2 , Fig 11B-2C)

245. Showers shall be finished with a smooth, hard, non-absorbent surface such as Portland cement, concrete, ceramic tile or other approved material to a height of not less than 70" above the drain inlet. Materials other than structural elements used in such walls shall be if a type which is not adversely affected by moisture. (1115B.9.6)

246. Where, within the same functional area, two or more accessible showers are provided, there shall be at least one shower constructed opposite hand from the other or others (i.e., one left hand control vs. right hand control). (1115B.6.2.3, 1505.4)

247. Except within guest rooms and suites in hotels, motels, and similar transient lodging establishments, where accessible shower facilities are provided in areas subject to excessive vandalism, in lieu of providing the fixed flexible hose, two wall mounted shower heads shall be

installed. Each shower head shall be installed so that it can be operated independently of the other and shall have swivel angle adjustments, both vertically and horizontally. One shower head shall be located at a height of 48" (plus or minus 1") above the floor.

(1115B.6.2.4.3, 1505.3)

248. Enclosures, when provided for shower stalls, shall not obstruct transfer from wheelchairs onto shower seats. (1115B.6.2.5)
249. Doors and panels of shower and bathtub enclosures shall be substantially constructed from approved, shatter-resistant materials. Hinged shower doors shall open outward. (1115B.9.7)
250. Glazing used in doors and panels of shower and bathtub enclosures shall be fully tempered, laminated safety glass, or approved plastic. When glass is used, it shall have a minimum thickness of not less than 1/8" when fully tempered, or 1/4" when laminated, and shall pass the test requirements of UBC Standard No. 24-2. (1115B.9.8)
251. Plastic used in doors and panels of showers and bathtub enclosures shall be of shatter-resistant type. (1115B.9.9)
252. At least one and not less than 1% of all lockers shall be made accessible to persons with disabilities, including clear space, reach range requirements, and a path of travel not less than 36" in clear width shall be provided to these lockers. (1115B.6.4)

DRINKING FOUNTAINS

253. In new construction, where only one drinking fountain area is provided on a floor, there shall be a drinking fountain which is accessible to individuals who use wheelchairs in accordance with **Section 1115B.2.1.2** and one accessible to those who have difficulty bending or stooping. This can be accommodated by the use of a hi-low fountain or by such other means as would achieve the required accessibility for each group on each floor. (1117B.1.1)
254. Drinking fountains shall be located completely within alcoves or otherwise positioned so as not to encroach into pedestrian ways. The alcove in which the water fountain is located shall not be less than 32" in width and 18" in depth. ***Protruding objects located in alcoves or otherwise positioned so as to limit encroachment into pedestrian ways are permitted to project 4" into walls, corridors, passageways or aisles.*** (1117B.1.2, **Fig 11B-3**)
255. Drinking fountains shall be a minimum of 18" in depth and there shall be a clear and unobstructed knee space under the drinking fountain not less than 27" in height and 8" in depth, the depth measurement being taken from the front edge of the fountain. (1115B.2.1.5.1, Fig 11B-3)
256. There shall be toe clearance of 9" in height above the floor, and 17" in depth from the front edge of the fountain. (1115B.2.1.5.1)
257. A side approach drinking fountain is not acceptable. (1115B.2.1.5.1)
258. The drinking fountain bubbler shall be activated by a manually operated system not requiring a force greater than 5 lbf., that is located within 6" of the front edge of the fountain or preferably an electronically controlled device. (1115B.2.1.5.3, Fig 11B-3)

- 259. The bubbler outlet orifice shall be located within 6" of the front of the drinking fountain and shall be within 36" of the floor. The water stream from the bubbler shall be substantially parallel to the front edge of the drinking fountain. (1115B.2.1.5.3, Fig 11B-3)
- 260. The spout shall provide a flow of water at least 4" high so as to allow the insertion of a cup or glass under the flow of water. The force required to activate controls shall be no greater than 5 lbf. (1115B.2.1.5.4)

PUBLIC TELEPHONES

- 261. If public telephones are provided, they shall be made accessible to the extent required by the following table: (1117B.2.1)

# of each type of telephone provided on each floor	Minimum # of telephones required to comply with 1117B.2*
1 or more single units	1 or at least 50% of telephone units per floor
1 telephone bank	1 or at least 50% of telephone units per bank
2 or more banks	1 or least 50% of telephone units per bank ... at least 1 telephone per floor shall meet the requirements for a forward reach telephone

* Additional public telephones may be installed at any height.

- 262. A clear floor or ground space at least 30" by 48" that allows either a forward or parallel approach by a person using a wheelchair shall be provided at telephones. (1117B.2.2, Fig 11B-4)
- 263. Bases, enclosures, and fixed seats shall not impede approaches to telephones by people who use wheelchairs. (1117B.2.5)
- 264. The highest operable part of the telephone shall be within 48" of the floor if forward approached and 54" if side approached. (1117B.2.6, Fig 11B-4)
- 265. Telephones mounted diagonally in a corner that require wheelchair users to reach diagonally shall have the highest operable part no higher than 54" above the floor. (1117B.2.6, Fig 11B-4)
- 266. The cord from the telephone to the handset shall be at least 29" long. (1117B.2.11)
- 267. Telephones shall have push-button controls where service for such equipment is available. (1117B.2.10)

268. If telephone enclosures are provided, they shall comply with the following: (1117B.2.7)
- a. For side approach telephones, the enclosure overhang shall be no greater than 19" and the height of the lowest overhanging part shall be equal to or greater than 27".
(1117B.2.7.1, Fig 11B-4(a))
 - b. For forward approach telephones, if the enclosure overhang is greater than 12", the clear width of the enclosure shall be 30" minimum; if the clear width of the enclosure is less than 30", the height of the lowest overhanging part shall be equal to or greater than 27".
(1117B.2.7.3, Fig 11B-4(c))
 - c. Entrances to full-height enclosures shall be 30" minimum. (1117B.2.7.2, Fig 11B-4(b))
 - d. Where telephone enclosures protrude into walls, halls, corridors, or aisles, they shall comply with Section **1133B8.6** (Hazards and Protruding Objects). (1117B.2.7.4)
269. Telephones shall be equipped with a receiver that generates a magnetic field in the area of the receiver cap. If banks of public telephones are provided, at least one in each bank and a total of at least 25% of the total number of public telephones, including closed circuit telephones in a building or facility, shall be equipped with a volume control. Such telephones shall be capable of a minimum of 12 dbA and a maximum of 18 dbA above normal. If an automatic reset is provided, 18 dbA may be exceeded. Public telephones with volume control shall be hearing aid compatible and shall be identified by a sign containing a depiction of a telephone handset with radiating sound waves. (1117B.2.8, **Fig 11B-14B**)
270. If a total of four or more public pay telephones are provided at the interior and exterior of a site, and if at least one of the total is in an interior location, then at least one interior public text telephone shall be provided. (1117B.2.9.1)
271. Text telephones shall comply with the following: (1117B.2.9.2)
- a. Text telephones used with a pay telephone shall be permanently affixed within or adjacent to the telephone enclosure. If an acoustic coupler is used, the telephone cord shall be sufficiently long to allow connection of the text telephone and telephone receiver.
(1117B.2.9.2.1)
 - b. Pay telephones designed to accommodate a portable text telephone shall be equipped with a shelf and an electrical outlet within or adjacent to the telephone enclosure. The telephone handset shall be capable of being placed flush on the surface of the shelf. The shelf shall be capable of accommodating a text telephone and shall have 6" minimum vertical clearance in the area where the text telephone is to be placed. (1117B.2.9.2.2)
 - c. Equivalent facilitation may be substituted for the above requirements. (1117B.2.9.2.3)
 - d. Text telephones shall be identified by the international **TTY symbol** (see Figure 11B-14). If a facility has a public text telephone, directional signage indicating the location of the nearest such telephone shall be placed adjacent to all banks of telephones that do not contain a text telephone. Such directional signage shall include the international **TTY symbol**. If a facility has no banks of telephones, the directional signage shall be provided at the entrance or in a building directory. (1117B.2.9.3)
272. If telephone books are provided, they shall be located within 48" of the floor if forward approached and within 54" if side approached. (1117B.2.12)

ALTERATIONS TO EXISTING BUILDINGS & FACILITIES

NOTE: Areas of renovation, structural repair, alteration and additions to existing buildings are required to meet the same accessibility standards as for new construction projects. In addition, an accessible path of travel from that entrance to the area of remodel, and accessible restrooms, drinking fountains, and public telephones serving the area of remodel must be provided.

273. When alteration, structural repair, or additions are made to existing buildings or facilities, those alterations shall comply with all provisions for New Buildings standards. These requirements shall apply to only the area of specific alteration, structural repair or addition. (1134B.2)
274. Furthermore, the requirements for New Buildings standards shall include the following areas: (1134B.2.1)
- a. A primary entrance to the building or facility and the primary path of travel to the specific area of alteration, structural repair or addition.

AND

- b. Existing sanitary facilities, drinking fountains and **signs and** public telephones serving the area of alteration, structural repair or addition must fully comply.
275. If the total cost of alterations, structural repair or additions does not exceed the threshold valuations of \$ _____, and the cost of providing all the accessible features mentioned in item No.2 above exceeds 20% of the total cost without these features, an "unreasonable hardship" may be created. In choosing which accessible features to provide, priority should be given to those elements that will provide the greatest access, in the following order: (1134B.2.1excep.1)
- a. An accessible entrance;
 - b. An accessible route of travel to the altered area;
 - c. At least one accessible restroom for each sex;
 - d. Accessible telephones;
 - e. Accessible drinking fountains; and
 - f. Other accessible elements such as parking, storage, and alarms.

276. In alteration projects involving certain types of privately funded multi-story buildings and facilities previously approved and built without elevators, areas requiring compliance above and below the ground floor are subject to the 20% disproportionality provisions described in Item No. 3 above (even if the value of the project exceeds the unreasonable hardship valuation).

(1134B.2.1excep.2)

The types of buildings and facilities are:

- a. Office buildings and passenger vehicle service stations of three stories or more and 3,000 square feet or more per floor.
 - b. Offices of physicians and surgeons.
 - c. Shopping centers
 - d. Other buildings and facilities three stories or more and more than 3,000 square feet per floor if a reasonable portion of services sought and used by the public is available on the accessible level.
 - e.
277. ***Where it is technically infeasible in the area of an alteration to make existing restroom facilities code compliant and to install separate sanitary facilities for each sex, then the installation of at least one unisex toilet/bathroom per floor being altered, located in the same area as existing toilet facilities, will be permitted. Such facility shall meet the requirements of Section 1115B.7.2 (1134B.2.2)***
278. ***When automatic door operator is utilized to operate a pair of doors, at least one of the doors shall provide a clear, unobstructed opening width of 32" with the door positioned at an angle of 90 degrees from its closed position. Exceptions:***
- a. ***In existing buildings the following shall apply:***
 - 1) ***Where the occupant load is less than 10, except Group I, Division 1 Occupancies, doorways may be 30" in clear width.***
 - 2) ***Where occupant load is greater than 10 and it is determined that compliance with Section 1133B.2.3 would create an unreasonable hardship, doorway may be 30" in clear width.***
 - b. ***In existing buildings, the provisions of this section shall not apply when legal or physical constraints will not allow compliance with these building standards or equivalent facilitation without creating an unreasonable hardship. See Section 101.17.11, Item 4. (1134B.3.1)***
279. Buildings that have been remodeled to provide specific sanitary facilities and/or elevators for the public use that conform to Title 24 shall have this information posted in the building lobby, preferably as part of the building directory. (1117B.5.8.1.3)
280. In existing sales facilities, check stands shall comply with the requirements of Section 1110B.1.3.
281. A 3-inch high toilet seat shall be permitted where the existing water closet fixture is less than 15 inches high. (1115B.2.1 excep. #1)

SPECIAL ACCESS (WHEELCHAIR) LIFTS

NOTE: Special Access (Wheelchair) Lifts may be provided between levels, in lieu of passenger elevators, when the vertical distance between landings, structural design, and safeguards are as allowed by the State of California, Division of the State Architect, Access Compliance Section, the Department of Industrial Relations, Division of Occupational Safety and Health, and any applicable safety regulations of other administrative authorities having jurisdiction.

If lifts are provided, they shall be designed and constructed to facilitate unassisted entry, operation and exit from the lift and shall comply with the restrictions and enhancements of this section in conjunction with sections 3093 to 3094, Part 7 of the California Code of regulations. (1116B.2)

282. Lifts shall be designed and constructed to facilitate unassisted entry, operation, exit from the lift, and shall comply with Chapter 11B, "Clear Floor or Ground Space"; Section 1124B, "Ground and Floor Surfaces"; Section 1116B.2.4.1, "Controls and Operating Mechanisms"; and ASME A17.1, Safety Code for Elevators and Escalators, Part XX, 1990.
283. Lifts may be provided as part of an accessible route only for the following conditions: (1116B.2)
- a) To provide an accessible route to a performing area in an assembly occupancy.(1116B.2.1)
 - b) To comply with the wheelchair viewing position line-of-sight and dispersion requirements of **Section 1104B.3.5.** (1116B.2.2)
 - c) To provide access to incidental occupiable spaces and rooms which are not open to the general public and which house no more than 5 persons, including but not limited to equipment control rooms and projection booths. (1116B.2.3)
 - d) To provide access where existing site constraints or other constraints make use of a ramp or an elevator infeasible. (1116B.2.4)

NOTE: Sections **1116B.2.4** Exception 3 does not limit the use of a Special Access (Wheelchair) Lift to the four conditions listed above when the lift is being installed as part of an accessible route for additions or alterations.

284. Special Access lifts shall not be used as a component in an egress system,

Exception: When provided as a means of egress component per Section 1116B2.2 the specialty access lift is permitted to be part of an accessible exit component when:

- a. The building has a supervised automatic sprinkler system.***
- b. The area served by the special access lift does not serve more than 4 wheelchair viewing positions.***
- c. The length of the common path of travel to a point where the occupant has a choice of two directions to an exit shall not exceed 30 feet. The length of the common path of travel shall include the vertical travel distance of the lift.***
- d. The special access lift is provided with standby power or with self-rechargeable battery power that provides sufficient power to operate all platform lift functions for a minimum of 5 upward and downward trips.*** (1116B3)

285. The lift platform or support shall be of sufficient size to accommodate large motorized wheelchairs per Chapter 11B and shall have a rated capacity of not less than as required by ASME A17.1, 1996.

286. There shall be a level and clear floor area or landing at each floor or level served by special access lifts to allow safe access to and exiting from the lift platform.
287. In new construction, the minimum size of landings shall be 60" by 60". Other dimensions may be substituted where it can be demonstrated that a person using a wheelchair measuring 30" by 48" can enter and operate the lift safely. (1116B.2.4.1)
- NOTE: Level and clear floor areas or landings as specified in this section shall be part of "Path of Travel" requirements. (1116B.2.4.2)
288. The top landing shall be equipped with a device, door, or gate 42" in height. Each door or gate shall be equipped with both mechanical and electrical contacts which prevent operation of the platform unless they are properly closed.
289. "Call-Send" controls shall be provided at each landing in compliance with Chapter 11B. Where platform lifts are used to provide barrier-free path of travel requirements, they shall facilitate unassisted entry, operation, and exit from the lift.
290. Solid, smooth enclosures provided as per ASME 17.1 shall be provided for the platform lift, which provides a reasonable degree of safety for persons with disabilities using the lift and others exposed to the lift.
291. When the enclosure required *in item 9 above* is not provided because the lift serves only 2 landings, the underside of the lifting platform shall be equipped with a safety pan cover which will automatically shut off the lifting device should any obstruction under the platform interfere with its downward travel. The platform shall be provided with a 42" high solid gate at the bottom landing entrance. A smooth vertical wall or fascia shall be provided from the sill of the top landing to the bottom landing level.
292. A pit may be provided to permit the platform to stop flush with the bottom landing level (which shall be protected by a runway enclosure that extends a minimum of 42" above the top landing level), or in lieu of a pit, a ramp shall be provided which does not exceed 1" rise in 12" of horizontal run. The surface of the ramp shall have a non-skid surface.
293. The lift assembly shall be securely supported to maintain the platform in a level position and to prevent the loosening or displacement of any portion of the unit. All portions of the lift machinery shall be protected from intrusion of water.
294. The rated speed of the platform shall not exceed 20 feet per minute and the operating control shall be the constant pressure type designed so that it can be easily operated by a person with a disability. A push-bar control designed for use by persons with disabilities or a control that provides equal usability shall be provided.
295. When the lift is hydraulically operated or is of the electric-hydraulic type, re-leveling switches shall be provided to keep the platform level with the landing at which it has been parked.

ASSEMBLY OCCUPANCIES

NOTE: Wheelchair areas shall be an integral part of any fixed seating plan, and shall be accessible from the main lobby or a primary entrance. (1104B.3.2)

296. Provide _____ seats/spaces for people using wheelchairs. (1104B.3.4, T11B-1)

Table 11B-1

Total Seating Capacity	Total # of wheelchair seating spaces required
4-26	1
27-50	2
51-300	4
301-500	6
501 & over	6 plus 1 additional for each total seating capacity increase of 100

297. One percent, but not less than one, of all fixed seats shall be aisle seats with no armrests on the aisle side, or removable or folding armrests on the aisle side. Each such seat shall be identified by a sign or marker. Signage notifying patrons of the availability of such seats shall be posted at the ticket office. (1104B.3.4.1)

298. Accessible seating or accommodations in places of public amusement and resort (theaters, concert halls and stadiums) shall be provided in a variety of locations so as to provide persons with disabilities a choice of admission prices and lines of sight otherwise available to members of the general public. (1104B.3.3)

299. Wheelchair areas shall be an integral part of any fixed seating plan and shall be arranged so as to provide persons with disabilities a choice of admission prices and lines of sight comparable of those for members of the general public. When the seating capacity exceeds 300, wheelchair spaces shall be provided in more than one location and must comply with Sect. 1104B.3.3. (1104B.3.5)

300. At least one companion fixed seat shall be provided next to each wheelchair seating area. (1104B.3.5)

301. Each wheelchair area shall adjoin an accessible route. (1104B.3.5)

302. Each wheelchair location shall be level and provide a minimum clear floor or ground space of 33" in width and 60" in depth for side access, or 48" in depth for front or rear access. (1104B.3.4.3 & 1104B.3.6, Fig. 11B-15)

303. Readily removable seats may be installed in wheelchair spaces when such spaces are not being used to accommodate wheelchair users. (1104B.3.7)

304. Provide _____ seats for semi-ambulant persons (at least 1% of the total seating but no fewer than two) which provide at least 24" of clear leg space between the front of the seat to the nearest obstruction or to the back of the seat immediately in front (in addition to spaces provided for wheelchair users). (1104B.3.8)
305. An accessible route shall connect wheelchair seating locations with performing areas, including stages, arena floors, dressing rooms, locker rooms, and other spaces used by performers. (1104B.3.10)
306. Stages, enclosed and unenclosed platforms, and Orchestra pits shall be made accessible to persons with disabilities. (1104B.3.11)
307. Customer and employee sides of ticket booths and of concession and refreshment sales facilities shall be made accessible to persons with disabilities. (1104B.3.12)
308. The customer side of a ticket booth shall be, and employee side may be, accessible to persons with disabilities (stadiums, grandstands, bleachers, athletic pavilion, gymnasiums, and miscellaneous sport-related facilities). (1104B.4.2)
309. Participation areas and clubrooms shall be accessible to person with disabilities. Provide wheelchair access to _____ . (1104B.4.3 & 1104.B.4.4)
310. ***Swimming pool deck areas must be accessible, and a mechanism to assist persons with disabilities in gaining entry into the pool and in exiting from the pool shall be provided. Mechanism shall meet requirements of Section 1104B.4.3.4 (1104B.4.3.4)***
311. Spectator and/or participant sanitary and/or locker facilities shall be accessible to persons with disabilities. (1104B.4.5)

ASSISTIVE-LISTENING SYSTEM IN ASSEMBLY OCCUPANCIES

- NOTE: Types of Assistive-Listening Systems include, but are not limited to. audio-induction loops, radio frequency systems (AM or FM), and infrared transmission. (1104B.2.2)
- NOTE: The requirements for Assistive-Listening Systems do not apply to systems used exclusively for paging, or background music, or a combination of these two uses. (1104B.2)
312. Assembly areas, conference rooms and meeting rooms shall be provided with assistive-listening systems for people with hearing impairments. (1104B.2)
313. Provide _____ personal receivers for people with hearing impairments (at least 4% of the total number of seats but no fewer than two). (1104B.2.1)
314. If the assistive-listening system provided is limited to specific areas or seats, then such areas or seats shall be within a 50-foot viewing distance of the performing area. (1104B.2.3)
315. A sign which includes the International Symbol of Access for Hearing Impaired and wording that states "Assistive-Listening System Available" shall be posted in a prominent place indicating the availability of assistive-listening devices. (1104B.2.4, Fig 11B-14B)

316. If portable assistive-listening systems are used for conference or meeting rooms, the system may serve more than one room. However, permanently installed assistive-listening systems are required in areas if (1) they accommodate at least 50 persons, or have audio-amplification systems, and (2) they have fixed seating. (1104B.2.6)

RELIGIOUS FACILITIES

317. Wheelchair access shall be provided to sanctuary areas, raised platforms, choir rooms, choir lofts, performing areas, and other similar areas. (1104B.6.2.2)
318. Assembly areas and enclosed and unenclosed platforms and stages in assembly areas shall be made accessible to persons with disabilities. (1104B.6.3)
319. Provide _____ spaces for people using wheelchairs at (. 1104B.6.2.1 & 1104B.3.1)
320. Classrooms and offices shall have entry doors that conform to the requirements in Section 1003.3.1. (1104B.6.4)

DINING, BANQUET, & BAR FACILITIES

NOTE: In existing dining, banquet and bar facilities, when the enforcing agency determines that compliance with this section would create an unreasonable hardship, an exception shall be granted provided that a minimum of 75 percent of the dining, banquet and bar area shall be a common level throughout or shall be connected by pedestrian ramps, passenger elevators or special lifts. (1104B.5)

321. Wheelchair access shall be provided to all areas where a different type of functional activity occurs. Provide wheelchair access to _____. (1104B.5.3)
322. Provide _____ seats/spaces for people using wheelchairs (at least one space for each 20 seats, with at least one space per functional area) integrated with general seating to avoid having one area specifically highlighted as the area for person with disabilities. (1104B.5.4)
323. Access to disabled seating shall be provided with main aisles not less than 36" in clear width. (1104B.5.4)
324. Food service aisles shall be a minimum of 36" in clear width with a preferred width of 42" where passage of stopped wheelchairs by pedestrians is desired. Tray slides shall be mounted no higher than 34" above the floor. If self-service shelves are provided, a reasonable portion must be within the ranges shown in Fig. 11B-16. (1104B.5.5)
325. Tableware, dishware, condiments, food and beverage display shelves and dispensing devices, when located on tables or counter tops, shall be placed 28" to 34" above the adjacent floor. These items, when located on shelves, shall be placed no higher than 54" above the adjacent floor, where not required to reach over an obstruction, and no higher than 46" above the adjacent floor when required to reach over an obstruction. An obstruction which a disabled person is required to reach over shall be no higher than 34" above the adjacent floor with a horizontal reach over the obstruction of no more than 24". (1104B.5.6, Fig 11B-17)
326. Access to food preparation areas shall comply with the provisions for entrance doors and doorways in Section 1004, and aisles in Section 1004.3.2 and 1004.3.2.2. (1104B.5.8)

EDUCATIONAL & LIBRARY FACILITIES

327. Teaching facility cubicles, study carrels, etc., shall have 5%, but always at least one cubicles or carrel in each group (language, dental, audio-visual, typing, drafting, darkrooms, etc.) made accessible to and usable by persons with disabilities in compliance with Sections 1118B & 1122B. (1106B.3)
328. Laboratory rooms shall have at least one work station and at least 5% of all work stations accessible. (1106B.2)
329. Library general use areas such as those housing card files, book stacks, periodicals, reading and reference areas, information desks, circulation counters, etc., shall be made accessible. (1106B.4.1)
330. Open book stacks available for customer use may be of normal heights and shall have main aisles no less than 44" in width and side, range and end aisles no less than 36" in width. (1106B.4.2)
331. Reach heights at card catalogs and magazine displays, shall be between 15" and 48" for forward reach and between 9" and 54" for side reach with reach over obstruction in accordance with Figure 11B-5C & 11B-5D. (1106B.4.4)
332. Unless an attendant is available to assist persons with disabilities, all book shelving shall be located not more than 54" above the floor. (1106B.4.3)

HAZARDOUS FACILITIES

333. Areas that are used by the public as customers, clients, visitors or which are potential places of employment, shall be accessible. (1108B)

MEDICAL CARE FACILITIES

334. At least one accessible entrance shall be protected from the weather by a canopy or roof overhang. Such entrances shall incorporate a passenger loading zone. Passenger loading zones shall provide an access aisle at least 60" wide and 20' long adjacent and parallel to the vehicle pull-up space. If there are curbs between the access aisle and the vehicle pull-up space, then a curb ramp complying with Sections 1127B.5 and 1131B shall be provided. Vehicle standing spaces and access aisles shall be level with surface slopes not exceeding 1:50 in all directions. A minimum vertical clearance of 114" at accessible passenger loading zones and along vehicle access routes to such areas from site entrance shall be provided. (1109B.2)
335. Long-Term-Care facilities, including skilled nursing facilities, intermediate care facilities, bed and care, and nursing homes shall have at least 50% of patient bedrooms and toilet rooms, and all public use and common use areas, accessible. (1109B.3.1)
336. General purpose hospitals, psychiatric facilities, and detoxification facilities shall have at least 10% of patient bedrooms and toilets, and all public use and common use areas accessible. (1109B.3.2)

337. Hospitals and rehabilitation facilities that specialize in treating conditions that affect mobility, or units within either that specialize in treating conditions that affect mobility shall have all patient bedrooms and toilets and all public use and common use areas accessible. (1109B.3.3)
338. Accessible patient bedrooms shall comply with the following: (1109B.4)
- a. Each bedroom shall have a turning space measuring 60" clear in diameter, or a T-shaped space complying with Figure 11B-12. In rooms with two beds, it is preferable that this space be located between beds. (1109B.4.1)
 - b. Each bedroom shall have a minimum clear floor space of 36" along each side of the bed, and shall provide an accessible route to each side of the bed (except the head side). (1109B.4.2)
 - c. Each bedroom shall have an accessible door that complies with Sections 1133B.2 and 1003.3.1 (1109B.4.3)
339. Patient toilet rooms required to be accessible shall comply with Section 1115B. (1109B.5)
340. Diagnostic and treatment areas and, where applicable, at least one dressing room, sanitary facility, etc., for each unit or suite, shall be made accessible. (1109B.6)

RECREATIONAL FACILITIES

341. A minimum of two campsites and no fewer than three campsites for each hundred campsites provided, shall be accessible by level path or ramp and shall have travel routes with slopes not exceeding 1:12 to sanitary facilities. Permanent sanitary facilities serving campgrounds shall be accessible to wheelchair occupants (1132B.2.1)
342. Beaches, picnic areas, day-use areas, vista points, and similar areas shall be accessible. (1132B.2.2)
343. Sanitary facilities shall be made accessible, to the extent that such facilities are provided, in each public use area that is accessible to wheelchair occupants by automobile, walks, or other paths of travel. (1132B.2.3)
344. Boat docks, fishing pier, etc., shall be accessible. (1132B.2.4)
345. Parking lots shall be provided with accessible parking spaces and with curb cuts leading to all adjacent walks, paths, or trails. (1132B.2.5)
346. Trails, paths, and nature walk areas, or portions of these, shall be constructed with gradients which will permit at least partial use by wheelchair occupants. Hard surface paths or walks shall be provided to serve buildings and other functional areas. (1132B.2.6)
347. Nature trails and similar educational and informational areas shall be accessible to the blind by the provision of rope guidelines, raised Arabic numerals and symbols for identification, information signs, and related guide and assistance devices. (1132B.2.7)

SALES FACILITIES

NOTE: General sales, display and office areas shall be made accessible. (1110B.1)

348. Employees work stations shall be located on accessible levels and shall be sized and arranged to provide access to employees in wheelchairs. (1110B.1.2)

349. The customer side of sales and checkout stations shall be accessible. (1110B.1.2)

350. In new construction, provide _____ accessible check stands. Check stands, including service counters requiring a surface for transactions, shall be made accessible by providing a minimum 36" aisle on the customer side of the check stand with an adjoining counter height not exceeding 38" above the finish floor and with the top of the counter lip not to exceed 40" above the finish floor. (1110B.1.3 & T11B-2)

Table 11B-2

Total # of check stands	Total # of check stands required to be accessible
1-4	1
5-8	2
9-15	3
over 15	3 plus 20% of additional check stands over 15

351. Accessible check stands shall be identified by a sign clearly visible to those in wheelchairs which displays the International Symbol of Accessibility in white on a blue background and shall state "This check stand to be open at all times for customers with disabilities". (1110B.1.3)

352. Where "quick" check stands are provided, at least one shall be accessible. (1110B.1.3)

353. In existing buildings being remodeled, at least one checkout aisle shall be accessible in facilities with under 5000 square feet of selling space. In an existing building, with 5000 or more square feet of selling space, at least one of each design of checkout aisle shall be made accessible when altered until the number of accessible checkout aisles of each design equals the number required in new construction. (1110B.1.3)

354. Where fitting or dressing rooms are provided for male or female customers, patients, employees, or the general public, 5 percent, but never less than one, of dressing rooms for each type of use in each cluster of dressing rooms shall be accessible by providing the following: (1110B.1.7)

- a. Entry doors conforming to the requirements of Section 1133B.2 and aisles leading to such doors conforming to Section 1133B.6.1 & 1133.6.2.

- b. Full-length mirrors at least 18" wide by 54" high, the bottom of which is no higher than 20" from the floor, and mounted in a position affording a view to a person on the bench as well as to a person in a standing position.
 - c. Clothing hooks located no higher than 48" from the floor.
 - d. A 24" by 48" bench mounted to the wall along the longer dimension of the room 17" to 19" above the floor with a clear space alongside the bench to allow a person using a wheelchair to make a parallel transfer onto the bench. The structural strength of the bench and attachments shall comply with Section 1115B.8.
 - e. A minimum clear space within the room shall be 60" in width and length. No door shall encroach into the required space.
355. Where shopping cart theft prevention barriers are utilized they shall conform to the requirements of Section 1110B.1.6.

AUTOMATIC TELLER MACHINES & POINT OF SALE MACHINES

NOTE: Automated Teller Machine (ATM) means any electronic information processing device, including a Point of Sale Machine (POS) used by a financial institution or other business entity and its customers for the primary purpose of executing financial transactions between itself and its customers. For the purpose of this section, automated teller machine includes point of sale machines used in grocery stores, ticket sales facilities, and other business entities, but does not include card reading devices located on fuel pump islands at gasoline service stations and motor vehicle fuel facilities. (1117B.7.1)

NOTE: ATM Site means that immediate area which is within or made or to be made part of an existing building or a building to be constructed, and to which one or more ATMs is or shall be affixed. (1117B.7.1.2)

NOTE: ATM Installation means a single ATM structurally affixed to a building or other structure. (1117B.7.1.3)

356. All point of sales machines used by customers for the primary purpose of executing transactions between the business entity and the customer shall be fully accessible and comply with Section 1117B.7 & Section 1110B.1.4.
357. Where ATMs are provided for the public, they shall comply with Section 1117B.7 & Section 1117B.7.2.
358. Controls for user activation shall be operable with one hand and shall not require tight grasping, twisting, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds (22.2N) of force. (1117B.7.3)
359. Instructions and all information for ATM use shall be made accessible to and independently usable by persons with vision impairments. (1117B.7.6)
360. Free standing or built-in units not having a clear space under them shall comply with the following as to reach and range. (1117B.7.4)

NOTE: ATMs allowed to be unregulated as to height in Section 1117B.7.4 through Section 1117B.7.4.3 are also exempt from requirements of Section 1117B.7.5.

361. Where one ATM is provided at a location, it shall meet the specifications of Section 4.34 of the Americans with Disabilities Act Accessibility Guidelines (ADAAG), as follows: (1117B.7.4.1)

a. The ATM shall be located so that a clear floor space of 30" by 48" is provided to allow a person using a wheelchair to make a forward approach, a parallel approach, or both (48"x 48"), to the machine. (1117B.7.4.1.1)

b. If only a forward approach is possible, operable parts of all controls shall be placed within 15" to 48" of the floor. See Section 1118B.5 for forward reach over an obstruction. (1117B.7.4.1.2)

c. If only a parallel approach is possible, operable parts of controls shall be placed as follows:

Reach depth not more than 10 inches: Where the reach depth to the operable parts of all controls as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the automated teller machine or surround is not more than 10 inches, the maximum height from the floor shall be 54 inches. (1117B.7.4.1.3.3.1)

Reach depth more than 10 inches: Where the reach depth to the operable parts of any control as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the ATM or surround is more than 10 inches, the maximum height from the floor shall be as shown in Table 11B-5. (1117B.7.4.1.3.3.2, Fig 11B-5F)

TABLE 11B-5 MAXIMUM REACH DEPTH FOR ATM's

Reach Depth (x) (inches)	Maximum Height (Y) (inches)
10	54
11	53.5
12	53
13	52.5
14	51.5
15	51
16	50.5
17	50
18	49.5
19	49
20	48.5
21	47.5
22	47
23	46.5
24	46

- d. If both a forward and parallel approach are possible, operable parts of controls shall be placed within at least one of the reach ranges specified in Sections 1117B.7.4.1.2 or 1117B.7.4.1.3.
 - e. Where bins are provided for envelopes, waste paper, or other purposes, at least one of each type provided shall comply with the applicable reach ranges specified in Sections 1117B.7.4.1.2 & 1117B.7.4.1.3 & 1117B.7.4.1.4.
 - f. Where two ATMs are provided at a location, one shall comply with Section 1117B.7.4.1 except that the highest operable part shall be 48" maximum. The second ATM is not regulated as to height, including height of display. (1117B.7.4.2)
 - g. Where three or more ATMs are provided, two shall be used to satisfy Section 1117B.7.4.2. For the additional ATMs beyond the first two, at least 50% shall comply with Section 1117B.7.4.1. The remainder are not regulated as to height, including height of display. If features provided differ from ATM to ATM, all features shall be equally represented among the accessible ATMs. (1117B.7.4.3)
362. LED, cathode ray, or other screen devices intended to be viewed by the user shall be positioned so they are readily visible to and usable by a person sitting in a wheelchair with approximate eye level of 45", and shall comply with the following requirements: (1117B.7.5)
- a. If mounted vertically or tipped no more than 30 degrees away from the viewer, the center line of screen and other screens devices shall be located a maximum of 52" above grade. (1117B.7.5.1)
 - b. If mounted at an angle between 30 degrees and 60 degrees tipped away from the viewer, the center line of screens and other screen devices shall be located a maximum of 44" above grade. (1117B.7.5.2)
 - c. If mounted at an angle between 60 degrees and 90 degrees tipped away from the viewer, the center line of screens and other screen devices shall be located a maximum of 34" above grade. (1117B.7.5.3)

FACTORIES & WAREHOUSES

363. In factories, major or principal floor areas, office areas, and sanitary facilities serving these areas shall be made accessible. (1107B.1.1 through 1107B.1.3)
364. In warehouses and miscellaneous warehousing areas which are located on the floor nearest grade and those areas on other floors that are otherwise provided with access by level entry, ramp or elevator, and office areas, and sanitary facilities serving these areas shall be made accessible. (1107B.2.1 through 1107B.2.3)

STORAGE FACILITIES & AREAS

365. If fixed storage facilities such as cabinets, shelves, closets, or drawers are provided where access is required by section 101.17.11, at least one of each type shall be accessible in terms of clear floor space, reach ranges, and hardware. Additional storage may be provided outside of required reach ranges. (1125B.1 Fig 11B-5D)

- 366. A clear floor space at least 30" by 48" that allows either a forward or parallel approach by a person using a wheelchair shall be provided at accessible storage facilities. (1125B.2 & Fig 11B-5A)
- 367. Accessible storage spaces shall be within as least one of the height ranges specified in Sections 1118B.5 and 1118B.6. (1125B.3)
- 368. Hardware for accessible storage facilities shall be within at least one of the reach ranges specified in Sections 1118B.5 and 1118B.6 and shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate the hardware shall be no greater than 5 pounds. Touch latches and U-shaped pulls are acceptable. (1125B.3, 1125B.4, 1117B.6)
- 369. Clothes rods shall be a maximum of 54" from the floor for a side approach. Where the distance from the wheelchair to the clothes rod or shelf exceeds 10", as in closets without accessible doors, the height and depth to the rod or shelf shall comply with Figure 11B-5D. (1125B.3)
- 370. The doorway providing access to storage areas shall be not less than 32" in clear width. Storage areas shall be made accessible as required in Section 1125B. (1105B.3.6)
- 371. Hardware for accessible storage facilities shall comply with Sections 1117B.6.2 through 1117.B.6.3 for clear spaces and height requirements. (1125B.4)
- 372. Hardware controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds of force. (1117B.6.4)

POLICE & FIRE DEPARTMENT FACILITIES AND COURTROOMS

- 373. Office areas, conference rooms, classrooms, dispatch rooms, and similar areas, along with related sanitary facilities, shall be made accessible. (1105B.3.5.1)
- 374. Detention-area visitor room shall be made accessible. (1105B.3.5.2)
- 375. At least one detention cell facility with supporting sanitary facilities shall be made accessible. (1105B.3.5.3)
- 376. Courtroom areas, including the judge's chambers and bench, counsel tables, jury box, witness stand, and public seating area shall be made accessible. (1105B.3.5.4)

PUBLIC UTILITY FACILITIES

- NOTE: Facilities located in operational areas which would not have any reasonable availability to or usage by persons who use wheelchairs for mobility are not subject to the wheelchair accessibility requirements of these regulations. (1105B.3.4.2)
- 377. Office areas, meeting rooms, and similar areas together with related toilet rooms, in public utility facilities, shall be made accessible. (1105B.3.4.1)
 - 378. Public tour areas, to the extent that such public tours are conducted through or about a facility, or where the public is permitted to walk in such areas, shall provide accessibility in those portions of the facility and grounds where this occurs. (1105B.3.4.2)

379. Visitor overlook facilities, orientation areas and similar public use areas, and any sanitary facilities that serve these facilities shall be made accessible. (1105B.3.4.3)
380. Where public parking is provided, spaces shall be provided for persons with disabilities as specified in Section 1129B and 1130B. (1105B.3.4.4)

GASOLINE SERVICE STATIONS (Requirements are stated in Health and Safety Code Section 13651)

381. Every new service station within 660 feet of an accessible right-of-way of any interstate or primary highway shall provide permanent public restroom facilities without charge to customers.
382. Restroom facilities shall consist of separate men's and women's room containing water closet and lavatory, and shall be usable by persons with physical disabilities as described in Title 24 of CCR.

ELEVATORS

NOTE: In buildings two or more stories in height, served by an elevator, or a building served by an elevator required by Chapter 11A or 11B or a building served by an elevator required for accessibility by Section 101.17, all elevators provided shall accommodate a wheelchair.

(1110A.1.2, 1116B.1.2)

383. Passenger elevators shall be located near a major path of travel and provisions shall be made to assure that they remain accessible and usable at all times the building is occupied.

(1110A.1.13, 1116B.1.16)

384. The car inside shall allow for the turning of a wheelchair. The minimum clear distance between walls or between wall and door, excluding return panels, shall be not less than 80" by 54" for center-opening doors, and 68" by 54" for side-slide opening doors. Minimum distance from wall to return panel shall be not less than 51".

(1110A.1.7, 1116B.1.8, Fig 11A-A)

385. Minimum clear width for elevator doors shall be 36".

(1116B.1.4, Fig 11A-A)

386. Provide the following note(s) or detail(s) on the plans:

a. A handrail shall be provided on one wall of the car, preferably the rear. The rails shall be smooth and the inside surface at least 1-1/2" clear of the walls at a nominal height between 31" and 33" above the floor.

(1116B.1.11, Fig 11A-B)

b. The centerline of elevator floor buttons shall be no higher than 54" above the finish floor for side approach and 48" for front approach. Where possible a 48 inch maximum height for elevator floor buttons is preferred.

(1110A.1.7, 1116B.1.8, Fig 11A-B)

c. Floor buttons shall be provided with visual indications to show when each call is registered. The visual indicators shall be extinguished when each call is answered.

(1110A.1.7, 1116B.1.8, Fig 11A-B)

d. Except for photo electric tube by-pass switches, emergency controls, including the emergency stop and alarm, shall be grouped in or adjacent to the bottom of the panel and shall be no lower than 2'-11" from the floor. For multiple controls only, one set must comply with these height requirement.

(1110A.1.7, 1116B.1.8, Fig 11A-B)

e. The centerline of the hall call buttons shall be no higher than 3'-6" of the floor. The buttons shall be a minimum of 3/4" in size and shall be raised 1/8" ± 1/32" above the surrounding surface. Visual indication shall be provided to show each call registered and extinguished when answered. Objects adjacent to and below hall call buttons shall not project more than 4" from the wall.

(1110A.1.9, 1116B.1.10, Fig 11B-40B)

f. The emergency telephone handset shall be positioned no higher than 4' above the floor, and the handset cord shall be a minimum of 2'-5" in length.

(1110A.1.7, 1116B.1.8)

387. Provide the following note(s) on the plans:

a. If the telephone system is located in a closed compartment, the compartment door hardware shall be of the lever type, conforming to the provisions of Section 1004.3, type of lock or latch. Emergency intercommunication shall not require voice communication.

(1116B.1.8)

- b. A car position indicator shall be provided above the car operating panel or over the opening of each car to show the position of the car in the hoistway by illumination of the indication corresponding to the landing at which the car is stopped or passing.
(3003.4.9)
- c. The car position indicator shall be on a contrasting color background and a minimum of 1/2" in height.
(3003.4.9)
- d. An audible verbal announcement or signal shall sound to tell passengers that the car is stopping or passing a floor served by the elevator. The audible signal shall be no less than 20 decibels with a frequency no higher than 1500 Hz.
(3003.4.9)
- e. The minimum illumination at the car controls, threshold, and the landing when the car and landing doors are open shall not be less than 5 foot-candles.
(1110A.1.10, 1116B.1.12)
- f. Identification for the visually impaired shall be as follows:
(1110A.1.8, 1116B.1.9, Fig 11A-B)
 - i. Passenger elevator car controls shall have a minimum dimension of 3/4" and shall be raised 1/8" ± 1/32" above the surrounding surface.
 - ii. Control buttons shall be illuminated, shall have square shoulders, and shall be activated by a mechanical motion that is detectable.
 - iii. All control buttons shall be designated by a 5/8" minimum, Arabic numeral, standard alphabet character, or standard symbol immediately to the left of the control button.
 - iv. A Braille symbol shall be located immediately below the numeral, character, or symbol.
 - v. A minimum clear space of 3/8" or other suitable means of separation shall be provided between rows of control buttons.
 - vi. The raised character shall be white on a black background.
 - vii. Controls and emergency equipment identified by raised symbols shall include, but not be limited to, door open, door close, alarm bell, emergency stop, and telephone.
 - viii. The call button for the main entry floor shall be designated by a raised star at the left of the floor designation.
- g. A visual and audible signal shall be provided at each hoistway entrance indicating to the prospective passenger the car answering the call and its direction of travel as follows:
(1110A.1.11, 1116B.1.14)
 - i. The visual signal for each direction shall be a minimum of 2-1/2" high by 2-1/2" wide, and visible from the proximity of the hall call button.
 - ii. The audible signal shall sound once for the up direction and twice for the down direction or of a configuration which distinguishes between up and down elevator travel.
 - iii. The center line of the fixture shall be located a minimum of 6' in height from the lobby floor.

- h. The use of in-car lanterns, located in or on the car door jambs, visible from the proximity of the hall call button and conforming to Sections **1110A.11 or 1116B.1.14** will be acceptable. **(1110A.1.11, 1116B.1.14)**
- i. The use of arrow shapes is preferred for visible signals. **(1110A.1.11, 1116B.1.14)**
- j. Passenger elevator landing jambs on all elevator floors shall have the number of the floor on which the jamb is located designated by raised Arabic numerals which are a minimum of 2" in height and raised Braille symbols which conform to Section 1117B.5.6 located approximately 5' above the floor on the jamb panels on both sides of the door so that they are visible from within the elevator. Raised Braille symbols shall be placed directly to the left of the corresponding raised Arabic numerals. The raised characters shall be on a contrasting background. **(1110A.1.12, 1116B.1.15)**
- k. Power-operated horizontally sliding car and hoistway doors opened and closed by automatic means shall be provided. **(3003.4.3)**
- l. Doors closed by automatic means shall be provided with a door reopening device which will function to stop and reopen a car door and adjacent hoistway door in case the car door is obstructed while closing. This reopening device shall also be capable of sensing an object or person in the path of the closing door without requiring contact for activation at a normal 5" and 29" above the floor. Door reopening devices shall remain effective for a period of not less than 20 seconds. After such an interval the doors may close in accordance with the requirements of ANSI 17.1-86 of the American Society of Mechanical Engineers (ASME) document ASME 17.1-1990. **(1110A.1.4, 1116B.1.5 Fig 11B-40B)**
- m. The minimum acceptable time from notification that a car is answering a call (lantern and audible signal) until the doors of the car start to close shall be calculated in accordance with **Sections 1110A.1.5 and 1116B.1.6**. **(1110A.1.5, 1116B.1.6, Fig 11A-C)**
- n. For cars with in-car lanterns, the total time, T, as calculated in accordance with Section **1116B.1.6**, begins when the lantern is visible from the vicinity of hall call buttons and an audible signal is sounded. **(1110A.1.5, 1116B.1.6, Fig 11A-C)**
- o. The minimum acceptable time for doors to remain fully open shall not be less than 5 seconds. **(1110A.1.6, 1116B.1.7)**
- p. The elevator shall be automatic and be provided with a self-leveling feature that will automatically bring the car to the floor landings with a tolerance of $\pm 1/2$ " under normal loading and unloading conditions. This self-leveling shall, within its zone, be entirely automatic and independent of the operating device and shall correct the overtravel or undertravel. The car shall also be maintained approximately level with the landing irrespective of load. The clearance between the car platform sill and the edge of the hoistway landing shall be no greater than 1-1/4". **(1110A.1.3, 1116B.1.2)**

EGRESS AND AREAS FOR EVACUATION ASSISTANCE

NOTE: Area of Evacuation Assistance is an accessible space which is protected from fire and smoke and which facilitates a delay in egress.

NOTE: Areas of Evacuation Assistance are not required in buildings or facilities having a supervised automatic sprinkler system. **(1114B.2.1, Exc.1)**

388. In alterations of existing buildings, Areas of Evacuation Assistance are not required. (1114B.2.1, Exc.2)
389. In buildings or portions of buildings required to be accessible, accessible means of egress shall be provided in the same number as required for exits by Chapter 10. (1114B.2.1)
390. When an exit required by Chapter 10 is not accessible, an area for evacuation assistance shall be provided and shall adjoin an accessible route of travel. (1114B.2.1)
391. An area for evacuation assistance shall be one of the following: (1114B.2.2.1)
- a. A portion of a stairway landing within a smoke-proof enclosure, complying with Section 1005.3.3. (1114B.2.2.1.1)
 - b. A portion of an exterior exit balcony located immediately adjacent to an exit stairway when the exterior exit balcony complies with Section 1006.3. Openings to the exterior of the building located within 20' of the area for evacuation assistance shall be protected with fire assemblies having a 3/4 hour fire protection rating. (1114B.2.2.1.2)
 - c. A portion of a one-hour fire-resistive corridor complying with Section 1004.3.4 located immediately adjacent to an exit enclosure. (1114B.2.2.1.3)
 - d. A vestibule located immediately adjacent to an exit enclosure and constructed to the same fire-resistive standards as required by Section 1004.3.4. (1114B.2.2.1.4)
 - e. A portion of a stairway landing within an exit enclosure which is vented to the exterior and is separated from the interior of the building by not less than one-hour fire-resistive door assemblies. (1114B.2.2.1.5)
 - f. When approved by the Building Official, an area or room which is separated from other portions of the building by a smoke barrier. Smoke barriers shall have a fire-resistive rating of not less than one hour and shall completely enclose the area or room. Doors in the smoke barrier shall be tight-fitting smoke- and draft-control assemblies having a fire-protection rating of not less than 20 minutes and shall be self-closing or automatic closing. The area or room shall be provided with an exit directly to an exit enclosure. When the room or area exits into an exit enclosure which is required to be of more than one-hour fire-resistive construction, the room or area shall have the same fire-resistive construction, including the same opening protection, as required for the adjacent exit enclosure. (1114B.2.2.1.6)
 - g. An elevator lobby complying with Section 1114B.2.3. See Item No. 7 below. (1114B.2.2.1.7)
392. Each area for evacuation assistance shall provide at least two accessible areas that are not less than 30" by 48". The area for evacuation assistance shall not encroach on any required exit width. The total number of such 30" by 48" areas per story shall not be less than one for every 200 persons of calculated occupant load served by the area for evacuation assistance. (1114B.2.2.2)
393. Each stairway adjacent to an area for evacuation assistance shall have a minimum clear width of 48" between handrails. (1114B.2.2.3)

394. Provide the following note(s) on the plans:
- a. A telephone with controlled access to a public telephone system or another method of two-way communication shall be provided between each area of refuge and the primary entry to the building. The fire department may approve a location other than the primary entry. (1114B.2.2.4.1)
 - b. Each area for evacuation assistance shall be identified by a sign which states "AREA OR EVACUATION ASSISTANCE" and the International Symbol of Accessibility. The sign shall be illuminated when exit sign illumination is required. In each area for evacuation assistance, instructions on the use of the area under emergency conditions shall be posted adjoining the two-way communication system. (1114B.2.2.5)
 - c. If emergency warning systems are required, they shall activate a means of warning for the hearing impaired. (1114B.2.4)
395. Within a building of any height or occupancy constructed in accordance with the requirements of Sections 403.1 through 403.10, an area for evacuation assistance may be located in the elevator lobby (high-rise alternative) when: (1114B.2.3.1)
- a. The area for evacuation assistance complies with the requirements for size, two-way communication, and identification as specified in Section 1114B.2.2. (1114B.2.3.1)
- AND
- b. Elevator shafts and adjacent lobbies are pressurized as required for smoke-proof enclosures in Section **1005.3.3**. Such pressurization system shall be activated by smoke detectors on each floor located in a manner approved by the building official. Pressurization equipment and its duct work within the building shall be separated from other portions of the building by a minimum two-hour fire-resistive construction. (1114B.2.3.2)
396. A method of two-way communication with both visible and audible communication, shall be provided between each area of evacuation assistance and the primary entry. A button in the area of rescue assistance shall activate both a light in the area of rescue assistance indicating that rescue has been requested and a light at the primary entry indicating that rescue is being requested. A button at the primary entry shall activate both a light at the primary entry and a light in the area of rescue assistance indicating that the request has been received. (1114B.2.2.4)



**APPENDIX
B
Code Sections
For
Apartments, Hotels,
and other
Residential Facilities**

SITE DEVELOPMENT & ACCESSIBLE ROUTE OF TRAVEL

NOTE: Accessible Route of Travel is defined as “a continuous unobstructed path connecting all accessible elements and spaces in a accessible building or facility that can be negotiated by a person with a severe disability using a wheelchair and that is also safe for and usable by persons with other disabilities. (1102A.1-A)

NOTE: Except within individual dwelling units, an accessible route of travel shall not pass through kitchens, storage rooms, restrooms, closets or other spaces used for similar spaces. (1102A.1-A)

397. At least one accessible route within the boundary of the site shall be provided from public transportation stops, accessible parking and accessible passenger loading zones, and public streets or sidewalks, to the accessible building entrance they serve. The accessible route shall, to the maximum extent feasible, coincide with the route for the general public. (1107A.2.1)

398. The accessible route of travel shall be the most practical direct route between accessible building entrances, accessible site facilities, and the accessible entrance to the site. (1107A.2.1)

399. When more than one building or facility is located on a site, accessible routes of travel shall be provided between buildings and accessible site facilities. (1107A.2.1)

400. When a building or portion of a building is required to be accessible or adaptable, an accessible route of travel shall be provided to all portions of the building, to accessible building entrances, and between the building and the public way. (1107A.2.1)

401. At least one accessible route shall connect to the following: (1107A.2.1)

- a. Accessible buildings, facilities, elements and spaces that are on the same site.
- b. Accessible building or facility entrances with all accessible spaces and elements and with all accessible dwelling units within the building or facility.

402. An accessible route shall connect at least one accessible entrance of each accessible dwelling unit with those exterior and interior spaces and facilities that serve the accessible dwelling unit. (1107A.2.1)

403. Where more than one route of travel is provided, all routes shall be accessible. (1107A.3)

EXCEPTION: Where an elevator is provided for vertical access, only one elevator is required. Where more than one elevator is provided, all elevators shall be accessible. (1107A.3)

404. At every primary public entrance and at every major junction along or leading to an accessible route of travel, there shall be a sign displaying the International Symbol of Accessibility. Signs shall indicate the direction to accessible building entrances and facilities. (1117A.3)

405. When the first floor containing dwelling units is a floor above grade, all units must be served by an accessible route. (1107A.5)

EXCEPTION: Multi-story dwelling units (townhouse type) without elevators.

(1107A.5)

406. If the building elevator is provided as a means of access to dwelling units other than dwelling units on a ground floor, then the building is an elevator building, and the elevator in the building must provide accessibility to all dwelling units in the buildings, regardless of the slope of the natural terrain.
407. In multi-story dwelling units with elevators, the story of the unit that is served by the building elevator is the primary entry to the unit. Such floor contain a bathroom or powder room usable to a person in a wheel chair. **(1107A.5)**
408. All ground floor units in non-elevator buildings must be adaptable and on an accessible route.
- EXCEPTION: In non-elevator buildings with common entrance when meeting Test No. 1 or Test No. 3 OR buildings with multiple entrances meeting Test No. 1, Test No. 2 or Test No. 3, an accessible route is not required and only 20% of the ground floor units that are not required to have accessible route shall be adaptable. The remaining ground floor dwelling units must comply with features listed in Sections **1119A.2** unless exempted by Test No. 3. **(1119A)**
409. Public-use and common-use areas serving adaptable dwelling units shall be accessible. **(1105A)**
410. All walks, **sidewalks**, halls, corridors, aisles and other spaces that are part of an accessible route shall provide a minimum clear width of 48 inches, except at doors.
- EXCEPTIONS: 1. Covered multifamily dwelling units shall provide a minimum clear width of 36 inches, except at doors.
- 2. For sidewalks or walks serving individual dwelling units in covered multifamily buildings, see Section 1120A.6.** **(1107A.4)**

ACCESSIBLE PARKING

- NOTE: Each lot or parking structure where parking is provided for clients, guests, employees or residents shall be accessible. **(1118A.1)**
411. Provide garages which serves a privately funded dwelling unit shall be accessible. Such garage is accessible if a person with a disability can exit the dwelling unit's accessible entry door and enter the garage from the driveways. **(1104A.1)**
412. Accessible parking spaces shall be located on the shortest possible accessible route of travel to an accessible building entrance. When practical, the accessible route of travel shall not cross lanes for vehicular traffic. When crossing vehicular traffic lanes is necessary, the route of travel shall be designated and marked as a crosswalk. **(1118A.1)**
413. Provide _____ disabled parking space(s) for residents. (2% of the covered number of dwelling units). A minimum of one parking space is required for each site parking amenity. Signage is not required. **(1118A.1)**

414. Provide _____ disabled parking space(s) for visitors (5% of the **visitor parking**). Signage is required and shall not be blocked from view by a vehicle parked in the space. **(1118A.1)**
415. All entrances to and vertical clearances within parking structures shall have a minimum vertical clearance of 8 feet 2 inches where required for accessibility to parking spaces with physical disabilities.
- NOTE: Private garages are exempt from the vertical clearance requirement. **(1118A.2)**
416. Accessible parking spaces shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance as near as practical to the accessible entrance. **(1118A.4)**
417. Where single accessible parking spaces are provided, they shall be 14' wide and outlined to provide a 9' parking area and a 5' loading and unloading access aisle on the passenger side of the vehicle. ***The word "NO PARKING" shall be painted on the ground within each five-foot loading and unloading access aisles. This notice shall be painted in white letters not less than 12 inches high and located so that it is visible to traffic enforcement officials.*** **(1118A.4.1, Fig.11B-18B)**
418. When more than one accessible parking space is provided, in lieu of providing a 14' wide space for each parking space, two spaces can be provided within a 23' wide area lined to provide a 9' parking area on each side of a 5' loading and unloading access aisle in the center. ***The word "NO PARKING" shall be painted on the ground within each five-foot loading and unloading access aisles. This notice shall be painted in white letters not less than 12 inches high and located so that it is visible to traffic enforcement officials.*** **(1118A.4.1, Fig.11B-18A)**
419. One in every eight accessible spaces, but not less than one, shall be served by an access aisle 8' wide minimum, ***placed on the side opposite the driver's side when the vehicle is going forward into the parking space*** and shall be designated "van accessible." ***The word "NO PARKING" shall be painted on the ground within each eight-foot loading and unloading access aisles. This notice shall be painted in white letters not less than 12 inches high and located so that it is visible to traffic enforcement officials.*** **(1118A.4.2, Fig.11B-18A, 18B, 11C)**
420. The minimum length of an accessible parking space shall be 18'. **(1118.4.1, Fig.11B-18A, 18-B, 18C)**
421. Accessible parking spaces shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own. **(1118A4.3, Fig.11B-18A thru 18C)**
422. Surfaces slopes of accessible parking spaces shall be minimum possible and shall not exceed ¼" ft. **(1118A4.4)**
423. In each parking area, a bumper or curb shall be provided and located to prevent encroachment of cars over the required width of walkways. ***Ramps shall not encroach into any accessible parking space or the adjacent access aisle. The maximum cross slope in any direction for both parking space and access aisle shall not exceed 2 % slope.***

424. Every parking space required shall be identified by a sign, centered between 3 feet and 5 feet above the parking surface, at the head of the parking space. The sign shall include the international symbol of accessibility and state "RESERVED", or equivalent language. (1118A.5)
425. An additional sign shall also be posted, in a conspicuous place, at each entrance to off-street parking facilities, or immediately adjacent to and visible from each stall or space. The sign shall be not less than 17" by 22" in size with letter not less than 1" in height, which clearly and conspicuously states the following:
- "Unauthorized vehicles parked in designated accessible spaces not displaying distinguishing placards or license plates issued for persons with disabilities may be towed away at the owner's expense. Towed vehicles may be reclaimed at _____ or by telephoning _____."
- (1118A.5)
426. The surface of each accessible parking space or stall shall have a surface identification duplicating either of the following schemes:
- a. By outlining or painting the stall or space in blue and outlining on the ground in the stall or space in white or suitable contrasting color a profile view depicting a wheelchair with occupant. (1118A.5#1)
 - b. By outlining a profile view of a wheelchair with occupant in white on blue background. The profile view shall be located so that it is visible to a traffic enforcement officer when a vehicle is properly parked in the space and shall be 36" high by 36" wide. (1118A.5#2)

WALKS AND SIDEWALKS

427. Walks and sidewalks shall have a continuous common surface, not interrupted by steps or by abrupt changes in level exceeding 1/2". (1120A.6.1)
428. Sidewalks serving **individual** dwelling units in covered multifamily building shall be 36" minimum in clear width. All other sidewalks shall be 48" minimum in clear width. (1120A.6.1, 1120A.6.1.#3(Except.))
429. Walk and sidewalk surface cross slopes shall not exceed 1/4" per foot. Where due to local conditions create unreasonable hardship, the cross slope may be increased to a maximum of 1/2" per foot for distances not to exceed 20 feet. (1120A.6.1#3)
430. Walk and sidewalk surfaces shall be slip-resistant as follows: (1120A.6.1)
- a. Surfaces with a slope of less than 6% gradient shall be at least as slip-resistant as that described as a medium salted finish. (1120A.6.1.#1)
 - b. Surfaces with a slope of 6% or greater gradient shall be slip-resistant. (1120A.6.1.#2)

431. Walks, sidewalks, and pedestrian ways shall be free of gratings whenever possible. For gratings located in the surface of any of these areas, grid openings in gratings shall be limited to ½" in the direction of traffic flow. (1120A.6.2)
432. When the slope in the direction of travel of any walk exceeds 1 vertical to 20 horizontal (5% slope), it shall comply with the provisions of Section 1120A.5, Ramps. (1120A.6.3)
433. All walks with continuous gradients shall have level areas at least 5 feet in length at intervals of at least every 400 feet. (1120A.6.6)
434. Walks shall be provided with a level area not less than 60"x 60" at a door or gate that swings toward the walk, and not less than 48" wide by 44" deep at a door or gate that swings away from the walk. Such walks shall extend 24" to the side of the strike edge of a door or gate that swings toward the walk. (1120A.6.5, Fig 11B-19A thru 11B-22, 11B-26B)
435. **Abrupt** changes in level along any accessible route shall not exceed 1/2 inch. When changes in level do occur, they shall be beveled with a slope no greater than 1 unit vertical in 2 units horizontal (50% slope), except that level changes not exceeding 1/4 inch may be vertical. When changes in levels greater than ½ inch are necessary, they shall comply with the requirements for curb ramps. (1120A.6.4.1)

CURB RAMPS

- NOTE: Curb Ramp is defined as a sloping pedestrian way, intended for pedestrian traffic which provides access between a walk or sidewalk to a surface located above or below an adjacent curb face. (1102A3-C)
- NOTE: Curb Ramps shall be constructed where a pedestrian way crosses a curb. The preferred and recommended location for a curb ramp is in the center of the crosswalk or each street corner. Where it is necessary to locate a curb ramp in the center of the curb return and the street surfaces are marked to identify pedestrian crosswalks, the lower end of the curb ramp shall terminate within such crosswalk areas. (1117A.4.1)
436. Provide a curb ramp at _____ . (1117A.4.1)
437. Curb ramps shall be a minimum of 4' in width and shall lie, generally, in a single sloped plane, with a minimum of surface warping and cross slope. (1117A.4.2)
438. The slope of curb ramps shall not exceed 1 vertical to 12 horizontal. (1117A.4.3, 1117A.4.5)
439. Transitions from ramps to walks, gutters, or streets shall be flush and free of abrupt changes, except that the lower end of each curb ramp shall have a ½" lip beveled at 45 degrees. (1117A.4.3)
440. Curb ramp located where pedestrians must walk across the ramp, shall have flared sides; the maximum slope of the flare shall be 1 unit vertical in 10 units horizontal (10% slope). Curb ramps with returned curbs can be used where pedestrians would not normally walk across the ramp. (1117A.4.3)

441. A level landing 4' deep shall be provided at the upper end of each curb ramp over its full width to permit safe egress from the ramp surface, or the slope of the fanned or flared sides of the curb ramp shall not exceed 1 unit vertical to 12 units horizontal. (1117A.4.4)
442. The surface of each curb ramp and its flared sides shall be stable, firm, and slip-resistant and shall be of contrasting finish from that of the adjacent sidewalk. (1117A.4.6)
443. A curb ramp shall have a detectable warning that extends the full width and depth of the curb ramp inside the grooved border when the ramp slope is less than 1 vertical to 15 horizontal. Detectable warnings shall consist of raised truncated domes with a diameter of nominal 0.9", a height of nominal 0.2", and a center-to-center spacing of nominal 2.35", and shall contrast visually with adjoining surfaces either light-on-dark or dark-on-light. Warning surfaces shall be of the **Table IV** of Standard No. **595B**. Where the color value contrast between the yellow warning and the main walking surface is less than 70 percent, a 1" wide black strip shall separate the yellow warning from the main walking surface.
Only approved DSA/AC detectable warning products and directional surfaces shall be installed. (1117A.4.7)
444. Curb ramps shall be located to prevent their obstruction by parked cars. Built-up-curb ramps shall be located so that they do not project into vehicular traffic lanes. (1117A.4.8)

RAMPS (EXTERIOR OR INTERIOR)

- NOTE: Any path of travel shall be considered a ramp if its slope is greater than 1 unit vertical in 20 units horizontal run. The least possible slope shall be used for any ramp. (1120A.6.3)
445. The maximum slope of a ramp that serves any exit way, provides access for persons with disabilities, or is in the path of travel shall be 1' rise in 12' of horizontal run. (1120A.5.4)
446. The cross slope of ramp surfaces shall be no greater than 1 unit vertical in 50 units horizontal (2% slope). (1120A.5.4.1)
447. The width of ramps shall be as required for stairways and exits. (1120A.5.1, 1120A.5.2)
448. Pedestrian ramps serving primary entrances to buildings having an occupant load of 300 or more shall have a minimum clear width of 60". (1120A.5.3)
449. Ramps serving Group R occupancies may be 36" clear width when the occupant load is 50 or less. (1120A.5.3)
450. All other pedestrian ramps serving primary entrances shall be a minimum width of 48". (1120A.5.3)
451. Landings shall be provided at the top and bottom of each ramp. (1120A.5.5.1)
452. Intermediate landings shall be provided at intervals not exceeding 30" of vertical rise and at each change of direction.
Intermediate and bottom landings in the change of direction in excess of 30° shall have a dimension in the direction of ramp run of not less than 72" to accommodate the handrail extension. Other intermediate landings shall have a dimension in the direction of ramp run of not less than 60". (1120A.5.5.1, 1120A.5.5.6, 1120A.5.5.7)

453. Top landings shall not be less than 60" wide and shall have a length of not less than 60" in the direction of ramp run. In **covered multi-family** buildings, the top landing shall not be less than 60" wide and shall have a length of 44" in the direction of ramp run. The top landing width shall extend a minimum of 24" past the strike edge of the door. (1120A.5.5.2 Except)
454. The width of the landing shall extend 24" past the strike edge of any door or gate for exterior ramps and 18" past the strike edge for interior ramps. (1120A.5.5.4)
455. Handrails are required on ramps that provide access if slope exceeds 1 foot rise in 20 feet of horizontal run (5% slope). (1120A.5.6)
456. Handrails shall be placed on each side of each ramp, shall be continuous the full length of the ramp, shall be 34" to 38" above the ramp surface, shall extend a minimum of 1' beyond the top and bottom of the ramp, and the ends shall be returned. (1120A.5.6)
457. The grip portion of handrails shall be not less than 1¼" nor more than 1½" nominal diameter, or the shape shall be smooth with no sharp corners. Handrails shall not rotate within their fittings. (1120A.5.6)
458. Any wall or other surface adjacent to handrails shall be free of sharp or abrasive elements. Edges shall have a minimum radius of 1/8". (1120A.5.6)
459. Where the ramp surface is not bounded by a wall or fence and the ramp exceeds 10' in length, the ramp shall comply with one of the following requirements. (1120A.5.7, Fig. 11B-27(b) & (c))
- a. A guide curb a minimum of 2" in height shall be provided at each side of the ramp; (1120A.5.7.1)
 - b. A wheel guide rail shall be provided, centered 3" ± 1" above the surface of the ramp. (1120A.5.7.2)

DOORS

460. **Every** primary entrance to a dwelling unit required to be accessible shall be provided with a door buzzer, bell, chime or equivalent installation, mounted a maximum of 48 inches above the floor, connected to permanent wiring. (1106A.1)
461. Recessed doormats must be adequately anchored to prevent interference with wheelchair traffic. (1120A.1.3)
462. Exit door may be provided with a night latch, dead bolt or security chain provided such devices are openable inside without the use of a key or tool and mounted at a height not to exceed 48" above finished floor. (1120A.2.1, 1003.3.1.8)
463. **Every required exit doorway shall be of a size as to permit the installation of a door not less than 3 feet in width and not less than 6 feet 8 inches in height. When installed, such door 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". In computing the exit width required by Sec.1003.2.3 the net dimensions of the exit way shall be used.** (1120A.2.2)

464. In covered multi-family dwelling units, doors and openings other than primary entrances within units shall provide a minimum of 32" nominal clear space, measured between the face of the door and the stop, when the door is in the 90-degree open position. A 34-inch door is acceptable. The nominal 32-inch clear opening provided by a standard 6-foot sliding patio door assembly is acceptable. (1109A.1Except)
465. Where a pair of doors is utilized, at least one of the doors shall provide a clear, unobstructed opening width of 32" with the leaf positioned at an angle of 90 degrees from its closed position. (1120A.2.3.1)
466. The floor or landing shall not be more than ½" lower than the threshold of the door way. (1120A.2.4)
467. Except as provided at the primary entrance thresholds at exterior doors, including sliding door tracks, shall be no higher than ¾". Thresholds and changes in level at these locations shall be beveled with a slope no greater than 1 unit vertical in 2 units horizontal. (1120A.2.4 Except 3)
468. Exterior deck, patio or balcony surfaces shall be no more than 4 inches below the floor level of the interior of the dwelling unit. Change in level greater than ½" shall be accomplished by means of a ramp. (1120A.2.4 Except 4)
469. The floor or landing at each side of an exit door shall be level and having a length in the direction of the door swing of at least 60 inches and the length opposite the direction of the door swing of 44 inches as measured at right angles to the plane of the door in its closed position.

EXCEPTIONS: 1. In Group R occupancies, the level area shall have a length both in the direction of door swing and opposite the direction of the door swing of 44" as measured at right angles to the plane of the door in its closed position.

2. In buildings containing covered multifamily dwelling units, the floor or landing immediately outside the entry may be sloped up to 1/8 inch per foot, in a direction away from the primary entrance of the dwelling unit for drainage.

3. Interior passage door(s) in individual Group R, Division 3, and Group U Occupancies and within individual units of Group R, Division 1 Occupancies, such length need not to exceed 36 inches. (1120A.2.4.2 Except 1, 2, 3)

470. The width of the level area on the side to which the door swings shall extend 24" past the strike edge of the door for exterior doors and 18" past the strike edge for interior doors. (1120A.2.4.3)
471. Maximum effort to operate doors shall not exceed 8-1/2 pounds for exterior doors and 5 pounds for interior doors, such pull or push effort being applied at right angles to hinged doors and at the center plane of sliding or folding doors. Compensating devices or automatic door operators may be utilized to meet the above standards. When fire doors are required, the maximum effort to operate the door may be increased to the minimum allowable by the appropriate administrative authority, not to exceed 15 pounds. (1120A.2.5)
472. The bottom 10" of all doors except automatic and sliding shall have a smooth, uninterrupted surface to allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition. Where narrow frame doors are used, a 10" high smooth panel shall be installed on the push side of the door, which will allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition. (1120A.2.6)

KITCHENS

NOTE: Kitchens within adaptable dwelling units shall be accessible.

(1112A.1)

473. Kitchens in covered multi-family dwelling units that are required to provide access to persons with physical disabilities shall have a clear space 30 inches by 48 inches that allows a parallel approach by a person in a wheelchair at the range or cook top and either a parallel or forward approach at the oven, dishwasher, refrigerator/freezer and trash compactor. (1112A.2)
474. For U-shaped with a range or cook top at the base of the U, a 60 inch clear width between cabinet fronts, appliances or fixtures shall be provided to allow a parallel approach, or base cabinets shall be removable at that location to a height of 27 inches above the floor to allow knee space for a forward approach. Base cabinets directly under kitchen sink counter area, including toeboard and shelving, shall be removable without the use of special tools or knowledge to provide clearance for a wheelchair. Finished flooring shall be installed on the floor beneath such countertop. A minimum clear space of 48" shall be provided for all other kitchen designs. (1112A.2 Except.)
475. A minimum linear length of 30 inches of counter top shall be provided for the kitchen sink, and a minimum linear length of 30 inches of countertop shall be provided for a work surface both of which shall be designed to enable repositioning to a minimum height of 28 inches. The base cabinets directly under sink and work surface counter areas which are designed for repositioning shall be removable to provide clearance for a wheelchair. (1112A.4)
476. Only 5% of **covered multifamily apartment** house dwelling units that are required to be accessible are required to comply with the requirements of repositionable counter tops per item 3 **above**. (1112A.4 Except. 1)
477. Stone, cultured stone and tiled counter tops may be used without meeting the repositioning requirements per item 3. (1112A.4 Except. 2)
478. Two 15-inch minimum width breadboards may be provided in lieu of the required 30 inches of counter top work surface per item 3. (1112A.4 Except. 3)
479. Lower shelving and/or drawer space shall be provided in the kitchen at a height of no more than 48 inches. (1112A.5)
480. Base cabinets directly below kitchen sink counter area shall be removable without the use of specialized tools. Finished flooring shall be provided on the floor beneath the counter top. (1112A.6)
481. Kitchen sink faucet controls shall be operable with one hand and shall not require grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbs. Lever-operated, push-type and electronically controlled mechanisms are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds. (1112A.3)

BATHROOMS

482. Bathroom entrance doorways shall have an 18" clear space to the side of the strike edge of the door on the swing side of the door and meet other requirements of section 1120A.2.
(T1109A.2-1#1, **T1109A.2-2#1**)
483. There shall be sufficient maneuvering space for a person using a wheelchair or other mobility aid to enter and close the door, use the fixtures, reopen the door, and exit. Doors may swing into the clear space provided at any fixture if the maneuvering space is provided. Maneuvering spaces may include any knee space or toe space available below bathroom fixtures.
(T1109A.2-1#2, **T1109A.2-2#2**)
484. Where the door swings into the bathroom, there shall be a clear space (approximately 30" by 48") within the room to position a wheelchair or other mobility aid clear of the path of the door as it is closed and to permit use of fixtures.
(T1109A.2-1#3, **T1109A.2-2#3**)
485. Reinforced walls for grab bars as shown in Section 1109A.5.
(T1109A.2-1#6,#8, **T1109A.2-2#7,#9**)
486. There shall be a minimum clear space 48" parallel by 30" perpendicular to the side of a bathtub or bathtub-shower combination (measured from the foot of the bathtub) to provide for the maneuvering of a wheelchair and transfer to and from the bathing facilities, which may include the maneuverable area under the lavatory.
(T1109A.2-1#4, T1109A.2-2#5)
487. The water closet shall be located in a space 36" in clear width with 48" of clear space provided in front of the water closet. This space may include maneuverable space under a lavatory, arranged so as not to impede access. Doors shall not infringe on the above clearances. The minimum height of water closet seats shall be 15" above the floor.
(1109A.3)
488. ***Water closet controls for the flush valves shall be mounted on the wide side of toilet areas, no more than 44" above the floor. The force required to activate controls shall be no greater than 5-pound force.***
(1109A.3.1)
489. ***At least one accessible lavatory shall be provided within any toilet facility. Where mirrors and towel fixtures are provided at least one of each shall be accessible.***
(1109A.4)
490. ***For lavatories, see Tables 1109A.2-1&1109A.2-2***
491. ***Hot water and drainpipes accessible under lavatories shall be insulated or otherwise covered. There shall be no sharp or abrasive surfaces under lavatories.***
(1109A.4.2)
492. ***Faucet controls and operation mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pound force. Lever operated, push-type, and electronically controlled mechanisms are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 sec.***
(1109A.4.3)
493. Where the toilet is not placed adjacent to a side wall the bathroom shall have provisions for installation of floor-mounted, foldaway, or similar alternative grab bars.
(1109A.6)

494. Where the powder room (a room with a toilet and a sink) is the only toilet facility located on an accessible level of a multi-story dwelling unit, it shall comply with the requirements for reinforced walls for grab bars. (1109A.6)
495. Where the toilet is placed adjacent to a side wall, reinforcement shall be installed on both sides or one side and the back. (1109A.6)
496. If reinforcement is installed at the back of the toilet, it shall be installed between 32" and 38" above the floor. The grab bar reinforcement shall be a nominal of 6" in height. The backing shall be a minimum of 40" in length. (1109A.6)
497. Reinforcement installed at the side of the toilet shall be installed 32" to 38" above the floor. The reinforcement shall be installed a maximum of 12" from the rear wall and shall extend a minimum of 26" in front of the water closet fixture. The grab bar reinforcement shall be a minimum of 6" nominal in height. (1109A.6)
498. A bathtub may be installed without surrounding walls provided reinforced areas are provided for installation of floor-mounted grab bars. (1109A.7)
499. Where a tub is installed with surrounding walls, grab bar reinforcement shall be installed on each end of the bathtub, 32" to 38" above the floor, extending a minimum of 24" aligned with the front edge of the bathtub toward the back wall of the bathtub. The grab bar reinforcement shall be a minimum of 6" nominal in height. (1109A.7)
500. Grab bar reinforcement shall be installed on the back wall of the bathtub commencing a maximum of 6" above the bathtub rim and extending upward to a point a minimum of 38" above the floor. The grab bar backing shall be installed horizontally a length to permit the installation of a 48" grab bar with each end a maximum of 6" from the end walls of the bathtub. The grab bar reinforcement material shall be a minimum of 6" nominal in height. (1109A.7)
501. When shower stall is provided in an accessible dwelling unit, at least one shower stall shall measure at least 42" wide by 48" deep with an entrance opening at least 36". When a threshold is used, it shall be a maximum of ½ inch in height and have a beveled or sloped angle not exceeding 45% from the horizontal. Maximum slope of the shower floor shall be ½ inch per foot in any direction and shall slope toward the rear to a drain located within 6 inches of the rear wall. The floor surfaces shall be of Carborundum or grit-faced tile or of material providing equivalent slip resistance. (T1109A.2-1#5, T1109A2-2#6)
502. Doors and panels of shower and bathtub enclosures shall be substantially constructed from approved, shatter-resistant materials. Hinged shower doors shall open outward. Glazing used shall be fully tempered, laminated safety glass or approved plastic. When glass is used, it shall have minimum thickness of not less than 1/8 inch when fully tempered, or 1/4 inch when laminated, and shall pass the test requirement of this part, Chapter 24 Glass and Glazing. Plastics used in doors and panels of showers and bathtub enclosures shall be of a shatter-resistant type. (T1109A.2-1#5.1, T1109A2-2#6.1)
503. Glass-walled shower stalls shall provide reinforcement for installation of floor-mounted grab bars. (1109A.8)
504. Grab bar reinforcement shall be installed continuous in the walls of adaptable showers 32" to 38" above the floor. The grab bar reinforcement material shall be a minimum 6" nominal in height. (1109A.8)

505. Only one bathroom need to be accessible provided it complies with the following additional requirements and all other bathrooms including powder rooms within the unit are on accessible route with usable entry doors. (1109A.2.2, **1109A2.4.1, T1109A2-2**)

- a. When both tub and shower fixtures are provided, at least one shall be made accessible. When two or more lavatories in a bathroom are provided, at least one shall be made accessible. (T1109A.2-2#10)
- b. Toilets shall be located in a manner that permits a grab bar to be installed on one side of the fixture. In locations where toilets are adjacent to walls or bath-tubs, the centerline of the fixture must be a minimum of 18" from the obstacle. The other (non grab bar) side of the toilet fixture must be a minimum of 18" from the finished surface of adjoining walls, vanities or from the edge of the lavatory. (T1109A.2-2#11)
- c. Vanities and lavatories shall be installed with the centerline of the fixture a minimum of 18" horizontally from an adjoining wall or fixture. The top of the fixture rim shall be a maximum of 34" above the finished floor.

Knee space shall be provided as follows:

- 1) *The knee space shall be at least 30" wide and 8" deep.*
- 2) *The knee space shall be at least 29" high at the front face and reducing to not less than 27" at the point 8" back from the front edge.*
- 3) *The knee space in this section shall be provided by one of the following:*

- A. *The space beneath the lavatory is left clear and unobstructed.*
- B. *Any cabinet beneath the lavatory is removable without the use of specialized knowledge or specialized tools or,*
- C. *Doors to the cabinet beneath the lavatory are removable or openable to provide the required unobstructed knee space.*

Toe space should be provided as follows:

- 1) *Shall be at least 30" wide and centered on the lavatory.*
- 2) *Shall be at least 17" deep, measured from the front edge.*
- 3) *Shall be at least 9" high from the floor.*

In each case, the finish floor beneath the lavatory shall be extended to the back of the wall. (T1109A.2-1#9, T1109A.2-2#12)

506. *In addition to requirements listed in T1109A2-2, all bathrooms shall conform to the following general accessibility requirements:*

- a. *Title 24, Part 3, Calif. Electrical Code requirements for light switches, electrical outlets, thermostats and other environmental controls.*
- b. *Minimum 36-inch wide accessible route within each bathroom.*
- c. *General door widths and strike side clearance consistent with Sect. 1109A.1 and 1120A.*
- d. *Wall reinforcement for future grab bar installations consistent with Sect. 1109A* (1109A2.4.1)

LAUNDRY ROOMS

507. If clothes-washing machines and clothes dryers are provided in covered multi-family buildings or dwelling units, at least one of each type of appliance shall be provided in each laundry area. Laundry rooms serving multi-family dwellings are not required to have front-loading clothes washers. (1115A.1)
508. Where front loading clothes washers are not provided, management shall provide assistive devices, on request, if necessary to permit a resident to use a top-loading clothes washer. (1115A.1)

TELEPHONE

- NOTE: On floors where public telephones are provided, at least one telephone shall be accessible. On any floor where two or more bank of multiple telephones are provided, at least one telephone in each bank shall be accessible. (1111A.1)
509. A clear floor or ground space at least 30 inches by 48 inches that allows either a forward or parallel approach by a person using a wheelchair shall be provided at the telephones. Clear floor or ground space for wheelchairs may be part of the knee space required under some objects. (1111A.2, 1111A.3)
510. The highest operable part of the telephone shall be within reach range specified in the Figure in Chapter 11B. Telephones mounted diagonally in a corner that require wheelchair users to reach diagonally shall have the highest operable part no higher than 54" above the floor. (1111A.6)
511. If telephone enclosures are provided, they may overhand the required clear floor space and comply with the following items: (1111A.7)
- a. For side approach telephones, the enclosure overhand shall be no greater than 19". The height of the lowest overhanging part shall be equal to or greater than 27". (1111A.7.1)
 - b. For forward approach telephones, if the enclosure overhang is greater than 12", then the clear width of the enclosure shall be 30" minimum, if the clear width of the enclosure is less than 30", the height of the lowest overhang part shall be equal to or greater than 27". (1111A.7.3)
 - c. Entrances to full-height enclosure shall be 30" minimum. (1111A.7.2)
512. If a total of four or more public pay telephones are provided at the interior and exterior of a site, and if at least one of the total is in an interior location, than at least one interior public text telephone shall be provided. (1111A.9)
513. Telephones shall have push-button controls where service for such equipment is available. (1111A.10)
514. The cord from the telephone to the handset shall be at least 29 inches long. (1111A.11)

515. Telephones shall be equipped with a receiver that generates a magnetic field in the area of the receiver cap. A reasonable number, but at least one on each floor or in each bank, shall be equipped with a volume control. Such telephones shall be capable of a minimum of 12 dbA and a maximum of 18 dbA above normal. If an automatic reset is provided, 18 dbA may be exceeded. Public telephones with volume control shall be hearing aid compatible and shall be identified by a sign containing a depiction of a telephone handset with radiating sound waves.
(1111A.8, Fig.11B-14B)

SWIMMING POOLS

516. Swimming pools deck areas in conjunction with privately funded multi-family dwelling must be accessible and an assisting device must be provided to assist persons with disabilities in gaining entry to the pool and shall comply with the provisions of Chapters 11B **and 31B**.
(1113A)

- 517. *Swimming pool seat requirements need to meet sec. 1104B.4.3.4***

DRINKING FOUNTAINS

- 518. *Wall-mounted and post-mounted cantilevered drinking fountains and water coolers shall have a clear knee space a minimum 30 inches in width and shall also have a minimum clear floor space 30 inches by 48 inches to allow a person in a wheelchair to approach the unit facing forward.***
(1113A.2.1)
- 519. *The spout shall provide a flow of water at least 4 inches high so as to allow the insertion of a cup or glass under the flow of water. The force required to activate controls shall be no greater than 5 pound force.***
(1113A.2.2)

ELEVATORS

NOTE: In buildings two or more stories in height, served by an elevator, or a building served by an elevator required for accessibility by Section **1109A** or serving common areas located above or below the ground floor, all elevators provided shall accommodate a wheel chair and shall comply with **Section 1110A.1.1-1110A.1.13**.
(1110A.1)

NOTE: Private elevators serving only one dwelling unit need not be accessible. (1110A.1excep)

For detailed requirements, see Supplemental Correction List No.5

SPECIAL ACCESS (WHEELCHAIR) LIFTS

NOTE: Special Access (Wheelchair) Lifts may be provided between levels, in lieu of passenger elevators, when the vertical distance between landings, structural design, and safeguards are as allowed by the State of California, **Division** of the State Architect, Access Compliance Section, the Department of Industrial Relations, Division of Occupational Safety and Health, and any applicable safety regulations of other administrative authorities having jurisdiction.

If lifts are provided, they shall be designed and constructed to facilitate unassisted entry, operation, and exit from the lift, and shall comply with restrictions and enhancements of this section in conjunction with Section 3093 to 3094.5, Part 7 of the California Code of Regulations. (1110A.2)

520. Lifts shall be designed and constructed to facilitate unassisted entry, operation, exit from the lift, and shall comply with Section 3105A(h)4, "Clear Floor or Ground Space"; Section 3105(n), "Ground and Floor Surfaces"; Section 3015A(f), "Controls and Operating Mechanisms"; and ASME A17.1, Safety Code for Elevators and Escalators, Section XX, **1996 edition**. (5107(a))

521. The lift platform or support shall be of sufficient size to accommodate large motorized wheelchairs per section 11B and shall have a rated capacity of not less than as required by ASME A17.1-Section XX, **1996 edition**.

523. There shall be a level and clear floor area or landing at each floor or level served by special access lifts to allow safe access to and exiting from the lift platform.

524. In new construction, the minimum size of landings shall be 60" by 60". Other dimensions may be substituted where it can be demonstrated that a person using a wheelchair measuring 30" by 48" can enter and operate the lift safely.

NOTE: Level and clear floor areas or landings as specified in this section shall be part of "Path of Travel" requirements.

525. The top landing shall be equipped with a device, door, or gate 42" in height. Each door or gate shall be equipped with both mechanical and electrical contacts which prevent operation of the platform unless they are properly closed.

526. "Call-Send" controls shall be provided at each landing. Where platform lifts are used to provide barrier-free path of travel requirements, they shall facilitate unassisted entry, operation, and exit from the lift.

527. Solid, smooth enclosures provided as per ASME 17.1 shall be provided for the platform lift, which provides a reasonable degree of safety for persons with disabilities using the lift and others exposed to the lift.

528. When the enclosure required in **item 7 above** is not provided because the lift serves only 2 landings, the underside of the lifting platform shall be equipped with a safety pan cover which will automatically shut off the lifting device should any obstruction under the platform interfere with its downward travel. The platform shall be provided with a 42" high solid gate at the bottom landing entrance. A smooth vertical wall or fascia shall be provided from the sill of the top landing to the bottom landing level.

529. A pit may be provided to permit the platform to stop flush with the bottom landing level (which shall be protected by a runway enclosure that extends a minimum of 42" above the top landing level), or in lieu of a pit, a ramp shall be provided which does not exceed 1" rise in 12" of horizontal run. The surface of the ramp shall have a non-skid surface.

530. The lift assembly shall be securely supported to maintain the platform in a level position and to prevent the loosening or displacement of any portion of the unit. All portions of the lift machinery shall be protected from intrusion of water.

531. The rated speed of the platform shall not exceed 20 feet per minute and the operating control shall be the constant pressure type designed so that it can be easily operated by a person with a disability. A push-bar control designed for use by persons with disabilities or a control that provides equal usability shall be provided.
532. When the lift is hydraulically operated or is of the electric-hydraulic type, releveling switches shall be provided to keep the platform level with the landing at which it has been parked.

STAIRWAYS

533. Stairways shall have handrails on each side, and every stairway required to be more than 88" in width shall be provided with not less than one intermediate handrail for each 88" of required width. Intermediate handrails shall be spaced approximately equally across the entire width of the stairway. (1003.3.6.1, 1120A.4.1)
534. Handrails shall be 34" to 38" above the nosing of the treads. (1120A.4.2.1)
535. Handrails shall extend a minimum of 12" beyond the top nosing and 12" plus the tread width beyond the bottom nosing and ends shall be returned or terminate in newel posts or safety terminals. (1120A.4.2.2 & 1120A.4.2.3)
536. Where the extension of the handrail in the direction of the stair run would create a hazard, the termination of the extension shall be made either rounded or returned smoothly to the floor, wall, or post. Where the stairs are continuous from landing to landing, the inner rail shall be continuous and need not extend out into the landing. (1120A.4.2.4)
537. The handgrip portion of handrails shall be not less than 1-1/4" nor more than 1-1/2" in cross-sectional dimension or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners. Any wall or other surface adjacent to the handrail shall be free of sharp or abrasive elements. Edges shall have a minimum radius of 1/8". (1120A.4.2.6)
538. Handrails projecting from a wall shall have a space of 1-1/2" between the wall and the handrail. Handrails may be located in a recess if the recess is a maximum of 3" deep and extends at least 18" above the top of the rail. Handrails shall not rotate within their fitting. (1120A.4.2.5)
539. The upper approach and the lower tread of each stair shall be marked by a strip of clearly contrasting color at least 2" wide placed parallel to and not more than 1" from the nose of the step or landing to alert the visually impaired. The strip shall be of material that is at least as slip resistant as the other treads of the stair. (1120A.4.3)
540. Where stairways occur outside a building, the upper approach and all treads shall be marked by a strip of clearly contrasting color at least 2" wide and placed parallel to and not more than 1" from the nose of the step or landing to alert the visually impaired. The strip shall be of a material that is at least as slip-resistant as the other treads of the stair. A painted strip shall be acceptable. (1120A.4.3)
541. All tread surfaces shall be slip-resistant. Treads shall have smooth, rounded, or chamfered exposed edges, and no abrupt edges at the nosing (lower front edge). (1120A.4.3.1)
542. The nosing shall not project more than 1-1/2" past the face of the riser below. (1120A.4.3.2)

543. *In covered multifamily buildings, open risers are not permitted on accessible routes of travel.* (1120A.4.3.3)

HAZARDS AND PROTRUDING OBJECTS

NOTE: Walks, halls, corridors, passageways, aisles or other circulation spaces shall have 80 inches minimum clear headroom. If vertical clearance of an area adjoining an accessible route is reduced to less than 80 inches nominal dimensions, a guardrail or other barrier having its leading edge at or below 27 inches above the finished floor shall be provided.

(1107A.7)

544. Abrupt changes in level, except between a walk or sidewalk and an adjacent street or driveway, exceeding 4" in a vertical dimension, such as at planters or fountains located in or adjacent to walks, sidewalks, or other pedestrian ways, shall be identified by warning curbs projecting at least 6" in height above the walk or sidewalk surface to warn the blind of a potential drop off. (1120A.7.1)
545. When a guardrail or handrail is provided, no warning curb is required when a guide rail is provided centered $3" \pm 1"$ above the surface of the walk or sidewalk, the walk is 5 percent or less gradient, or no adjacent hazard exists. (1120A.7.1)
546. Any obstruction that overhangs a pedestrian way shall be a minimum of 80" above the walking surface as measured from the bottom of the obstruction. (1120A.7.2, Fig. 11B-28)
547. Where a guy support is used parallel to a path of travel, including, but not limited to, sidewalks, a guy brace, sidewalk guy or similar device shall be used to prevent an overhanging obstruction as defined. (1120A.7.2)

CORRIDORS

548. Every corridor serving an occupant load of 10 or more shall not be less than 44 inches in width. Corridors serving an occupant load of less than 10 or corridors within privately funded multi-family dwelling units shall be at least 36 inches. (1120A.3.1, 1120A.3.2 Except)
549. Corridors that exceed 200 feet in length shall: (1120A.3.2)
- a. Have minimum clear width of 60-inches; or
 - b. Have at a central location, a 60-inch by 60-inch minimum wheelchair turning space or passing alcove; or
 - c. Have at a central location, an intervening cross or tee corridor a minimum of 44 inches in width; or
 - d. Have, at a central location, an operable door.

SWITCHES AND ELECTRICAL OUTLETS

550. The center of electrical and communication system receptacle outlets shall be installed not less than 15" or more than 48" above the floor or working platform. (E.C. 210-7(g))
551. The center of the grip of the operating handle of switches used to control light switches, thermostats, and other environmental controls shall be located no higher than 48 inches above the floor or working platform. (E.C.380-8(c))
552. The center of the grip of the operating handle of switches used to control light switches, thermostats, and other environmental controls shall be located no higher than 48 inches and no lower than 15 inches above the floor. (E.C.210-7(g))
553. If the reach is over an obstruction (for example, a kitchen base cabinet) between 20 and 25 inches in depth, the maximum height is reduced to 44 inches for forward approach, or 46 inches for side approach provided the obstruction is no more than 24 in depth from wall beneath a control. (E.C. 210-7(g), 380-8c.1)
554. The center of 15, 20, and 30-ampere electrical outlets must be installed no higher than 48 inches and no lower than 15 above the floor. If the reach is over an obstruction, comply with the same requirements specified in Item no. 2. (E.C. 210-7(g))
555. The center of fire alarm initiating devices shall be located 48 inches above the level of the floor, working platform, ground surface or sidewalk. (E.C. 760-16)

RESIDENTIAL FACILITIES

- 556. Hotels, motels, inns, dormitories, resorts, homeless shelters, halfway houses, transient group homes, and similar places of transient lodging, shall be accessible. (1111B.4)
- 557. Provide ___ fully accessible guest rooms or dormitory rooms, including sanitary facilities serving such guest rooms or dormitory rooms and _____ additional accessible rooms with roll-in showers in accordance with Table 11B-3. (1111B.4.2)

Table 11B-3

Total Number of Room	Fully Accessible Rooms	Plus Additional Accessible Rooms with Roll-In Showers
1 to 25	0	1
26 to 50	1	1
51 to 75	3	1
76 to 100	4	1
101 to 150	5	2
151 to 200	6	2
201 to 300	7	3
301 to 400	8	4
401 to 500	9	4
501 to 1,000	2% of Total	4 plus 1 for each additional 100 over 400
1,001 and over	20 +1 for each 100 over 1,000	

- 558. Accessible guest rooms or suites shall be dispersed among the various classes of sleeping accommodations to provide a range of options applicable to room sizes, costs, amenities provided, and the number of beds provided. (1111B.4.1)
- 559. When accommodations are provided with kitchen units, accessible kitchens shall be provided to those accommodations required to be accessible in conformance with Table 11B-3 and shall meet the requirement of Section 1112A. (1111B.4.4)
- 560. Provide ___ additional sleeping rooms and suites with visual alarms, notification devices and telephones for persons with hearing impairments in accordance with table 11B-4. (1111B.4.5)

Table 11B-4

Total Number of Rooms	Number of Rooms Equipped for hearing Impaired
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1,000	2% of Total
1,001 and Over	20 plus 1 for each 100 over 1,000

561. Accessible sleeping rooms shall have a 36" clear width maneuvering space located along both sides of a bed, except that where two beds are provided, this requirement can be met by providing a 36" wide maneuvering space located between the beds. ***In addition, there shall be a clear space under the bed for the use of a personal lift device. The clear space shall be on a long side of the bed adjacent to an accessible aisle. The clear space shall extend horizontally to points not more than 12 inches from each end of the bed, vertically not less than 7 inches, and not less than 30 inches deep.*** (1111B.4.3)
562. Hotel and motel bathrooms beyond those required to be fully accessible by Section 1111B.4 and Table 11B-3 are not required to be fully accessible if they provide the following features: (1111B.4.6)
- a. All bathroom fixtures are in a location that allows a person using a wheelchair measuring 30" by 48" to touch the wheelchair to any lavatory, urinal, water closet, tub, sauna, shower stall, and any other similar sanitary installation, if provided.
- AND
- b. All bathroom entrance doors have a clear opening width of 32" and shall be either sliding doors or shall be hung to swing in the direction of egress from the bathroom.
563. Dormitory rooms beyond those specified in Section 1111B.4 shall comply with the adaptability requirements of Section 1111B.5. (1111B.4.7)
564. Toilet facilities shall comply with Section 1111B.4.6 as modified for hotel, motel, and dormitory accommodations. (1111B.4.6.7)

565. Required accessible bathrooms for places of transient lodging shall comply with the following: (1111B.4.6)
- a. Doors into the accessible bathrooms shall comply with Section 1133B.2 and shall not swing into the floor space required for any fixture. (1111B.4.6.1)
 - b. All fixtures and controls shall be on an accessible route. There must be within the bathroom a clear floor space measuring 30" by 60". The clear floor spaces at fixtures and controls, the accessible route, and the turning space may overlap. (1111B.4.6.2)
 - c. If toilet stall is provided, it shall comply with Sections 1115B.7.1 or 1115B.7.2, and its water closet shall comply with Section 1115B. (1111B.4.6.3)
 - d. If a lavatory and/or mirror is provided, they shall comply with Section 1115B.9. (1111B.4.6.4)
 - e. If controls, dispensers, receptacles, or other types of equipment are provided, at least one of each shall be on an accessible route and shall comply with Section 1117B.6 (1111B.4.6.5)
 - f. If tubs or showers are provided, at least one accessible tub that complies with Section 1115B.6.1 and Section 5-1506 of the California Plumbing Code, or at least one accessible shower that complies with Section 1115B.6.2. (1111B.4.6.6)
566. All accessible sleeping rooms or suites required by Table 11B-3 shall comply with the requirements of Section 1111B.4 for hearing impaired guests. (1111B.4.2)
567. In addition to the devices required by Table 11B-3 in fully accessible sleeping rooms and suites for hearing impaired persons, the following elements are required in an additional number of rooms and suites in conformance with Table 11B-4. (1111B.4.5)
- a. Auxiliary visual alarms shall be provided and shall comply with Section 1114B.2.4. (1111B.4.5.1)
 - b. Visual notification devices shall also be provided in units, sleeping rooms, and suites to alert room occupants of incoming telephone calls and a door knock or bell. Notification devices shall not be connected to auxiliary visual alarm signal appliances. (1111B.4.5.2)
 - c. Permanently installed telephones shall have volume controls complying with Section 1117B.2.8; an accessible electrical outlet within 48" of a telephone connection shall be provided to facilitate the use of a text telephone. (1111B.4.5.3)
568. Public and common use rooms and similar areas shall be made accessible to people with disabilities. (1111B.2)
569. When recreational facilities are provided, including swimming pools, they shall comply with Sections 1104B.4.3 and 1132B.2. (1111B.3)

BATHING FACILITIES

570. Where facilities for bathing are provided for the public, clients, or employees, including showers, bathtubs, or lockers, at least one such facility, and not less than 1% of all facilities, shall be made accessible. (1115B.6)

571. Provide a clear floor space with minimum dimensions of ____ adjacent to bathtub. (1115B.6.1, Fig 11B-8)
572. Provide grab bars for bathtubs which comply with Section 1115B.B.2 through 1115B.8.4. (1115B.6.1.3, Fig 11B-9A & 11B-9B)
573. Bathtubs shall be provided with a shower spray unit having a hose at least 60" long that can be used as a fixed shower head or as a handheld shower. (1115B.6.1.5, Fig 11B-9B)
574. Provide an in-tub seat or a seat at the head end of bathtubs which is mounted securely, does not slip during use, and is designed, including attachments, to meet the requirements of Section 1115B.8.3. (1115B.6.1.2, Fig 11B-8 & 9B)
575. Faucets and other controls for bathtubs shall be located between top of tub and grab bar, shall be operable with one hand, and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds. (1115B.6.1.4, Fig 11B-9B)
576. If provided, enclosures for bathtubs shall not obstruct controls or transfer from wheelchairs onto bathtub seats or into tubs. Enclosures on bathtubs shall not have tracks mounted on their rims. (1115B.6.1.6)
577. Showers shall be either 60" minimum in width between wall surfaces and 30" minimum in depth with a full opening width on the long side, or 42" in width between wall surfaces and 48" minimum in depth with an entrance opening of 42". As an alternative, showers 60" minimum in width may be 36" minimum in depth as long as the entrance opening width is a minimum 36" (1115B.6.2.1, Fig 11B-2A)
578. Provide grab bars for compartment showers which comply with Section 1115B.8.2 thru Section 1115B.B.4 (1115B.6.2.4.5.2, Fig 11B-2A)
579. When a threshold or recessed drop is permitted, at compartment showers it shall be a maximum of ½" in height and shall be beveled or sloped at an angle not exceeding 45 degrees from the horizontal. (1115B.6.2.2., Fig 11B)
580. The maximum slope of the floor shall be 2% in any direction. Where drains are provided, grate openings shall be a minimum of ¼" and located flush with the floor space. (1115B.6.2.4.4)
581. The following compartment shower accessories shall be provided: (1115B.6.2.4.5, Fig 11B-2A)
- a. A folding seat located within 27" of the controls mounted 18" above the floor, and with a minimum space of 1" and maximum space of 1-½" allowed between the edge of the seat and any wall. When folded, the seat shall not extend more than 6" from the mounting wall. (1115B.6.2.4.5.1, Fig 11B-2A, 2B, 2C & 2D)
 - b. L-shaped grab bars located on walls adjacent to and opposite to the front edge of the seat, but not extended to include that portion of wall over seat. Grab bars shall comply with diameter, loading, and projection requirements of Section 1115B.8.2 through 1115B.8.4. Grab bars shall be not less than 24" by 36" in length, with the 36" side on the wall having the shower head and controls. (1115B.6.2.4.5.2, Fig 11B-2A & 11B -2B)
 - c. Grab bars mounted 33" to 36" above the shower floor. (1115B.6.2.4.5.2)

- d. Soap dish located on the control wall at a maximum height of 40" above the floor, and within reach limits from the seat. (1115B.6.2.4.6)
582. The following open shower accessories shall be provided:
- a. A folding seat, mounted 18" above the floor, and with a minimum space of 1" and a maximum space of 1-1/2" allowed between the edge of the seat and any wall. When folded, the seat shall not extend more than 6" from the mounting wall. *See Figure 11B-2C for seat size and configuration.* (1115B.6.2.4.5.1 & 1115B.6.3.Fig 11B-2C)
 - b. The shower located in a corner with an L-shaped or two grab bars, a minimum of 24" in length and a minimum of 36" in length, with the 36" grab bar located on the wall having the shower head and controls, but not extended to include that portion of wall over the long side of the seat. Grab bars shall be mounted between a minimum of 33" and a maximum of 36" above the shower floor. (1115B.6.2.4.5.2 & 1115B.6.3. Fig 11B-2C)
 - c. Grab bars complying with the diameter, loading, and projection requirements of Sections 1115B.8.2 through 1115B.8.4. (1115B.6.2.4.5.2)
583. Showers shall be finished with a smooth, hard, non-absorbent surface such as Portland Cement, concrete, ceramic tile or other approved material to a height of not less than 70" above the drain inlet. Materials other than structural elements used in such walls shall be of a type which is not adversely affected by moisture. (1115B.9.6)
584. A flexible shower spray unit with a hose at least 60" long shall be provided within reach range of the seat at a distance not to exceed 27" horizontally measured from the rear seat edge to the centerline of the mounting bracket. This unit shall be mounted at a maximum height of 48" (plus or minus 1") above the shower floor. (1115B.6.2.4.2, Fig 11B-2B)
585. Water controls for showers of a single lever design shall be located on the wall of the compartment adjacent to the seat and mounted at 40" (plus or minus 1") above the shower floor, and the centerline of the controls shall be within a reach range of no less than 18" and no more than 24" from the rear edge of the seat. The controls shall be operable with a maximum force of 5plf. (1115B.6.2.4.1 & 1505.1. Fig 11B-2B, Fig.11B-2C)
586. Where, within the same functional area, two or more accessible showers are provided, there shall be at least one shower constructed opposite hand from the other or others (i.e., one left hand control vs. right controls). (1115B.6.2.3)
587. Except within guest rooms and suites in hotels, motels, and similar transient lodging establishments, where accessible shower facilities are provided in areas subject to excessive vandalism, in lieu of providing the fixed flexible hose, two wall mounted shower heads shall be installed. Each shower head shall be installed so that it can be operated independently of the other and shall have swivel angle adjustments, both vertically and horizontally. One shower head shall be located at a height of 48" (plus or minus 1") above the floor. (1115B.6.2.4.3 & 5-1505.3)
588. Enclosures, when provided for shower stalls, shall not obstruct transfer from wheelchairs onto shower seats. (1115B.6.2.5)

589. Where no separate shower compartments are provided, the shower for people with disabilities shall be located in a corner with an L-shaped grab bar extending along two adjacent walls or with two grab bars, a minimum of 24" in length and a minimum of 36" in length, with the 36" grab bar located on the wall having the shower head and controls, and with a folding seat 16" \pm 1" in width, 36" \pm 1" in length, and 18" high, adjacent to the shower controls. (1115B.6.3, Fig 11B-2B)
590. Doors and panels of shower and bathtub enclosures shall be substantially constructed from approved, shatter-resistant materials. Hinged shower doors shall open outward. (1115B.9.7)
591. Glazing used in doors and panels of shower and bathtub enclosures shall be fully tempered, laminated safety glass, or approved plastic. When glass is used, it shall have a minimum thickness of not less than 1/8" when fully tempered, or 1/4" when laminated, and shall pass the test requirements of UBC Standard No. 54-2. (1115B.9.8)
592. Plastics used in doors and panels of showers and bathtub enclosures shall be of a shatter-resistant type. (1115.9.9)

LOCKERS

593. Where lockers are provided for the public, clients, employees, members or participants, at least one, and not less than 1%, of all lockers shall be made accessible to persons with disabilities, including clear space, reach range requirements, and a path of travel not less than 36" in clear width to these lockers. (1115B.6.4)