Accessibility Significant Changes

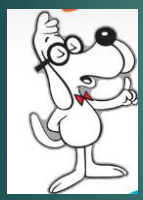
1

Shums Coda Associates

1

Instructor

2



Bill Clayton, CBO

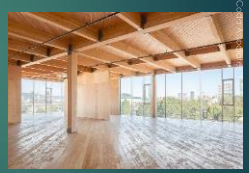
- Designer/ builder 15+ years
- Combination Inspector 34+ years
- Plans examiner 30+ years
- 22 ICBO/ICC/FEMA/State of Colorado & California certifications
- IEBC Committee 2009 & 2012
- IBC General Committee 2015
- 10+ years CBO
- 9+ years as Consultant and Instructor for CCC/Shums Coda Associates
- 7+ years ICC Instructor
- Author of Firestopping, Joint Systems and Dampers for ICC based on the 2024 I codes

2

Today's Schedule

3

- Discuss the majoraccessibility changes in the 2021 IBC, IEBC and ICC A117.1 2017
- Background behind the changes
- Application of the new requirements



3

1102
Accessibility Compliance/Design

4

- Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1.

New 2017 Edition

4

1104.4
Multistory buildings and facilities Accessible Route (added an exception)

5

- Exception 1.
- An accessible route is not required to stories, mezzanines and occupied roofs that have an aggregate area of not more than 3,000 square feet and are located above and below accessible levels. This exception shall not apply to:
- 1.5. Structures with four or more dwelling units.

5

1105.1.1
Automatic doors

6

- In facilities with the occupancies and building occupant loads indicated in Table 1105.1.1, public entrances that are required to be accessible shall have one door be either a full power-operated door or a low-energy power-operated door.
- Where the public entrance includes a vestibule, at least one door into and one door out of the vestibule shall meet the requirements of this section.

TABLE 1105.1.1
PUBLIC ENTRANCE WITH POWER-OPERATED DOOR[a]

OCCUPANCY	BUILDING OCCUPANT LOAD GREATER THAN
A-1, A-2, A-3, A-4	300
B, M, R-1	500

a. In mixed-use facilities where the total sum of the building occupant load is greater than those listed, the most restrictive building occupant load shall apply.

6

1106.8 - Parking meters and pay stations

7

- Where parking meters and pay stations serve accessible parking spaces, such parking meters and pay stations shall be accessible.

7

1107.2 Electrical vehicle charging stations

8

- Electrical vehicle charging stations shall comply with Sections 1107.2.1 and 1107.2.2.
  - Exception: Electrical vehicle charging stations provided to serve Group R-2, R-3 and R-4 occupancies are not required to comply with this section.

8

1107.2.1 Number of accessible vehicle spaces

9

- Not less than 5 percent of vehicle spaces on the site served by electrical vehicle charging systems, but not fewer than one for each type of electric vehicle charging system, shall be accessible.

9

10

1107.2.2 Vehicle space size

- Accessible vehicle spaces shall comply with the requirements for a van accessible parking space that is 132 inches minimum in width with an adjoining access aisle that is 60 inches minimum in width.

10

11

1107.3

FUEL DISPENSING SYSTEMS SHALL BE ACCESSIBLE

11

12

1108.5.1.1 Accessible units

- In Group I-1, Condition 1, at least 4 percent, but not less than one, of the dwelling units and sleeping units shall be Accessible units. Accessible dwelling units and sleeping units shall be dispersed among the various classes of units.
  - Exceptions:
  - 1. Water closets shall not be required to comply with ICC A117.1 where such water closets comply with Section 1110.2.2, in not more than 50 percent of the Accessible units.
  - 2. Roll-in-type showers shall not be required to comply with ICC A117.1 where roll-in-type showers comply with Section 1110.2.3, in not more than 50 percent of the Accessible units.

12

1108.5.1.2 - Accessible units in Group I-1, Condition 2

13

- In Group I-1, Condition 2, at least 10 percent, but not less than one, of the dwelling units and sleeping units shall be Accessible units. Accessible dwelling units and sleeping units shall be dispersed among the various classes of units.
  - Exceptions:
  - 1. Water closets shall not be required to comply with ICC A117.1 where such water closets comply with Section 1110.2.2, in not more than 50 percent of the Accessible units.
  - 2. Roll-in-type showers shall not be required to comply with ICC A117.1 where roll-in-type showers comply with Section 1110.2.3, in not more than 50 percent of the Accessible units.

13

1108.5.2.1 - Nursing Homes Accessible units

14

- At least 50 percent but not less than one of each type of the dwelling units and sleeping units shall be Accessible units.
  - Exceptions:
  - 1. Water closets shall not be required to comply with ICC A117.1 where such water closets comply with Section 1110.2.2, in not more than 90 percent of the Accessible units.
  - 2. Roll-in-type showers shall not be required to comply with ICC A117.1 where roll-in-type showers comply with Section 1110.2.3, in not more than 90 percent of the Accessible units.

14

1108.5.4 - Group I-2 rehabilitation facilities

15

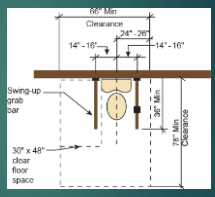
- In hospitals and rehabilitation facilities of Group I-2 occupancies that specialize in treating conditions that affect mobility, or units within either that specialize in treating conditions that affect mobility, 100 percent of the dwelling units and sleeping units shall be Accessible units.
  - Exceptions:
  - 1. Water closets shall not be required to comply with ICC A117.1 where such water closets comply with Section 1110.2.2, in not more than 50 percent of Accessible units.
  - 2. Roll-in-type showers shall not be required to comply with ICC A117.1 where roll-in-type showers comply with Section 1110.2.3, in not more than 50 percent of Accessible units.

15

1110.2
Toilet and bathing facilities

16

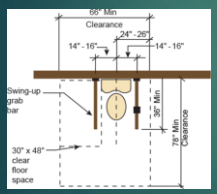
- Each toilet room and bathing room shall be accessible. …
  - New Exceptions:
  - 7. Where permitted in Section 1108, in toilet rooms or bathrooms serving Accessible units, water closets designed for assisted toileting shall comply with Section 1110.2.2.
  - 8. Where permitted in Section 1108, in bathrooms serving Accessible units, showers designed for assisted bathing shall comply with Section 1110.2.3.



16

1110.2.2 - Water closets designed for assisted toileting

17

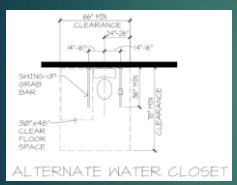


- Water closets designed for assisted toileting shall comply with Sections 1110.2.2.1 through 1110.2.2.6.

17

1110.2.2.1 Location

18

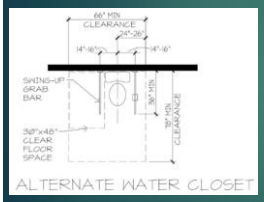


- .
- The centerline of the water closet shall be not less than 24 inches and not greater than 26 inches from one side of the required clearance.

18

1110.2.2.2 Clearance

19



ALTERNATE WATER CLOSET

- Clearance around a water closet shall be not less than 66 inches in width, measured perpendicularly from the side of the clearance that is not less than 24 inches and not greater than 26 inches from the water closet centerline.
- Clearance around the water closet shall be not less than 78 inches in depth, measured perpendicularly from the rear wall
- The required clearance around the water closet shall permit overlaps per ICC A117.1, Section 604.3.3

19

1110.2.2.3 Height

20

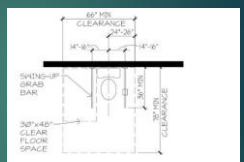
- The height of the water closet seats shall comply with ICC A117.1, Section 604.4. (17" to 19" AFF to top of seat.)

20

1110.2.2.4 Swing-up grab bars

21

- Swing-up grab bars shall comply with ICC A117.1, Sections 609.2 and 609.8. Swing-up grab bars shall be provided on both sides of the water closet and shall comply with all of the following:
  - 1. The centerline of the grab bar shall be not less than 14 inches and not greater than 16 inches from the centerline of the water closet.
  - 2. The length of the grab bar is not less than 36 inches in length, measured from the rear wall to the end of the grab bar.
  - 3. The top of the grab bar in the down position is not less than 30 inches and not greater than34 inches above the floor.



ALTERNATE WATER CLOSET

21

1110.2.2.5 Flush controls

22

- Flush controls shall comply with ICC A117.1, Section 604.6.
- *"Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 309. Flush controls shall be located on the open side of the water closet".*

22

1110.2.2.6 Dispensers

23

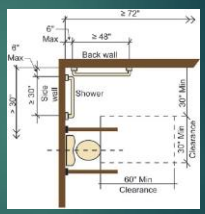
- Toilet paper dispensers shall be mounted on at least one of the swing-up grab bars and the outlet of the dispenser shall be located not less than 24 inches and not greater than 36 inches from the rear wall.

23

1110.2.3 Standard roll-in-type shower compartment designed for assisted bathing

24

- Standard roll-in-type shower compartments designed for assisted bathing shall comply with Sections 1110.2.3.1 through 1110.2.3.9.

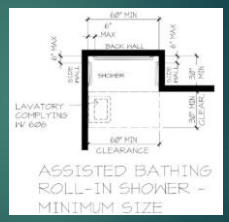


24

1110.2.3.1 Size

25

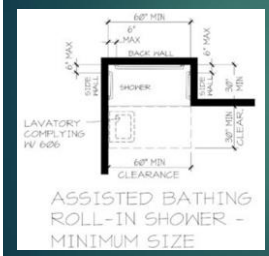
- Standard roll-in-type shower compartments shall have a clear inside dimension of not less than 60 inches in width and 30 inches in depth, measured at the center point of opposing sides. An entry not less than 60 inches in width shall be provided.



25

1110.2.3.2 Clearance

26

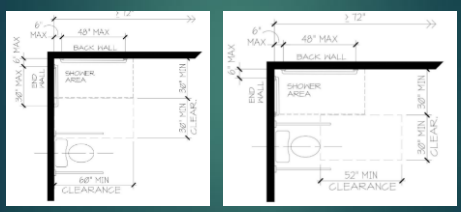


- A clearance of not less than 60 inches in length adjacent to the 60-inch width of the open face of the shower compartment, and not less than 30 inches in depth, shall be provided.
  - Exceptions:
  - 1. A lavatory complying with ICC A117.1, Section 606 shall be permitted at one end of the clearance.
  - 2. Where the shower compartment exceeds minimum sizes, the clear floor space shall be placed adjacent to the grab bars and not less than 30 inches from the back wall.

26

1110.2.3.2 Clearance (Options)

27



27

1110.2.3.5 - Controls and hand showers

28

- In standard roll-in-type showers, the controls and hand shower shall be located not less than 38 inches and not greater than 48 inches above the shower floor.
- Controls shall be located to facilitate caregiver access.

28

1110.2.3.3 Grab bars

29

- Grab bars shall comply with ICC A117.1, Section 609 and shall be provided in accordance with Sections 1110.2.3.3.1 and 1110.2.3.3.2.
- In standard roll-in-type shower compartments, grab bars shall be provided on three walls.
- Where multiple grab bars are used, required horizontal grab bars shall be installed at the same height above the floor.
- Grab bars can be separate bars or one continuous bar.

ASSISTED BATHING ROLL-IN SHOWER - MINIMUM SIZE

29

1110.2.3.5 - Controls and hand showers

30

- In standard roll-in-type showers, the controls and hand shower shall be located not less than 38 inches and not greater than 48 inches above the shower floor.
- Controls shall be located to facilitate caregiver access.

30

1110.2.3 - Standard roll-in-type shower compartment designed for assisted bathing

31

- Wall-mounted folding seats shall not be installed.
- Hand showers shall comply with ICC A117.1, Section 608.5.
- Thresholds shall comply with ICC A117.1, Section 608.6.
- Shower compartment enclosures for shower compartments shall comply with ICC A117.1, Section 608.7.
- Water temperature shall comply with ICC A117.1, Section 608.8.

31

1110.6 Bottle-filling stations

32

- Where bottle-filling stations are provided, they shall be accessible.
  - Exception: Bottle-filling stations over drinking fountains for standing persons are not required to be accessible, provided that bottle-filling stations are also located over the drinking fountains for persons using wheelchairs.

32

1110.13.2 - Sales and service counters and windows

33

- Where counters or windows are provided for sale or distribution of goods or services, at least one of each type of counter and window provided shall be accessible.
- Where such counters or windows are dispersed through-out the building or facility, accessible counters or windows shall also be dispersed.

33

1110.15 - Controls, operating mechanisms and hardware

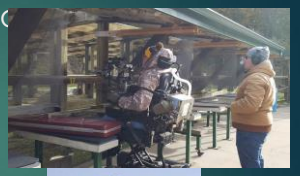
34

- Controls, operating mechanisms and hardware intended for operation by the occupant, including switches that control lighting and ventilation and electrical convenience outlets, in accessible spaces, along accessible routes or as parts of accessible elements shall be accessible.
- Exceptions 2-6 deleted
- New Exception:
- 3. Operable parts exempted in accordance with ICC A117.1 are not required to be accessible.

34

1111.4.15- Shooting facilities with firing positi

35



- Where shooting facilities with firing positions are designed and constructed at a site, at least 5 percent, but not less than one, of each type of firing position shall be accessible and be on an accessible route.
  - Exception: Shooting facilities with firing positions on free-standing platforms that are elevated more than 12 feet above grade, provided that the aggregate area of the elevated firing positions is not more than 500 square feet , are not required to be accessible.

35

1112.2 - Signs identifying toilet or bathing rooms

36

- Signs required in Section 403.4 of the International Plumbing Code identifying toilet rooms and bathing rooms shall be visual characters, raised characters and braille complying with ICC A117.1.
- Where pictograms are provided as designations for toilet rooms and bathing rooms, the pictograms shall have visual characters, raised characters and braille complying with ICC A117.1.

36

1009.6.3 Area of Refuge Size

37

- Each area of refuge shall be sized to accommodate one wheelchair space of 30 inches by 52 inches for each 200 occupants or portion thereof, based on the occupant load of the area of refuge and areas served by the area of refuge.

37

1207 - Enhanced classroom acoustics

38

- Enhanced classroom acoustics, where required by this section, shall comply with Section 808 of ICC A117.1.
- In Group E occupancies, enhanced classroom acoustics shall be provided in all classrooms with a volume of 20,000 cubic feet or less.

38

3001.2 Emergency elevator communication systems for the deaf, hard of hearing and speech impaired

39

- An emergency two-way communication system shall be provided.
- The system shall provide visible text and audible modes that meet all of the following requirements:
- 1. When operating in each mode, include a live interactive system that allows back and forth conversation between the elevator occupants and emergency personnel.
- 2. Is operational when the elevator is operational.
- 3. Allows elevator occupants to select the text-based or audible mode depending on their communication needs to interact with emergency personnel.

39


IEBC
INTERNATIONAL
EXISTING BUILDING
CODE
2021
40
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40


306 - ACCESSIBILITY FOR EXISTING BUILDINGS
41
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The provisions of Sections 306.1 through 306.7.16 apply to maintenance and repair, change of occupancy, additions and alterations to existing buildings, including those identified as historic buildings.
Entire Section reformatted
Removed redundant language with A117.1

41


306.3
Maintenance and repair
42
© 2024 Shums Coda Associates
A facility that is constructed or altered to be accessible shall be maintained accessible during occupancy.
Required accessible means of egress shall be maintained during construction, demolition, remodeling or alterations and additions to any occupied building.
Exception: Existing means of egress need not be maintained where approved temporary means of egress and accessible means of egress systems and facilities are provided.

42

306.7.2 Accessible means of egress

43

- Accessible means of egress required by Chapter 10 of the International Building Code are not required to be added in existing facilities.

43

306.3.1 - Prohibited reduction in accessibility

44

- An alteration that decreases or has the effect of decreasing accessibility of a building, facility or element, thereof, below the requirements for new construction at the time of the alteration is prohibited.
- The number of accessible elements need not exceed that required for new construction at the time of alteration.

44

306.5 Change of occupancy

45

- Existing buildings that undergo a change of group or occupancy shall comply with Section 306.7. (Alterations)
- Deleted complete change of occupancies and list of accessible features.

45

306.7.6 Accessible route

46

- Exterior accessible routes, including curb ramps, shall be not less than 36 inches minimum in width.

46

306.7.9 - Stairways and escalators in existing buildings

47

- Where an escalator or stairway is added where none existed previously and major structural modifications are necessary for installation, an accessible route complying with Section 1104.4 of the International Building Code is required between levels served by such escalator or stairway.

47

306.7.11 Toilet rooms

48

- Where it is technically infeasible to alter existing toilet rooms to be accessible, one accessible single-user toilet room or one accessible family or assisted-use toilet room constructed in accordance with Section 1110.2.1 of the International Building Code is permitted.

48

306.7.12 Bathing rooms

49

- Where it is technically infeasible to alter existing bathing rooms to be accessible, one accessible single-user bathing room or one accessible family or assisted-use bathing room constructed in accordance with Section 1110.2.1 of the International Building Code is permitted.
- This accessible bathing room shall be located on the same floor and in the same area as the existing bathing rooms.

49

306.7.12 Bathing rooms

50

- At the inaccessible bathing rooms, directional signs indicating the location of the nearest such bathing room shall be provided.
- These directional signs shall include the International Symbol of Accessibility, and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

50

306.7.16 Historic structures

51

- Where compliance with the requirements for accessible routes, entrances or toilet rooms would threaten or destroy the historic significance of the historic structure, as determined by the authority having jurisdiction, the alternative requirements of Sections 306.7.16.1 through 306.7.16.5 for that element shall be permitted.
  - Exceptions:
  - 1. Accessible means of egress required by Chapter 10 of the International Building Code are not required to be provided in historic structures.
  - 2. The altered element or space is not required to be on an accessible route, unless required by Sections 306.7.16.1 or 306.7.16.2.

51

306.7.16.1 – Historic Buildings, Site arrival points

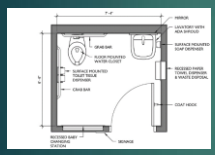
52

- Not fewer than one exterior accessible route, including curb ramps from a site arrival point to an accessible entrance, shall be provided and shall not be less than 36 inches minimum in width.

52

306.7.16.4 – Historic Buildings toilet facilities

53



- Where toilet rooms are provided, not fewer than one accessible single-user toilet room or one accessible family or assisted-use toilet room complying with Section 1110.2.1 of the International Building Code shall be provided.

53

306.7.16.5 – Historic buildings bathing facilities

54

- Where bathing rooms are provided, not fewer than one accessible single-user bathing room or one accessible family or assisted-use bathing rooms complying with Section 1110.2.1 of the International Building Code shall be provided.

54


55
ICC A117.1-2017
Standard for Accessible and Usable Buildings and Facilities
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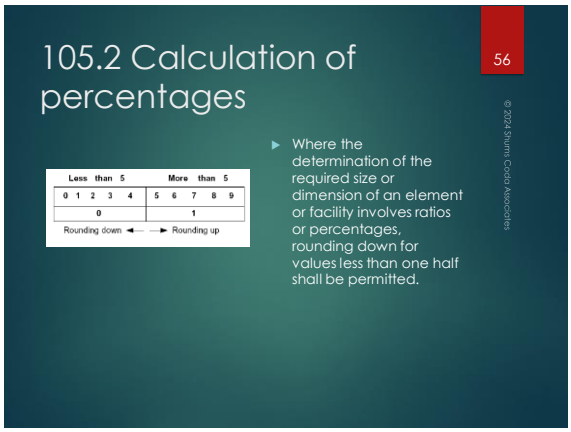
55


105.2 Calculation of percentages
56
Less than 5
More than 5
0 1 2 3 4
5 6 7 8 9
0
1
Rounding down
Rounding up
Where the determination of the required size or dimension of an element or facility involves ratios or percentages, rounding down for values less than one half shall be permitted.
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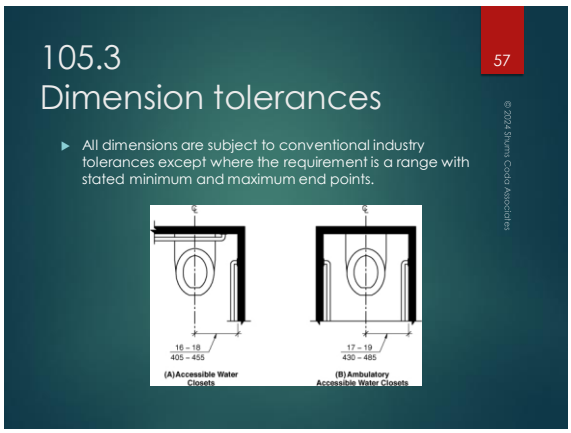
56


105.3
Dimension tolerances
57
All dimensions are subject to conventional industry tolerances except where the requirement is a range with stated minimum and maximum end points.
16 – 18
405 – 455
(A) Accessible Water Closets
17 – 19
430 – 485
(B) Ambulatory Accessible Water Closets
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57

107 Definitions

58

- Existing building:
  - A building erected prior to the date of adoption of this standard, or one for which a legal building permit has been issued.
- existing facility:
  - A facility completed prior to the date of adoption of this standard, or one for which a legal permit has been issued.

58

304.3.1.1 Turning Space -New buildings and facilities

59

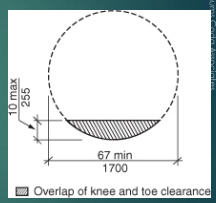
- In new buildings and facilities, the turning space shall be a circular space with a 67-inch minimum diameter.

59

304.3.1.1.1 Overlap

60

- Turning spaces shall be permitted to include knee and toe clearance complying with Section 306. Where the turning space includes knee and toe clearances under an obstruction, the overlap shall comply with all of the following:
- 1.The depth of the overlap shall not be more than 10 inches, and
- 2.The depth shall not exceed the depth of the knee and toe clearances provided, and
- 3.The overlap shall be permitted only within the turning circle area shown shaded in Figure 304.3.1.

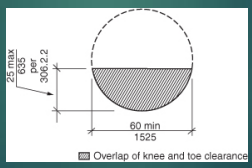


60

304.3.1.2 Existing buildings and facilities

61

- In existing buildings and facilities, the turning space shall be a circular space with a 60-inch minimum diameter.

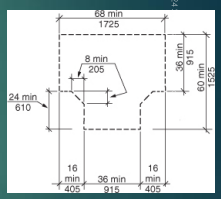


61

304.3.2.1 - New buildings and facilities

62

- In new buildings and facilities, the turning space shall be a T–shaped space complying with one of the following:
- 1. A T-shaped space, clear of obstruction, that fits within an area 68 inches wide and 60 inches deep, with two arms and one base that are all 36 inches minimum in width.
- Each arm shall extend 16 inches minimum from each side of the base located opposite the other, and the base shall extend 24 inches minimum from the arms.
- At the intersection of each arm and the base, the interior corners shall be chamfered for 8 inches minimum along both the arm and along the base.

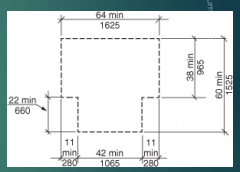


62

304.3.2.1 - New buildings and facilities

63

- 2. A T-shaped space, clear of obstruction, that fits within an area 64 inches wide and 60 inches deep, with two arms 38 inches minimum in width and a base 42 inches minimum in width.
- Each arm shall extend 11 inches minimum from each side of the base, located opposite the other, and the base shall extend 22 inches minimum from each arm.

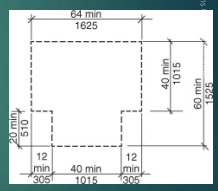


63

304.3.2.1 - New buildings and facilities

64

- 3. A T-shaped space, clear of obstruction, 64 inches wide and 60 inches deep, with two arms and one base 40 inches minimum in width.
- Each arm shall extend 12 inches minimum from each side of the base and the base shall extend 20 inches minimum from each arm.

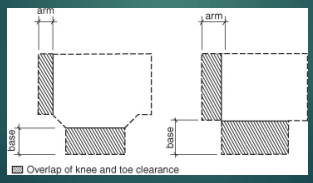


64

304.3.2.1.1 Overlap

65

- Turning spaces shall be permitted to include knee and toe clearance complying with Section 306 of either the base or one arm.
- For Option 1, the base or arm is the portion beyond the chamfer.

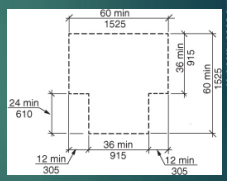


65

304.3.2.2 - Existing buildings and facilities

66

- In existing buildings and facilities, the turning space shall be a T-shaped space within a 60-inch minimum square, with arms and base 36 inches minimum in width.
- Each arm of the T shall be clear of obstructions 12 inches minimum in each direction, and the base shall be clear of obstructions 24 inches minimum.

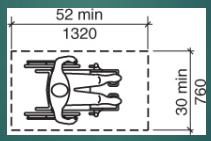


66

305.3.1 – Clear floor space in new buildings and facilities

67

- In new buildings and facilities, the clear floor space shall be 52 inches minimum in length and 30 inches minimum in width.

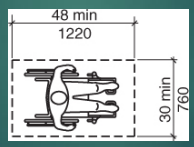


67

305.3.2 - Existing buildings and facilities

68

- In existing buildings and facilities, the clear floor space shall be 48 inches minimum in length and 30 inches minimum in width.

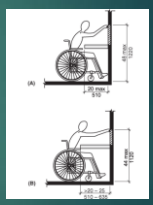


68

308.2.2 Obstructed high reach

69

- Where a high forward reach is over an obstruction, the clear floor space complying with Section 305 and knee and toe clearance complying with Section 306 shall extend beneath the element for a distance not less than the required reach depth over the obstruction.
- The high forward reach shall be 48 inches maximum above the floor where the reach depth over the obstruction is 20 inches maximum. The high forward reach shall be 44 inches maximum above the floor where the reach depth over the obstruction is greater than 20 inches and not more than 25 inches maximum.



69

308.3.1 Unobstructed side reach

70

- Where a clear floor space complying with Section 305 allows a parallel approach to an element and the edge of the clear floor space is 10 inches maximum from the element, the high side reach shall be 48 inches maximum and the low side reach shall be 15 inches minimum above the floor.
  - New Exception:
  - 2. Operable parts on fuel dispensers installed on existing curbs shall be permitted at 54 inches maximum above the floor.

70

309.1 Operable parts

71

- Operable parts shall comply with Section 309.
- Exceptions:
- 1. Receptacle outlets serving a dedicated use.
- 2. Where two or more receptacle outlets are provided in a kitchen above a length of countertop that is uninterrupted by a sink or appliance, one receptacle outlet shall not be required to comply with this section.
- 3. In a kitchen, where a clear floor space for a parallel approach cannot be located at a countertop in a corner between appliances, receptacle outlets over the countertop shall not be required to comply with this section provided that the countertop area does not exceed 9 square feet maximum.
- 4. Floor receptacle outlets.

71

309.1 Operable parts (Exc. Cont.)

72

- 5. HVAC diffusers.
- 6. Controls mounted on ceiling fans.
- 7. Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to comply with this section.
- 8. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
- 9. Electrical panelboards shall not be required to comply with Section 309.4.
- 10. Emergency aid devices, such as fire department hose connections, valve controls, gauges, police call boxes and annunciator panels shall not be required to comply with this section provided that they are used only for emergencies by emergency personnel acting in their official capacity

72

403.5.1 Accessible clear width

73

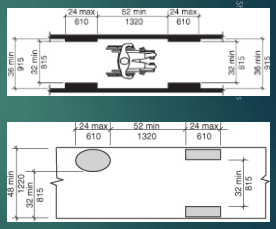
- The clear width of an interior accessible route shall be 36 inches minimum.
- The clear width of an exterior accessible route shall be 48 inches minimum.

73

403.5.1 Accessible clear width

74

- Exceptions:
- 1. In new buildings and facilities, the clear width shall be permitted to be reduced to 32 inches minimum for a length of 24 inches maximum provided the reduced-width segments are separated by segments that are 52 inches minimum in length and 36 inches minimum in width.

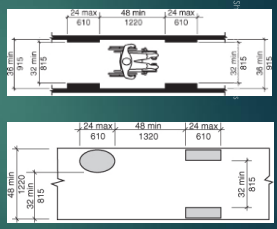


74

403.5.1 Accessible clear width

75

- 2. In existing buildings and facilities, the clear width shall be permitted to be reduced to 32 inches minimum for a length of 24 inches maximum provided the reduced width segments are separated by segments that are 48 inches minimum in length and 36 inches minimum in width.



75

403.5.1 Accessible clear width

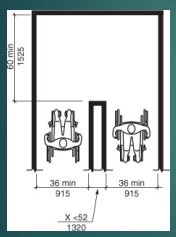
76

- 3. The clear width of an exterior accessible route located within seating areas shall be 36 inches minimum.
- 4. The clear width of an exterior ramp shall comply with Section 405.5.

76

403.5.2 - Clear width at 180-degree turn New buildings and facilities

77

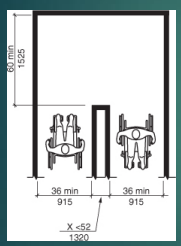


- In new building and facilities, where an accessible route makes a 180-degree turn around an object that is equal to or greater than 52 inches in width, the clear widths in the turn shall comply with Section 403.5.3.1.
- Where an accessible route makes a 180-degree turn around an object that is less than 52 inches in width, the clear widths approaching the turn, during the turn and leaving the turn, shall be one of the following sets of dimensions:

77

403.5.2 - Clear width at 180-degree turn New buildings and facilities

78

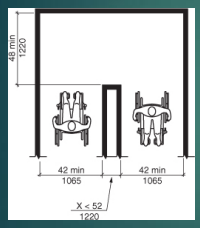


- 1. Approaching width is 36 inches minimum, during width is 60 inches minimum, and leaving width is 36 inches minimum.

78

403.5.2 - Clear width at 180-degree turn New buildings and facilities

79

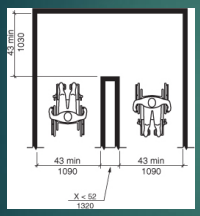


- 2. Approaching width is 42 inches minimum, during width is 48 inches minimum, and leaving width is 42 inches minimum.

79

403.5.2 - Clear width at 180-degree turn New buildings and facilities

80



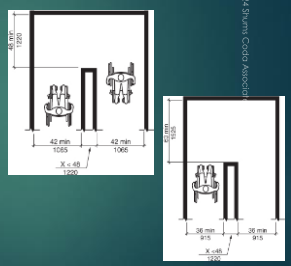
- 3. Approaching width is 43 inches minimum, during width is 43 inches minimum, and leaving width is 43 inches minimum.

80

403.5.2.2 Existing buildings and facilities

81

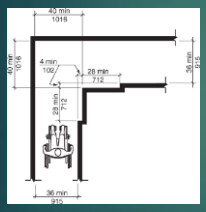
- In existing buildings and facilities, where an accessible route makes a 180 degree turn around an object that is less than 48 inches in width, clear widths shall be 42 inches minimum approaching the turn, 48 inches minimum during the turn, and 42 inches) minimum leaving the turn.
- Exception: This section shall not apply where the clear width during the turn is 60 inches minimum.



81

403.5.3.1 - Clear width at 90-degree turn New buildings and facilities.

82

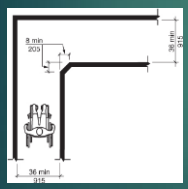


- In new buildings and facilities, where an accessible route makes a 90-degree turn the clear widths approaching the turn and leaving the turn shall be one of the following sets of dimensions:
- 1. Both legs of the turn shall be 40 inches minimum in width The width of each leg of the turn shall be maintained for 28 inches minimum from the inner corner.

82

403.5.3.1 - Clear width at 90-degree turn New buildings and facilities.

83

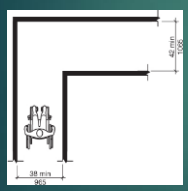


- 2. Where the interior corners of the turn are chamfered for 8 inches minimum along both walls, both legs of the turn shall be 36 inches minimum in width.

83

403.5.3.1 - Clear width at 90-degree turn New buildings and facilities.

84

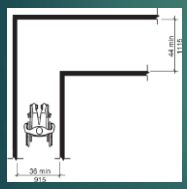


- 3. Where one leg of the turn is 42 inches minimum in width, the other shall be permitted to be 38 inches minimum in width.

84

403.5.3.1 - Clear width at 90-degree turn New buildings and facilities.

85

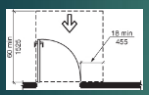


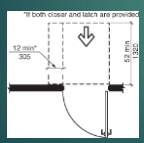
- 4. Where one leg of the turn is 44 inches minimum in width, the other shall be permitted to be 36 inches minimum in width.

85

403.5.3.1 - Clear width at 90-degree turn New buildings and facilities.

86





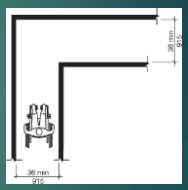
- Exceptions:
- 1. Where an accessible route makes a 90-degree turn at doors, doorways and gates complying with Section 404.2.3, the route shall not be required to comply with this section.
- 2. Where an accessible route makes a 90-degree turn at an elevator or platform lift complying with Sections 407 through 410, the accessible route shall not be required to comply with this section.

86

403.5.3.2 - Existing buildings and facilities

87

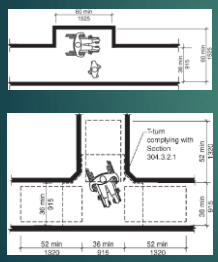
- In existing buildings and facilities, where an accessible route makes a 90-degree turn the clear widths approaching the turn and leaving the turn shall be 36 inches minimum.



87

403.5.4.1 Passing space New buildings and facilities

88



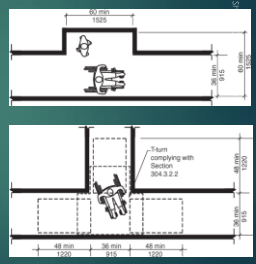
- In new buildings and facilities, an accessible route with a clear width less than 60 inches shall provide passing spaces at intervals of 200 feet maximum.
- Passing spaces shall be either a 60-inch minimum by 60-inch minimum space, or an intersection of two walking surfaces that provide a T-shaped turning space complying with Section 304.3.2.1, provided the base and arms of the T-shaped space extend 52 inches minimum beyond the intersection.

88

403.5.4.2 - Existing buildings and facilities

89

- In existing buildings and facilities, an accessible route with a clear width less than 60 inches shall provide passing spaces at intervals of 200 feet maximum.
- Passing spaces shall be either a 60-inch minimum by 60-inch minimum space, or an intersection of two walking surfaces that provide a T-shaped turning space complying with Section 304.3.2, provided the base and arms of the T-shaped space extend 48 inches minimum beyond the intersection.



89

404.2 - Manual doors, doorways and manual gates

90

- Manual doors, doorways and manual gates intended for user passage shall comply with Section 404.2.

90

TABLE 404.2.3.2 Maneuvering Clearances at Manual Swinging Doors and Gates

TYPE OF USE		MINIMUM MANEUVERING CLEARANCES	
Approach Direction	Door or Gate Side	Perpendicular to Doorway	Parallel to Doorway (beyond latch unless noted)
From front	Pull	60 inches (1525 mm)	18 inches (455 mm)
From front	Push	~~48 inches (1220 mm)~~ 52 inches (1320 mm)[4]	0 inches (0 mm)[3]
From hinge side	Pull	60 inches (1525 mm)	36 inches (915 mm)
From hinge side	Pull	54 inches (1370 mm)	42 inches (1065 mm)
From hinge side	Push	42 inches (1065 mm)[1]	22 inches (560 mm)[3, 5, 4]
From latch side	Pull	48 inches (1220 mm)[2]	24 inches (610 mm)
From latch side	Push	42 inches (1065 mm)[2]	24 inches (610 mm)

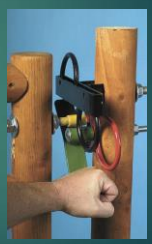
1. Add 6 inches (150 mm) if closer and latch provided.
2. Add 6 inches (150 mm) if closer provided.
3. ~~Add 12 inches (305 mm) beyond latch if closer and latch provided.~~
4. 3. Beyond hinge side.
5. In existing buildings and facilities, the dimension perpendicular to the door or gate for the front direction on the push side shall be 48 inches (1220 mm) minimum.

91

404.2.6
Door and gate hardware

92

- Handles, pulls, latches, locks and other operable parts on doors and gates shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching or twisting of the wrist to operate.
- The operational force to retract latches or disengage devices that hold the door or gate in a closed position shall be as follows:
  - 1. Hardware operation by a forward, pushing or pulling motion: 15 pounds maximum.
  - 2. Hardware operation by a rotational motion: 28 inch-pounds maximum.



92

404.2.6.1
Hardware height

93

- Operable parts of such hardware shall be 34 inches minimum and 48 inches maximum above the floor.
- Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

93

404.3 - Automatic and power-assisted doors and gates

94

- Automatic doors and gates shall comply with Section 404.3.
- Full powered automatic doors and gates shall comply with ANSI/BHMA A156.10 listed in Section 106.2.7.
- Power-assist doors and gates and low-energy automatic doors and gates shall comply with ANSI/BHMA A156.19 listed in Section 106.2.6.

94

404.3.1 Public entrances

95

- Where an automatic door or gate is required at a building or facility public entrance, it shall be a full powered automatic or a low-energy automatic door or gate.

95

404.3.2 Vestibules

96

- Where an entrance includes a vestibule, at least one exterior door or gate and one interior door or gate in the vestibule shall have the same type of automatic door or gate opener.

96

404.3.4 Maneuvering clearances

97

- Maneuvering clearances at power-assisted doors and gates shall comply with Section 404.2.3.
- Maneuvering clearances complying with Section 404.2.3 shall be provided on the egress side of low-energy automatic and full power automatic doors and gates that serve as part of an accessible means of egress.
- Exceptions:
- 1. Low-energy automatic and full power automatic doors and gates that have standby power or battery back-up shall not be required to comply with this section.
- 2. Low-energy automatic and full power automatic doors and gates that remain open in the power-off condition shall not be required to comply with this section.
- 3. Full power automatic sliding doors and gates that include a break-away feature shall not be required to comply with this section.

97

404.3.6 Two doors or gates in series

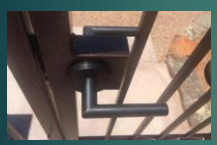
98

- Doors or gates in series shall comply with Section 404.2.5.
  - Exception: Where both doors or gates in a series are low-energy automatic or full power automatic doors or gates, the two doors or gates in a series shall not be required to provide a turning space between the doors or gates.

98

404.3.8 Door and gate hardware

99



- Handles, pulls, latches, locks and other operable parts shall comply with Section 404.2.6.
- (tight grasping, pinching or twisting of the wrist to operate)

99

404.3.9
Break out opening

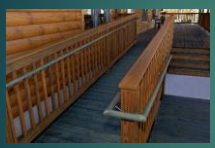
100

- Where full power automatic sliding doors and gates are equipped with a break out feature, the clear break out opening shall be 32 inches minimum when operated in emergency mode.

100

405.5
Ramp clear width

101



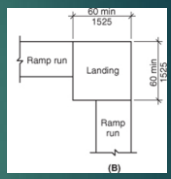
- The clear width of a ramp run shall be 36 inches minimum.
- Handrails and handrail supports that are provided on the ramp run shall not project into the required clear width of the ramp run.
  - Exception: Within employee work areas, the required clear width of ramps that are a part of common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

101

405.7.4
Change in direction

102

- Ramps that change direction between runs at landings shall have a clear landing 60 inches minimum by 60 inches minimum.



102

406
Curb ramps and blended transitions

103

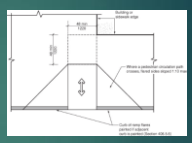
- Curb ramps and blended transitions on accessible routes shall comply with Section 406.
- Perpendicular curb ramps shall comply with Sections 406.2 and 406.5.
- Parallel curb ramps shall comply with Sections 406.3 and 406.5.
- Blended transitions shall comply with Sections 406.4 and 406.5.

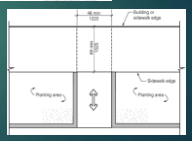
103

406.2.1 - Perpendicular curb ramp landings

104

- A landing 48 inches minimum by 48 inches minimum shall be provided at the top of a curb ramp.
- The landing shall be permitted to overlap pedestrian routes and clear spaces.
- Where the landing is constrained at the back-of-sidewalk, the landing shall be 48 inches minimum by 60 inches minimum. The 60-inch dimension shall be provided in the direction of the curb ramp run.
- The slope of landings shall be 1:48 maximum in all directions.





104

406.2.2
Running slope

105

- The running slope of a curb ramp shall cut through or shall be built up to the curb at right angles or shall meet the gutter grade break at right angles where the curb is curved.
- The running slope of a curb ramp shall be 1:20 minimum and 1:12 maximum. The curb ramp run length shall not be required to exceed 15 feet.

105

406.2.3 Flared sides

106

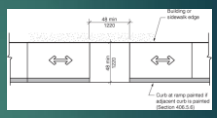
- Where a pedestrian circulation path crosses a curb ramp, flared sides shall be provided and shall be sloped 10 percent maximum.

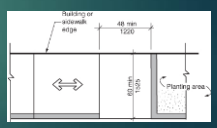
106

406.3.1 – Parallel curb ramp landing

107

- A landing 48 inches minimum by 48 inches minimum shall be provided at the bottom of a curb ramp.
- The landing shall be permitted to overlap pedestrian routes and clear spaces.
- Where the landing is constrained on two or more sides, the landing shall be 48 inches minimum by 60 inches minimum.
- The 60 inches dimension shall be provided in the direction of the pedestrian street crossing.
- The slope of landings shall be 1:48 maximum in all directions.

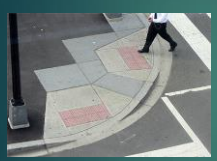




107

406.3.2 Running slope

108



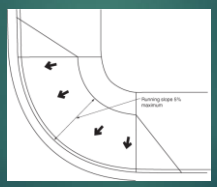
- The running slope of a curb ramp shall be in line with the direction of sidewalk travel.
- The running slope of a curb ramp shall be 1:20 minimum and 1:12 maximum.
- The curb ramp run length shall not be required to exceed 15 feet.

108

406.4.1 – Blended transitions running slope

109

- The running slope of blended transitions shall be 1:20 maximum.

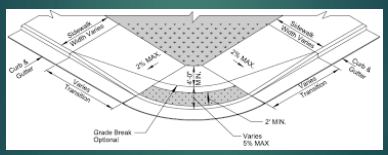


109

406.5 Common requirements

110

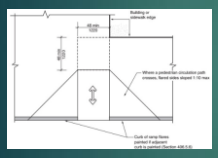
- Curb ramps and blended transitions shall comply with Section 406.5.



110

406.5.1 Width

111



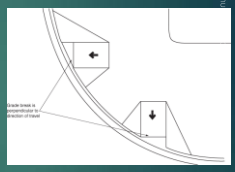
- The clear width of curb ramp runs (excluding any flared sides) and blended transitions shall be 48 inches minimum.

111

406.5.2 Grade breaks

112

- Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the curb ramp run.
- Grade breaks shall not be permitted on the surface of curb ramp runs and landings.
- Surface slopes that meet at grade breaks shall be flush.



112

406.5.3 Cross slope

113

- The cross slope of curb ramps and blended transitions shall be 1:48 maximum.
- At pedestrian street crossings without yield or stop control and at mid-block pedestrian street crossings, the cross slope shall be permitted to equal the street or highway grade.

113

406.5.4 Counter slope

114

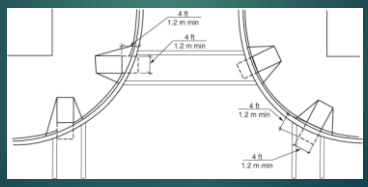
- The counter slope of the gutter or street at the foot of curb ramp runs, blended transitions and landings shall be 1:20 maximum.

114

406.5.5 Clear space

115

- Beyond the bottom grade break, a clear space 48 inches minimum by 48 inches minimum shall be provided within the width of the pedestrian street crossing and wholly outside the parallel vehicle travel lane.



115

406.6 Detectable warnings

116

- Where detectable warning surfaces are provided, they shall comply with Section 705.

116

406.6.2 - Locations for detectable warning surfaces

117

- Detectable warning surfaces shall be provided at the following locations on pedestrian access routes and at transit stops:
- 1. Curb ramps and blended transitions at pedestrian street crossings,
- 2. Pedestrian refuge islands,
  - Exception: Detectable warning surfaces shall not be required at pedestrian refuge islands that are cut-through at street level and are less than 6 feet (1830 mm) in length in the direction of pedestrian travel.
- 3. Pedestrian at-grade rail crossings not located within a street or highway,
- 4. Boarding platforms at transit stops for buses and rail vehicles where the edges of the boarding platform are not protected by screens or guards and
- 5. Boarding and alighting areas at sidewalk or street-level transit stops for rail vehicles where the side of the boarding and alighting areas facing the rail vehicles is not protected by screens or guards.

117

TABLE 407.4.1 - MINIMUM DIMENSIONS OF ELEVATOR CARS

118

TABLE 407.4.1 MINIMUM DIMENSIONS OF ELEVATOR CARS

Door Location	Door Clear Opening Width	Inside Car, Side to Side	Inside Car, Back Wall to Front Return	Inside Car, Back Wall to Inside Face
Centered	42 inches (1065 mm)	80 inches (2030 mm)	51 inches (1295 mm)	54 inches (1370 mm)
Side (Off Center)	36 inches (915 mm)[1]	68 inches (1725 mm)	51 inches (1295 mm)	54 inches (1370 mm)
Any	36 inches (915 mm)[1]	54 inches (1370 mm)	80 inches (2030 mm)	80 inches (2030 mm)
Any	36 inches (915 mm)[1]	60 inches (1525 mm)[2]	60 inches (1525 mm)[2]	60 inches (1525 mm)[2]

[1] A tolerance of minus ⅝ inch (16 mm) is permitted.

[2] Other car configurations that provide a 36-inch (915 mm) door clear opening width and a 60-inch (1525 mm) diameter space with the door closed are permitted.

Revised Footnote 2. Other car configurations that provide a 36-inch door clear opening width and a 60-inch diameter space with the door closed are permitted.

118

407.4.7.1 – Elevator control buttons

119

- Car control buttons shall comply with Section 407.4.7.1.

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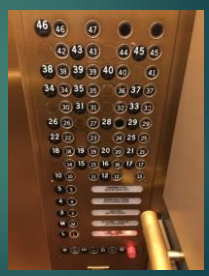


119

407.4.7.1.2 Designation

120

- Floors shall be designated . . . -4, -3, -2, -1, 0, 1, 2, 3, 4, etcetera, with floors below the main entry floor designated with minus numbers.
- Numbers shall be permitted to be omitted, provided the remaining numbers are in sequence.
- Where a telephone keypad arrangement is used, the number key ("#") shall be utilized to enter the minus symbol ("-").

120

407.4.7.1.2 Designation

121

- Ancillary letters shall be permitted to be used in conjunction with the numbers, provided the letters are located to the right of the numbers and not more than two letters are used for each floor designation.

Wrong!

121

407.4.9.1.1 – Car position indicator size

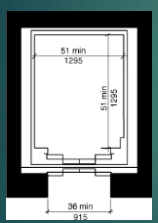
122

- Characters shall be ⅝ inch minimum in height.
- Increased from ½ inch

122

408.4.1 - LULA Inside dimensions

123



- Elevator cars shall provide a clear floor width of 42 inches minimum.
- The clear floor area shall not be less than 15.75 square feet.
- The elevator car shall provide a clear floor space complying with Section 305.3.
- New Exception:
- 2. For installations in existing buildings, elevator cars that provide a clear width of 51 inches minimum, a clear depth of 51 inches minimum and car doors providing a clear opening 36 inches wide minimum shall be permitted.

123

409.4.1 – Residential elevators inside dimensions

124

- In new buildings, elevator cars shall provide a clear floor area 36 inches minimum in width and 52 inches minimum in depth.
- In existing buildings, elevator cars shall provide a clear floor area 36 inches minimum in width and 48 inches minimum in depth.

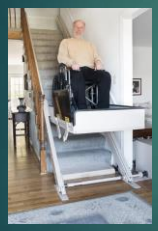
New Building

Existing Building

124

410.5.1.1 – Platform lifts, new buildings

125



- In new buildings, platform lifts with a single door or doors on opposite ends shall provide a clear floor width of 36 inches minimum and a clear floor depth of 52 inches minimum.
  - Exception: Incline platform lifts with passenger restraining arms, shall be permitted to provide a clear floor width of 36 inches minimum and a clear floor depth of 48 inches minimum.

125

410.5.1.2 – Platform lifts, existing buildings

126

- In existing buildings, platform lifts with a single door or with doors on opposite ends shall provide a clear floor width of 36 inches minimum and a clear floor depth of 48 inches minimum.

126

502 Parking spaces

127

- Car and van parking spaces in parking lots shall comply with Sections 502.2 through 502.8.
- Car and van parking spaces provided as part of on-street parking shall comply with Sections 502.9 and 502.10.
- Where an electrical vehicle charging station is provided at a parking space, it shall comply with Section 502.11.

127

502.10 - Parking meters and parking pay stations

128

- Parking meters and parking pay stations that serve parking spaces shall comply with Section 309 (Operable parts).
- At parallel parking spaces, parking meters shall be located at the head or foot of the parking space.
- Displays and information shall be visible from a point located 40 inches maximum above the center of the clear space in front of the parking meter or parking pay station.

128

502.11 - Electrical vehicle charging stations

129

- An electrical vehicle charging station serving a parking space shall comply with Section 502.11.
- Operable parts on the charging station intended for operation by the user, including card readers, shall comply with Section 309.

129

502.11.2 Accessible route

130

- An accessible route shall be provided from the access aisle adjacent to the parking space to the clear floor space complying with Section 502.11.1 adjacent to the vehicle charging station.
- When the vehicle is being charged, the accessible route shall not be obstructed by the cable between the car and charging station.

130

502.11.3 Obstructions

131

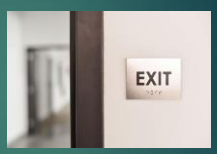
- Protection bollards, curbs or wheel stops shall be located so that they do not obstruct the clear floor space required by Section 502.11.1 or the accessible route required by Section 502.11.2.

131

504.11 Tactile signage at exits

132

- A sign stating EXIT in raised characters and Braille and complying with Sections 703.3 and 703.4 shall be provided adjacent to each door to an area of refuge providing direct access to a stairway, an exterior area for assisted rescue, an exit stairway, an exit ramp, an exit passageway and the exit discharge.



132

506 Windows

133

- Where operable windows are provided in an accessible room or space, at least one shall comply with Section 506.
- Where operable windows are required to provide natural ventilation or operable windows are required to provide an emergency escape and rescue opening, that window shall be the operable window that complies with Section 506.
  - Exceptions

133

506 Windows

134

- Exceptions:
- 1.Operable windows that are operated only by employees shall not be required to comply with this section.
- 2.Operable windows in Type A units that comply with Section 1103.13.
- 3.Operable skylights shall not be required to comply with this section.

134

506.2 Operating force

135

- The operating force for windows includes forces for opening, closing, locking or latching, and unlocking or unlatching and shall be determined in accordance with AAMA 513 listed in Section 106.2.11.
- Operable parts for locking or latching and unlocking or unlatching shall comply with Section 309.
- The operating force for opening and closing operable windows shall be as follows:
  - 1. 8.5 pounds maximum for vertical or horizontal sliding windows.
  - 2. 5 pounds maximum for all other types of operating windows.

135

1102.13 Accessible Unit windows

136

- Operable windows shall comply with Section 506.1.
  - Exceptions:
  - 1.Windows in kitchens shall not be required to comply with Section 1102.13.
  - 2.Windows in bathrooms shall not be required to comply with Section 1102.13.

136

1103.13 Type A unit windows

137

- Operable windows shall comply with Section 1103.13.
- Exceptions:
- 1.Windows in kitchens shall not be required to comply with Section 1103.13.
- 2.Windows in bathrooms shall not be required to comply with Section 1103.13.

137

507 - Accessible routes through parking

138

- Where accessible routes pass through parking facilities, they shall be physically separated from vehicular traffic.
  - Exceptions:
  - 1. Accessible routes crossing drive aisles shall not be required to comply with this section.
  - 2. Accessible routes only from parking spaces complying with Section 502 and passenger loading zones complying with Section 503 to accessible entrances shall not be required to comply with this section.

138

602 - Drinking fountains and bottle filling stations

139

- Drinking fountains for persons using wheelchairs shall comply with Sections 602.2 and 307.
- Drinking fountains for persons who are standing shall comply with Section 602.3 and 307.

139

602.2.1 – Wheelchair fountain, clear floor space

140

- A clear floor space positioned for a forward approach to the drinking fountain shall be provided. Knee and toe space complying with Section 306 shall be provided. The clear floor space shall be centered on the drinking fountain.
  - Exception: Drinking fountains primarily for children's use shall be permitted where a clear floor space provides a parallel approach and is centered on the drinking fountain.

140

602.2.4 – Wheelchair fountain, spout location

141

- The spout shall be located 15 inches minimum from the vertical support and 5 inches maximum from the front edge of the drinking fountain, including bumpers.
  - Exception: At drinking fountains primarily for children's use, the spout shall be located 3½ inches maximum from the front edge of the drinking fountain, including bumpers.

141

602.3 - Drinking fountains for persons who are standing

142

- Drinking fountains for persons who are standing shall comply with Sections 602.3.1 through 602.3.4.

142

602.3.1 Operable parts

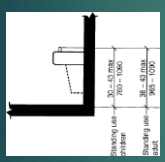
143

- Operable parts shall comply with Sections 309.3 (Height within reach ranges) and 309.4 (Operation).

143

602.3.2 Spout outlet height

144



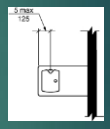
- Spout outlets of drinking fountains shall be 38 inches minimum and 43 inches maximum above the floor.
  - Exception: Drinking fountains primarily for children's use shall be permitted where the spout outlet is 30 inches minimum and 43 inches maximum above the floor.

144

602.3.3 Spout location

145

- The spout shall be located 5 inches maximum from the front edge of the drinking fountain, including bumpers.



145

602.3.4 Water flow

146

- The spout shall provide a flow of water 4 inches minimum in height.
- The angle of the water stream from spouts within 3 inches of the front of the drinking fountain shall be 30 degrees maximum, and from spouts between 3 inches and 5 inches from the front of the drinking fountain shall be 15 degrees maximum, measured horizontally relative to the front face of the drinking fountain.

146

602.4 Bottle filling stations

147

- Bottle filling stations shall comply with Sections 602.4.1 and 602.4.2.
  - Exception: Where bottle filling stations are part of the drinking fountain for persons who are standing, the bottle filling station is not required to comply with this section provided a bottle filling station is located at the drinking fountain for persons using wheelchairs.

147

602.4.1 Clear floor space

148

- A clear floor space positioned for a forward or side approach shall be provided.

148

602.4.2 Controls

149

- Controls for bottle filling stations shall be hand operated or automatic. Hand operated controls shall comply with Section 309.

149

604.5.1 – Water closets fixed side-wall grab bars

150

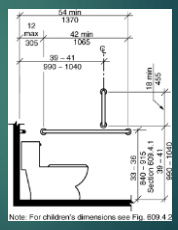
- Fixed side-wall grab bars shall include a horizontal bar complying with Section 604.5.1.1 and a vertical grab bar complying with Section 604.5.1.2.
- The vertical grab bar at water closets primarily for children's use shall comply with Section 609.4.2.

150

604.5.1.1 Horizontal grab bar

151

- A horizontal grab bar 42 inches minimum in length shall be located 12 inches maximum from the rear wall and extend 54 inches minimum from the rear wall.

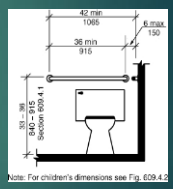


151

604.5.2 Rear-wall grab bars

152

- The fixed rear-wall grab bar shall
  - 1. Be 36 inches minimum in length,
  - 2. Be located 6 inches maximum from the side wall, and
  - 3. Extend 42 inches minimum from the side wall.
- Exceptions unchanged



152

604.7 Dispensers

153

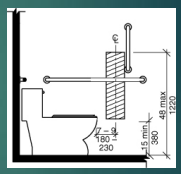
- Toilet paper dispensers shall comply with Sections 309.4 and 609.3.
- Dispensers shall not be of a type that control delivery or do not allow continuous paper flow.
- Relocated from 604.7.1

153

604.7.1 Dispenser location

154

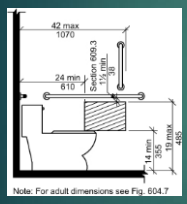
- New Exception: Toilet paper dispensers that accommodate a maximum of 2 toilet paper rolls of not more than 5-inch diameter each shall be permitted to be located 7 inches minimum and 9 inches maximum in front the of the water closet measured to the centerline of the dispenser.
- The outlet of the dispenser shall be 15 inches minimum and 48 inches maximum above the floor.



154

604.11.7.1 Children's dispenser location

155

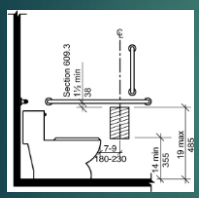


- The outlet of toilet paper dispensers shall be located within an area 24 inches minimum and 42 inches maximum from the rear wall. The outlet of the dispenser shall be 14 inches minimum and 19 inches maximum above the floor.

155

604.11.7.1 Children's dispenser location

156



- Exception: Toilet paper dispensers that accommodate a maximum of 2 toilet paper rolls of not more than 5-inch diameter each shall be permitted to be located 7 inches minimum and 9 inches maximum in front of the of the water closet measured to the centerline of the dispenser.
- The outlet of the dispenser shall be 14 inches minimum and 19 inches maximum above the floor.

156

604.9.2 - Wheelchair accessible toilet compartments size

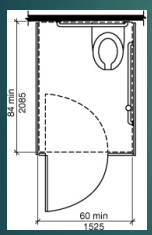
157

- Wheelchair accessible toilet compartments shall comply with Section 604.9.2.1, 604.9.2.2 **or** 604.9.2.3 as applicable.
  - Normal compartment
  - Children's compartment
  - Alternate compartment

157

604.9.2.3 - Alternate wheelchair accessible toilet compartments

158

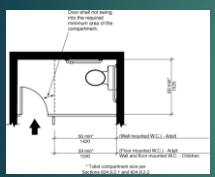


- Where an alternate wheelchair accessible toilet compartment is provided, the minimum area of the compartment shall be 60 inches minimum in width, measured perpendicular to the side wall, and 84 inches minimum in depth, measured perpendicular to the rear wall.

158

604.9.3 Doors

159

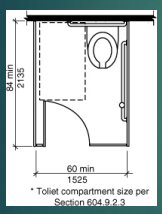


- Wheelchair accessible toilet compartment doors, including door hardware, shall comply with Section 404.
- The door shall be self-closing.
- A door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch.
- Wheelchair accessible toilet compartment doors shall not swing into the required minimum area of the compartment.
- Exceptions

159

604.9.3 Doors

160



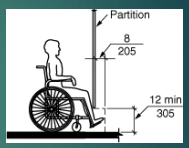
- Exceptions:
- 1. Outside of the compartment, where the approach is to the latch side of the wheelchair accessible toilet compartment, door clearance between the door side of the compartment and any obstruction shall be 42 inches minimum.
- 2. Within the wheelchair accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section 404.
- 3. In an alternate wheelchair accessible toilet compartment, the door shall be permitted to swing into the stall where a clear floor space complying with Section 305.3 is provided within the stall beyond the arc of the door swing.

160

604.9.5.1 - Toe clearance at wheelchair accessible toilet compartments

161

- The front partition and at least one side partition of the wheelchair accessible toilet compartments shall provide a toe clearance of ~~9~~ 12 inches minimum above the floor and extending ~~6~~ 8 inches beyond the compartment side face of the partition, exclusive of partition support members.
  - Exceptions



161

604.9.5.1 - Toe clearance at wheelchair accessible toilet compartments

162

- Exceptions:
- 1. Toe clearance at the front partition is not required in a wheelchair accessible toilet compartment greater than ~~62~~ 64 inches in depth with a wall-hung water closet, or greater than ~~65~~ 67 inches in depth with a floor-mounted water closet.
- 2. Toe clearance at the side partition is not required in a wheelchair accessible toilet compartment greater than ~~66~~ 68 inches in width

162

604.9.5.2 - Toe clearance at wheelchair accessible toilet compartments for children's use

163

- The front partition and at least one side partition of wheelchair accessible toilet compartments primarily for children's use shall provide a toe clearance of 12 inches minimum above the floor and extending ~~6~~ 8 inches beyond the wheelchair accessible toilet compartment side face of the partition, exclusive of partition support members.
  - Exceptions

163

604.9.5.2 - Toe clearance at wheelchair accessible toilet compartments for children's use

164

- Exceptions:
- 1. Toe clearance at the front partition is not required in a wheelchair accessible toilet compartment greater than ~~65~~ 67 inches in depth.
- 2. Toe clearance at the side partition is not required in a wheelchair accessible toilet compartment greater than ~~66~~ 68 inches in width.

164

606.2 Lavatory/sink clear floor space

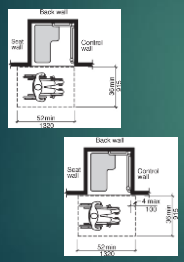
165

- Revised Exceptions:
- 1. A clear floor space providing a parallel approach ~~complying with Section 305 and centered on the sink,~~ shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided.
- 4. A clear floor space providing a parallel approach ~~complying with Section 305 and centered on the sink,~~ shall be permitted at lavatories and sinks used primarily by children ages 5 and younger.
- 6. A clear floor space providing a parallel approach ~~complying with Section 305 and centered on the sink,~~ shall be permitted at wet bars.

165

608.2.1.2.1 - New buildings and facilities

166



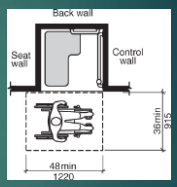
- In new buildings and facilities, a clearance of 52 inches minimum in length and 36 inches minimum in depth shall be provided adjacent to the open face of the compartment.
- The length of the clear floor space shall be measured perpendicular from either the control wall or from 4 inches behind the control wall.

166

608.2.1.2.2 - Existing buildings and facilities

167

- In existing buildings and facilities, a clearance of 48 inches minimum in length measured perpendicular from the control wall, and 36 inches minimum in depth shall be provided adjacent to the open face of the compartment.



167

608.3.2 – Standard roll-in-type showers

168

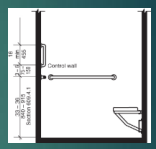
- Grab bars in standard roll-in showers shall comply with Sections 608.3.2.1 through 608.3.2.3.

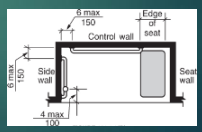
168

608.3.2.1 Back-wall grab bar

169

- In standard roll-in type showers, a grab bar shall be provided on the back wall beginning at the edge of the seat. The grab bars shall not be provided above the seat.
- The back-wall grab bar shall extend the length of the wall and extend within 6 inches maximum from the adjacent side wall opposite the seat.
  - Exceptions:
  - 1. The back wall grab bar shall not be required to exceed 48 inches in length.
  - 2. The back-wall grab bar is not required to extend within 6 inches of the adjacent side wall opposite the seat if it would require the grab bar length to exceed 48 inches in length.

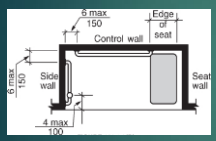




169

608.3.2.2 Side-wall grab bars

170



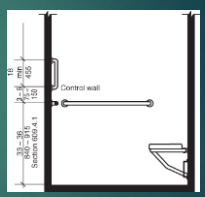
- Where a side wall is provided opposite the seat within 72 inches of the seat wall, a grab bar shall be provided on the side-wall opposite the seat.
- The side wall grab bar shall extend the length of the wall and extend within 6 inches maximum from the adjacent back wall.
  - Exception: The side-wall grab bar shall not be required to exceed 30 inches in length.

170

608.3.2.3 Vertical grab bar

171

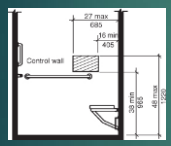
- Where a side wall is provided opposite the seat within 72 inches of the seat wall a vertical grab bar shall be provided.
- A vertical grab bar 18 inches minimum in length shall be provided on the end wall 3 inches minimum and 6 inches maximum above the horizontal grab bar, and 4 inches maximum inward from the front edge of the shower.



171

608.4.2 - Standard roll-in showers controls

172



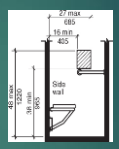
- In standard roll-in showers, the controls and hand shower shall not be located above the seat.
- Controls and hand showers shall be located according to the following:
- 1. On the back wall,
- 2. At a height of 38 inches minimum and 48 inches maximum above the shower floor and
- 3. 16 inches minimum and 27 inches maximum from the wall behind the seat.

172

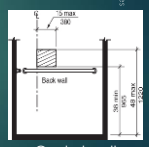
608.4.3 - Alternate roll-in showers controls

173

- In alternate roll-in showers, the controls and hand shower shall be located
- 1. At a height of 38 inches minimum and 48 inches maximum above the shower floor, and
- 2. Where the controls and hand shower are located on the end wall adjacent to the seat, the controls and hand shower shall be 16 inches minimum and 27 inches maximum from the wall behind the seat wall, or
- 3. Where the controls and hand shower are located on the back wall opposite the seat, the controls and hand shower shall be located within 15 inches maximum from the centerline of the seat toward the transfer space.



End wall



Control wall

173

612.2 Sauna & Steam Room bench

174

- Where seating is provided in saunas and steam rooms, at least one bench shall comply with Section 903.
- Doors shall not swing into the clear floor space required by Section 903.2.
  - Exception: Where the room is for individual use and a clear floor space complying with Section 305.3 is provided within the room beyond the arc of the door swing, the door shall not be required to comply with this section.

174

702 Alarms

175

- 702.1 General
- Audible and visible alarms and notification appliances that are part of a building fire alarm system shall be installed in accordance with NFPA-72 listed in Section 106.2.4, be powered by a commercial light and power source, be permanently connected to the wiring of the premises electric system and be permanently installed.
  - Exception: Audible and visible notification appliances provided within dwelling or sleeping units shall comply with Sections 1106.2 through 1106.4.4.

175

703.2.10.1 – Visual Characters, Nonglare finish

176

- The glare from coverings, the finish of characters and their background shall not exceed 19 gloss units (gu) as measured on a 60-degree gloss meter.

176

703.5.3.1 – Pictograms, Nonglare finish

177

- The glare from coverings and the finish of pictograms and their fields shall not exceed 19 gloss units (gu) as measured on a 60-degree gloss meter.

177

703.5.3.2 – Pictograms, Character contrast

178

- Characters shall contrast with their background, with either light characters on a dark background or dark characters on a light background.

178

703.6.2.1 – Symbol of Accessibility, Nonglare finish

179

- The glare from coverings and the finish of symbols of accessibility and their backgrounds shall not exceed 19 gloss units (gu) as measured on a 60-degree gloss meter.

179

Table 703.2.4 Visual character height

180

TABLE 703.2.4 VISUAL CHARACTER HEIGHT

Height above Floor to Baseline of Character[1]	Horizontal Viewing Distance	Minimum Character Height
40 inches (1015 mm) to less than or equal to 70 inches (1780 mm)	Less than 6 feet (1830 mm)	⅝ inch (16 mm)
	6 feet (1830 mm) and greater	⅝ inch (16 mm), plus ⅛ inch (3.2 mm) per foot (305 mm) of viewing distance above 6 feet (1830 mm)
Greater than 70 inches (1780 mm) to less than or equal to 120 inches (3050 mm)	Less than 15 feet (4570 mm)	2 inches (51 mm)
	15 feet (4570 mm) and greater	2 inches (51 mm), plus ⅛ inch (3.2 mm) per foot (305 mm) of viewing distance above 15 feet (4570 mm)
Greater than 120 inches (3050 mm)	Less than 21 feet (6400 mm)	3 inches (75 mm)
	21 feet (6400 mm) and greater	3 inches (75 mm), plus ⅛ inch (3.2 mm) per foot (305 mm) of viewing distance above 21 feet (6400 mm)

New Footnote 1. The vertical height is measured from the floor of the viewing position to the baseline of the highest line of characters.

Same for Table 703.7.4

180

705.6 - Depth and width of detectable warnings surfaces

181

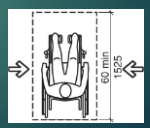
- Detectable warnings shall comply with the following:
- 1. Detectable warning surfaces shall extend 24 inches minimum in the direction of pedestrian travel.
- 2. At curb ramps and blended transitions, detectable warning surfaces shall extend the full width of the curb ramp run excluding any flared sides or blended transition.
- 3. At pedestrian at-grade rail crossings not located within a street or highway, detectable warnings shall extend the full width of the crossing.
- 4. At boarding platforms for buses and rail vehicles, detectable warning surfaces shall extend the full length of the public use areas of the platform.
- 5. At boarding and alighting areas at sidewalk or street level transit stops for rail vehicles, detectable warning surfaces shall extend the full length of the transit stop.

181

802.4.1 – Assembly Wheelchair space, new buildings and facilities

182

- In new buildings and facilities, where a wheelchair space is entered from the front or rear, the wheelchair space shall be 52 inches minimum in depth.
- Where a wheelchair space is only entered from the side, the wheelchair space shall be 60 inches minimum in depth.

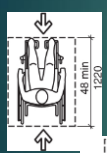


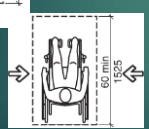
182

802.4.2 – Assembly wheelchair space, existing buildings and facilities

183

- In existing buildings and facilities, where a wheelchair space is entered from the front or rear, the wheelchair space shall be 48 inches minimum in depth.
- Where a wheelchair space is only entered from the side, the wheelchair space shall be 60 inches minimum in depth.



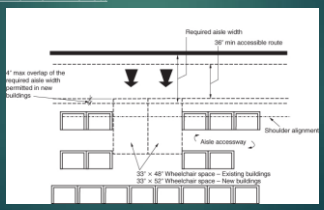


183

802.5.1Overlap

184

- A wheelchair space shall not overlap the required width of an aisle.
  - Exception: In new buildings and facilities, the depth of a wheelchair space shall be permitted to overlap the required aisle width a maximum of 4 inches.



184

802.7.2 Companion seat alignment

185

- In row seating, the companion seat shall be located to provide shoulder alignment with the wheelchair space occupant. The shoulder of the wheelchair space occupant is considered to be 36 inches or more from the front and 12 inches or more from the rear of the wheelchair space.
- The floor surface for the companion seat shall be at the same elevation as the wheelchair space floor surface.
  - Exception: Companion seat alignment shall not be required in tiered seating that includes dining surfaces or work surfaces.

185

802.10.4.2 - Distance from the screen (movie screen)

186

- Wheelchair space locations shall be located in accordance with one of the following:
- 1.Within the rear 60 percent of the seats provided; or
- 2.Located within the area of an auditorium in which the vertical viewing angles, as measured to the top of the screen, are from the 40th to the 100th percentile of vertical viewing angles for all seats as ranked from the seats in the first row (1st percentile) to seats in the back row (100th percentile).
- (You will need aa section drawing demonstrating this has been met.)

186

804.2
Kitchen clearance

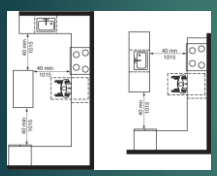
187

- Where a pass-through kitchen is provided, clearances shall comply with Section 804.2.1.
- Where a U-shaped kitchen is provided, clearances shall comply with Section 804.2.2.
- Kitchens where a cook top or conventional range is not provided shall comply with Section 804.2.3.
  - Exception deleted

187

804.2.2
U-shaped kitchens

188



- In kitchens enclosed on three contiguous sides, clearance between all opposing base cabinets, countertops, appliances, or walls within kitchen work areas shall be 60 inches minimum.
  - Exception: U-shaped kitchens with an island complying with Section 804.2.1.

188

804.2.3 - Spaces where a cook top or conventional range is not provided

189

- In a kitchen space where a cooktop or conventional range is **not** provided, clearance between all opposing base cabinets, countertops, appliances and walls within kitchen work areas shall be 40-inch minimum.

189

1103.12.1.2 – Accessible Units U-shaped kitchens

190

- In kitchens with counters, appliances, or cabinets on three contiguous sides, clearance between all opposing base cabinets, countertops, appliances, or walls within kitchen work areas shall be 60 inches minimum.
  - Exception: U-shaped kitchens with an island complying with Section 1103.12.1.1.

190

1104.12.1.2 Type B U-shaped kitchens

191

- In kitchens with counters, appliances or cabinets on three contiguous sides, clearance between all opposing base cabinets, countertops, appliances, or walls within kitchen work areas shall be 60 inches minimum.
  - Exception: U-shaped kitchens with an island complying with Section 1104.12.1.1.

191

808 - Enhanced acoustics for classrooms

192

- Classrooms not exceeding 20,000 cubic feet and required to provide enhanced acoustics shall comply with Section 808.
- Classroom reverberation times shall comply with either Section 808.2.1 **or** Section 808.2.2, depending on the size of the room.

192

808.2.1 Performance method

193

- For each of the octave frequency bands with center frequencies of 500, 1000, and 2000 Hz, the reverberation time (T60) shall not exceed the times specified below:
  - 1. 0.6 seconds in classrooms with volumes up to and including 10,000 cubic feet.
  - 2. 0.7 seconds in classrooms with volumes of more than 10,000 cubic feet, but less than 20,000 cubic feet.
- Reverberation times shall apply to fully-furnished, unoccupied classrooms.
- Reverberation times shall be field verified via measurements over a minimum 20 dB decay in each octave frequency band in accordance with ASTM E2235 listed in Section 106.2.13.

193

808.2.2 Prescriptive method

194

- The Noise Reduction Coefficient (NRC) ratings for floor, wall and ceiling surface finishes shall conform to the following equations: For a classroom with a volume less than or equal to 10,000 cubic feet:
  - (NRCFloor x SFloor)+ (NRCCeiling x SCeiling) + (NRCWall x SWall) ≥ Volume/12
- For a classroom with a volume between 10,000 cubic feet and 20,000 cubic feet:
  - (NRCFloor x SFloor)+ (NRCCeiling x SCeiling) + (NRCWall x SWall) ≥ Volume/14

- Where:
- NRCFloor = NRC rating of the floor finish material
- SFloor = floor area in square feet
- NRCCeiling = NRC rating of the ceiling finish material
- SCeiling = ceiling area in square feet
- NRCWall = NRC rating of the wall acoustical treatment
- SWall = wall treatment area in square feet
- Volume = room volume in cubic feet

- Where a floor, ceiling or wall has multiple surface finishes, the NRC x S product for each surface finish shall be added to the left side of the equation.

194

808.3 Ambient sound level

195

- Classroom ambient sound levels shall comply with Sections 808.3.1 and 808.3.2.
- Ambient sound levels from sound sources outside and inside the classroom shall be evaluated individually.
- The greatest one-hour averaged sound levels shall be evaluated at the loudest usable location in the room at a height of 36 inches to 42 inches above the floor and no closer than 36 inches from any wall, window or object.

195

808.3 Ambient sound level

196

- The ambient sound level limits shall apply to fully-furnished, unoccupied classrooms, and with only permanent HVAC, electrical and plumbing systems functioning.
- Classroom equipment, including, but not limited to, computers, printers and fish tank pumps shall be turned off during these measurements.

196

808.3.1 - Sound sources outside of the classroom

197

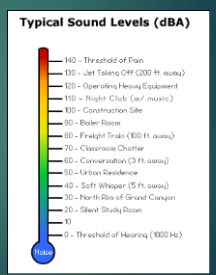
- Classroom ambient sound levels shall not exceed 35 dBA and 55 dBC due to intruding noise from sound sources outside of the classroom, whether from the exterior or from other interior spaces.

197

808.3.2 - Sound sources inside the classroom

198

- Classroom ambient sound levels shall not exceed 35 dBA and 55 dBC for noise from sound sources inside the classroom.

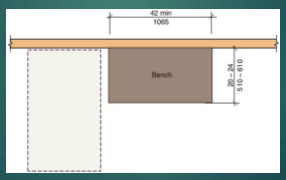


198

903.2 Clear floor space

199

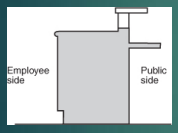
- A clear floor space positioned at the end of the bench seat and parallel to the short axis of the bench shall be provided.



199

904.3 - Sales and service counters and windows

200



- Sales and service counters and windows shall comply with Section 904.3.1 and either Section 904.3.2 or Section 904.3.3.
- Where counters are provided, the accessible portion of the counter-top shall extend the same depth as the public portion of the sales and service countertop provided for standing customers.

200

904.3 - Sales and service counters and windows

201

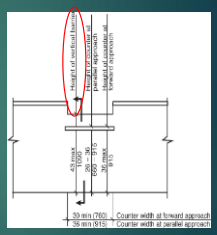
- Exception: In alterations, when the provision of a counter complying with this section would result in a reduction of the number of existing counters at workstations or a reduction of the number of existing mailboxes, the counter shall be permitted to have a portion which is 24 inches mininum in length complying with Section 904.3.2 provided that the required clear floor space is centered on the accessible length of the count

201

904.3.1 Vertical barriers

202

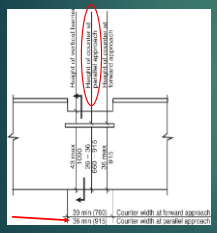
- At service windows or service counters, any vertical barrier between service personnel and customers shall be at a height of 43 inches maximum above the floor.
  - Exception: Transparent security glazing shall be permitted above the 43 inches maximum height.



202

904.3.2 Parallel approach

203



- A portion of the public use side of the counter surface 36 inches minimum in length and 26 inches minimum to 36 inches maximum in height above the floor shall be provided.
- A clear floor space positioned for a parallel approach adjacent to the accessible counter shall be provided.
- The space between the accessible counter surface and any projecting objects above the accessible counter shall be 12 inches minimum.
  - Exception

203

904.3.2 Parallel approach

204

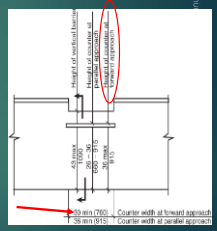
- Exception: Where the counter surface is less than 36 inches in length, the entire counter surface shall be 26 inches minimum to 36 inches maximum in height above the floor.

204

904.3.3 Forward approach

205

- A portion of the public use side of the counter surface 30 inches minimum in length and 36 inches maximum in height above the floor shall be provided.
- A clear floor space positioned for a forward approach to the accessible counter shall be provided.
- Knee and toe clearance complying with Section 306 shall be provided under the accessible counter.
- The space between the accessible counter surface and any projecting objects above the accessible counter shall be 12 inches minimum.



205

906 Charging stations

206

- A charging station shall consist of a grounded duplex outlet.
- A clear floor space shall be provided at the charging station.
- Charging stations shall comply with at least one of the reach ranges specified in Section 308.

206

907 Gaming machines and tables

207

- Gaming machines and tables shall have a clear floor space positioned for transfer or for use by an individual seated in a wheelchair.
- Clear floor spaces required at gaming machines and tables shall be permitted to overlap.

207

1001.2.1 – Recreational general exceptions

208

- The following shall not be required to comply with this standard or to be on an accessible route:
- 11. Shooting facilities with firing positions on freestanding platforms that are elevated above grade 12 feet minimum provided that the aggregate area of elevated firing positions is 500 square feet maximum.

208

1010.3 – Shooting Range Firing position counters

209

- Where a firing position requires shooting over a counter or wall, the top of the counter or wall shall be 34 inches maximum in height above the floor surface.
- If counter surfaces are provided at other firing positions of the same type, equivalent counter surfaces shall be provided at the firing position complying with Section 1010.2.

209

1102.5 – Accessible Unit doors and doorways

210

- The primary entrance door to the unit, and all other doorways intended for user passage, shall comply with Section 404.
  - New Exception 7:
  - The maneuvering clearances required by Section 404 shall not be required within a closet or pantry complying with Exception 2 of Section 1102.3.2. (48" deep closet/pantry)

210

1103.5 – Type A Unit doors and doorways

211

- The primary entrance door to the unit, and all other doorways intended for user passage, shall comply with Section 404.
  - New Exception 7: The maneuvering clearances required by Section 404 shall not be required within a closet or pantry complying with Exception 2 of Section 1103.3.2.

211

1102.15.3 – Accessible Unit bed height

212

- At least one bed shall measure 17 to 23 inches high from the floor to the top of the uncompressed mattress.

212

1102.15.4 – Accessible Unit wheelchair charging area

213

- The clear floor space required by Section 1102.15.1 shall also serve as a wheelchair charging area complying with Section 906.

213

1103.12.3 – Type A Unit work surface

214

- At least one section of counter shall provide an accessible work surface 30 inches minimum in length complying with Section 1103.12.3.
- New Exception: Spaces that do not provide a cooktop or conventional range shall not be required to provide an accessible work surface.

214

1103.12.4.1 – Type A Unit sink clear floor space

215

- A clear floor space, positioned for a forward approach to the sink, shall be provided.
- Knee and toe clearance complying with Section 306 shall be provided.
- New Exceptions:
- 3.A clear floor space providing a parallel approach and centered on the sink shall be permitted at a kitchen sink in a space where a cook top or conventional range is not provided.
- 4.A clear floor space providing a parallel approach and centered on the sink shall be permitted at wet bars.

215

1104 Type B Units

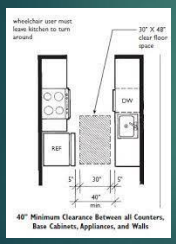
216

- Section reformatted to organize better.
- No major technical changes

216

1104.1.1 – Type B Unit clear floor space

217



40" Minimum Clearance Between all Counters, Base Cabinets, Appliances, and Walls

- For Type B units, clear floor spaces shall be 48 inches minimum in length and 30 inches minimum in width.
- 52-inch space not required in Type B units

217

1104.1.2 Mailboxes

218

- Mailboxes serving Type B units shall be permitted an unobstructed side reach range at 54 inches maximum above the floor.

218

1104.5.2 – Type B Unit user passage doorways

219

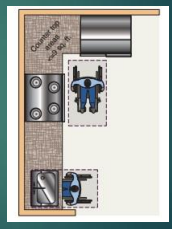
- Doorways intended for user passage shall comply with Section 1104.5.2.
  - New Exception: Doors that are part of a shower door assembly shall not be required to comply with this section.

219

1104.9 – Type B Unit operable parts

220

- Lighting controls, electrical switches and receptacle outlets, environmental controls, electrical panelboards, and user controls for security or intercom systems shall comply with Sections 309.3 and 1104.1.1.
- New Exception:
- 3. In a kitchen where a clear floor space for a parallel approach cannot be located at a countertop in a corner between appliances, receptacle outlets over the countertop shall not be required to comply with this section provided that the countertop area does not exceed 9 square feet maximum.



220

1104.10.1 – Type B Unit clear floor space

221

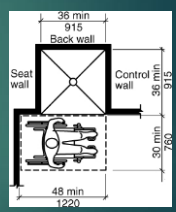
- A clear floor space shall be provided for each washing machine and clothes dryer.
- A parallel approach shall be provided for a top loading machine.
- A forward or parallel approach shall be provided for a front loading machine.
- 30" X 52" space not applicable

221

1104.11.3.1.3.3 – Type B Unit shower compartment

222

- If a shower compartment is the only bathing facility, the shower compartment shall have dimensions of 36 inches minimum in width and 36 inches minimum in depth.
- A clearance of 48 inches minimum in length, measured perpendicular from the control wall, and 30 inches minimum in depth, measured from the face of the shower compartment, shall be provided.

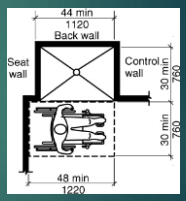


222

1104.11.3.1.3.3 – Type B Unit shower compartment

223

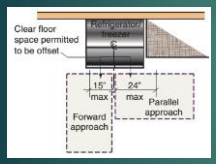
- Exceptions:
- 1. A shower compartment with dimensions of 30 inches minimum in depth and 44 inches minimum in width shall be permitted.
- 2. A shower door assembly shall be permitted where the assembly can be removed without removal or replacement of the surrounding walls and floor to which it is affixed.



223

1104.12.2.5 – Type B Unit refrigerator/freezer

224



- A clear floor space positioned for a parallel or forward approach to the refrigerator/freezer shall be provided.
- Where the clear floor space is positioned for a forward approach, the centerline of the clear floor space shall be offset 15 inches maximum from the centerline of the appliance.
- Where the clear floor space is positioned for a parallel approach, the centerline of the clear floor space shall be offset 24 inches maximum from the centerline of the appliance.

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1106.5.1 Notification

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- A hard-wired electric doorbell shall be provided. A button or switch shall be provided on the public side of the unit primary entrance.
- Activation of the button or switch shall initiate an audible tone within the unit.
- Where visible doorbell signals are located in sleeping areas, controls shall be provided to deactivate the signal.

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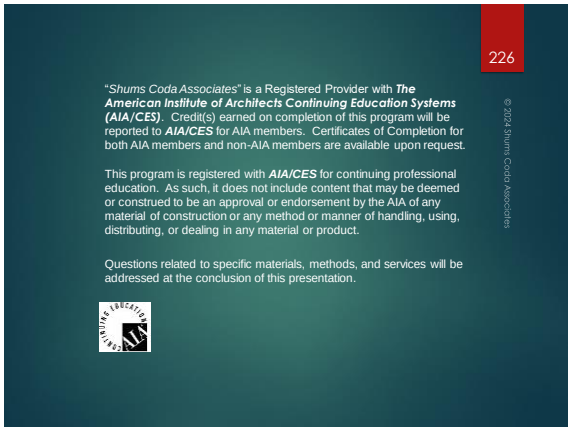
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