Commercial Accessibility
2018 IBC

Colorado Code Consulting, LLC
Instructor
Steve Thomas, CBO

- President, Colorado Code Consulting, LLC
- Over 35 years experience in code administration and enforcement
- ICC Means of Egress Code Committee
- Author

Today's Discussion

- Accessibility Requirements
  - 2018 International Building Code
  - 2009 ICC/ANSI A117.1
  - 2018 International Existing Building Code
- Application of Code Requirements
- Limited to Commercial Projects

Federal Regulations

- Americans with Disabilities Act
  - ADA
  - ADA Standards for Accessible Design (ADASAD)
- Architectural Barriers Act
  - ABA
- Uniform Federal Accessibility Standards
  - UFAS

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1103 Scope

- Sites, buildings, structures, facilities, elements and spaces, temporary or permanent, shall be accessible to individuals with disabilities.

- Translation: 
  - Everything must be accessible 
  - EXCEPT...

1103.2.2 Employee work areas

- Spaces and elements within employee work areas shall only be required to comply with Sections 907.5.2.3.2 (R-1/I-1 visible alarm), 1009 (AMOE) and 1104.3.1 (employee work areas) and shall be designed and constructed so that individuals with disabilities can approach, enter and exit the work area.

Definition Employee Work Area

- All or any portion of a space used only by employees and only for work.
- Corridors, toilet rooms, kitchenettes and break rooms are not employee work areas.

1103.2.2 Employee work areas

- Work areas, or portions of work areas, other than raised courtroom stations in accordance with Section 1108.4.1.4, that are less than 300 square feet in area and located 7 inches or more above or below the ground or finished floor where the change in elevation is essential to the function of the space shall be exempt from all requirements.
1103.2.4 Utility buildings

- Group U occupancies are not required to comply with this chapter other than the following:
  - 1. In agricultural buildings, access is required to paved work areas and areas open to the general public.
  - 2. Private garages or carports that contain required accessible parking.

1103.2.5 Construction sites

- Structures, sites and equipment directly associated with the actual processes of construction including, but not limited to, scaffolding, bridging, materials hoists, materials storage or construction trailers are not required to comply with this chapter.

1103.2.6 Raised areas

- Raised areas used primarily for purposes of security, life safety or fire safety including, but not limited to, observation galleries, prison guard towers, fire towers or lifeguard stands are not required to comply with this chapter.

1103.2.7 Limited access spaces

- Spaces accessed only by ladders, catwalks, crawl spaces, freight elevators or very narrow passageways are not required to comply with this chapter.
1103.2.8 Areas in places of religious worship

- Raised or lowered areas, or portions of areas, in places of religious worship that are less than 300 square feet in area and located 7 inches or more above or below the finished floor and used primarily for the performance of religious ceremonies are not required to comply with this chapter.

1103.2.9 Equipment spaces

- Spaces frequented only by service personnel for maintenance, repair or occasional monitoring of equipment are not required to comply with this chapter.

1103.2.10 Highway tollbooths

- Highway tollbooths where the access is provided only by bridges above the vehicular traffic or underground tunnels are not required to comply with this chapter.

1103.2.12 Day care facilities

- Where a day care facility is part of a dwelling unit, only the portion of the structure utilized for the day care facility is required to comply with this chapter.
1103.2.13 Detention and correctional facilities

- In detention and correctional facilities, common use areas that are used only by inmates or detainees and security personnel, and that do not serve holding cells or housing cells required to be Accessible units, are not required to comply with this chapter.

Other than that, everything needs to be accessible.

1103.2.14 Walk-in coolers and freezers

- Walk-in cooler and freezer equipment accessed only from employee work areas is not required to comply with this chapter.

1104 Accessible Route

- At least one accessible route within the site shall be provided from public transportation stops, accessible parking, accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance served.
  - Exception: Other than in buildings or facilities containing or serving Type B units, an accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing for pedestrian access.
1104.2
Within a site

- At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements and accessible spaces that are on the same site.
  - Exceptions:
    1. An accessible route is not required between accessible buildings, accessible facilities, accessible elements and accessible spaces that have, as the only means of access between them, a vehicular way not providing for pedestrian access.
    2. An accessible route to recreational facilities shall only be required to the extent specified in Section 1110.

1104.3
Connected spaces

- When a building or portion of a building is required to be accessible, at least one accessible route shall be provided to each portion of the building, to accessible building entrances connecting accessible pedestrian walkways and to the public way.

1104.3.1
Employee work areas

- Common use circulation paths within employee work areas shall be accessible routes.
  - Exceptions:
    1. Common use circulation paths, located within employee work areas that are less than 1,000 square feet in size and defined by permanently installed partitions, counters, casework or furnishings, shall not be required to be accessible routes.
1104.3.1 Employee work areas

2. Common use circulation paths, located within employee work areas, that are an integral component of equipment, shall not be required to be accessible routes.

3. Common use circulation paths, located within exterior employee work areas that are fully exposed to the weather, shall not be required to be accessible routes.

1104.4 Multistory buildings and facilities

At least one accessible route shall connect each accessible story, mezzanine and occupied roofs in multilevel buildings and facilities.

EXCEPTIONS…

1104.4 Multistory buildings and facilities

Exceptions

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:

1.1. Multiple tenant facilities of Group M occupancies containing five or more tenant spaces used for the sales or rental of goods and where at least one such tenant space is located on a floor level above or below the accessible levels;
1104.4 Multistory buildings and facilities

- 1.2. Stories or mezzanines containing offices of health care providers (Group B or I);

1104.4 Multistory buildings and facilities

- 1.3. Passenger transportation facilities and airports (Group A-3 or B); or
- 1.4. Government buildings.

1104.5 Location

- Accessible routes shall coincide with or be located in the same area as a general circulation path. Where the circulation path is interior, the accessible route shall also be interior.
- Where only one accessible route is provided, the accessible route shall not pass through kitchens, storage rooms, restrooms, closets or similar spaces.

Accessible Routes

A117.1

- Walking Surfaces
- Doors and Doorways
- Ramps
- Curb Ramps
- Elevators
- Limited-use/Limited Application Elevators (LULA’s)
- Platform Lifts
403 Walking Surfaces

- Floor Surface must comply with Section 302.
  - Carpet securely attached
  - Maximum pile height ½ inch
  - Level loop, textured loop, level cut pile, or level cut/uncut pile texture
  - Openings in floor surfaces shall be of a size that does not permit the passage of a ½ inch diameter sphere.
  - Elongated openings shall be placed so that the long dimension is perpendicular to the predominant direction of travel.

403.3 Slope

- The running slope of walking surfaces shall not be steeper than 1:20.
- The cross slope of a walking surface shall not be steeper than 1:48.
- Over 1:20 IT’S A RAMP!

403.4 Changes in Level

- Changes in level shall comply with Section 303.
  - Changes in level of 1/4 inch maximum in height shall be permitted to be vertical.
  - Changes in level greater than 1/4 inch in height and not more than 1/2 inch maximum in height shall be beveled with a slope not steeper than 1:2.
  - Greater than ½ inch = RAMP!

403.5 Clear Width

- The clear width of an accessible route shall be 36 inches minimum.
  - EXCEPTION: 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.
403.5.1
Clear Width at 180 Degree Turn

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: Section 403.5.1 shall not apply where the clear width during the turn is 60 inches minimum.

403.5.2
Passing Space

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.

Doors and Doorways
404.2 Manual Doors

• Manual doors and doorways, and manual gates, including ticket gates, shall comply with Section 404.2.

• EXCEPTION: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with Sections 404.2.6, 404.2.7, and 404.2.8.

404.2.1
Double-Leaf Doors and Gates

• At least one of the active leaves of doorways with two leaves shall comply with Sections 404.2.2 and 404.2.3.
404.2.2 Clear Width

- Doorways shall have a clear opening width of 32 inches minimum.
- Clear opening width of doorways with swinging doors shall be measured between the face of door and stop, with the door open 90 degrees.
- Openings more than 24 inches in depth at doors and doorways without doors shall provide a clear opening width of 36 inches minimum.

- There shall be no projections into the clear opening width lower than 34 inches above the floor.
- Projections into the clear opening width between 34 inches and 80 inches above the floor shall not exceed 4 inches.

EXCEPTIONS:

1. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.
2. In alterations, a projection of 5/8 inch (16 mm) maximum into the required clear opening width shall be permitted for the latch side stop.

404.2.3.2 Swinging Door Maneuvering Clearance

- Swinging doors shall have maneuvering clearances complying with Table 404.2.3.2.
404.2.3.2
Swinging Door Maneuvering Clearance

Where both closer and latch are provided

12 min
305
48 min
1200

(b) Front Approach, Push Side

36 min
915
60 min
1035

(c) Hinge Approach, Pull Side

404.2.3.2
Swinging Door Maneuvering Clearance

404.2.3.2
Swinging Door Maneuvering Clearance

(d) Hinge Approach, Pull Side

404.2.3.2
Swinging Door Maneuvering Clearance

404.2.3.2
Swinging Door Maneuvering Clearance

(e) Hinge Approach, Push Side
404.2.3.2
Swinging Door Maneuvering Clearance

(f) Latch Approach, Pull Side

*54 min (1370) if closer is provided

4.8 min
1200
24 min
610

404.2.3.3
Sliding and Folding Doors

- Sliding doors and folding doors shall have maneuvering clearances complying with Table 404.2.3.3.

<table>
<thead>
<tr>
<th>Approach Direction</th>
<th>Perpendicular to Doorway</th>
<th>Parallel to Doorway (beyond step or latch side unless noted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From front</td>
<td>42 inches (1066 mm)</td>
<td>22 inches (558 mm)</td>
</tr>
<tr>
<td>From non-latch side</td>
<td>42 inches (1066 mm)</td>
<td>24 inches (610 mm)</td>
</tr>
</tbody>
</table>

*Beyond pocket or hinge side

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404.2.3.4 Doorways without Doors

- Doorways without doors that are less than 36 inches in width shall have maneuvering clearances complying with Table 404.2.3.4.

404.2.3.5 Recessed Doors

- Where any obstruction within 18 inches of the latch side of a doorway projects more than 8 inches beyond the face of the door, measured perpendicular to the face of the door, maneuvering clearances for a forward approach shall be provided.

404.2.4 Thresholds

- If provided, thresholds at doorways shall be 1/2 inch maximum in height.
- Raised thresholds and changes in level at doorways shall comply with Sections 302 and 303.
  - EXCEPTION: An existing or altered threshold shall be permitted to be 3/4 inch maximum in height provided that the threshold has a beveled edge on each side with a maximum slope of 1:2 for the height exceeding 1/4 inch.

404.2.5 Two Doors in Series

- Distance between two hinged or pivoted doors in series shall be 48 inches minimum plus the width of any door swinging into the space.
- The space between the doors shall provide a turning space complying with Section 304.
404.2.6 Door Hardware

- Handles, pulls, latches, locks, and other operable parts on accessible doors 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.
- 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.

  • EXCEPTION: Locks used only for security purposes and not used for normal operation shall not be required to comply with Section 404.2.6.

404.2.7 Closing Speed

- Door Closers
  - Door closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to an open position of 12 degrees shall be 5 seconds minimum.

- Spring Hinges
  - Door spring hinges shall be adjusted so that from an open position of 70 degrees, the door shall move to the closed position in 1.5 seconds minimum.

404.2.8 Door-Opening Force

- Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.
- The force for pushing or pulling open doors other than fire doors shall be as follows:
  1. Interior hinged door: 5.0 pounds maximum
  2. Sliding or folding door: 5.0 pounds maximum
- These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position.

404.2.9 Door Surface

- Door surfaces within 10 inches of the floor, measured vertically, shall be a smooth surface on the push side extending the full width of the door.
- Parts creating horizontal or vertical joints in such surface shall be within 1/16 inch of the same plane as the other.
- Cavities created by added kick plates shall be capped.
404.2.9 Door Surface

- EXCEPTIONS:
  1. Sliding doors shall not be required to comply with Section 404.2.9.
  2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at no less than 60 degrees from the horizontal shall not be required to comply with the 10-inch bottom rail height requirement.
  3. Doors that do not extend to within 10 inches of the floor shall not be required to comply with Section 404.2.9.

404.2.10 Vision Lites

- Doors and sidelites adjacent to doors containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one panel on either the door or an adjacent sidelite 43 inches maximum above the floor.
  - EXCEPTION: Vision lites with the lowest part more than 66 inches above the floor.

404.3 Automatic Doors

- Automatic doors and automatic gates shall comply with Section 404.3. Full powered automatic doors shall comply with ANSI/BHMA A156.10 listed in Section 105.2.4. Power-assist and low-energy doors shall comply with ANSI/BHMA A156.19 listed in Section 105.2.3.
  - EXCEPTION: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with Sections 404.3.2, 404.3.4, and 404.3.5.
405.1 Ramp Slope

- Ramp runs shall have a running slope greater than 1:20 and not steeper than 1:12.
  - EXCEPTION: In existing buildings or facilities, ramps shall be permitted to have slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to space limitations.

<table>
<thead>
<tr>
<th>Slope</th>
<th>Maximum Rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steeper than 1:12 but not steeper than 1:16</td>
<td>2 inches (50 mm)</td>
</tr>
<tr>
<td>Steeper than 1:16 but not steeper than 1:12</td>
<td>6 inches (150 mm)</td>
</tr>
</tbody>
</table>

405.3 – Cross Slope
1:48 Maximum

405.4 – Floor or Ground Surfaces
Shall comply with Section 302

405.5 – Clear Width
36 inches minimum

Where is it measured????

405.6 – Rise
30 inches
Maximum
The ANSI Standard previously stated that the measurement was "between the handrails".
DELL OWNER, 1/20/2004
405 Ramps

- 405.7 – Landings
  Required at the Top and Bottom of each run.

- 405.7.1 – Slope = 1:48 Maximum
- 405.7.2 – Width = Wide as Ramp Run
- 405.7.3 – Length = 60” Minimum

- 405.7.4 - Change in Direction
  60” x 60” Minimum

- 405.7.5 – Doorways
  Maneuvering clearances may overlap

- 405.8 – Handrails
  - If Rise > 6 inches, then they are required
  - Shall not reduce required clearances
405 Ramps

- 405.9 – Edge Protection
  - 405.9.1 - Extend 12” minimum each side OR
  - 405.9.2 - Provide Curb or Barrier (4” dia.)
  (see Exceptions)

405 Ramps

- 405.10 – Outdoor Conditions
  Outdoor ramps and approaches shall be designed to not accumulate water on walking surfaces.

406 Curb Ramps

- 406.1 – General
  Curb ramps on an accessible route shall comply with 406

- 406.2. – Slope
  1:12 Maximum

406 Curb Ramps

- 406.3 – Counter Slope
  Adjoining gutter and road = 1:20 maximum
407 Elevators

Regulates:
- Call Buttons
- Hall Signals
- Tactile Characters
- Doors
- Car Call Delays
- Car Dimensions
- Operating Controls

408 LULA

- Limited-use/limited-application elevators shall comply with Section 408 and ASME A17.1/CSA B44 listed in Section 105.2.5. Elevator operation shall be automatic.
  - Similar to regular elevators but smaller cab.

409 Platform Lifts

- Platform lifts shall comply with Section 410 and ASME A18.1 listed in Section 105.2.6. Platform lifts shall not be attendant operated and shall provide unassisted entry and exit from the lift.
  - Lift Entry
  - Floor Surfaces
  - Platform to Runway Clearance
  - Clear Floor Space
  - Operable Parts

1105.1 Public entrances

- In addition to accessible entrances required by Sections 1105.1.1 through 1105.1.7, at least 60 percent of all public entrances shall be accessible.
  - Exceptions:
    1. An accessible entrance is not required to areas not required to be accessible.
    2. Loading and service entrances that are not the only entrance to a tenant space.
1105 Accessible Entrances

- Parking Garage direct access
- Tunnels or elevated walkways
- Restricted entrances
- Entrances for inmates or detainees
- Service entrances
- Tenant spaces
- Dwelling units and sleeping units

1106.1 Required

- Where parking is provided, accessible parking spaces shall be provided in compliance with Table 1106.1, except as required by Sections 1106.2 through 1106.4.
- Where more than one parking facility is provided on a site, the number of parking spaces required to be accessible shall be calculated separately for each parking facility.
  - **Exception:** This section does not apply to parking spaces used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles or vehicular impound and motor pools where lots accessed by the public are provided with an accessible passenger loading zone.

1106.5 Van spaces

- For every six or fraction of six accessible parking spaces, at least one shall be a van-accessible parking space.

1106.6 Location

- Accessible parking spaces shall be located on the shortest accessible route of travel from adjacent parking to an accessible building entrance.
- In parking facilities that do not serve a particular building, accessible parking spaces shall be located on the shortest route to an accessible pedestrian entrance to the parking facility.
- Where buildings have multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located near the accessible entrances.
1106.6 Location

- Exceptions:
  1. In multilevel parking structures, van-accessible parking spaces are permitted on one level.
  2. Accessible parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee and user convenience.

502.2 Vehicle Space Size

- Car parking spaces shall be 96 inches minimum in width.
- Van parking spaces shall be 132 inches minimum in width.
- EXCEPTION: Van parking spaces shall be permitted to be 96 inches minimum in width where the adjacent access aisle is 96 inches minimum in width.

502.4.1 Access Aisle Location

- Access aisles shall adjoin an accessible route.
- Two parking spaces shall be permitted to share a common access aisle.
- Access aisles shall not overlap with the vehicular way.
- Parking spaces shall be permitted to have access aisles placed on either side of the car or van parking space.
- Van parking spaces that are angled shall have access aisles located on the passenger side of the parking space.
502.4.4 Marking

- Access aisles shall be marked so as to discourage parking in them. Where access aisles are marked with lines, the width measurements of access aisles and adjacent parking spaces shall be made from the centerline of the markings.

  • EXCEPTION: Where access aisles or parking spaces are not adjacent to another access aisle or parking space, measurements shall be permitted to include the full width of the line defining the access aisle or parking space.

502.5 Floor Surfaces

- Parking spaces and access aisles shall comply with Section 302 and have surface slopes not steeper than 1:48.

- Access aisles shall be at the same level as the parking spaces they serve.

502.6 Vertical Clearance

- A vertical clearance of 98 inches minimum shall be provided at the following locations:
  1. Parking spaces for vans.
  2. The access aisles serving parking spaces for vans.
  3. The vehicular routes serving parking spaces for vans.

502.7 Identification

- Where accessible parking spaces are required to be identified by signs, the signs shall include the International Symbol of Accessibility complying with Section 703.6.3.1.

- Signs identifying van parking spaces shall contain the designation “van accessible.”

- Such signs shall be 60 inches minimum above the floor of the parking space, measured to the bottom of the sign.
502.8  
Relationship to Accessible Routes

- Parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent accessible routes.

1108.2  
Assembly area seating

- A building, room or space used for assembly purposes with fixed seating shall comply with Sections 1108.2.1 through 1108.2.5.
- Lawn seating shall comply with Section 1108.2.6. Assistive listening systems shall comply with Section 1108.2.7.
- Performance areas viewed from assembly seating areas shall comply with Section 1108.2.8.
- Dining areas shall comply with Section 1108.2.9.

1108.2.2  
Wheelchair spaces

- In rooms and spaces used for assembly purposes with fixed seating, accessible wheelchair spaces shall be provided in accordance with Sections 1108.2.2.1 through 1108.2.2.3.

- Wheelchair spaces shall be provided in accordance with Table 1108.2.2.1.

1108.2.3  
Companion seats

- At least one companion seat shall be provided for each wheelchair space required by Sections 1108.2.2.1 through 1108.2.2.3.
1108.2.4 Dispersion of wheelchair spaces in multilevel assembly seating areas

- In multilevel assembly seating areas, wheelchair spaces shall be provided on the main floor level and on one of each two additional floor or mezzanine levels.
- Wheelchair spaces shall be provided in each luxury box, club box and suite within assembly facilities.

Exceptions:

1. In multilevel assembly seating areas utilized for worship services where the second floor or mezzanine level contains 25 percent or less of the total seating capacity, wheelchair spaces shall be permitted to all be located on the main level.
2. In multilevel assembly seating areas where the second floor or mezzanine level provides 25 percent or less of the total seating capacity and 300 or fewer seats, all wheelchair spaces shall be permitted to be located on the main level.
3. Wheelchair spaces in team or player seating serving areas of sport activity are not required to be dispersed.

1108.2.5 Designated aisle seats

- At least 5 percent, but not less than one, of the total number of aisle seats provided shall be designated aisle seats and shall be the aisle seats located closest to accessible routes.
  - Exception: Designated aisle seats are not required in team or player seating serving areas of sport activity.

1108.2.7 Assistive listening systems

- Each building, room or space used for assembly purposes where audible communications are integral to the use of the space shall have an assistive listening system.
  - Exception: Other than in courtrooms, an assistive listening system is not required where there is no audio amplification system.
1108.2.7.1 Receivers

- The number and type of receivers shall be provided for assistive listening systems in accordance with Table 1108.2.7.1.

<table>
<thead>
<tr>
<th>CAPACITY OF SEATING IN ASSEMBLY AREAS</th>
<th>MINIMUM REQUIRED NUMBER OF RECEIVERS</th>
<th>MINIMUM NUMBER OF RECEIVERS TO BE HEARING-AND-COMPATIBLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 or less</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>51 to 200</td>
<td>2, plus 1 per 25 seats over 50 seats*</td>
<td>2</td>
</tr>
<tr>
<td>201 to 500</td>
<td>2, plus 1 per 25 seats over 50 seats*</td>
<td>2 per 6 receivers*</td>
</tr>
<tr>
<td>501 to 1,000</td>
<td>20, plus 1 per 25 seats over 100 seats*</td>
<td>2 per 4 receivers*</td>
</tr>
<tr>
<td>1,001 to 2,000</td>
<td>50, plus 1 per 50 seats over 1,000 seats*</td>
<td>2 per 5 receivers*</td>
</tr>
<tr>
<td>Over 2,000</td>
<td>50, plus 1 per 50 seats over 2,000 seats*</td>
<td>2 per 6 receivers*</td>
</tr>
</tbody>
</table>

* Note: *= fraction thereof

1108.2.7.3 Public address systems

- Where stadiums, arenas and grandstands have 15,000 fixed seats or more and provide audible public announcements, they shall also provide prerecorded or real-time captions of those audible public announcements.

1108.2.8 Performance areas

- An accessible route shall directly connect the performance area to the assembly seating area where a circulation path directly connects a performance area to an assembly seating area.
- An accessible route shall be provided from performance areas to ancillary areas or facilities used by performers.

1108.2.9 Dining and drinking areas

- In dining and drinking areas, all interior and exterior floor areas shall be accessible and be on an accessible route.
  - Exceptions:
    - 1. Accessible levels and stories above or below is not required where permitted by Section 1104.4, Exception 1.
    - 2. Mezzanine, provided the mezzanine contains less than 25 percent of the total combined area for dining and drinking and the same services, and decor are provided in the accessible area.
    - 3. In sports facilities, tiered dining areas at least 25 percent of the dining area, provided that accessible routes serve accessible seating and where each tier is provided with the same services.
    - 4. Employee-only work areas.
1108.2.9.1 Dining surfaces

- Where dining surfaces for the consumption of food or drink are provided, at least 5 percent, but not less than one, of the dining surfaces for the seating and standing spaces shall be accessible and be distributed throughout the facility and located on a level accessed by an accessible route.

1109.2 Toilet and bathing facilities

- Each toilet room and bathing room shall be accessible.
- Where a floor level is not required to be connected by an accessible route, the only toilet rooms or bathing rooms provided within the facility shall not be located on the inaccessible floor.
- Except as provided for in Sections 1109.2.2 and 1109.2.3, at least one of each type of fixture, element, control or dispenser in each accessible toilet room and bathing room shall be accessible.

- 1. Toilet rooms or bathing rooms accessed only through a private office, not for common or public use and intended for use by a single occupant, shall be permitted to comply with the specific exceptions in ICC A117.1.
- 2. This section is not applicable to toilet and bathing rooms that serve dwelling units or sleeping units that are not required to be accessible by Section 1107.
- 3. Where multiple single-user toilet rooms or bathing rooms are clustered at a single location, at least 50 percent but not less than one room for each use at each cluster shall be accessible.
- 4. Where no more than one urinal is provided in a toilet room or bathing room, the urinal is not required to be accessible.
- 5. Toilet rooms or bathing rooms that are part of critical care or intensive care patient sleeping rooms serving Accessible units are not required to be accessible.
- 6. Toilet rooms or bathing rooms designed for bariatrics patients are not required to comply with the toilet room and bathing room requirement in ICC A117.1. The sleeping units served by bariatrics toilet or bathing rooms shall not count toward the required number of Accessible sleeping units.
- 7. Where toilet facilities are primarily for children’s use, required accessible water closets, toilet compartments and lavatories shall be permitted to comply with children’s provision of ICC A117.1.
1109.2.1 Family or assisted-use toilet and bathing rooms

- In assembly and mercantile occupancies, an accessible family or assisted-use toilet room shall be provided where an aggregate of six or more male and female water closets is required.
- In buildings of mixed occupancy, only those water closets required for the assembly or mercantile occupancy shall be used to determine the family or assisted-use toilet room requirement.

1109.2.1.2 Family or assisted-use toilet rooms

- Family or assisted-use toilet rooms shall include only one water closet and only one lavatory.
- A family or assisted-use bathing room in accordance with Section 1109.2.1.3 shall be considered a family or assisted-use toilet room.
  - Exception: The following additional fixtures shall be permitted in a family or assisted-use toilet room:
    1. A urinal.
    2. A child-height water closet.
    3. A child-height lavatory.

1109.2.1.4 Location

- Family or assisted-use toilet and bathing rooms shall be located on an accessible route.
- Family or assisted-use toilet rooms shall be located not more than one story above or below separate-sex toilet rooms.
- The accessible route from any separate-sex toilet room to a family or assisted-use toilet room shall not exceed 500 feet.

In recreational facilities where separate-sex bathing rooms are provided, an accessible family or assisted-use bathing room shall be provided.

Fixtures located within family or assisted-use toilet and bathing rooms shall be included in determining the number of fixtures provided in an occupancy.

- Exception: Where each separate-sex bathing room has only one shower or bathtub fixture, a family or assisted-use bathing room is not required.
1109.2.1.5 Prohibited location

- In passenger transportation facilities and airports, the accessible route from separate-sex toilet rooms to a family or assisted-use toilet room shall not pass through security checkpoints.

1109.2.1.6 Clear floor space

- Where doors swing into a family or assisted-use toilet or bathing room, a clear floor space not less than 30 inches by 48 inches shall be provided, within the room, beyond the area of the door swing.

1109.2.1.7 Privacy

- Doors to family or assisted-use toilet and bathing rooms shall be securable from within the room.

1109.2.2 Water closet compartment

- Where water closet compartments are provided in a toilet room or bathing room, at least 5 percent of the total number of compartments shall be wheelchair accessible.
1109.2.2 Water closet compartment

- Where the combined total water closet compartments and urinals provided in a toilet room or bathing room is six or more, at least 5 percent of the total number of compartments shall be ambulatory accessible, provided in addition to the wheelchair-accessible compartment.

603 Toilet and Bathing Rooms

- Accessible toilet and bathing rooms shall comply with Section 603.

603.2.1 Turning Space

- A turning space complying with Section 304 shall be provided within the room.
- The required turning space shall not be provided within a toilet compartment.

603.2.2 Door Swing

- Doors shall not swing into the clear floor space or clearance for any fixture.
- EXCEPTIONS:
  - 1. Doors to a toilet or bathing room for a single occupant, accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space, provided the swing of the door can be reversed to comply with Section 603.2.2.
  - 2. 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 Section 603.2.2.
603.3 Mirrors

- Where mirrors are located above lavatories, a mirror shall be located over the accessible lavatory and shall be mounted with the bottom edge of the reflecting surface 40 inches maximum above the floor.
- Where mirrors are located above counters that do not contain lavatories, the mirror shall be mounted with the bottom edge of the reflecting surface 40 inches maximum above the floor.

603.3 Mirrors

EXCEPTION:
- Other than within Accessible dwelling or sleeping units, mirrors are not required over the lavatories or counters if a mirror is located within the same toilet or bathing room and mounted with the bottom edge of the reflecting surface 35 inches maximum above the floor.

603.4 Coat Hooks and Shelves

- Coat hooks shall be located within one of the reach ranges specified in Section 308.
- Shelves shall be 40 inches minimum and 48 inches maximum above the floor.

603.5 Diaper Changing Tables

- Diaper changing tables shall comply with Sections 309 and 902
  - Operable parts
  - Work Surfaces
603.6 Operable Parts

- Operable parts on towel dispensers and hand dryers serving accessible lavatories shall comply with Table 603.6.

<table>
<thead>
<tr>
<th>Maximum Reach Depth</th>
<th>0.5 inch (13 mm)</th>
<th>2 inches (51 mm)</th>
<th>5 inches (125 mm)</th>
<th>6 inches (150 mm)</th>
<th>9 inches (230 mm)</th>
<th>11 inches (280 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Reach Height</td>
<td>64 inches (1620 mm)</td>
<td>48 inches (1270 mm)</td>
<td>42 inches (1065 mm)</td>
<td>40 inches (1015 mm)</td>
<td>36 inches (915 mm)</td>
<td>34 inches (865 mm)</td>
</tr>
</tbody>
</table>

604.2 Location

- The water closet shall be located with a wall or partition to the rear and to one side.
- The centerline of the water closet shall be 16 inches minimum and 18 inches maximum from the side wall or partition.
- Water closets located in ambulatory accessible compartments specified in Section 604.10 shall have the centerline of the water closet 17 inches minimum and 19 inches maximum from the side wall or partition.

604.3 Clearance

- Width - 60 inches minimum in width, measured perpendicular from the sidewall.
- Depth - 56 inches minimum in depth, measured perpendicular from the rear wall.

604.3.3 Clearance Overlap

- The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, paper dispensers, sanitary napkin receptacles, coat hooks, shelves, accessible routes, clear floor space at other fixtures and the turning space.
- No other fixtures or obstructions shall be within the required water closet clearance.
604.4 Height

- The height of water closet seats shall be 17 inches minimum and 19 inches maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position.
  - EXCEPTION: A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with Section 604.4.

604.5 Grab Bars

- Grab bars for water closets shall comply with Section 609 and shall be provided in accordance with Sections 604.5.1 and 604.5.2. Grab bars shall be provided on the rear wall and on the side wall closest to the water closet.
  - EXCEPTIONS:
    1. In a toilet room for a single occupant, accessed only through a private office and not for common use or public use, provided reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with Section 604.5.
    2. In detention or correction facilities, grab bars are not required to be installed in housing or holding cells or rooms that are specially designed without protrusions for purposes of suicide prevention.

604.5.1 Fixed Side Wall Grab Bars

604.5.2 Rear Wall Grab Bars

- EXCEPTIONS:
  1. The rear grab bar shall be permitted to be 24 inches minimum in length, centered on the water closet, where wall space does not permit a grab bar 36 inches minimum in length due to the location of a recessed fixture adjacent to the water closet.
  2. Where an administrative authority requires flush controls for flush valves to be located in a position that conflicts with the location of the rear grab bar, that grab bar shall be permitted to be split or shifted to the open side of the toilet area.
604.6 Flush Controls
- 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.
  - EXCEPTION: In ambulatory accessible compartments

604.8 Coat Hooks and Shelves
- Coat hooks provided within toilet compartments shall be 48 inches maximum above the floor.
- Shelves shall be 40 inches minimum and 48 inches maximum above the floor.

604.7 Dispensers

604.9 Wheelchair Accessible Compartments
604.9.3 Doors

- Toilet compartment doors, including door hardware, shall comply with Section 404, except if the approach is to the latch side of the compartment door clearance between the door side of the stall and any obstruction shall be 42 inches minimum.
- 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.
- Toilet compartment doors shall not swing into the required minimum area of the compartment.

604.9.3.1 Door Opening Location

Wheelchair accessible compartment door openings—alternate

604.9.5 Toe Clearance
604.9.5 Toe Clearance

- EXCEPTIONS:
  1. Toe clearance at the front partition is not required in a compartment greater than 62 inches in depth with a wall-hung water closet, or greater than 65 inches in depth with a floor-mounted water closet.
  2. Toe clearance at the side partition is not required in a compartment greater than 66 inches in width.

604.9.6 Grab Bars

- Grab bars shall comply with Section 609.
- Side wall grab bars complying with Section 604.5.1 located on the wall closest to the water closet, and a rear wall grab bar complying with Section 604.5.2, shall be provided.
609.4.2
Position of Children's Grab Bars

604.11.6
Flush Controls
- Flush controls primarily for children's use shall be hand operated or automatic. Hand operated flush controls shall comply with Sections 309.2 and 309.4 and shall be installed 36 inches maximum above the floor.
- Flush controls shall be located on the open side of the water closet.

604.11.7
Dispensers

605
Urinals
605 Urinals

- A clear floor space complying with Section 305, positioned for forward approach, shall be provided.
- Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 309.

1109.2.3 Lavatories

- Where lavatories are provided, at least 5 percent, but not less than one, shall be accessible.
- Where an accessible lavatory is located within the accessible water closet compartment at least one additional accessible lavatory shall be provided in the multi-compartment toilet room outside the water closet compartment.
- Where the total lavatories provided in a toilet room or bathing facility is six or more, at least one lavatory with enhanced reach ranges shall be provided.

606.2 Clear Floor Space

- A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided.
- Knee and toe clearance complying with Section 306 shall be provided.
- The dip of the overflow shall not be considered in determining knee and toe clearances.

306 Knee and Toe Clearance

- Where space beneath an element is included as part of clear floor space at an element, clearance at an element, or a turning space, the space shall comply with Section 306.
- Additional space shall not be prohibited beneath an element, but shall not be considered as part of the clear floor space or turning space.
306.2 Toe Clearance

The front of lavatories and sinks shall be 34 inches (865 mm) maximum above the floor, measured to the higher of the rim or counter surface.

- EXCEPTION: A lavatory in a toilet or bathing facility for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with Section 606.3.

306.3 Knee Clearance

606.3 Height

- The front of lavatories and sinks shall be 34 inches (865 mm) maximum above the floor, measured to the higher of the rim or counter surface.

  - EXCEPTION: A lavatory in a toilet or bathing facility for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with Section 606.3.

606.4 Faucets

- Faucets shall comply with Section 309.
- Hand-operated metering faucets shall remain open for 10 seconds minimum.
309.4 Operation

- Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.
- The force required to activate operable parts shall be 5.0 pounds maximum.

606.5 Lavatories with Enhanced Reach Range

- Where enhanced reach range is required at lavatories, faucets and soap dispenser controls shall have a reach depth of 11 inches maximum or, if automatic, shall be activated within a reach depth of 11 inches maximum.
- Water and soap flow shall be provided with a reach depth of 11 inches maximum.

606.6 Exposed Pipes and Surfaces

- Water supply and drainpipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact.
- There shall be no sharp or abrasive surfaces under lavatories and sinks.

607 Bathtubs
607.3 Seat

- A permanent seat at the head end of the bathtub or a removable in-tub seat shall be provided.
- Seats shall comply with Section 610.

610.2 Bathtub Seats

607.4.1 Bathtubs with Permanent Seats

Grab Bars

607.4.2 Bathtubs without Permanent Seats

Grab Bars
607.5 Controls

- Controls, other than drain stoppers, shall be provided on an end wall, located between the bathtub rim and grab bar, and between the open side of the bathtub and the centerline of the width of the bathtub.
- Controls shall comply with Section 309.4.

607.6 Hand Shower

- A hand shower with a hose 59 inches minimum in length, that can be used as both a fixed shower head and as a hand shower, shall be provided.
- The hand shower shall have a control with a nonpositive shut-off feature.
- Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars.

607.7 Bathtub Enclosures

- Enclosures for bathtubs shall not obstruct controls, faucets, shower and spray units or obstruct transfer from wheelchairs onto bathtub seats or into bathtubs.
- Enclosures on bathtubs shall not have tracks installed on the rim of the bathtub.

607.8 Water Temperature

- Bathtubs shall deliver water that is 120°F maximum.
608.2.1 Transfer-type Shower Compartments

610.3 Shower Compartment Seats
- The height of shower compartment seats shall be 17 inches minimum and 19 inches maximum above the bathroom floor, measured to the top of the seat.
- In transfer-type and alternate roll-in-type showers, the seat shall extend along the seat wall to a point within 3 inches of the compartment entry.

610.4 Strength
- Allowable stresses shall not be exceeded for materials used where a vertical or horizontal force of 250 pounds is applied at any point on the seat, fastener mounting device, or supporting structure.
608.2.2 Standard Roll-in-type Shower Compartments

608.2.3 Alternate Roll-in-type Shower Compartments

608.3.1 Transfer-Type Showers Grab Bars

608.3.3 Alternate Roll-in-Type Showers Grab Bars
608.4 Controls and Hand Showers

Transfer Type Shower

Standard Roll-in shower

608.4.3 Alternate Roll-in Showers Grab Bars

608.5 Hand Showers

- A hand shower with a hose 59 inches minimum in length, that can be used both as a fixed shower head and as a hand shower, shall be provided.
- The hand shower shall have a control with a nonpositive shut-off feature.
- Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars.

608.6 Thresholds

- Thresholds in roll-in-type shower compartments shall be 1/2 inch maximum in height in accordance with Section 303. In transfer-type shower compartments, thresholds 1/2 inch maximum in height shall be beveled, rounded, or vertical.
  - EXCEPTION: In existing facilities, in transfer-type shower compartments where provision of a threshold 1/2 inch in height would disturb the structural reinforcement of the floor slab, a threshold 2 inches maximum in height shall be permitted.
1109.4 Kitchens and kitchenettes

- Where kitchens and kitchenettes are provided in accessible spaces or rooms, they shall be accessible.

804.2.1 Pass-through Kitchens

- In pass-through kitchens where counters, appliances or cabinets are on two opposing sides, or where counters, appliances or cabinets are opposite a parallel wall, clearance between all opposing base cabinets, counter tops, appliances, or walls within kitchen work areas shall be 40 inches minimum.
- Pass-through kitchens shall have two entries.

804.2.2 U-Shaped Kitchens

804.3 Work Surface

- At least one work surface shall be provided in accordance with Section 902.
  - EXCEPTION: Spaces that do not provide a cooktop or conventional range shall not be required to provide an accessible work surface.
902
Dining Surfaces and Work Surfaces

- A clear floor space positioned for a forward approach.
- Knee and toe clearance complying shall be provided.
- No sharp or abrasive surfaces under the exposed portions of dining surfaces and work surfaces.
- The tops of dining surfaces and work surfaces shall be 28 inches minimum and 34 inches maximum in height above the floor.

804.4
Sinks

- The sink shall comply with Section 606.
  - A clear floor space positioned for forward approach
  - Knee and toe clearance shall be provided.
  - The front sinks shall be 34 inches maximum above the floor, measured to the higher of the rim or counter surface.
  - Faucets shall comply with Section 309.
  - Water supply and drainpipes under lavatories and sinks protected.

804.5
Appliances

- A clear floor space complying with Section 305 shall be provided at each kitchen appliance.
- All appliance controls shall comply with Section 309 (Reach Range).
  - EXCEPTIONS:
    1. Appliance doors and door latching devices shall not be required to comply with Section 309.4.
    2. Bottom-hinged appliance doors, when in the open position, shall not be required to comply with Section 309.3.

804.5.3
Dishwasher

- A clear floor space positioned adjacent to the dishwasher door, shall be provided.
- The dishwasher door in the open position shall not obstruct the clear floor space for the dishwasher or an adjacent sink.
804.5.4 Cooktop

- A clear floor space, positioned for a parallel or forward approach
- Clear floor space is positioned for a forward approach, knee and toe clearance shall be provided. The underside of the cooktop shall be insulated.
- Clear floor space positioned for a parallel approach, the clear floor space shall be centered on the appliance.
- The location of controls shall not require reaching across burners.

804.5.5 Oven

- A clear floor space shall be provided. The oven door in the open position shall not obstruct the clear floor space for the oven.
- Side-hinged door ovens shall have a work surface complying with Section 804.3 positioned adjacent to the latch side of the oven door.
- Bottom-hinged door ovens shall have a work surface complying with Section 804.3 positioned adjacent to one side of the door.
- The location of controls shall not require reaching across burners.

804.5.6 Refrigerator/Freezer

- Combination refrigerators and freezers shall have at least 50 percent of the freezer compartment shelves, including the bottom of the freezer, 54 inches maximum above the floor when the shelves are installed at the maximum heights possible in the compartment.
- A clear floor space, positioned for a parallel approach to the refrigerator/freezer, shall be provided.
- The centerline of the clear floor space shall be offset 24 inches maximum from the centerline of the appliance.

1109.5 Drinking Fountains

- No fewer than two drinking fountains shall be provided.
- One drinking fountain shall comply with the requirements for people who use a wheelchair and one drinking fountain shall comply with the requirements for standing persons.
1109.5.2
More than the minimum number

- Where more than the minimum number of drinking fountains specified in Section 1109.5.1 is provided, 50 percent of the total number of drinking fountains provided shall comply with the requirements for persons who use a wheelchair and 50 percent of the total number of drinking fountains provided shall comply with the requirements for standing persons.

602.2
Clear Floor Space

- 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.

602.4
Spout Outlet Height

- Spout outlets of wheelchair accessible drinking fountains shall be 36 inches maximum above the floor.
- Spout outlets of drinking fountains for standing persons shall be 38 inches minimum and 43 inches maximum above the floor.

602.5
Spout Location

- 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.
602.6 Water Flow

- 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.

IBC 1109.7 Elevators

- Elevators shall comply with Section 3001.3 (ICC A117.1)
- A117.1 Section 407
  - Commercial elevators
  - 408 – LULA

A117.1 407 Elevators

- Call Buttons shall be 35-48" AFF
- Visible and audible signals req’d.
- Visible signal shall be 72" min. AFF
  - 2.5" min. ht.

407.3 Elevator Doors

- Shall open & close automatically.
- Door shall stop and reopen if obstructed.
ANSI A117.1 - 407 - Elevators

- 407.4.1 Provides requirements for minimum car dimensions.

Buttons:
- Shall be identified with tactile symbols per the table.
- Located 48” AFF

1109.8 Platform (wheelchair) Lifts

1. An accessible route to a performing area and speaker platforms.
2. An accessible route to wheelchair spaces required to comply with the wheelchair space dispersion requirements of Sections 1108.2.2 through 1108.2.6.
3. An accessible route to spaces that are not open to the general public with an occupant load of not more than five.
1109.8 Platform (wheelchair) Lifts

- 7. An accessible route to play components or soft contained play structures.
- 8. An accessible route to team or player seating areas serving areas of sport activity.
- 10. An accessible route where existing exterior site constraints make use of a ramp or elevator infeasible.

1109.9 Storage

- Where fixed or built-in storage elements such as cabinets, coat hooks, shelves, medicine cabinets, lockers, closets and drawers are provided in required accessible spaces, at least 5 percent, but not less than one of each type shall be accessible.

1109.9 Storage

- Accessible facilities and spaces shall be provided with the same storage elements as provided in the similar nonaccessible facilities and spaces.
- Self-service shelves and display units shall be located on an accessible route. Such shelving and display units shall not be required to comply with reach-range provisions.

1109.11 Seating at tables, counters and work surfaces

- Where seating or standing space at fixed or built-in tables, counters or work surfaces is provided in accessible spaces, at least 5 percent of the seating and standing spaces, but not less than one, shall be accessible.
904.3 Sales and Service Counters

- Parallel Approach.
- A portion of the counter surface 36 inches minimum in length and 36 inches maximum in height above the floor shall be provided.
- Where the counter surface is less than 36 inches in length, the entire counter surface shall be 36 inches maximum in height above the floor.
- A clear floor space complying with Section 305, positioned for a parallel approach adjacent to the accessible counter, shall be provided.

904.3 Sales and Service Counters

- Forward Approach.
- A portion 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 complying with Section 305, 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.

1109.11.1 Dispersion

- Accessible fixed or built-in seating at tables, counters or work surfaces shall be distributed throughout the space or facility containing such elements and located on a level accessed by an accessible route.

1109.12.1 Dressing, fitting and locker rooms

- Where dressing rooms, fitting rooms or locker rooms are provided, at least 5 percent, but not less than one, of each type of use in each cluster provided shall be accessible.
803
Dressing, Fitting, and Locker Rooms
- Turning space required
- Door Swing not permitted to swing into room unless turning space outside of swing
- Bench must be accessible per Section 903
- Coat hooks 40-48 inches above floor.

903
Benches
- Clear floor space required
- Must support 250 pounds
- Slip resistant surface in wet locations.

1109.12.2
Check-out aisles
- Where check-out aisles are provided, accessible check-out aisles shall be provided in accordance with Table 1109.12.2.
- Where check-out aisles serve different functions, accessible check-out aisles shall be provided in accordance with Table 1109.12.2 for each function.

<table>
<thead>
<tr>
<th>TOTAL CHECK-OUT AISLES OF EACH FUNCTION</th>
<th>MINIMUM NUMBER OF ACCESSIBLE CHECK-OUT AISLES OF EACH FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 4</td>
<td>1</td>
</tr>
<tr>
<td>5 to 8</td>
<td>2</td>
</tr>
<tr>
<td>9 to 15</td>
<td>3</td>
</tr>
<tr>
<td>Over 15</td>
<td>3 plus 20% of additional aisles</td>
</tr>
</tbody>
</table>

1109.12.2
Check-out aisles
- Where check-out aisles are dispersed throughout the building or facility, accessible check-out aisles shall also be dispersed.
- Traffic control devices, security devices and turnstiles located in accessible check-out aisles or lanes shall be accessible.
  - Exception: Where the public use area is under 5,000 square feet not more than one accessible check-out aisle shall be required.
904.4 Checkout Aisles

- Aisles comply with 403
- The checkout counter surface shall be 38 inches maximum in height above the floor.
- The top of the counter edge protection shall be 2 inches maximum above the top of the counter surface on the aisle side of the checkout counter.
- Where provided, check writing surfaces shall be 28-34 inches AFF.

1109.12.3 Point of sale and service counters

- Where counters are provided for sales or distribution of goods or services, at least one of each type provided shall be accessible.
- Where such counters are dispersed throughout the building or facility, accessible counters shall also be dispersed.

1109.12.4 Food service lines

- Food service lines shall be accessible.
- Where self-service shelves are provided, at least 50 percent, but not less than one, of each type provided shall be accessible.

904.5 Food Service Lines

- Self-service shelves and dispensing devices for tableware, dishware, condiments, food and beverages shall comply with Section 308.
- The tops of tray slides shall be 28 inches minimum and 34 inches maximum above the floor.
1109.13 Controls, operating mechanisms and hardware

- 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:

1. Operable parts that are intended for use only by service or maintenance personnel shall not be required to be accessible.
2. Electrical or communication receptacles serving a dedicated use shall not be required to be accessible.
3. Where two or more outlets are provided in a kitchen above a length of counter top that is uninterrupted by a sink or appliance, one outlet shall not be required to be accessible.
4. Floor electrical receptacles shall not be required to be accessible.
5. HVAC diffusers shall not be required to be accessible.
6. Except for light switches, where redundant controls are provided for a single element, one control in each space shall not be required to be accessible.
7. Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to comply with Section 1008.1.9.2.

1110.1 General

- Recreational facilities shall be provided with accessible features in accordance with Sections 1110.2 through 1110.4.
1110.4.1
Area of sport activity
- Each area of sport activity shall be on an accessible route and shall not be required to be accessible except as provided for in Sections 1110.4.2 through 1110.4.14.

1110.4.7
Animal containment areas
- Animal containment areas that are not within public use areas are not required to be accessible or to be on an accessible route.

1110.4.8
Amusement rides
- Amusement rides that move persons through a fixed course within a defined area shall comply with Sections 1110.4.8.1 through 1110.4.8.3.
  - Exception: Mobile or portable amusement rides shall not be required to be accessible.

1110.4.8.2 - Wheelchair spaces, ride seats designed for transfer and transfer devices
- Where amusement rides are in the load and unload position, the following shall be on an accessible route.
  1. The position serving a wheelchair space.
  2. Amusement ride seats designed for transfer.
  3. Transfer devices.
1110.4.8.3
Minimum number

- Amusement rides shall provide at least one wheelchair space, amusement ride seat designed for transfer or transfer device.
- Exceptions:
  1. Amusement rides that are controlled or operated by the rider are not required to comply with this section.
  2. Amusement rides designed primarily for children, where children are assisted on and off the ride by an adult, are not required to comply with this section.
  3. Amusement rides that do not provide seats that are built-in or mechanically fastened shall not be required to comply with this section.

1110.4.9
Recreational boating facilities

- Boat slips required to be accessible by Sections 1110.4.9.1 and 1110.4.9.2 and boarding piers at boat launch ramps required to be accessible by Section 1110.4.9.3 shall be on an accessible route.

1110.4.9.1
Boat slips

- Accessible boat slips shall be provided in accordance with Table 1110.4.9.1.
- All units on the site shall be combined to determine the number of accessible boat slips required.
- Where the number of boat slips is not identified, each 40 feet of boat slip edge provided along the perimeter of the pier shall be counted as one boat slip for the purpose of this section.
  - Exception: Boat slips not designed for embarking or disembarking are not required to be accessible or be on an accessible route.

<table>
<thead>
<tr>
<th>TOTAL NUMBER OF BOAT SLIPS PROVIDED</th>
<th>NUMBER OF REQUIRED ACCESSIBLE BOAT SLIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 or less</td>
<td>1</td>
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<tr>
<td>11 to 20</td>
<td>2</td>
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<tr>
<td>21 to 30</td>
<td>3</td>
</tr>
<tr>
<td>31 to 50</td>
<td>4</td>
</tr>
<tr>
<td>51 to 100</td>
<td>5</td>
</tr>
<tr>
<td>101 or more</td>
<td>6</td>
</tr>
</tbody>
</table>

1110.4.9.2
Dispersion

- Accessible boat slips shall be dispersed throughout the various types of boat slips provided.
- Where the minimum number of accessible boat slips has been met, no further dispersion shall be required.
1110.4.9.3  Boarding piers at boat launch ramps

- Where boarding piers are provided at boat launch ramps, at least 5 percent, but not less than one, of the boarding piers shall be accessible.

1110.4.10  Exercise machines and equipment

- At least one of each type of exercise machine and equipment shall be on an accessible route.

1110.4.11  Fishing piers and platforms

- Fishing piers and platforms shall be accessible and be on an accessible route.

1110.4.12  Miniature golf facilities

- Miniature golf facilities shall comply with Sections 1110.4.12.1 through 1110.4.12.3.
1110.4.12.1
Minimum number

- At least 50 percent of holes on miniature golf courses shall be accessible.

1110.4.12.2 - Miniature golf course configuration

- Miniature golf courses shall be configured so that the accessible holes are consecutive.
- Miniature golf courses shall provide an accessible route from the last accessible hole to the course entrance or exit without requiring travel through any other holes on the course.
  - Exception: One break in the sequence of consecutive holes shall be permitted provided that the last hole on the miniature golf course is the last hole in the sequence.

1110.4.12.3
Accessible route

- Holes required to comply with Section 1110.4.12.1, including the start of play, shall be on an accessible route.

1110.4.13 Play areas

- Play areas containing play components designed and constructed for children shall be located on an accessible route.
1110.4.14 - Swimming pools, wading pools, hot tubs and spas

- Swimming pools, wading pools, hot tubs and spas shall be accessible and be on an accessible route.
- Exceptions:
  1. Catch pools or a designated section of a pool used as a terminus for a water slide flume shall not be required to provide an accessible means of entry, provided that a portion of the catch pool edge is on an accessible route.
  2. Where spas or hot tubs are provided in a cluster, at least 5 percent, but not less than one spa or hot tub in each cluster, shall be accessible and be on an accessible route.
  3. Swimming pools, wading pools, spas and hot tubs that are required to be accessible by Sections 1110.2.2 and 1110.2.3 are not required to provide accessible means of entry into the water.

1110.4.14.1 - Raised diving boards and diving platforms

- Raised diving boards and diving platforms are not required to be accessible or to be on an accessible route.

1110.4.14.2 - Water slides

- Water slides are not required to be accessible or to be on an accessible route.

1110.4.15 - Shooting facilities with firing positions

- 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.
**1111 Signage**

- Required accessible elements shall be identified by the International Symbol of Accessibility at the following locations.
- 1. Accessible parking spaces required by Section 1106.1.
  - Exception: Where the total number of parking spaces provided is four or less, identification of accessible parking spaces is not required.
- 2. Accessible parking spaces required by Section 1106.2.
  - Exception: In Group I-1, R-2, R-3 and R-4 facilities, where parking spaces are assigned to specific dwelling units or sleeping units, identification of accessible parking spaces is not required.
- 3. Accessible passenger loading zones.
- 4. Accessible rooms where multiple single-user toilet or bathing rooms are clustered at a single location.
- 5. Accessible entrances where not all entrances are accessible.
- 6. Accessible check-out aisles where not all aisles are accessible. The sign, where provided, shall be above the check-out aisle in the same location as the checkout aisle number or type of check-out identification.
- 7. Family or assisted-use toilet and bathing rooms.
- 8. Accessible dressing, fitting and locker rooms where not all such rooms are accessible.
- 9. Accessible areas of refuge in accordance with Section 1007.9.
- 10. Exterior areas for assisted rescue in accordance with Section 1007.9.
- 11. In recreational facilities, lockers that are required to be accessible in accordance with Section 1109.9.
1111.2 Directional signage

- Directional signage indicating the route to the nearest like accessible element shall be provided at the following locations.
- 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.

1. Inaccessible building entrances.
2. Inaccessible public toilets and bathing facilities.
3. Elevators not serving an accessible route.
4. At each separate-sex toilet and bathing room indicating the location of the nearest family/assisted use toilet or bathing room where provided in accordance with Section 1109.2.1.

703 Signs

- Tactile signs shall contain both raised characters and braille.
- Where signs with both visual and raised characters are required, either one sign with both visual and raised characters, or two separate signs, one with visual, and one with raised characters, shall be provided.
Accessibility for Existing Buildings 305

- Applies to:
  - maintenance,
  - change of occupancy,
  - additions and alterations to existing buildings
  - including those identified as historic buildings.

305.2 Maintenance of facilities

- A facility that is constructed or altered to be accessible shall be maintained accessible during occupancy.

305.3 Extent of application

- An alteration of an existing element, space or area of a building or facility shall not impose a requirement for greater accessibility than that which would be required for new construction.

- Alterations shall not reduce or have the effect of reducing accessibility of a building, portion of a building or facility.
305.4 Change of occupancy

- Existing buildings that undergo a change of group or occupancy shall comply with this section

Partial Change of Occupancy

305.4.1

- Where a portion of the building is changed to a new occupancy classification... use:

305.6 – Alterations
305.7 – Alterations for primary function
305.8 – Alterations Scoping

Complete Change in Occupancy

- Complete Change in Occupancy
- Where an entire building undergoes a change of occupancy:
  - shall comply with Section 305.4.1 and shall have all of the following accessible features:

305.4.2 Change of occupancy

1. Not fewer than one accessible building entrance.
2. Not fewer than one accessible route from an accessible building entrance to primary function areas.
4. Accessible parking, where parking is being provided.
5. Not fewer than one accessible passenger loading zone, when loading zones are provided.
6. Not fewer than one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.
305.4.2 Change of occupancy

Where it is technically infeasible to comply with the new construction standards for any of these requirements for a change of group or occupancy, the above items shall conform to the requirements to the maximum extent technically feasible.

Definitions

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TECHNICALLY INFEASIBLE. An alteration of a building or a facility that has little likelihood of being accomplished because
- the existing structural conditions require the removal or alteration of a load-bearing member that is an essential part of the structural frame,
- or because other existing physical or site constraints prohibit modification or addition of elements, spaces or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility.

305.5 Additions

Provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, a primary function shall comply with the requirements in Section 305.7.

305.6 Alterations

A building, facility or element that is altered shall comply with the applicable provisions in Chapter 11 of the IBC, unless technically infeasible.

Where compliance with this section is technically infeasible, the alteration shall provide access to the maximum extent technically feasible.
305.6 Alterations Exceptions

1. The altered element or space is not required to be on an accessible route, unless required by Section 305.7.

305.6 Alterations Exceptions

2. Accessible means of egress required by Chapter 10 of the IBC are not required to be provided in existing buildings and facilities.

305.7 Alterations affecting an area containing a primary function

Where an alteration affects:
- Accessibility to a primary function
- or contains an area of primary function
- Then the route to the primary function area shall be accessible.

Primary Function Definition

PRIMARY FUNCTION. A primary function is a major activity for which the facility is intended.
- Examples of primary function:
  - Customer service lobby of a bank,
  - Dining area of a cafeteria,
  - Meeting rooms in a conference center,
  - Offices and other work areas in which the activities of the public accommodation or other private entity using the facility are carried out.
Primary Function Definition

- Examples of what is NOT primary function:
  - Mechanical rooms,
  - boiler rooms,
  - supply storage rooms,
  - employee lounges or locker rooms, janitorial closets,
  - entrances,
  - corridors,
  - restrooms

305.7 Alterations

- The accessible route to the primary function area shall include toilet facilities and drinking fountains serving the area of primary function.

305.7 Alterations Exceptions

1. The costs of providing the accessible route are not required to exceed 20 percent of the costs of the alterations affecting the area of primary function.

Cost of Alteration

Cost of Access Route

Disproportion ADA

- Alterations cause accessible routes to be retrofit
- Costs shall not be disproportionate to the cost of the alteration
20% Disproportion

- Accessible Route Features:
  - Ch. 4 – ICC/A117.1
  - Walking Surfaces
  - Doors & Doorways
  - Ramps & Curb Ramps
  - Elevators
  - Platform Lifts

Walking Surfaces

- 403.2Floor Surface (see 302)
- 403.3Slope
- 403.4Changes in Level
- 403.5Clear Width


- What is a "path of travel"?
- It also includes
  - phones,
  - restrooms,
  - drinking fountains
- …serving the altered area.


- What costs can be included in determining whether the 20 percent disproportionality limitation has been met?
- Widening doorways, installing ramps, making bathrooms accessible, lowering telephones, relocating water fountains -- as well as any other costs associated with making the path of travel accessible -- can be included.
How to spend the 20%...

- IBC is silent
- ADA Guidance:
  - First priority should be given to measures that will enable individuals with disabilities to "get in the front door," followed by measures to provide access to areas providing goods and services.

Changes should be made in the following order:
- accessible entrance
- accessible route to the altered area
- at least one accessible restroom for each sex or single unisex restroom
- phones
- drinking fountains
- and then other elements such as parking, storage, and alarms.

305.7 Alterations Exceptions

- 2. This provision does not apply to alterations limited solely to
  - windows,
  - hardware,
  - operating controls,
  - electrical outlets &
  - signs.

3. This provision does not apply to alterations limited solely to
- mechanical systems,
- electrical systems,
- installation or alteration of fire protection systems &
- abatement of hazardous materials.
305.7 Alterations Exceptions

4. This provision does not apply to alterations undertaken for the primary purpose of increasing the accessibility of an existing building, facility or element.

305.7 – Alterations Affecting an Area Containing a Primary Function

Exception 5

“This provision does not apply to altered areas limited to Type B dwelling and sleeping units.”

305.8 Scoping for alterations

The provisions of Sections 305.8.1 through 305.8.14 shall apply to alterations to existing buildings and facilities.

305.8.1 Entrances

Where an alteration includes alterations to an entrance that is not an accessible entrance, the altered entrance is not r
305.8.1 Entrances
- Where an alteration includes alterations to an entrance that is not accessible,
- and the facility has an accessible entrance,
- the altered entrance is not required to be accessible, unless required by Section 305.7.
- Signs complying with Section 1111 of the IBC shall be provided.

305.8.2 Elevators
- Altered elements of existing elevators shall comply with ASME A17.1 and ICC A117.1.
- Such elements shall also be altered in elevators programmed to respond to the same hall call control as the altered elevator.

305.8.3 Platform lifts
- Platform (wheelchair) lifts complying with ICC A117.1 and installed in accordance with ASME A18.1 shall be permitted as a component of an accessible route.

305.8.4 Stairways and escalators in existing buildings.
- In alterations, change of occupancy or additions where an escalator or stairway is added where none existed previously and major structural modifications are necessary for installation, an accessible route shall be provided between the levels served by the escalator or stairways in accordance with Section 1104.4 of the IBC.
305.8.5 Ramps

- Where steeper slopes than allowed by Section 1012.2 of the IBC are necessitated by space limitations, the slope of ramps in or providing access to existing buildings or facilities shall comply with Table 305.8.5.

<table>
<thead>
<tr>
<th>SLOPE</th>
<th>MAXIMUM RISE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steeper than 1:10 but not steeper than 1:8</td>
<td>3 inches</td>
</tr>
<tr>
<td>Steeper than 1:12 but not steeper than 1:10</td>
<td>6 inches</td>
</tr>
</tbody>
</table>

305.8.6 Dwelling or sleeping units

- Where I-1, I-2, I-3, R-1, R-2 or R-4 dwelling or sleeping units are being altered or added, the requirements of Section 1107 of the IBC for Accessible units apply only to the quantity of spaces being altered or added.

305.8.10 Toilet rooms

- Where it is technically infeasible to alter existing toilet and bathing facilities to be accessible, an accessible family or assisted use toilet constructed in accordance with 1109.2.1 of the IBC is permitted.
- The family or assisted use facility shall be located on the same floor and in the same area as the existing facilities.
- Directional signage required.

Additional toilet and bathing fixtures – 305.8.11

- In assembly and mercantile occupancies, where additional toilet fixtures are added, not fewer than one accessible family or assisted-use toilet room shall be provided where required by Section 1109.2.1 of the IBC. (6 or more)
- In recreational facilities, where additional bathing rooms are being added, not fewer than one family or assisted-use bathing rooms shall be provided where required by Section 1109.2.1 of the IBC.
305.8.12 Dressing, fitting and locker rooms

- Where it is technically infeasible to provide accessible dressing, fitting or locker rooms at the same location as similar types of rooms, one accessible room on the same level shall be provided.
- Where separate-sex facilities are provided, accessible rooms for each sex shall be provided.
- Separate-sex facilities are not required where only unisex rooms are provided.

305.8.14 Thresholds

- The maximum height of thresholds at doorways shall be ¾ inch.
- Such thresholds shall have beveled edges on each side.

305.8.15 Amusement rides

- Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride’s performance differs from that specified by the manufacturer or the original design, the amusement ride shall comply with requirements for new construction in Section 1110.4.8 of the IBC.

305.9 Historic buildings

- These provisions shall apply to buildings and facilities designated as historic structures that undergo alterations or a change of occupancy, unless technically infeasible.
305.9 Historic buildings

- Where compliance with the requirements for accessible routes, ramps, entrances or toilet facilities would threaten or destroy the historic significance of the building or facility, as determined by the authority having jurisdiction, the alternative requirements of Sections 305.9.1 through 305.9.4 for that element shall be permitted.

305.9.1 Site arrival points

- Not fewer than one accessible route from a site arrival point to an accessible entrance shall be provided.

305.9.2 Multilevel buildings and facilities

- An accessible route from an accessible entrance to public spaces on the level of the accessible entrance shall be provided.

305.9.3 Entrances

- Not fewer than one main entrance shall be accessible.
305.9.3 Entrances Exceptions

- If a public entrance cannot be made accessible, an accessible nonpublic entrance that is unlocked while the building is occupied shall be provided; or

- A locked accessible entrance with a notification system or remote monitoring shall be provided.

305.9.3 Entrances

- Signs complying with Section 1111 of the IBC shall be provided at the public entrance and the accessible entrance.

305.9.4 Toilet and bathing facilities

- Where toilet rooms are provided, not fewer than one accessible toilet room complying with Section 1109.2.1 of the IBC shall be provided.
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Colorado Code Consulting, LLC
4610 S Ulster, Suite 150
Denver, CO 80237
Ph. 303-400-6564
Fax 303-693-0630

www.coloradocode.net
sthomas@coloradocode.net