

Chapter 1

REVIEW OF PROJECT TYPES & USES

This chapter is comprised of an overview of accessibility requirements for disparate elements and project types. This can be a small part of a facility or the overall project which has a specific use with its own considerations. Items mentioned in this chapter are to be used in conjunction with other elements of Access unless specifically noted otherwise. There may be small exceptions based on building type or facility use or even when the facility was initially constructed. There is also the issue of funding sources and whether the project is new construction or alterations. All of these have impact on which regulations are applicable. And on top of this, there are local state, city, and county regulations to be aware of. Simple, right? Just be aware of construction dates, funding sources, and if there is any public or federal programming.



✗ Outdoor dining area has no accessible seating – all tables have center pedestal bases



✓ Dining area with fixed pedestal tables having accessible seating & knee/toe clearance below



✗ Accessible check-out aisle is closed & the ISA is too low & not visible when people queue



✓ Guest room bed has clearance on both sides & accessible route to drapery controls

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✗ In assembly areas, the wheelchair space can not project into & block the *circulation path* or egress route



✓ Closet provides both high & low storage of hang- rods and shelves



✗ High bar with no lower counters in area for seating



✓ High bar with lowered section for 5% of the bar seating



✗ Designated aisle seats with folding arms but missing designation



✓ More than 5% of the lockers are accessible, although not designated

Existing Projects

Existing Buildings – In General

- ▶ Under the ADA Standards, when determining which regulations to apply and how to apply them, information on the type of project and its financing is needed
- ▶ *Public facilities* or programs, trigger Title II of the ADA and the questions for existing buildings are: date it was permitted, initial regulations it was under, and how it fits into an accessibility *transition plan* if one exists
- ▶ For *public accommodations* under Title III of the ADA, the date it was permitted, dates of last alterations and its supporting *path of travel*, as well as *readily achievable barrier removal* are critical
- ▶ Some facilities with federal funds may trigger multiple regulations so determining whether to use the ADA Title II, HUD's Deeming Notice, UFAS, the ABA, or the other federal regulations based on ABA is critical
- ▶ There are also different programs which can be offered at a facility, that impact which regulations to use dependent on funding sources
- ▶ And, on top of this there is the local state, city, and county regulations to be aware of

DISCUSSION

The nature of architecture has changed over the years with a higher proportion of renovation, alterations, and re-use. Under the ADA Standards, there are differing requirements for maintaining existing buildings even without alterations versus altering a portion of a facility or even the total facility. The type of facility, ownership of the facility, or the funding for the facility, and even the types of programs that are being offered within the facility have a large impact.

If we are talking about ADA Title II Regulations (28 CFR 35) or the 2010 ADA Standards, it is applicable to a *public facility* within or on the exterior, or it can be a public service, program, or activity. A public facility refers to a State, a county, or a city, and it includes its services, programs, and activities, or it can be either constructed by a public entity or by a private entity on behalf of or for the use of a public entity. This can include city schools, or state community colleges, or local libraries, or public parking on the street, or even temporary street fairs or county beach access. It can also include federal development funds overseen by a State entity.

If we are talking about Title III of the ADA Standards, it is applicable to places of *public accommodation* as well as *commercial facilities* where no public may be present – only employees. An exception is a private club that has exclusive membership, meaning that it is expensive to join and is not your neighborhood work-out gym. Another exception is a religious institution. For both of these facility types, if there are activities offered to the public, even if it is on an once-a-year basis, or an event where a space is rented by the public, then those areas and their supporting *path of travel* will need to comply with the ADA. A place of *public accommodation* can be a store, an office, entertainment, a restaurant, or hotels, for example, which have non-public ownership. In other words, private ownership.

If there are federal programs, or funds that derived from a federal entity, then it can be under the Architectural Barriers Act Standards (ABAS). There are approximately 78 other federal agencies which may have adopted their own version of ABA, or are using the Uniform Federal Accessibility Standards (UFAS). Like HUD, they may use ADA with HUD's May 23, 2014 Deeming Notice which is a safe harbor when 2010 ADAS and UFAS are both required. The Deeming Notice contains 11 exceptions to the 2010 ADAS where HUD believes Section 504/UFAS provide greater accessibility than ADA Title II. If the project is considered covered multi-family housing, then FHA and a designated safe harbor are to apply in addition to the above depending upon funding sources and programs. Note, FHA is only applicable to multi-family housing built for first occupancy after March 13, 1991 if it meets certain criteria. If one is altering a multi-family project which was built before that date, then FHA is not applicable to those dwelling units or the common use spaces unless there is an addition after that date meeting the criteria for *covered* units. If additional dwelling units in and of itself meet the criteria for a covered multi-family, then those dwelling units and any new supporting common use space(s) will need to comply, but not the existing.

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.1 Existing Projects

With all of these regulations, it is critical to understand which one(s) pertain to a project, and it can be more than one – what is the funding; what kind of programs; where did the funding originally come from; and indeed, not all of these are obvious. For instance, there is a new California program for public housing meant to quickly convert existing hotels and other existing building types in order to get our urban nomads off of the street into transitional or permanent supportive housing. This appears, at first glance, to be a public program administered by the State, but digging into the funding sources, the larger portion is derived from federal Covid Relief Funds (CRF), so these projects will need to meet both public and federal requirements. And this really should not be ignored, nor conclusions hastily determined, since it does affect which regulations apply. And, then, there are all of the building code requirements for state, county, and city that need to additionally be integrated into the equation. This scoping and understanding can indeed be a challenge.

ADA Title II for Public Entities – 28 CFR Part 35

- ▶ The definition of a public entity is – *any State or local government; any department, agency, special purpose district, or other instrumentality of a State or States or local government; and the National Railroad Passenger Corporation, and any commuter authority (as is defined in section 103(8) of the Rail Passenger Service Act)*
- ▶ If the start date of construction/alteration for state and local government facilities was on or after March 15, 2012, Title II Regulations 28 CFR 35 (TII), and the 2010 ADA Standards are applicable and mandatory
- ▶ If the start date of construction/alteration was after September 15, 2010 and before March 15, 2012, TII and either the 1991 ADA Standards without the elevator exemptions, UFAS, or the 2010 ADA Standards are applicable
- ▶ If the start of construction date was prior to September 15, 2010, (TII) and UFAS or the 1991 ADA are applicable
- ▶ If the facility was not built or altered in compliance with the above-mentioned regulations and construction started after January 26, 1992, then it is non-complying and now needs to be fixed to comply with the 2010 ADA
- ▶ A public entity is required to have its services, programs, and activities readily accessible when viewed in its entirety, if built prior to when the ADA went into affect on January 26, 1992
- ▶ A public entity is not required to make all of its existing facilities readily accessible, nor does it require an action that would threaten or destroy the historic significance of an historic property, nor would it require an action if it would result in a fundamental alteration in the nature of the service, program, or activity, nor if it would result in an *undue financial and administrative burden*
- ▶ If it is determined that making existing facilities accessible would either result in a fundamental alteration in the nature of the service, program, or activity, or it would result in an *undue financial and administrative burden*, this determination is to be made by the head of the public entity or their designee and is to be accompanied by a written statement as to the reasons for reaching that conclusion
- ▶ When an alteration is done for *program access*, the full *path of travel* supporting the altered area is to be made accessible and *disproportionality* is not applicable, although if it is determined by the head of the public entity that it would be an *undue financial and administrative burden* there is some consideration for doing less than the full *path of travel*
- ▶ If alterations are being done for other than program access, then the 20% *disproportionality* is applicable to the *path of travel* supporting the altered space and is similar to *path of travel* requirements under Title III
- ▶ If a *path of travel* or portions of it have already been altered before March 15, 2012 to be in compliance with the 1991 ADA or UFAS, then those portions have *safe harbor* and do not need to be revised to meet the 2010 ADA when supporting another primary function area being altered, unless the *path of travel* itself is being altered
- ▶ UFAS does not have any language for *path of travel* as related to alterations except for how *substantial alterations* could have been implemented, therefore, if a public entity was using UFAS, there might not be an accessible *path of travel* to altered areas and it would now be subject to the ADA requirement for alterations to primary function areas with a supporting *path of travel*
- ▶ If a public entity has 50 or more employees, and physical changes to the buildings need to be done for *program access*, then they are to have a *transition plan* which is to have been updated to include the new 14 items in the supplemental requirements
- ▶ An accessibility self-evaluation and *transition plan* are to include 4 elements – identification of physical obstacles; description on how these obstacles will be made accessible; specify a schedule for correction; and indicate the official responsible for implementation of the plan
 - ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
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1.1 Existing Projects

- ▶ The *transition plan* is to be available for public inspection and to allow interested people or organizations to submit comments and participate in its development
- ▶ If a public entity has responsibility over streets, roads, and walkways under their jurisdiction, the schedule for providing curb ramps or sloped walkways is to be included in the *transition plan*
- ▶ Providing a curb ramp on a public street ahead of schedule in the public entity's *transition plan* would be considered a *reasonable modification/accommodation* in response to someone with a disability
- ▶ Resurfacing a roadway with a new layer of asphalt is considered an alteration – *newly constructed or altered streets, roads, and highways are to contain curb ramps or sloped areas at intersections where there are curbs or barriers at entry from a street level pedestrian walkway*
- ▶ Public buildings are required to have all floors connected by an *accessible route* unless it is a 2-story building and the non-accessible story has an occupant load of 5 or less with no public use space
- ▶ Some of the funding sources that trigger requirements for public housing include the following, although it is not limited to this list;
 - General Obligation (GO) bonds issued by a public entity that are repaid by tax revenues
 - Mortgage revenue bonds (MRB), either tax-exempt or taxable, issued by a public entity that are then repaid with interest by project revenues
 - Allocations of federal and state Low Income Housing Tax Credits (LIHTC) to developers by State government such as the California Tax Credit Allocation Committee (CTCAC)
 - City funds, Tax Increment/Low & Moderate Income Housing Funds of former Redevelopment Agencies, federal entitlement funds for local governments to spend on housing and/or community development
 - Below-market rate ground leases, loans with below-market rate interest, and grants from a city or county
 - US Department of Education – ADAS without the elevator exception
 - California-specific – State Mills Act (administered and implemented by local government); VHHP (Veterans Housing & Homeless Prevention Program – Prop 12); IIG (Infill Infrastructure Grant funded by Prop 1C); HomeKey are all subject to both ADA and HUD's Deeming

ADA Title III for Public Accommodation & Commercial – 28 CFR Part 36

- ▶ The definition of a place of public accommodation is – *a facility operated by a private entity whose operations affect commerce and fall within at least one for the following categories ; a place of lodging (with some exceptions), a restaurant or bar, a place of exhibition or entertainment, a place of public gathering, sales or rental establishments, service center establishments, stations used for specified public transportation, places for public display or collection, place of recreation, place of education, social service center establishments, and places for exercise or recreation*
- ▶ The definition of a commercial facility is – *facilities whose operations affect commerce and intended for non-residential use by a private entity but that are not housing, aircraft, or railroads*
- ▶ The definition of commerce is *travel, trade, traffic, commerce, transportation, or communication – (1) among the several States; (2) between any foreign country or any territory or possession and any State; or (3) between points in the same State but through another State or foreign country* – in other words across state lines which does not fall under the categories listed for a place of public accommodation
- ▶ If the start date of construction/alteration for public accommodations and commercial facilities was on or after March 15, 2012, the 2010 ADA Standards are applicable and mandatory
- ▶ If the start date of construction/alteration was after September 15, 2010 and before March 15, 2012, either the 1991 ADA Standards or the 2010 ADA Standards are applicable
- ▶ If the start of construction date was prior to September 15, 2010, the 1991 ADAS are applicable
- ▶ If the facility was not built or altered in compliance with the above-mentioned regulations and construction started after January 26, 1992, then it is non-complying and would now need to be fixed to comply with the 2010 ADA

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.1 Existing Projects

- ▶ If a building was built prior to the ADA or there were items that are now addressed in the 2010 Supplemental requirements that were not incorporated prior to March 15, 2012, then there is the obligation of *readily achievable barrier removal*
- ▶ *Readily achievable* is defined as – *easily accomplishable and able to be carried out without much difficulty or expense*
- ▶ *Barrier removal* is an ongoing obligation that places of public accommodation have even if no construction is being done – there is an annual federal tax credit for small businesses for this with a description found at: <https://archive.ada.gov/taxincent.htm>
- ▶ In order for the Owner to determine what is *readily achievable* for them, there is a criteria of 5 items – *the nature and cost of the action; overall financial resources of the site; geographic separateness to a parent entity; the overall financial resources of the parent entity; and the type of operation of the parent entity*

NOTE: What is *readily achievable* is a determination that can not be made by the architect or designer since it requires understanding of the ownership and resources for the facility. Only the first item of what is the nature and perhaps the cost can be provided by a design professional. This is an ongoing obligation for the Owner and is required even if there is no construction or alteration projects. Be aware that the prioritization for *barrier removal* is different than prioritization for *proportional spending* for an alteration, and is not applicable to employee only areas since employees are protected under Title I of the ADA nor to public facilities.

- ▶ When determining which barriers are to be removed, for a *barrier removal* project, DOJ has a prioritized the list (c) **Priorities.** *A public accommodation is urged to take measures to comply with the barrier removal requirements of this section in accordance with the following order of priorities.*
 - (1) *First, a public accommodation should take measures to provide access to a place of public accommodation from public sidewalks, parking, or public transportation. These measures include, for example, installing an entrance ramp, widening entrances, and providing accessible parking spaces.*
 - (2) *Second, a public accommodation should take measures to provide access to those areas of a place of public accommodation where goods and services are made available to the public. These measures include, for example, adjusting the layout of display racks, rearranging tables, providing Brailled and raised character signage, widening doors, providing visual alarms, and installing ramps.*
 - (3) *Third, a public accommodation should take measures to provide access to restroom facilities. These measures include, for example, removal of obstructing furniture or vending machines, widening of doors, installation of ramps, providing accessible signage, widening of toilet stalls, and installation of grab bars.*
 - (4) *Fourth, a public accommodation should take any other measures necessary to provide access to the goods, services, facilities, privileges, advantages, or accommodations of a place of public accommodation.*
- ▶ DOJ has also published a list of examples they feel are *readily achievable* for *barrier removal*, but it is not limited to this list and these are only examples (b) **Examples.** *Examples of steps to remove barriers include, but are not limited to, the following actions*
 - (1) *Installing ramps;*
 - (2) *Making curb cuts in sidewalks and entrances;*
 - (3) *Repositioning shelves;*
 - (4) *Rearranging tables, chairs, vending machines, display racks, and other furniture;*
 - (5) *Repositioning telephones;*
 - (6) *Adding raised markings on elevator control buttons;*
 - (7) *Installing flashing alarm lights;*
 - (8) *Widening doors;*
 - (9) *Installing offset hinges to widen doorways;*

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1.1 Existing Projects

- (10) Eliminating a turnstile or providing an alternative accessible path;
- (11) Installing accessible door hardware;
- (12) Installing grab bars in toilet stalls;
- (13) Rearranging toilet partitions to increase maneuvering space;
- (14) Insulating lavatory pipes under sinks to prevent burns;
- (15) Installing a raised toilet seat;
- (16) Installing a full-length bathroom mirror;
- (17) Repositioning the paper towel dispenser in a bathroom;
- (18) Creating designated accessible parking spaces;
- (19) Installing an accessible paper cup dispenser at an existing inaccessible water fountain;
- (20) Removing high pile, low density carpeting; or
- (21) Installing vehicle hand controls.

- ▶ If an alteration (not *barrier removal*) is being done that affects or could affect the usability of the building, then the *path of travel* supporting the *primary function* area of the altered area is also to be made accessible to the maximum extent feasible, up to 20% of the construction budget for the *primary function* area, if it did not comply with the 1991 ADA and this gets calculated over a 3 year period for alterations
- ▶ If the full *path of travel* can not be made completely compliant without becoming *disproportionate*, the items to consider are prioritized in the following order
 - (2) In choosing which accessible elements to provide, priority should be given to those elements that will provide the greatest access, in the following order:
 - (i) An accessible entrance;
 - (ii) An accessible route to the altered area;
 - (iii) At least one accessible restroom for each sex or a single unisex restroom;
 - (iv) Accessible telephones;
 - (v) Accessible drinking fountains; and
 - (vi) When possible, additional accessible elements such as parking, storage, and alarms.
- ▶ The following areas are not considered areas of *primary function* and therefore do not trigger *path of travel* requirements if altered – mechanical rooms, boiler rooms, supply storage rooms, employee lounges, locker rooms, janitorial closets, entrances, corridors, and restrooms
- ▶ Egress only *circulation paths* are not considered part of the *path of travel* for alteration purposes, and therefore are not subject to *proportional spending* when a *primary function* area is being altered, unless the egress component is also altered or the egress route is the *path of travel* for the altered area
- ▶ The following items are not considered alterations that affect the usability of or access to an area containing a *primary function* and therefore do not trigger *proportional spending* on the supporting *path of travel* when they are altered – windows, hardware, controls, electrical outlets, and signage
- ▶ Other items not considered alterations requiring *proportional spending* on the supporting *path of travel* are – *normal maintenance, re-roofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building*

NOTE: Notice that in the previous list of what is not considered an alteration, plumbing is not included. Hence, plumbing is always considered an alteration. If an HVAC system has new thermostats where none were located before, or if there are new electrical outlets in new locations, it would be considered an alteration since it would affect the usability of the facility. New flooring and carpeting are also considered an alteration.

- ▶ If a tenant is altering their area that only the tenant occupies, it does not trigger a *path of travel* requirement on the landlord for areas under the landlord's authority if those areas are not also being altered

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- ▶ And one other item to note, *if existing structural conditions would require the need to remove or alter a load-bearing member that is an essential part of the structural frame, or because of existing physical or site constraints prohibit modification or addition of elements in strict compliance with the requirements, it would be considered technically infeasible* and not required to be fully compliant, although it should be modified to the maximum extent feasible
- ▶ If alterations of single element(s) are done, the entire room or space does not need to be accessible, unless the intent was to alter the entire room
- ▶ Employee only areas do not have a *barrier removal* requirement since they are protected under Title I of the ADA, but if the space is altered, then it would need to comply with the Standards

DISCUSSION

ADA Title III is applicable to public accommodations, commercial facilities, and to private entities that offer exams and courses, but only portions are applicable to all. For instance, *barrier removal* is not applicable to employee-only areas since employees are protected under Title I of the ADA. It is also not applicable to commercial facilities for employee-only areas for the same rationale.

The policies and practices delineated under 28 CFR Subparts B and C apply to public accommodations with respect to their operations including §36.309 regarding examinations and courses, and to §36.310 for transportation provided by public accommodations, along with a few other items. Maintenance of accessible features is part of Subpart B, so is only an obligation of a *place of public accommodation*, not commercial facilities. Be aware that there might be other requirements outside of ADA – for instance, CBC requires maintenance of accessible features, facilities, and equipment under 11B-108.

Subpart C is also about policies, practices, and procedures including requirements and expectations for service animals. There are also requirements for making reservations for lodging, whether on-line or via the phone. Keeping the accessible check-out aisle open when a store is open to the public is also a policy requirement applicable to retail. Provisions for ticketing and reservations in assembly areas for accessible seating are also regulated. And the provisions of auxiliary aids and services such as sign language interpreters, assistive listening devices, screen reader software, and other aids are delineated.

Subpart D is applicable to a *place of public accommodation* and to a commercial facility. It is basically a delineation of new construction and alteration requirements in a broad sweep. There is discussion on *path of travel*, primary function areas, and *disproportionality* requirements for alterations for a better understanding of what needs to be addressed in an existing project. Included is a discussion on elevator exemptions and alterations for historic preservation. It has a section discussing noncomplying new construction and alteration which is important to understand and how to address the non-complying elements. It also includes an overview on some of the new or expanded requirements for places of lodging, social service center establishments, housing at a place of education, and assembly areas, to list a few. While this is not a comprehensive listing, it is important for understanding the overall requirements for alterations.

Supplemental Requirements Under the ADA Standards

- ▶ The 2010 ADA Standards added new Supplemental requirements for elements that did not previously have scoping or technical requirements – these elements do not receive safe harbor
- ▶ Safe Harbor for Title II and Title III facilities is not applicable to the new supplemental requirements
 - (ii) *The safe harbor provided in §35.150(b)(2)(i) [§36.304(d)(2)(i)] does not apply those elements in existing facilities that are subject to supplemental requirements.*
 - (A) *Residential facilities dwelling units, sections 233 and 809.*
 - (B) *Amusement rides, sections 234 and 1002; 206.2.9; 216.12.*
 - (C) *Recreational boating facilities, sections 235 and 1003; 206.2.10.*
 - (D) *Exercise machines and equipment, sections 236 and 1004; 206.2.13.*

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(E) Fishing piers and platforms, sections 237 and 1005; 206.2.14.

(F) Golf facilities, sections 238 and 1006; 206.2.15.

(G) Miniature golf facilities, sections 239 and 1007; 206.2.16.

(H) Play areas, sections 240 and 1008; 206.2.17.

(I) Saunas and steam rooms, sections 241 and 612.

(J) Swimming pools, wading pools, and spas, sections 242 and 1009.

(K) Shooting facilities with firing positions, sections 243 and 1010.

(L) Miscellaneous.

(1) Team or player seating, section 221.2.1.4.

(2) Accessible route to bowling lanes, section. 206.2.11.

(3) Accessible route in court sports facilities, section 206.2.12.

- ▶ If these elements are existing in a Title II, public facility, then they need to be altered to be compliant with these new standards or they need to be added to the *transition plan* in order to be addressed
- ▶ If these elements are existing in a Title III, public accommodation facility, then they need to be altered to be compliant with these new standards or they need to have barriers removed as part of the *readily achievable barrier removal* obligation

Federal Facility Requirements

- ▶ A federal facility is one that is constructed by or on behalf of, or owned by or leased to a federal entity
- ▶ When an element or a space is altered or an addition to is provided, it is to comply with the ABA Standards
- ▶ In an addition, an *accessible route* is to be provided within the site from the public right of way and public transportation stops, to and including accessible parking, an accessible passenger loading zone (if a loading zone exists), and to and including an accessible entrance
- ▶ In an addition, if a toilet room, bathing room, public phones, and/or drinking fountains exist, they are to be made accessible or new accessible ones are to be provided as part of the addition
- ▶ In an alteration, the altered element or space needs to comply and if the *circulation path* to that element or space is not altered, then an *accessible route* is not required to be provided unless the *alteration affects or could affect the usability of or access to an area containing a primary function*
- ▶ If the alteration affects or could affect an area of primary function, the restrooms, telephones, and drinking fountains serving the altered are also to be altered to be accessible unless disproportionate to the overall cost and scope of the alteration as determined by the federal entity
- ▶ There is also an exception for *technically infeasible* defined similarly to the ADA where the item is to be altered to the maximum extent feasible
- ▶ If a facility is leased by a federal entity for 12 months or less or for servicing disasters on a temporary emergency basis, they not required to comply with a number of the accessibility requirements
- ▶ The US Postal Service adopted the ABA Standards and integrated it into their RE-4 Standards on October 1, 2005
- ▶ Department of Defense (DoD) adopted the ABA Standards on October 21, 2008
- ▶ GSA adopted the ABA Standards on May 8, 2006 and for leased facilities on February 6, 2007 as indicated in their Federal Management Regulations (Subpart C)
- ▶ HUD has not adopted the ABA Standards but is allowing the use of the 2010 ADAS along with their May 23, 2014 Deeming Notice which has 11 exceptions where Section 504 and UFAS are to be used instead of the ADA
- ▶ There are approximately 78 other federal facilities that might still be using UFAS or following the lead of HUD with their Deeming Notice – do check with the agency to find out what standard they are using
- ▶ Some of the funding sources that trigger requirements for federal housing include the following, although it is not limited to this list and some additionally trigger public housing requirements from the ADA if the program is administered by a public entity;
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1.1 Existing Projects

- HUD – can use UFAS, or if public involvement then ADA TII with HUD's Deeming Notice (which incorporates both)
- HUD - VASH – if building-based use UFAS, or if public involvement then ADA TII with HUD's Deeming Notice
- FHLB-AHP (Federal Home Loan Bank - Affordable Housing Program) is chartered thru a federal government agency – use UFAS, or if public involvement then ADA TII with HUD's Deeming Notice
- HOME-CHDO (Community Housing Development Organization set aside of federal HOME funds) – if building-based then UFAS, or if public involvement then ADA TII with HUD's Deeming Notice
- CDBG (Community Development Block Grant from HUD to local jurisdictions) – ADA TII with HUD's Deeming Notice
- US Agriculture Department – UFAS, or if public involvement then ADA TII with HUD's Deeming Notice
- Project-based Section 8 Certificates – UFAS, or if public involvement then ADA with HUD's Deeming Notice

Alterations & Local Requirements

- ▶ Alterations require an additional 20% *proportional spending* on *path of travel* upgrades supporting the *primary function* area being altered – amounts over 20% are considered *disproportionate* and are not required until another alteration is done that the *path of travel* supports
 - While CBC does recognize *proportional spending* on alterations being limited to 20% of construction costs for *path of travel* upgrades, it allows for 20% maximum spending up to the *valuation threshold* which increases annually in January – 2023 it is at \$195,358 [CBC]
 - If the construction costs are above that *valuation threshold* amount, the full *path of travel* supporting the primary function area will need to be upgraded regardless of cost, although there is now a hardship consideration, but 20% of construction costs will still need to be applied [CBC]
- Elevator upgrades are always limited to the 20% *proportional spending* of the adjusted construction costs [CBC]
- If the 20% *proportional spending* does not cover all *path of travel* upgrades, the prioritization is the same as ADA with the exception that a single user unisex restroom could also be a family restroom and signs are added to the last priority grouping [CBC]
- ▶ Under Title II of the ADA, if an alteration is made for *program accessibility*, it is not limited to 20% for proportional spending and the full *path of travel* supporting the altered area will need to comply, but if done for other than *program access*, then 20% *disproportionality* is applicable
- ▶ If the *path of travel* supporting the *primary function* area is already compliant or if it does not need the full 20% dollar amount to be spent to make it compliant, then 20% is not required
- CBC does not have requirements for *barrier removal*, but it does recognize ADA requirements under 11B-202.4 exceptions 3 thru 7 in that it will not trigger *path of travel* requirements for *barrier removal* projects [CBC]

NOTE: Be aware that for *barrier removal* on existing *places of public accommodation*, there is an annual tax credit available for small businesses. If qualified, up to \$10,250 can be spent annually, where the first \$250 is out of pocket, and half of the remainder would be a tax credit. Something to discuss with a CPA.

- ▶ The *safe harbor* consideration under ADA applies to the previous ADA (1991 ADA), or UFAS if applicable, except for items listed under the *Supplemental Requirements*
 - The CBC allows for a 'safe harbor' on *path of travel* upgrades but only if it complied with the previous edition of the code [CBC]

NOTE: The CBC states that alterations to existing parking lots by resurfacing are limited to the actual scope of work. This may be in conflict with the DOJ interpretation that a new layer of asphalt is considered an alteration, not maintenance which could then trigger curb ramps.

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

- ◆ A117.1 does not state anything specific for *barrier removal, path of travel, readily achievable, or proportional spending* so the ADA will need to be followed without any modifications [A117.1]
- IBC does not state anything specific for *barrier removal, readily achievable, or proportional spending*, although *path of travel* is referred to but in terms of egress or circulation path, not access, so the ADA will need to be followed without any modifications [IBC]

Historical Facilities

- ▶ Historic facility considerations are only provided for buildings that are either already designated as historic under state or local laws, or ones that are eligible for listing or already listed in the National Register of Historic Places – both are known as a *Qualified Historic Facility*
- Alterations to a *qualified historic building* are to comply with the CA State Historical Building Code part 8 of the California Code of Regulations [CBC]
- ▶ Any alterations to historic properties are to comply with access standards to the maximum extent feasible including the prioritization of items to be altered
- ▶ If an historic facility is undergoing a restoration it is considered an alteration
- ▶ A public entity or a place of public accommodation is not required to make any changes that would threaten or destroy the historic significance of an historic property
- ▶ If it is not possible to provide access to a physical historic property, alternate methods can be implemented for *program access* under Title II such as audio visual materials and devices, assigning a guide to assist into or thru a portion that is not accessible, or other innovative methods
- ▶ *Barrier removal* for a place of public accommodation would not be considered *readily achievable* if it would threaten the historic significance of a *Qualified Historic Facility*
- ▶ An exemption for a *path of travel* element for a qualified historic building, such as entrances, toilet facilities, and *accessible routes* needs to be made on an item by item basis by a State Historic Preservation Officer
- ▶ An *accessible route* is still to be provided from a site arrival point to the accessible entry
- ▶ If no public entrance can be made to comply, an unlocked compliant entrance not used by the public can be substituted, or a compliant locked entrance with a notification system or remote monitoring is to be provided
- An alternative entry is to be located within 200' from the primary entry with directional signs [CBC]
- ▶ If not all toilet rooms can be altered to be accessible, then one accessible is to be provided for each sex if the existing are gender-specific, or if that is not possible, then one accessible unisex toilet room is to be provided
- ▶ A ramp is allowed with a 10% maximum slope with a 6" maximum rise due to space limitations in existing facilities
 - A ramp is allowed with a 10% maximum slope with a 6" maximum rise due to space limitations in historic facilities [CBC]
- Documentation is to be provided stating reasons for application of alternative provisions [CBC]

NOTE: The California State Historical Building Code lists allowable clear opening widths to entry doors that are less than what is allowed under ADA – so be very careful using this since it does not comply with ADA. It is also allowing a power-assist door as an equivalent alternative to a level landing, operating force, and strike side clearance. This appears to be a mistake since a power-assist door still requires a level landing and strike side clearance and one still needs to operate the door – just the operating force gets relieved. Most likely what was meant was a low energy door opener device which can have it controls located over a level clear floor space. When engaged, it will open the door so one does not have to 'operate' the door itself – just engage the button and the door opens automatically so it is equivalent to an accessible *path of travel*. It also allows a ramp of 16.67% slope with a 13" maximum rise for historical properties, but this is not allowed under ADA which allows a 12.5% slope with a 3" maximum rise for existing facilities. The ADA would over-rule the local codes in this case, so be careful using it. [CBC]

- A variance can be issued for repair or rehabilitation of an historic structure presuming the work does not preclude the continuing designation as an historic structure [IBC]

▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
■ □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.1 Existing Projects

Regulation Sources

2010 ADA Sources

- 106.5 Definitions > Defined Terms > Alteration
- 106.5 Qualified Historic Building or Facility
- 106.5 Technically Infeasible
- 202.3 Existing Buildings and Facilities > Alterations
- 202.5 Alterations to Qualified Historic Buildings and Facilities
- 206.2.1 **except 1** Accessible Routes > Where Required > Site Arrival Points
- 206.2.3 **except 7** Multi-Story Buildings and Facilities
- 206.4 **except 2** Entrances
- 213.2 **except 2** Toilet Facilities and Bathing Facilities > Toilet Rooms and Bathing Rooms

Advisory 202.5 Alterations to Qualified Historic Buildings and Facilities Exception

ADA Implementing Regulations

Title II 28 CFR Part 35

- § 35.104 Definitions > Historic Properties
- § 35.105 Public Entity
- § 35.150 (a) (2) & (3) Subpart D > Program Accessibility > Existing Facilities > General
- § 35.150 (b) (2) Methods > Safe Harbor
- § 35.150 (b) (3) Methods
- § 35.150 (d) (1) & (d3) Transition Plan
- § 35.151 (b) (3) New Construction and Alterations > Alterations
- § 35.151 (i) Curb Ramps

Title III 28 CFR Part 36

- § 36.102 (b), (c), & (d) Subpart A – General > General > Application
- § 36.104 Definitions > Commerce
- § 36.104 Commercial Facility
- § 36.104 Place of Public Accommodation
- § 36.104 Readily Achievable
- § 36.211 Maintenance of Accessible Features
- § 36.304 (b) Removal of Barriers > Examples
- § 36.304 (c) Priorities
- § 36.304 (d) (2) (iii) Relationship to Alterations Requirements of Subpart D of This Part
- § 36.304 (g) (2) Duty to Provide Accessible Features in the Event of Disproportionality

2022 CBC Sources

(Sources shown in italics differ from ADA)

- 202 Definitions > Alteration*
- 202 Qualified Historic Building or Facility*
- 202 Technically Infeasible*
- 11B-108 Maintenance of Accessible Features*
- 11B-202.3 except 2 Existing Buildings and Facilities > Alterations*
- 11B-202.4 excepts Path of Travel Requirements in Alterations, Additions, and Structural Repairs*
- 11B-202.5 Alterations to Qualified Historic Buildings and Facilities*

California Code of Regulations

- State Historical Building Code Part 8-6 Accessibility*
- 8-602.1 Basic Provisions > Regular Code*
- 8-602.2 Alternative Provisions*
- 8-603.2 Entry*

2021 IBC Sources

(Sources shown in italics differ from ADA)

- 202 Definitions > Historic Buildings*
- G106.3 Variances > Historic Structures*

Regulation Sources

- § 36.309 Examinations and Courses
- § 36.310 Transportation Provided by Public Accommodations
- § 36.402 Alterations
- § 36.402 (b) (1) Alteration
- § 36.403 (b) Alterations: Path of Travel > Primary Function
- § 36.403 (c) Alterations to an Area Containing a Primary Function
- § 36.403 (d) Landlord/Tenant
- § 36.403 (f) Disproportionality
- § 36.405 Alterations: Historic Preservation
- § 36.406 (a) (5) Standards for New Construction and Alterations > Noncomplying New Construction and Alterations

US DOJ & US DOT Requirements to Provide Curb Ramps When Streets, Roads, or Highways Are Altered Thru Resurfacing

US DOJ Tax Incentives for Businesses <https://archive.ada.gov/taxincent.htm>

DOJ 1991 Part 35 Section-by-Section Analysis

28 CFR Part 35 Subpart D Program Accessibility > Historic Preservation Programs

Section 35.151 New Construction and Alterations

DOJ 1991 Section-by-Section Analysis

28 CFR Part 36

§ 36.304 (b) Removal of Barriers

§ 36.402 (b) (1) Alterations > Alteration

§ 36.405 Alterations: Historic Preservation

ABA Sources

F201 Application

F202 Existing Buildings and Facilities

F202.2 Additions

F202.3 Alterations

F202.4 Alterations Affecting Primary Function Areas

F202.6 Leases

Retail, Restaurants, Cafeterias, & Bars

Retail – In General

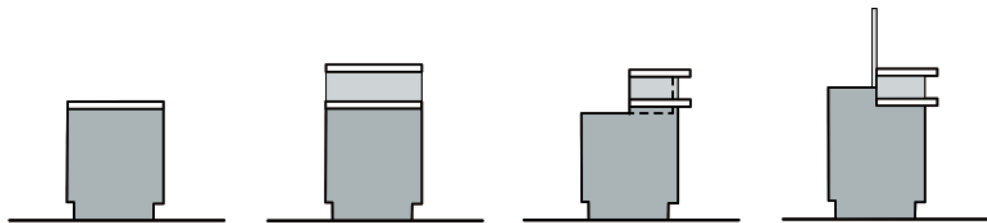
- ▶ Retail follows the same requirements for other building types on parking, entry, *accessible route*, protruding objects, signage, and other amenities

NOTE: Retail can be broken down into several parts. Aisles where you can view the products. Sales counters where you pay for the products. Service counters where you can get information, order, or return a product. Queues where you line up for a service if that is a feature. Changing rooms if provided with a bench, and seating areas if provided, whether for waiting or even trying on shoes. Basically these elements for retail stores do not differ from the general requirements.

- ▶ An *accessible route* is to be provided to all stories in a multi-storied building if it is considered a mall or a shopping center – which is defined as having 5 or more sales or rental establishments even if not located in the same building
 - A shopping center or mall is defined as having one or more sales or rental facilities [CBC]

NOTE: A shopping center is considered a facility having stores or rental establishments either located in a single building or separate on a site, if it is built under common ownership/control or developed as a single project. The *accessible route* is not required to connect to stories where there are no sales or rental establishments or where it was not designed to include any, but if there is one sales/rental space on that level then an *accessible route* is to be provided. Bear in mind that a restaurant or a bar is not considered a sales establishment, so those types of facilities are not considered part of the count for determination. And another item to note, under the CBC, a shopping center or mall is defined as having one or more sales or rental facilities, so an *accessible route* is always required and the elevator exemption can not be used. IBC does not use the same definition of shopping center or mall, but rather uses the term *Covered Mall Building* which also includes drinking and dining establishments and which can be one or multiple buildings.

- ▶ For sales and service counters, one of each type is to be accessible with either a parallel approach or a forward approach with knee/toe clearance below for the latter, and dispersed by area if counters are spread out within the store
- ▶ Check-out aisles, such as in super markets, have different requirements than other sales and service type counters regarding scoping for quantity of accessible as well as height requirements
- ▶ The accessible portion is to be the full depth of the customer side of the sales/service counter which is either the full depth of the counter, or if a split-height counter then the same depth as the accessible portion on the customer side – having a pull-out shelf is more of a *barrier removal* solution than what can be used in new construction



Accessible Sales & Service Counters

NOTE: Some stores tend to crowd the accessible counter top with merchandise displays for spontaneous and last minute purchases. The intent of the lower counter section is to have the required width and depth of the accessible portion to remain free of items. It is to be usable as a counter-top for sales and service, not as product display.

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.2 Retail, Restaurants, Cafeterias, & Bars

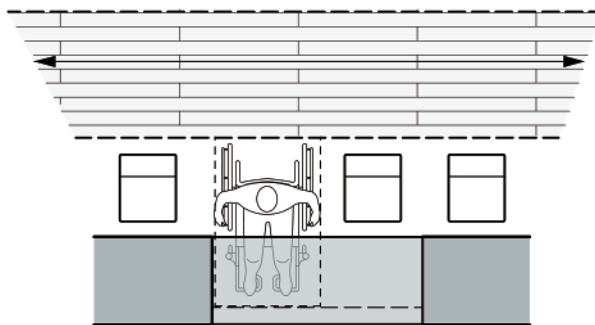
- ▶ If not all sales and service counters remain open, the accessible ones are to be the primary staffed stations remaining open to customers whenever the facility is open to the public
- ▶ The payment areas at these counters, whether checks or point of sale devices, are also to be accessible for reach range, operating force, ability to use with one hand without tight grasping, pinching, or twisting of the wrist

NOTE: Be aware that sales people walking around with a tablet for customer use may not be accessible, particularly if it requires two hands to hold and work the device or if it does not have tactile keypads so those with limited vision can make use of them.

- ▶ All aisles used by customers are to meet clearance requirements of 36" minimum and should not be blocked by product or displays, although they can be narrowed down to 32" minimum clear for a 24" length if they open up for a 48" length on each side
 - Single loaded aisles are to be 36" minimum clear, double-loaded aisles are to provide 44" minimum clear, and should not be blocked by product or displays [CBC]
- ▶ If one can do a 'U'-turn at the end of the aisle, then the clearances are to meet the end aisle requirements for clearances depending upon the aisle width for a 'U'-turn
- ◆ If one has to do a right turn at the end of the aisle, then the clearances are to be met on both legs at the turn [A117.1]
- ▶ Items on display along aisles are not required to be within reach range
- ▶ Information for aisles and services are to be visual but product-specific information is not required to comply
- ▶ If a dressing or fitting room is provided, 5% are to be accessible and are to include a bench with the length of a clear floor space aligning with the end of the bench, and a turning space inside the room
- ▶ The bench is to meet the same requirements as benches provided in saunas, locker rooms, and steam rooms and is to be 42" in length by 20" to 24" deep, and either fixed to the wall or have an integral back
 - The bench is similar to benches provided in saunas and steam rooms and is to be 48" in length by 20" to 24" deep, and either fixed to the wall or floor with an integral back or the wall can be used as the back [CBC]

Restaurants, Cafeterias, & Bars – In General

- ▶ Restaurants, cafeterias, and bars follow the same requirements for other building types for parking, entry, *accessible routes*, and toilet rooms, with additional requirements on counters for food and drink
- ▶ Whether seating is located at a table or bar/counter, the accessible table or counter is to have a clear floor space adjoining an *accessible route* for forward approach that is 30" minimum wide by 27" minimum clear height, and 17" minimum to 25" maximum clear depth under the table or counter, with the typical knee reduction and toe clearance beyond
 - Whether seating is located at a table or bar/counter, the accessible table or counter is to have a clear floor space for forward approach adjoining an *accessible route* that is 30" minimum wide by 27" minimum clear height, and 19" minimum to 25" maximum depth under the table or counter with no knee reduction beyond – in other words it is to be a rectangular volume [CBC]



Counter & Bar Seating with Aisle Clearance

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◆ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.2 Retail, Restaurants, Cafeterias, & Bars

- ▶ The wheelchair space can not block the minimum *accessible route* or *circulation path* while someone is seated at the table or counter
- ▶ 5% of the seating is to be at an accessible space – fixed furniture is to be scoped separately from loose furniture; exterior areas are also to be scoped separately; and rooms with different features or ambiance are to be scoped separately as well
- ▶ All dining and function areas are to be located on an *accessible route* whether the areas are raised, sunken, outdoor, or mezzanine, and an *accessible route* is required within those areas to the accessible table – if there is no accessible seating within that area, then an *accessible route* is not required within, although it is still required to the area
- ▶ If the facility meets the multi-story building and facility exception for an *accessible route*, then an *accessible route* is not required to the mezzanine level if it is less than 25% of the total dining area and the decor and services are the same
 - If the facility is existing and meets the multi-story building and facility exception, then an *accessible route* is not required to the mezzanine level if it is less than 25% of the total dining area and if the decor and services are the same [CBC]
- ▶ In tiered dining areas within sports facilities where accessible seating is located, 25% minimum of the tiered dining area is to have an *accessible route* to the area and to the accessible seats, presuming that each tier has the same services
 - ◇ In tiered dining areas, within sports facilities, the wheelchair seating space is not required to be recessed 12" to align with the companion seat back [A117.1]
- ▶ Accessible seating is to be dispersed and not located at the same table or all in the same area
- ▶ The height of the accessible table top or counter is 28" to 34" above the finished floor
 - If the surface is greater than 34" high, lower a 60" wide section to be at an accessible height [CBC]
- ▶ Drink rails that are not also a dining surface are not required to have a forward approach and are not required to meet the requirements for dining surface heights

NOTE: A drink rail is meant to rest drinks, not for dining. This is not covered under section 226 of the ADA which is specific for dining and work surfaces. ADA states "Where dining surfaces are provided for the consumption of food and drink..." so this is not applicable to narrow drink rails that are not meant for dining. But, the drink rail surface does need to be within reach range, and be aware of the rail being a protruding object where a cane detectable barrier might be needed.

- ▶ Menus are not required to have tactile characters, but employees should be able to assist with reading the items out loud – large print menus are helpful but not required
- ▶ The hostess stand counter on the public side should also meet counter height requirements
- ▶ Food service lines are to have the tray rail surface at 34" maximum above the finished floor
- ▶ If food preparation and/or selection are visually available to customers who are standing, then it should also be available for those in a wheelchair or short of stature in order to see the selection and preparation
- ▶ If there is a condiment or utensil counter for self-service, then 50% of each type, with one minimum, is to be within reach range

DISCUSSION

How much space is required for seating backed up to an aisle? This is not clearly delineated anywhere and requires that some consideration be given to the required clear floor space below and the aisles leading to it. A wheelchair space takes up a 30" wide x 48" long space. Tables and counters require a minimum of 17" knee/toe clearance below up to a maximum of 25". Presuming just the minimum dimension of 17" below is provided, the wheelchair would stick out 31" beyond the edge of the table or counter. So if the table or counter backs up to an aisle, we know that an additional 31" minimum space is required from the edge of the aisle to the face of the counter or table top for the clear floor space, before the clear width of the aisle is provided. Since the CBC requires 2" more clear depth below of 19" for the minimum, then the inset to the aisle would be reduced to 29" instead of 31".

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.2 Retail, Restaurants, Cafeterias, & Bars

If the seating is backed up to a wall or other obstruction, a front approach would require at least 36" clear to the seat wall in order to maneuver with a 'T'-shaped turn and that is presuming the table has a 48" width from the aisle side to the back wall. If the table does not have that width, then this would be similar to using a side approach into an alcove which requires 60" clear from seat wall to edge of table since the alcove space would be greater than 15" deep.

If the table is wall-hung versus having legs on each end that can also have impact and lessen the amount of maneuvering space, but be careful that the table-top support does not block the knee/toe space below.

If the approach from the aisle requires one to make a 'U'-turn into the seating space, the area from the table edge to the seat wall may also need to be deeper similar to an end aisle at a 'U'-turn. All of this requires planning. A person can not be seated at the end of the table if blocking the *circulation path*. And if the table has a pedestal base, the 30" wide seating space can not overlap the base. This is an issue for table-tops with a center pedestal, since making the table-top larger in order to provide the clearance below would then require the base to also be made larger. Many items to consider.

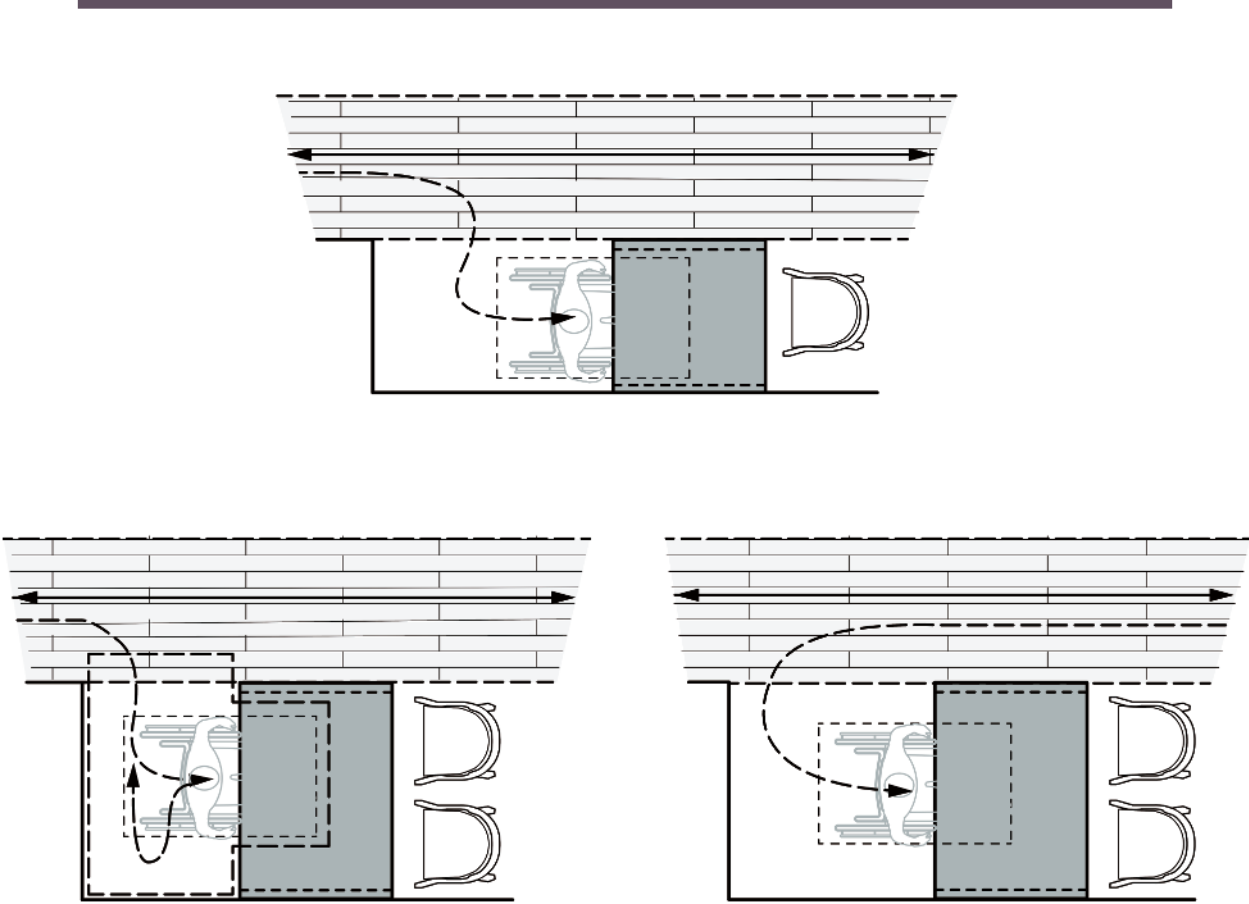


Table Seating & Approach

NOTE: One other item to be aware of is that food trucks are required to have compliant service counters for ordering, payment, and pick-up of food. This means that the surface needs to be at 36" maximum under ADA and 34" maximum under CBC. While these are movable and temporary, the ADA Standards are still applicable.

► – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
■ □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

Regulation Sources

2010 ADA Sources

- 206.2.3 Accessible Routes > Where Required > Multi-Story Buildings and Facilities
- 206.2.5 Restaurants and Cafeterias
- 222.1 Dressing, Fitting, and Locker Rooms > General
- 226 Dining Surfaces and Work Surfaces
- 227 Sales and Service
- 902 Dining Surfaces and Work Surfaces
- 903 Benches
- 904 Check-Out Aisles and Sales and Service Counters

ADA Implementing Regulations

Title III 28 CFR Part 36

- § 36.401 (d) (1) ii New Construction > Elevator Exemption > Shopping Center or Shopping Mall
- § 36.401 (d) (2) i This section...

2017 ICC A117.1 Sources

(Sources shown in italics differ from ADA)

- 802.1 Assembly Areas > General
- 802.7.2 Companion Seat > Companion Seat Alignment
- 803.1 Dressing, Fitting, and Locker Rooms > General
- 902 Dining Surfaces and Work Surfaces
- 904.3 Sales and Service Counters and Windows > Sales and Service Counters and Windows

2022 CBC Sources

(Sources shown in italics differ from ADA)

- 11B-206.2.3 Accessible Routes > Where Required > Multistory Buildings and Facilities*
- 11B-206.2.5 Restaurants, Cafeterias, Banquet Facilities and Bars*
- 11B-222.1 Dressing, Fitting, and Locker Rooms > General*
- 11B-226 Dining Surfaces and Work Surfaces*
- 11B-227 Sales and Service*
- 11B-902 Dining Surfaces and Work Surfaces*
- 11B-903 Benches*
- 11B-904 Check-Out Aisles and Sales and Service Counters*

2021 IBC Sources

(Sources shown in italics differ from ADA)

- 202 Definitions > Covered Mall Building*
- 1104.4 excep Accessible Route > Multi-Story Buildings and Facilities*
- 1109.2.9 Special Occupancies > Assembly Area Seating > Dining and Drinking Areas*
- 1110.13 Other Features and Facilities > Service Facilities*
- 1110.14 Dressing, Fitting and Locker Rooms*

Assembly, Sports, & Entertainment

Assembly & Entertainment – In General

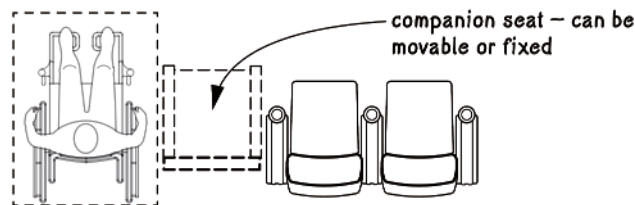
- ▶ Assembly, whether venues for sports, theater, concert, film, lecture halls, or meeting rooms, has requirements for seating and for assisted listening systems (ALS)
- ▶ If there is a stage or performance area that has a *circulation path* directly connecting the performance area with the seating area, then an *accessible route* is to be provided connecting both
- ▶ A platform lift can be used as part of the *accessible route* to performance areas and speaker platforms
- ▶ An *accessible route* is also to be provided from the performance area to ancillary areas used by performers unless the multi-story building exception applies

NOTE: A performance area would also include orchestra pits, platforms, and temporary installations. Under CBC, if the facility is one-story then an *accessible route* is to be provided to the different levels since the exception is for multi-story facilities, not multi-levels. Also if this is a Title II, public facility, then an *accessible route* is to be provided unless the ancillary area has an occupant load of 5 or fewer.

- ▶ If a facility has lawn seating or exterior overflow seating areas, the areas are to connect to an *accessible route* even if the seating is not fixed
- ▶ Wheelchair seating spaces are to adjoin an *accessible route*, but they can not overlap the minimum required *circulation path* which dimension is typically set by fire and life safety codes
 - ◆ In new buildings, the space can overlap 4" if there is 36" minimum clear in the aisle beyond [A117.1]
- ▶ In areas where there are fixed seats, an *accessible route* is not required to seating areas that do not have accessible wheelchair spaces
- ▶ Aisle ramps require handrails either within the aisle or on one side at a minimum, but they are not required to be continuous if adjacent to seating
- ▶ Aisle ramps adjacent to seating areas that are not serving wheelchair spaces nor other elements required to be accessible, do not need to have handrails nor meet other ramp requirements
- ▶ Access to a wheelchair space can not be approached thru another wheelchair seating space, although a front approach to the seating space can be used from an aisle
- ▶ In team or player seating areas, an *accessible route* is provided to and within the seating area to the wheelchair space and connecting it to the area of sports activity – remember the area of sports activity itself may not be accessible and is not part of the *accessible route* – if needed, a platform lift can be used but a ramp is preferable

Wheelchair & Companion Seating Requirements

- ▶ A designated wheelchair space is to be placed in a row where there are an additional minimum of 3 contiguous seats in the same row available for purchase (one of which can be the companion seat)

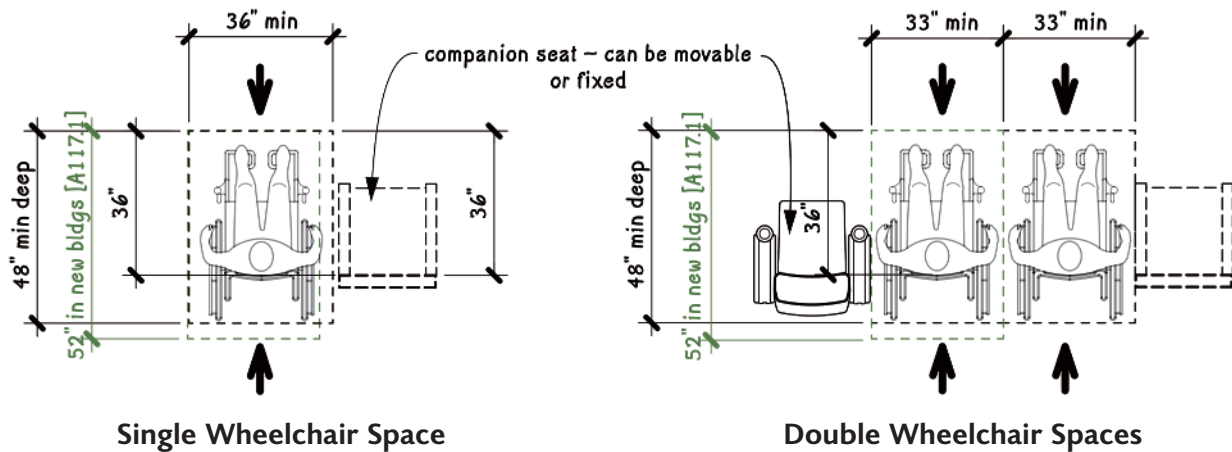


Wheelchair Seating Option for Contiguous Seating

- ▶ The seating space has a maximum slope of 2.083% in all directions and is stable, firm, and slip resistant, and if it is carpeted, then the pile height is ½" maximum
 - ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◆ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

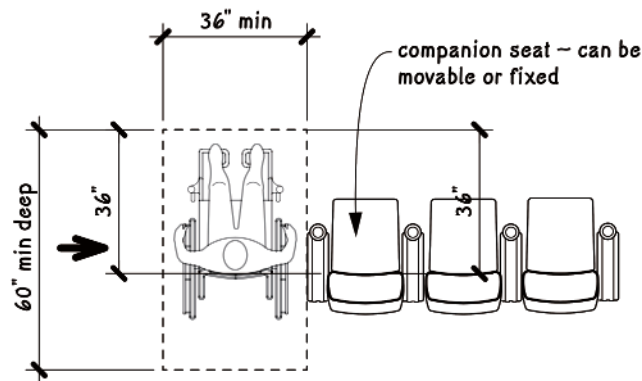
1.3 Assembly, Sports, & Entertainment

- ▶ The companion seat is to be placed adjacent to the wheelchair space and at the same elevation level as the space
- ▶ The companion seat can be either fixed or movable and provides equivalent size, quality, comfort and amenities as other seating in the immediate area
- ▶ If the wheelchair space is not occupied, a movable seat can be provided in that space
- ▶ The back of the companion seat is aligned with the wheelchair seat-back – 36" from the front of the wheelchair space to the front of the seat-back
- ▶ An individual wheelchair space with a front approach is to be a minimum of 48" deep by 36" wide
 - ◇ In new buildings, the wheelchair space is 52" minimum in length, which can overlap the aisle 4" [A117.1]
- ▶ If two wheelchair spaces are adjacent to each other, then the 36" width can go down to 33" wide for front approach for each



Wheelchair & Companion Seating – Front Approach

- ▶ An individual wheelchair space that has a side approach is to be 60" long by 36" wide minimum



Wheelchair & Companion Seating – Side Approach

NOTE: Since access to a wheelchair space can not be thru another wheelchair space, there would not be a situation where you would have two adjacent wheelchair spaces for side approach.

- ▶ The wheelchair space and its companion seat are to be dispersed with equivalent lines of site provided over the row immediately in front or if staggered then 2 rows in front
 - ▶ If the area has standing spectators, then the line of site is applicable as well
 - ◇ With standing spectators, the front of the wheelchair space is 12" maximum from the seat in front [A117.1]
- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 ■ □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.3 Assembly, Sports, & Entertainment

- ▶ Within team or player seating areas, wheelchair spaces and companion seats, which can be the end of the team bench, are to be provided in the same quantity required as spectator seating, with one minimum, and on an *accessible route*, but it does not have to meet site line requirements
- ▶ Team or player seating areas for bowling lanes are not required to have a wheelchair space
- ◆ If a charging space is provided at the wheelchair seat, it has a duplex grounded outlet in reach range [A117.1]

Wheelchair & Companion Seating – Scoping & Location

- ▶ Wheelchair and companion seating are to be provided where there is fixed seating and are to be integrated into the general seating plan, not in a separate area

NOTE: Although the ADA requirements are specific for fixed seating, there is the over-arching requirement of equality since it is a civil rights law. In the absence of any direction for loose furniture, one can use fixed seating requirements as equivalent for accessible seating. But fixed and loose furnishing should always be scoped separately.

- ◆ A wheelchair space is provided in a jury box and witness stand unless exempted for existing, but an adjacent companion seat is not required [A117.1]
- ◆ In gallery seating in judicial facilities, wheelchair spaces are to be provided [A117.1]
- ▶ In arenas, stadiums, and grandstands, the number of wheelchair and companion seats are scoped separately for each luxury box, club box, and suite
- ▶ In performing arts auditoriums, other boxes such as special tiered boxes, the number of wheelchair and companion seats are to be scoped together in order to determine the total quantity required and then are to be dispersed in not less than 20% of the boxes
- Wheelchair and companion seats are also to be dispersed in specialty seating areas that provide additional services and amenities not available in the general seating areas – this does not require separate scoping with additional accessible spaces but rather dispersing the seats proportionally [CBC] & [A117.1]

NOTE: In existing buildings if it is not *readily achievable* to disperse accessible seating in these specialty areas, the services and amenities are to be provided at the wheelchair and companion seats in the general seating areas at no additional cost. [CBC]

- If the seating is in a multi-level assembly area, the wheelchair spaces are to be placed on the main level and additionally provided on two additional floor or mezzanine levels [IBC]
- ▶ General seating, other than the specialty boxes whether in arenas or performing arts, are to be scoped together in order to determine the total quantity required, and then are to be dispersed and integrated thru-out
- In multi-level assembly areas used for worship, if the 2nd floor or mezzanine level has 25% maximum of the total seating, the wheelchair spaces can be located on the main level [IBC]
- ▶ Accessible seating is to be dispersed horizontally in the rows unless there are 300 or less seats total and the accessible wheelchair spaces and companion seats are located in the 2nd and 3rd quartile of the row length (middle half of the row) – the row length includes the intermediate aisles
- ▶ If there is not sufficient space to disperse the seating in the 2nd and 3rd quartiles, then the two outer quartiles can be used and two wheelchair spaces with their companion seats can be adjacent to each other
- ▶ Accessible seating is to be dispersed vertically and in each accessible balcony and mezzanine unless there are 300 or less seats total, and the accessible wheelchair spaces and companion seats have equal or better than average viewing angles
- Seating areas that fully or partially surround a playing field or performance area are to have the wheelchair space and companion seats also dispersed horizontally around the perimeter of the area [CBC]
- ▶ Seating in bleachers is not required to be dispersed vertically, but rather are located at the points of entry to the bleachers, whether that is the cross aisle, concourse, vomitories, or entrance ramps
- In stadium-style movie theaters, the required wheelchair and companion seats are located either in the rear 60% of the theater, or in an area where the vertical viewing angle measured to the top of the screen is between 40% to 100% of the overall viewing angle for the theater with 1% being the front and 100% being the

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1.3 Assembly, Sports, & Entertainment

back row – in other words, in the rear 60% of the theater measured by viewing angle to the top of the screen [CBC] & [A117.1]

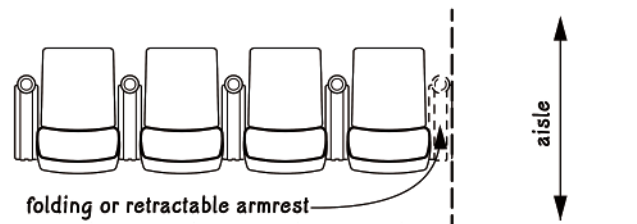
- ◆ If tiered seating is provided, the wheelchair spaces are located on a riser or cross aisle that is integrated [A117.1]
- Wheelchair spaces and companion seats are not located on (or obstructed by) temporary platforms or movable structures unless the entire seating section is placed on the platform/structure to increase seating for an event [CBC]
- ▶ The number of wheelchair spaces and adjacent companion seats are to be determined by quantity in general areas or specialty boxes as previously listed based on the following table

Number of Seats	Minimum Number of Required Wheelchair Spaces with Companion Seats
4 to 25	1
26 to 50	2
51 to 150	4
151 to 300	5
301 to 500	6
501 to 5,000	6 + 1 for each 150 or fraction between 501 to 5,000 6 + 1 for each 100 or fraction between 501 to 5,000 [CBC]
5,001 and over	36 + 1 for each 200 or fraction over 5,000 46 + 1 for each 200 or fraction over 5,000 [CBC]

Number of Wheelchair Spaces

Other Seating Types

- ▶ Another type of seat to be provided is a designated aisle seat
- ▶ The quantity of designated aisle seats is 5% minimum of all aisle seats in the facility
- ▶ The location is to be closest to the *accessible route*, but not necessarily on an *accessible route*
- ▶ Team and player seating areas are not required to have a designated aisle seat
- ▶ If armrests are provided on seats in the area, then the designated aisle seat is to have a folding or retractable armrest on the aisle side
- ▶ Designated aisle seats are to be identified with a sign or marker that is preferably photo luminescent with the information or symbol contrasting with its background
 - The sign or marker on a designated aisle seat is to include an ISA [CBC]
- The ticket office is to display an informational sign on the availability of designated aisle seats, or if there is no ticket office then the informational sign is to be displayed at the lobby or assemble entry [CBC]

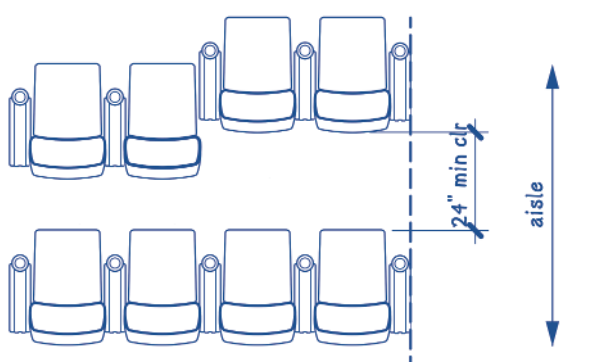


Designated Aisle Seat

- Semi-ambulant seats are to be provided based on 1% of all seating with 2 minimum [CBC]
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1.3 Assembly, Sports, & Entertainment

- The requirement for a semi-ambulant seat is to have 24" minimum clear in front from the edge of the seat to either the seat in front or an obstruction in front [CBC]



Semi-Ambulant Seat [CBC]

Assistive Listening Systems (ALS)

- ▶ An Assistive Listening System (ALS) is to be provided where audible communication is integral to the use of the assembly space regardless of whether the seats are fixed or movable
 - An ALS is provided in assembly areas including conference and meeting rooms and religious facilities [CBC]
- ▶ If audio amplification is not provided an ALS is not required, although courtrooms do not have this exception and are always required to have an ALS
- A permanently installed ALS is provided if there are 50 or more fixed seats, or if there are less than 50 fixed seats where the room has audio amplification [CBC]
- A portable ALS can be provided If the space does not have any fixed seats, or there are less than 50 fixed seats with no audio amplification system, and if additional electric outlets and supplemental wiring are provided for the system [CBC]
- If a portable ALS is used in conference and meeting rooms, the unit can serve more than one room [CBC]
- Public address systems in stadiums, arenas, and grandstands with 15,000 or more fixed seats, which provide public audible announcements, they are to also provide captioning of the announcements, whether pre-recorded or real-time [IBC]
- An ALS is not required for audio systems used exclusively for paging and/or background music [CBC]

DISCUSSION

Assistive Listening Systems (ALS) have several components, each with their own advantages and disadvantages. When specifying, one should understand the requirements and why to use one over the other.

Basically a system is comprised of 3 different elements – a method to capture the sound, typically thru a microphone, a method to transmit the sound, and then a method to receive the sound. The latter can be received thru a person's own hearing aid device or it can be part of the system with the receiver provided at the facility. The method for transmitting the sound is what is critical. There are hardwired systems and 3 different types of wireless. The wireless systems really need to be specified and installed by someone who is familiar with them.

FM Radio Transmission system (FM) transmits the sound on radio frequencies. The user would need to select the correct frequency in order to hear. This needs to be sized for the space it is located in and is easier to ensure that the signal is adequate both indoors and on the exterior as well as in different sized spaces.

An **Infrared system (IR)** transmits sound to a receiver via line of sight. The sound can not go thru solid objects and is typically used indoors since sunlight can interfere with transmission. Fluorescent lights can also have impact on reception, but not as much as the impact of sunlight. This is a better system to use when discussing confidential information.

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1.3 Assembly, Sports, & Entertainment

An **Induction Loop system** requires the receiver to be within the hardwired looped area. The hearing aid is to have a telecoil switch or program in order to receive, but this is typical only in about 30% of hearing aids in the US. This can be more difficult to install in existing buildings.

- ▶ If an ALS is required, the ticket window or office is to display informational signs on its availability with the International Symbol of Access for Hearing Loss, or if there is no ticket window/office, then the informational signs are to be displayed at each assembly area required to have an ALS
 - The sign is to state **ASSISTIVE LISTENING SYSTEM AVAILABLE** and is to be posted in a prominent place at or near the assembly area entry [CBC]
 - ▣ If ticket windows are provided, a minimum of one window at each location has an ALS [IBC]



International Symbol of Access for Hearing Loss

- ▶ The number of receivers provided is dependent upon the seating count
 - The minimum number of provided receivers is 4% of the total number of seats with two minimum [CBC]
- ▶ 25% of the minimum number of receivers with 2 minimum are required to be hearing aid compatible with a 1/8" standard mono jack and are to have the capacity to interface with telecoils in hearing aids thru a neckloop

Number of Seats	Minimum Number of Required Receivers 4% of total seats with 2 minimum [CBC]	Minimum # of Receivers to be Hearing Aid Compatible
50 or less	2	2
51 to 200	2 + 1 per 25 seats over 50 seats	2
201 to 500	2 + 1 per 25 seats over 50 seats	1 per 4 receivers (rounding up)
501 to 1,000	20 + 1 per 33 seats over 500 seats	1 per 4 receivers (rounding up)
1,001 to 2,000	35 + 1 per 50 seats over 1,000 seats	1 per 4 receivers (rounding up)
2,001 and over	55 + 1 for 100 seats over 2,000 seats	1 per 4 receivers (rounding up)

Required Minimum Number of Receivers for ALS

- ▶ If the ALS is an induction loop, then the receivers are not required to be hearing-aid compatible
- ▶ If there is more than one assembly area in a building and the areas are under the control of one management, then the number of receivers can be scoped based on the total number of seats presuming that the receivers are compatible by all systems
 - If the ALS is limited to a specific area, then that area and its seating is to be located within 50 linear feet of viewing distance to the stage or playing area and include a complete view of that area [CBC]
- ▶ There are more technical specification requirements for sound pressure level, signal-to-noise ratio, and peak clipping level

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Regulation Sources

2010 ADA Sources

206.2.3 Accessible Routes > Where Required > Multi-Story Buildings and Facilities
206.2.4 except 2 Spaces and Elements
206.2.6 Performance Areas
206.2.11 Bowling Lanes
206.7.1 Platform Lifts > Performance Areas and Speakers' Platforms
206.7.9 Team or Player Seating
216.10 Signs > Assistive Listening Systems
219 Assistive Listening Systems
221.1 Assembly Areas > General
221.2 Wheelchair Spaces
221.2.1.4 Number and Location > Team or Player Seating
221.3 Companion Seats
221.4 Designated Aisle Seats
221.5 Lawn Seating
302 Floor or Ground Surfaces
405.1 except Ramps > General
505.2 except Handrails > Where Required
706 Assistive Listening Systems
802 Wheelchair Spaces, Companion Seats, and Designated Aisle Seats
802.1 Wheelchair Spaces
802.2 Lines of Sight
802.3 Companion Seats
802.4 Designated Aisle Seats

Advisory 221.2.1.2 Luxury Boxes, Club Boxes, and Suites in Arenas, Stadiums, and Grandstands
Advisory 221.2.1.3 Other Boxes
Advisory 221.2.3.2 Vertical Dispersion Exception 2
Advisory 706.1 General
Advisory 802.1.5 Overlap

US Access Board in cooperation with DOJ & DOT

www.access-board.gov/ada/guides/

Chapter 10: Sports Facilities > Team Player Seating Areas

2022 CBC Sources

(Sources shown in italics differ from ADA)
11B-206.2.3 Accessible Routes > Where Required > Multistory Buildings and Facilities
11B-206.2.4 except 2 Spaces and Elements
11B-206.2.6 Performance Areas
11B-206.2.11 Bowling Lanes
11B-206.7.1 Platform Lifts > Performance Areas and Speakers' Platforms
11B-206.7.9 Team or Player Seating
11B-216.10 Signs > Assistive Listening Systems
11B-219 Assistive Listening Systems
11B-221.1 Assembly Areas > General
11B-221.2 Wheelchair Spaces
11B-221.2.1.4 Number and Location > Team or Player Seating
11B-221.2.1.5 Stadium-Style Movie Theaters
11B-221.3 Companion Seats
11B-221.4 Designated Aisle Seats
11B-221.5 Lawn Seating
11B-221.6 Semi-Ambulant Seats
11B-244 Religious Facilities
11B-302 Floor or Ground Surfaces
11B-405.1 except Ramps > General
11B-505.2 except 1 Handrails > Where Required
11B-706 Assistive Listening Systems
11B-802 Wheelchair Spaces, Companion Seats, and Designated Aisle Seats and Semi-Ambulant Seats
11B-802.1 Wheelchair Spaces
11B-802.2 Lines of Sight
11B-802.3 Companion Seats
11B-802.4 Designated Aisle Seats
11B-802.5 Semi-Ambulant Seats

Advisory 11B-206.2.6 Performance Areas
Advisory 11B-802.4.2 Identification

2021 IBC Sources

(Sources shown in italics differ from ADA)
1104.3 except Accessible Route > Connected Spaces
1109.2 Special Occupancies > Assembly Area Seating

1.3 Assembly, Sports, & Entertainment

Regulation Sources

US Access Board Large Area Assistive Listening Systems *<https://www.access-board.gov/research/communication/assistive-listening-systems/>*

John F Kennedy Center for the Performing Arts Assistive Listening devices for People with Hearing Loss – A Guide for Performing Arts Settings, 2012

2017 ICC A117.1 Sources

(Sources shown in italics differ from ADA)

107 Definitions > Assembly Area

802 Assembly Area

802.4 Depth

802.5.1 Approach > Overlap

802.7 Companion Seat

802.8 Designated Aisle Seat

802.9 Lines of Site

802.10 Wheelchair Space Dispersion

802.10.3.1 Dispersion by Type > Charging Stations

802.10.4 Spaces Utilized Primarily for Viewing Motion Picture Projections

807 Courtrooms

906 Charging Stations

2021 IBC Sources (cont)

1109.2.4 Dispersion of Wheelchair Spaces in Multilevel Assembly Seating Areas

1109.2.5 Designated Aisle Seats

1109.2.6 Lawn Seating

1109.2.7 Assistive Listening Systems

1109.2.8 Performance Areas

1109.4.1 Judicial Facilities > Courtrooms

1110.9 Other Features and Facilities > Lifts

1111.4 Recreational Facilities > Recreational Facilities

Hotels, Inns, & Transient Lodging

In General

- ▶ Transient lodging is comprised of hotels, motels, inns, dormitories, resorts, bed and breakfasts, and student housing at a place of education that are considered short-term in nature
- ▶ It does not include bread and breakfast or similar type of facilities where there are a maximum of 5 rooms for rent if the proprietor lives on the premises
- ▶ There is also the situation where a property has units where the interiors and furnishing are substantially controlled by individual owners, even though the units are rented out by an entity that owns, leases, or operates the overall facility – in this case these units are exempt from the ADA Standards

DISCUSSION

Transient & Non-Transient Lodging Types

Aside from hotels, motels, and inns, there are other types of vacation rentals that people use. Some fall under the definition of bed & breakfast, while others are considered short-term private rentals where people rent out their homes or rooms within their homes, whether thru an agent or thru on-line companies. The latter has become quite controversial due to its growing impact on the market, what codes to follow for construction, and other issues possibly impacting residential neighborhoods or typical hotel and motel businesses.

One of the main questions concerning access is: what are the requirements under ADAS for privately owned lodging-type of facilities? DOJ has provided the following definition for a *place of lodging*, as one of the types of *places of public accommodation* and has defined it in the implementing regulations as:

- (1) *Place of lodging, except for an establishment located within a facility that contains not more than five rooms for rent or hire and that is actually is occupied by the proprietor of the establishment as the residence of the proprietor. For purposes of this part, a facility is a "place of lodging" if it is –*
- (i) *An inn, hotel, or motel: or*
 - (ii) *A facility that –*
 - (A) *Provides guest rooms for sleeping for stays that primarily are short-term in nature (generally 30 days or less) where the occupant does not have the right to return to a specific room or unit after the conclusion of his or her stay; and*
 - (B) *Provides guest rooms under conditions and with amenities similar to a hotel, motel, or inn, including the following –*
 - (1) *On- or off-site management and reservations service;*
 - (2) *Rooms available on a walk-up or call-in basis;*
 - (3) *Availability of housekeeping or linen service; and*
 - (4) *Acceptance of reservations for a guest room type without guaranteeing a particular unit or room until check-in, and without a prior lease or security deposit.*

Bed & Breakfast

Bed and breakfast facilities are mostly straight forward. If the facility has 5 rooms maximum for rent AND the proprietor lives at the facility as their place of residence, then by definition, the facility is not considered a *place of lodging* per item (1) above and therefor is not required to meet accessibility standards under the ADA. If the proprietor does not live there and there are 5 or less rooms for rent; or if the proprietor lives there and there are more than 5 rooms for rent, then the bed and breakfast might fall under the same requirements as transient lodging in terms of access for parking, guest rooms (both mobility and communication features), common use space, accessible routes, and *readily achievable barrier removal* if it is an existing facility. This would depend upon whether it meets both criteria (A) and (B) from the definition above. As a

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1.4 Hotels, Inns, & Transient Lodging

note, if there are 4 or more rooms on the ground floor or if it is an elevated building, it may very well be covered under FHA as well.

Short-Term Private Rentals

Short-term private rentals are a bit more complex as to interpretation, but they are becoming more prevalent as a vacation rental option. Generally these will not meet criteria (B)(2) thru (B)(4) above and most do not meet the other criteria listed under the ADAS definition for a *place of lodging*. So this type of vacation rental would generally not fall under the access requirements of ADA and neither would there be any requirements for *barrier removal*.

- ▶ The number of mobility feature and communication feature guest rooms are to be based on the total number of guest rooms in a facility, or sleeping rooms for housing at a place of education

NOTE: The IBC treats guest rooms for hotels, motels, and inns, as well as sleeping rooms for student housing at a place of education as residential *Accessible* type units as opposed to a separate class known as transient lodging. Be careful to implement ADA in that the technical requirements under A117.1 may not be fully in compliance with ADA. The ADA Standards are to be used and if the other codes provide for more access, they are to be overlaid on top of ADAS. [IBC] & [A117.1]

- ▶ Facilities built under the same permit and on the same site that have 50 or less guest rooms per building, can be scoped based on the total number of guest rooms in the overall facility, then dispersed by buildings
- ▶ Facilities that have more than 50 guest rooms in a building are to be scoped separately by each building

Total Guest Rooms	# Rooms with No Roll-In Showers	# Rooms with Roll-In Showers	Total Mobility Guest Rooms	Total Communication Guest Rooms
1	1	0	1	0 1 [CBC] [IBC]
2 to 25	1 1 [CBC]	0 1 [CBC]	1 2 [CBC]	2
26 to 50	2	0 1 [CBC]	2 3 [CBC]	4
51 to 75	3	1	4	7
76 to 100	4	1	5	9
101 to 150	5	2	7	12
151 to 200	6	2	8	14
201 to 300	7	3	10	17
301 to 400	8	4	12	20
401 to 500	9	4	13	22
501 to 1,000	2% of total	1% of total	3% of total	5% of total
1001 and over	20 + 1 per 100 over 1,000	10 + 1 per 100 over 1,000	30 + 2 per 100 over 1,000	50 + 3 per 100 over 1,000

Quantities – Mobility & Communication Feature Guest Room

- ▶ The number of accessible guest rooms required to be provided are to be dispersed by class in the following order without needing to exceed the overall quantity required – guest room type, number of beds, and amenities for the guest rooms
 - ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
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1.4 Hotels, Inns, & Transient Lodging

NOTE: Guest rooms can be broken down by room size, bed size, the number of beds, the cost, views, types of bathroom fixtures (including hot tubs or steam rooms), and non-smoking versus smoking. This could include dispersion on floors which are for hotel reward members. It could also include rooms with balconies, or multi-room suites. Generally you would want to have rooms physically dispersed as well – upper versus lower floors; north versus south on the building, near the elevator versus further away, etc. When looking at dispersion, look at the overall percentage of a certain room type and then apply that percentage to the total number of required accessible rooms. In a basic example - if the overall percentage of rooms with king beds versus queen-queen works out to 60% and 40% respectively, and there are 100 rooms, apply that same percentage to the 5 required mobility rooms of 3 with king beds and 2 with queen-queen.

- ▶ Communication feature rooms are to overlap mobility rooms, with a maximum of 10% of the mobility feature rooms overlapping with one minimum
- Bathrooms within guest rooms or sleeping rooms are not required to have restroom door symbols or signs [CBC]
- ▶ In an alteration, the requirements for mobility and communication feature guest rooms are to be scoped based on the quantity being altered or added rather than the total number in the facility
- ▶ The door stop on the latch side can project 5/8" maximum into the required clear width in alterations
- ▶ If a facility has both residential and transient lodging units, the units for residential-use only are not required to comply with transient lodging requirements
- If on-call sleeping rooms used by doctors and staff are provided, then 10% with one minimum comply with the mobility requirements for transient lodging for the sleeping area, the toilet and bathing facility, and the turning space [CBC]
- ▶ Social service center establishments fall under the requirements for residential dwelling units regardless of the funding sources, with some modifications and do not fall under the requirements for transient lodging
- ▶ Apartments or townhouses at a place of education that are leased on a year-round basis only to graduate students or faculty also fall under residential dwelling unit requirements regardless of the funding sources as long as there are no areas for educational programming in the building

Mobility Guest Rooms

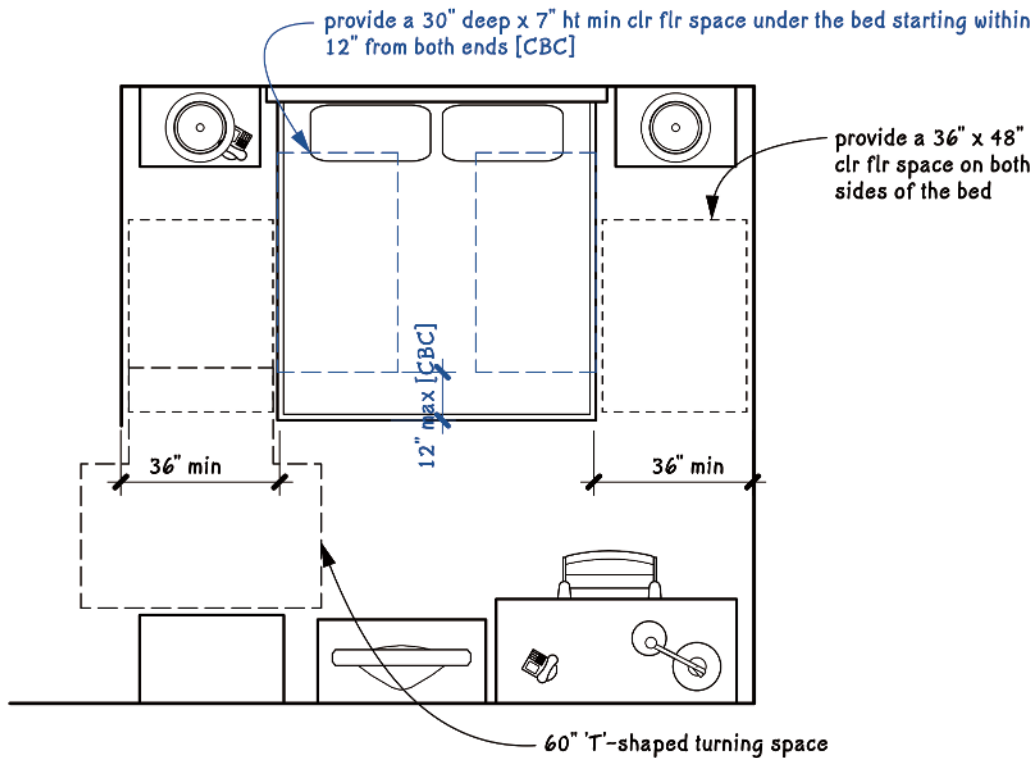
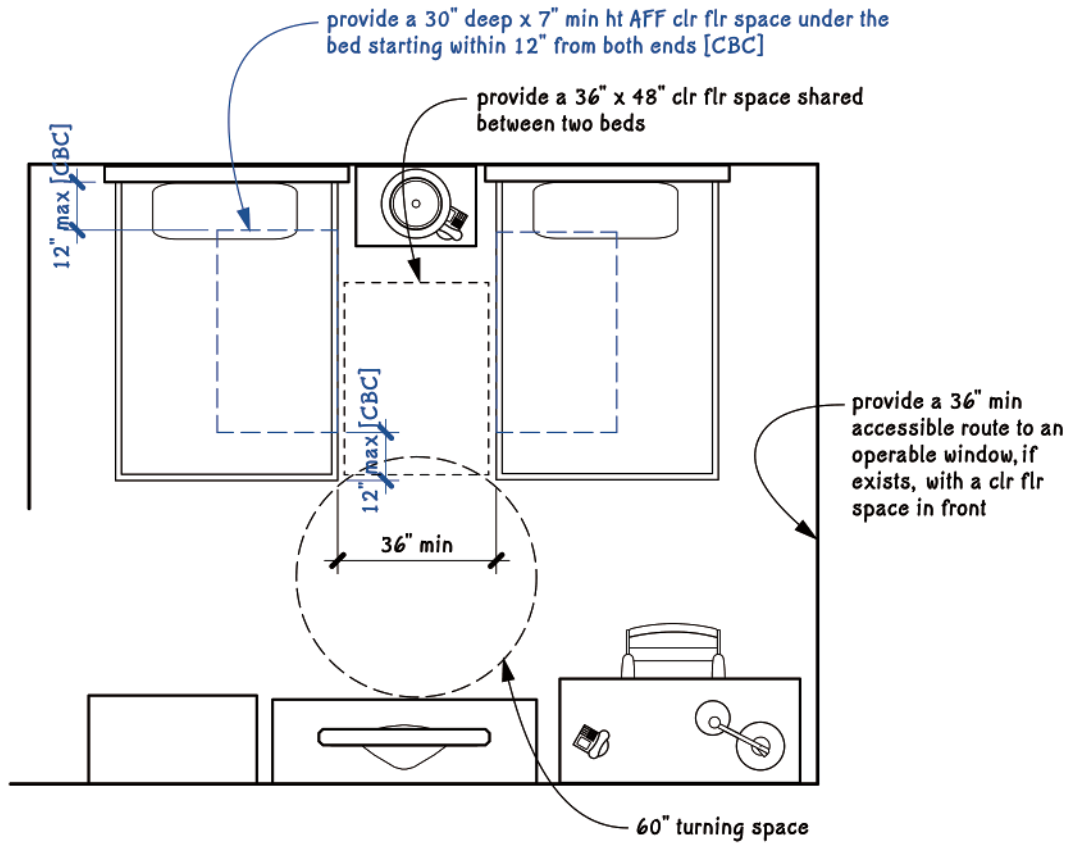
- ▶ The mobility feature guest rooms are to have a 60" turning space within the room which can either be a diameter or a 'T'-shaped turn and an *accessible route* is provided to the different elements
- ◆ The turning spaces and clear floor spaces in new construction are to follow the enlarged requirements [A117.1]

NOTE: Loose rugs are often placed in guest rooms and other areas to provide a more residential-type of feel. Unfortunately, although these may not be directly regulated, they can be a tripping hazard since the flooring surfaces are no longer firm and stable. In order to avoid this, either remove the rugs altogether, or secure all edges to the floor, which can be done with special double-sided tape meant for this purpose. This will need to be 're-taped' in order to keep it securely fastened to the floor depending upon how often it is lifted and the floor is cleaned.

- ▶ The sleeping area adjacent to the beds has a 30" x 48", or if enclosed on 3 sides, then a 36" x 48" clear floor space provided parallel to both sides of the length of the bed
 - The sleeping area has a 36" x 48" clear floor space provided parallel to both sides of the bed [CBC]
- ▶ If there are two beds in the guest room, they can share the same 36" x 48" clear floor space between the beds instead
- ▶ If a guest or sleeping room has more than 25 beds, 5% minimum is to have the clear floor space adjacent
- Underneath the long side of the bed, provide a space of 30" deep by 7" clear height along the full length of the bed starting within 12" of both ends for a personal lift device – this should be provided adjoining an *accessible route* [CBC]
- ◆ 5% of beds with one minimum, are to have the clear floor space on one side which also serves as a wheelchair charging space, and the bed is to have an open frame [A117.1]
- ◆ The charging station is to have a grounded duplex receptacle within reach range [A117.1]

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1.4 Hotels, Inns, & Transient Lodging



Guest Room Clearances at Beds

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1.4 Hotels, Inns, & Transient Lodging

- ▶ All passage doors in mobility dwelling units are to have the required maneuvering space
- ▶ If the mobility guest room has a terrace or balcony, it is to be accessible and on an *accessible route*

NOTE: Furniture inside mobility guest rooms is currently not regulated other than having equivalent type of furnishing in mobility versus non-mobility guest rooms. It is suggested to track which guest rooms have high beds versus low beds and to provide a choice when someone books a room. Higher beds work better for some people whereas lower beds work better for others. It is about choice and communication.

- ◆ 5% of beds with one minimum are to have a mattress height of 17" to 23" above the floor, measured when uncompressed [A117.1]
- ▶ If the windows are operable, one minimum is to be accessible for reach range from a clear floor space; operating force of 5 lbs maximum; operable with one hand without tight grasping/pinching/twisting of the wrist; and on an *accessible route*, which can overlap the operable window required by the administrative authority, if one is required
- ▶ Other items within a mobility feature guest room such as thermostats, window treatment controls, and phones are to be on an *accessible route* and are to be accessible with no obstructions in the clear floor space in front

NOTE: If there is only one phone located within the guest room, be careful of not only placing it on the nightstand between two beds. Unless that nightstand has knee/toe clearance below for front approach or there is 60" minimum clear between the beds for side approach, more than likely, that phone will not be within reach range. Consideration should be given to providing two phones – one at a desk or table and the other at the nightstand. This works for access in mobility guest rooms and also works with guest-provided TTY placement for communication feature guest rooms if an outlet is placed adjacent.

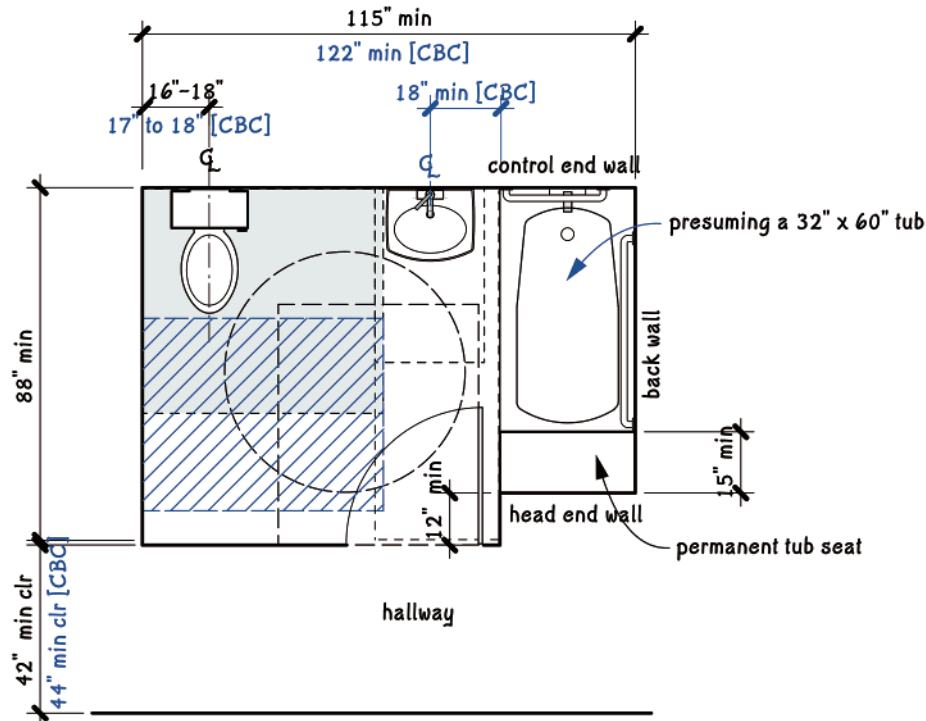
- ▶ If a kitchen is provided in a mobility guest room, it is to be accessible with 50% of the shelf space within reach range, and if there is a cooktop or a range, then knee/toe clearance below the sink is to be provided – if a microwave is provided instead for a cooking element or a bar sink instead of a kitchen sink, a parallel approach can be used at the sink
- ▶ If the counter has a kitchen sink, but no cooking elements, provide a forward approach, but only one of each type of storage is required to be within reach range
- ▶ If the room has a wet bar, then a parallel approach is to be provided with one of each type of storage within reach range
 - If the room has a wet bar, then a parallel approach is to be provided with 50% of shelving to be within reach range [CBC]

NOTE: One of each type of element in a mobility guest room is to comply with the requirements of ADA even if not stated in the specific chapter on transient lodging, unless it is exempted. If an element is provided such as a refrigerator, it is to comply. The controls on a safe, for a television, or a coffee machine, if provided in the room are to comply. Storage is to have one of each type within reach range. Items that are stored, whether an iron, a hair dryer, an extra blanket, or an ice bucket with glasses are to be provided within reach range and from a clear floor space in front. A person using the mobility room is not to be reliant on someone assisting them with an item, unless it is the same for all guests.

- ▶ One bathroom minimum in a guest room or suite is to be accessible which includes a 60" turning space, and the required clear floor spaces for the plumbing fixtures and for other accessories
 - Transfer-type showers are now allowed in transient-type guest rooms and housing at a place of education [CBC]
- ▶ If a vanity counter is provided in non-mobility guest room bathrooms, then provide one with an equivalent surface storage area within the mobility bathroom
- ▶ The lavatory is to provide knee/toe clearance below with protection from piping and rough surfaces

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.4 Hotels, Inns, & Transient Lodging



- presuming lavatory is 22" wide, dimensions are to face of finish, & includes 1" tolerance
- the width may need to be increased to provide equivalent vanity space as non-mobility bathrooms

Bathroom Example – In-Swinging Door & Tub with Permanent Seat

- ▶ Items such as a towel bar can not overhang the tub or shower required clear floor space
- ▶ Showers and bathtubs have grab bars installed and seats provided

NOTE: If the guest room has a separate tub seat, thought should be given to storage within the room for the seat when not in use. This is better if actually stored in the mobility guest room and is not a 'seat-on-call'. Although many hotels say it only takes housekeeping 5 minutes to bring a seat, it often takes much longer. Another thought, if storing the seat in the guest room is not desirable, is to modify policies, practices, and procedures by asking at check-in or when reserving the room, if a tub seat is required, and then having it placed in the room before it is necessary to ask.

- ▶ Each type of storage located within the room has one accessible, within reach range, with a clear floor space in front in each location and on an *accessible route* – this can include a shelf and hangrod in each closet, a safe, ironing boards, iron, and additional pillow and blanket storage

NOTE: Another item to note is closet storage – one of each type of storage is required to be within reach range for mobility guest rooms. This could be hangrods or shelves or drawers. Be aware of placement for a safe or a small refrigerator under a lower hangrod since this often interferes with the ability to hang dresses, pants, or other longer garments. Also consider placing only a partial amount of the storage in each closet at lower reach, since a companion using the closet may be able-bodied and a higher hangrod would be desirable. Aside from clothes, other items to be aware of are – often loose irons or extra blankets and pillows are placed on upper shelves that are not within reach range. So other storage options should be considered. Also consider how hair dryers are stored – they are often placed in a bag hanging from a robe hook in the bathroom which is not within reach range and requires two hands to remove, making it difficult to access.

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

Communication Feature Guest Rooms

- ▶ Communication feature guest rooms have a notification device that is visual and is not tied into the alarm system nor is it connected to an alarm-type of appliance
- ▶ One minimum communication feature room is to overlap a mobility feature room with 10% maximum of the mobility overlapping

DISCUSSION

A communication feature guest room is only required to have a doorbell or door knocker tied into a visible notification device. It is not required to have an audible signal for transient lodging. The regulations specifically state "*Notification devices shall not be connected to visible alarm signal appliances*". Everyone assumes you use the same device but just not connected to the alarm system. This is an incorrect assumption, and not only is it not required, but it leads to much confusion and uncertainty, and could be dangerous. The doorbell should not be tied into any visible alarm signal nor should it look like a visible alarm. Regardless of whether there is a visible alarm system in an existing facility, a visible notification device is to be provided both for incoming phone calls and for a door knock or bell.

There are a number of products that allow for an adjustable volume that sounds like a normal doorbell and also have a flashing light that does not look like a visible fire alarm strobe. There are also products that are sensitive to someone knocking on the door or stepping on a mat in front of the door. Some products have sophisticated receivers that recognize a doorbell or incoming phone call or even an alarm clock that vibrate or flash an LED light, and can connect to a watch or smartphone. So just because the regulations state door notification systems are not tied into a fire and life safety system, it does not mean the device should sound or look like a fire alarm. One other item – dormitories one of several types of student housing are considered to be transient lodging, so a visible notification device for the doorbell/door knock is to be provided, and if a phone exists, a visible notification is also to be provided.

- ▶ Phones, if provided, have a volume control with an adjustable receive volume up to 20 dB minimum or an incremental volume control providing one intermediate step 12 dB gain minimum with an automatic reset
- Phones are also equipped with a receiver that generates a magnetic field at the receiver cap and is hearing aid compatible [CBC]
- ▶ Phones have an electrical outlet within 48" for a guest-provided TTY, located within compliant reach ranges
- ▶ In transient lodging, if emergency warning systems are provided, then they have permanently installed audible and visible alarms complying with NFPA 72 (Sections 4.3 and 4.4 in the 1999 edition or Sections 7.4 and 7.5 in the 2002 edition)
 - In transient lodging, if emergency warning systems are provided, then they have permanently installed audible and visible alarms complying with NFPA 72 (Sections 4.3 and 4.4 in the 1999 edition or Sections 7.4 and 7.5 in the 2002 edition) and with 907.5.2.3.3 and carbon monoxide alarms according to Chapter 9 [CBC]
- ◆ Visible notification devices for transient lodging guest rooms and sleeping rooms are not differentiated from dwelling unit requirements, so there may be some requirements in addition to ADA [A117.1]

Non-Mobility Guest Room Requirements

- ▶ All guest rooms that are not mobility feature guest rooms are to meet the requirements below
- ▶ Doors into and within non-mobility guest rooms are not required to comply with maneuvering clearances, thresholds, door hardware requirements, smooth surface on doors, nor closing speed and operating force
- ▶ The non-mobility guest room doors providing user passage into and within guest rooms are to comply with the requirements of 32" minimum clear width or 36" minimum if recessed more than 24"; no protrusions below 34" on the push side; 4" maximum protrusions between 34" and 80" above the finished floor; and with the closer and door stop at 78" minimum
- ▶ Shower and sauna doors are exempt from all door requirements

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.4 Hotels, Inns, & Transient Lodging

- Bathroom doors within non-mobility units are to either swing out of the bathroom in the direction of egress or are to be sliding [CBC]
- The bathrooms within non-mobility guest rooms are to have a 30" x 48" clear floor space touching each plumbing fixture or sanitary installation [CBC]

Student Housing at a Place of Education

- ▶ Student housing at a place of education and dormitories follow transient lodging requirements for technical and scoping equating a sleeping room with a guest room, and may also follow the Fair Housing Act if it meets the requirements for covered multi-family dwellings

NOTE: Housing at a place of education and dormitories might additionally have to follow 11B requirements for adaptable dwelling units and sleeping rooms as applicable. 11B-224.7 appears to be in conflict with 11B-224.7.2. Look for clarification in the future when the Supplement comes out. [CBC]

- ▶ If the housing unit has multi-sleeping rooms and one of them has mobility features, then the unit is to have an *accessible route* thru-out the unit with a 60" turning space in each room, including a walk-in closet
- ▶ The *accessible route* does not pass thru bathrooms or closets if it is the only route
- ◆ Walk-in closets that are 48" maximum in depth are not required to have turning spaces inside [A.117.1]

NOTE: A multi-bedroom student housing unit comprised of 4 bedrooms would be counted as 4 sleeping rooms being equivalent to 4 guest rooms. The actual number of beds in each room does not have any impact for scoping purposes. The overall total number of sleeping rooms in the facility is what is used for determining the required number of mobility and communication feature sleeping rooms.

- ▶ Kitchens within student housing units containing a mobility feature sleeping room or on any floors containing a common use kitchen whether or not it supports a mobility sleeping room, are to comply with requirements for accessible kitchens including a turning space, a compliant kitchen sink, and a work surface, with the latter having the clear floor space centered on the work surface
- ▶ Both the sink and the work surface are to be 30" minimum in clear width for front approach, no sharp or rough edges below, insulated piping, and 34" maximum in height with nothing in the knee/toe clearance below

NOTE: Residential dwelling units are allowed to have easily removable cabinetry below a kitchen work surface and a sink, but the question comes up as to whether student housing, which is transient lodging, can use the adaptable residential-only exception. For consideration, grab bars, not just blocking, are to be installed in housing at a place of education. DOJ states "...since educational institutions often use their academic housing facilities as short-term transient lodging in the summers, it is important that accessible features be installed at the outset" and accessible features should be immediately available since a unit may not be able to be readily adapted within a short time frame. So with that said, no cabinetry below sinks and work surfaces in common use space kitchens.

- ▶ In the student housing unit with a mobility feature sleeping room, only the bathroom that supports the mobility sleeping room is required to be fully accessible, although the other bathrooms and powder rooms are required to meet door maneuvering clearances and the turning space
- ▶ The bathroom that supports the mobility sleeping room is required to be fully accessible and follow transient lodging requirements for mobility guest rooms

NOTE: The mobility bathroom can not follow residential requirements, and is required to have the toilet clearance on the toilet plumbing wall of 60" wide with no lavatory or other fixtures within the space.

- ▶ Housing at a place of education provided by or on behalf of a place of education and used by graduate students or faculty that is not leased on a year round basis, is to also follow these requirements, but there is an exception if leased on a year-round basis to graduate students or faculty and there are no common or public use areas for educational programming, then they are to comply with residential requirements under ADA regardless of the funding source

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆◆ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

Regulation Sources

2010 ADA Sources

- 106.5 Definitions > Defined Terms > Transient Lodging
- 206.5.3 Accessible Routes > Doors, Doorways, and Gates > Transient Lodging Facilities
- 213.2 Toilet Facilities and Bathing Facilities > Toilet Rooms and Bathing Rooms
- 224.1 Transient Lodging Guest Rooms > General
 - 224.1.2 Guest Room Doors and Doorways
- 224.2 Guest Rooms with Mobility Features
- 224.3 Beds
- 224.4 Guest Rooms with Communication Features
- 224.5 Dispersion
- 225.2 Storage > Storage
- 229 Windows
- 403 Walking Surfaces
 - 404.2 Doors, Doorways, and Gates > Manual Doors, Doorways, and Manual Gates
- 606.2 **except 3** Lavatories and Sinks > Clear Floor Space
- 702 Fire Alarm Systems
- 704.3 Telephones > Volume Control Telephones
- 804 Kitchens and Kitchenettes
 - 804.3 Kitchen Work Surface
- 806 Transient Lodging Guest Rooms
 - 806.2 Guest Rooms with Mobility Features
 - 806.3 Guest Rooms with Communication Features

Advisory 221.2.1.3 Other Boxes

Advisory 221.2.3.2 Vertical Dispersion Exception 2

Advisory 224.1 Transient Lodging Guest Rooms > General

Advisory 706.1 General

Advisory 802.1.5 Overlap

ADA Implementing Regulations

Title II 28 CFR Part 35

- § 35.104 Definitions > Housing at a Place of Education
- § 35.151 (f) (1), (3) New Construction and Alterations > Housing at a Place of Education

Title III 28 CFR Part 36

- § 36.104 Definitions > Place of Lodging
- § 36.104 Place of Public Accommodation

2022 CBC Sources

(Sources shown in italics differ from ADA)

202 Definitions > Housing at a Place of Education

202 Transient Lodging

11B-206.5.3 Accessible Routes > Doors, Doorways, and Gates > Transient Lodging Facilities

11B-213.2 *Toilet Facilities and Bathing Facilities > Toilet Rooms and Bathing Rooms*

11B-215.4 *Fire Alarm Systems and Carbon Monoxide Alarm Systems > Transient Lodging*

11B-216.8.1 **except 1** *Signs > Toilet Rooms and Bathing Rooms > Geometric Symbols*

11B-223.2.3 *Medical Care and Long-Term Care Facilities > Hospitals, Rehabilitation Facilities, Psychiatric Facilities, and Detoxification Facilities > On-Call Rooms*

11B-224.1 *Transient Lodging Guest Rooms, Housing at a Place of Education and Social Service Center Establishments*

11B-224.1.2 *Guest Room Doors and Doorways*

11B-224.2 *Guest Rooms with Mobility Features*

11B-224.3 *Beds*

11B-224.4 *Guest Rooms with Communication Features*

11B-224.5 *Dispersion*

11B-224.7 *Housing at a Place of Education*

11B-225.2 *Storage > Storage*

11B-229 *Windows*

11B-233.3.6 *Public Housing Facilities > Public Housing Facilities > Graduate Student and Faculty Housing at a Place of Education*

11B-403 *Walking Surfaces*

11B-404.2 *Doors, Doorways, and Gates > Manual Doors, Doorways and Manual Gates*

11B-603.6 *Toilet and Bathing Rooms > Guest Room Toilet and Bathing Rooms*

11B-606.2 **except 3** *Lavatories and Sinks > Clear Floor Space*

11B-702 *Fire Alarm Systems*

11B-704.3 *Telephones > Volume Control Telephones*

11B-804 *Kitchens, Kitchenettes and Wet Bars*

11B-804.2.3 *Clearance > Turning Space*

11B-804.3 *Kitchen Work Surface*

11B-806 *Transient Lodging Guest Rooms*

11B-806.2 *Guest Rooms with Mobility Features*

11B-806.3 *Guest Rooms with Communication Features*

1.4 Hotels, Inns, & Transient Lodging

Regulation Sources

§ 36.104 Housing at a Place of Education

§ 36.406 (c) Standards for New Construction and Alterations > Places of Lodging

§ 36.406 (e) Housing at a Place of Education

2017 ICC A117.1 Sources

(Sources shown in italics differ from ADA)

201 Scoping > General

202 Dwelling and Sleeping Units

906 Charging Stations

1102 Accessible Units

1102.3.2 except 2 Accessible Route > Turning Space

1102.15 Beds

1106 Units with Communication Features

2021 IBC Sources

(Sources shown in italics differ from ADA)

202 Definitions > Transient

310.2 Residential Group R > Residential Group R-1

310.3 Residential R-2

1103.2.11 Scoping Requirements > General Exceptions > Residential Group R-1

1108.6.1 Dwelling Units and Sleeping Units > Group R > Group R-1

E102.1 Definitions > Transient Lodging

E104.1 Special Occupancies > General

E104.2 Communication Features

E104.2.4 Notification Devices

Table 1108.6.1.1 Accessible Dwelling Units and Sleeping Units

Residential Under the ADA

Multi-Family Residential – In General

- ▶ The ADA for Title II applies to all services, programs, and activities provided by, or made available thru a public entity, which is mostly a city, county, or state entity, or thru a department, an agency, a special purpose district, or other instrumentality of state or local government where the funding sources can trigger various regulations
- ▶ If a project has received funds for its construction from a public entity, generally in the form of a grant, loan, or land contribution, it meets the definition of public housing
- ▶ If a project is privately owned, it still may be considered public housing, if it is funded in whole or in part by a public entity

DISCUSSION

Any programs administered by a public entity, are considered to be public programs, therefore ADA Title II is applicable. For example, Low Income Housing Tax Credit (LIHTC) is authorized thru the federal tax code and the program is administered by the state which has the responsibility for allocating the tax credit, making LIHTC a public program, triggering ADA Title II. In California, low income housing tax credits are overseen by the CA Tax Credit Allocation Committee (TCAC) and triggers 11B and ADA Title II.

On the other hand, Section 8 Housing Choice Tenant Vouchers are a rent subsidy given directly the beneficiary and not to the physical structure. Project-Based Vouchers (PBV) under the Section 8 program, are a subsidy, though, to the project and trigger ADA along with HUD's Deeming Notice of May 23, 2014. The Deeming Notice has instructions for 11 exceptions to the ADA where Section 504 and UFAS have higher standards which need to additionally be complied with when used as an alternative. The Veterans Affairs Supportive Housing (VASH) program is similar, since vouchers can go directly to tenants or are building-based. HOME-Community Housing Development Organization (HOME-CHDO) is always project-based. There are a number of other programs that are set up in a similar manner.

There are other federal programs administered by a local public entity and trigger both ADA Title II and Section 504 (with HUD's Deeming Notice). These can include the Federal Home Loan Bank - Affordable Housing Program (FHLB-AHP) which is chartered thru a federal government agency, or a Community Development Block Grant (CDBG), as well as others. One has to dig into project financing to find the triggers that determine which regulations and codes apply to a project.

There are also public sources of programs and funds which would only trigger ADA. These can be General Obligation (GO) bonds or Mortgage Revenue Bonds (MRB) issued by a public entity and repaid by tax revenues for the former, or with interest from project revenues for the latter. Another public program can be below-market-rate ground leases or loans with below-market rate interest that would trigger ADA only. And of course, housing that is owned in whole or part, or operated by a public agency, would be ADA.

Regardless of the program funding, whether public or private, all of these projects additionally need to meet the FHA specifications if the project is considered *covered multi-family dwellings*. Briefly, dwelling units are considered *covered*, under FHA, if built for first occupancy as residential after March 13, 1991, where there are 4 or more dwelling units in an elevated building or if these dwelling units are located on the ground floor without an elevator. There are some exceptions to this which would need to be addressed. Also, all of the relevant local building codes for state, county, and city would need to be implemented. But be careful, since some of these local codes do not comply with the above-listed requirements. This includes the IBC, which does not specifically address public housing, since public housing is thought of only as a funding source rather than a trigger for the building code by IBC. This puts even more burden on the architect and the owner to understand the nature of what regulations to apply. This chapter will mainly address the ADA Standards, HUD's Deeming Notice, CBC (since it mostly complies with ADAS), and just a few items from FHA.

-
- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.5 Residential Under the ADA

- ▶ Multi-family residential facilities are to have 5% of the dwelling units be mobility and 2% with communication features with one minimum of each
- ▶ The dwelling unit used by the building manager(s) are to be included in the overall scoping
- ▶ The mobility feature and the communication feature units are not permitted to overlap in the same dwelling unit, unlike the transient lodging requirements, and should also not overlap the building manager unit(s)
- ▶ If the facility has multiple buildings, the 5%|2% can be applied to the total number on the site if each building has 15 or fewer dwelling units, or it can be applied across several sites if built as a single contract or developed as a whole – this is applicable to both new construction and to alterations
- ▶ If a building has more than 15 dwelling units, it is to be scoped separately from the smaller buildings, although the smaller buildings can still be treated as a sum for scoping purposes
- ▶ If a public entity has a program providing new individual units for purchase, the 5%|2% would be applicable
 - If a public entity has acquired existing dwelling units and is not performing any alterations, then those units can be sold without providing the 5%|2% [CBC]
- ▶ Dwelling units with mobility features and units with communication features are required to be dispersed according to the different dwelling unit types and dispersed and integrated within the overall facility,

NOTE: Some programs may increase the percentage of mobility feature or communication feature dwelling units than the minimum, so be sure to know what the requirements are in order to provide the compliant scoping.

- ▶ If the project has HUD or other federal funds/programs, all washers/dryers in common use laundry rooms are front loading and accessible, unlike ADA TII requirement which also allows top loading with a limited number of each depending on the quantity provided – one of the 11 exceptions in the Deeming Notice [HUD's Deeming]
- ▶ Mailboxes designated for mobility feature units are required to be within reach range
 - Mailboxes for mobility feature and adaptable units are to be within reach range of 48" maximum [CBC]
- ▶ Mobility or communication feature residential dwelling units are not required to have the window controls comply with ADA requirements for operation, reach range, or being on an *accessible route*, but window treatment itself is to comply
- ▶ If the project has HUD or other federal funds/programs with employee only spaces, there are some exceptions ADA allows, but not HUD's Deeming Notice, nor ABA, so be sure to address them [ABA] & [HUD's Deeming]
- ▶ HUD's Deeming Notice also does not allow some exceptions under ADA, or modifies them, for structural impracticability, alterations, additions, or *path of travel* to the public right of way, where portions of Section 504 and UFAS are still to be implemented [HUD]

Alterations to Dwelling Units

- ▶ ADA defines a *substantial alteration* of a dwelling unit as replacement of cabinetry or rearrangement in plan configuration of either a kitchen or a bathroom, but it is not limited to this definition
- ▶ If a dwelling unit has a *substantial alteration* and at least one other room is altered, then the 5%|2% applies to the altered unit(s) – note that normal maintenance or appliance/fixture replacement do not affect the usability of the space and are not considered alterations unless the location of the elements are changed
- ▶ In an alteration, if it is *technically infeasible* for a dwelling unit to be made into a mobility feature unit and on an accessible *path of travel*, then another comparable unit can be substituted
- ▶ A single-story dwelling unit can be substituted for a multi-storied unit for one with mobility features if it has equivalent space and amenities
- ▶ If a building with more than 15 dwelling units is vacated for an alteration other than asbestos removal or pest control, then 5% of the units are to be altered and on an *accessible route* to meet mobility feature requirements and 2% are to provide communication features
- ▶ If the interior of a building is removed including all structural portions of floors and ceilings, the building is considered a new building [FHA] & [CBC]
- ▶ Normal maintenance, such as re-roofing, painting, mechanical, and electrical are not considered an alteration unless it affects the usability of the space

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.5 Residential Under the ADA

- ▶ Alterations to windows, hardware, controls, outlets, and signage are not alterations that are considered to affect the usability of, or access to an area containing a primary function, and therefore do not trigger *path of travel* requirements

NOTE: An alteration is defined under the ADA, as a change that could affect the usability of a space which can include remodeling, renovation, a change to the structure, and rearrangement of plan layouts. Normal maintenance is not considered an alteration. If a new thermostat or electrical outlet was provided in a room where there was none before, that would be considered an alteration since it affects the usability of the space. Modifications to specific elements are considered an alteration and required to comply, but they might not affect the usability of, or access to, an area containing a primary function, so they might not trigger *proportional spending* on the *path of travel* unless the intent was to alter the full space. Notice that plumbing is not included in the list and would always be considered an alteration, not maintenance. Also be aware, if the project has HUD funds, then under Section 504 regulations, § 8.23 defines a *substantial alteration for housing* with 15 or more dwelling units as 75% or more of the replacement cost based on the completed facility, and the facility has to comply with new construction codes.

- ▶ When an addition is constructed that increases the number of dwelling units, the 5%|2% is only applied to the added dwelling units

Communication Feature Dwelling Units

- ▶ Communication feature units are to comply with the specifications under FHA for usable dwelling units with some added requirements [FHA]
 - Communication feature units are to comply with the requirements of adaptable features now located under 11B with some newly added conditions [CBC]
- ▶ If a building fire alarm is provided, it is to be extended to be within the unit to a point near the smoke detection system
- ▶ Visible fire alarms that are provided within the unit are to be activated when the building fire alarm is activated for that area
- ▶ All smoke detection devices within the unit are to activate a visible alarm when smoke is detected
- All carbon monoxide detection devices within the unit are to activate a visual alarm when carbon monoxide is detected [CBC]
- ▶ The same visible alarm used for the unit smoke detection can also be used for the building fire detection, but for nothing else
 - The same visible alarm used for the unit smoke detection can also be used for the building fire detection and the unit carbon monoxide detection, but for nothing else [CBC]
- ▶ The primary unit entry doorbell is to be hard-wired with a button or switch on the unit exterior which activates both a visible signal and an audible tone within the unit
- ▶ If a visible doorbell signal is located in a sleeping area, provide a deactivation button for the signal in that room
- ▶ Where an intercom system is provided allowing for voice communication between a visitor and the dwelling unit occupant, the public or common use interface of the system is to have the capacity of supporting both voice and TTY communication with the occupant, and the dwelling unit must have a telephone jack capable of supporting both voice and TTY with the visitor
- ▶ A peephole is to be provided at the entry door allowing for a 180° view, and installed at an appropriate height for a standing person

NOTE: Consider providing a second peephole that is at an appropriate height for children or someone short of stature. If a peephole is installed in units other than communication features be sure to also install lower peepholes in mobility feature dwelling units for a seated person. While a height is not specifically stated, 40" to 43" above the finished floor might be appropriate, which is similar to the bottom edge of mirrors and the maximum height for vision lites.

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

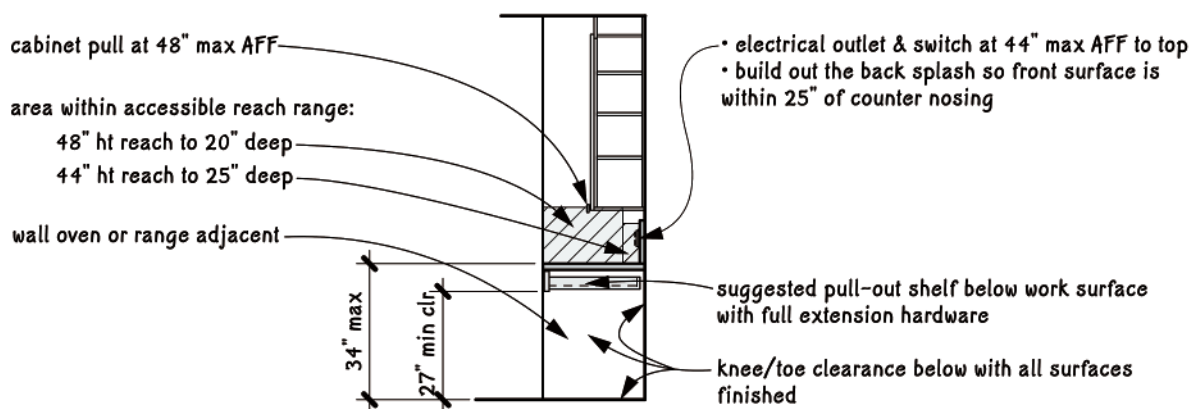
1.5 Residential Under the ADA

Mobility Feature Dwelling Units

- ▶ Mobility feature dwelling units are to be located on an *accessible route*
- ▶ Common use spaces not serving mobility feature dwelling units are not required to be accessible nor on an *accessible route*
 - Common use spaces not serving mobility feature or adaptable dwelling units are not required to be accessible nor on an *accessible route* which is typically found in non-elevated buildings [CBC]
- ▶ HUD requires all common use spaces to be accessible and on an *accessible route*, whether or not they support mobility feature dwelling units, with the exception in non-elevated buildings having an equivalent common use space on the accessible ground floor, then other common use spaces are exempt [HUD's Deeming] [FHA]
- ▶ Within mobility dwelling units, a compliant *accessible route* is to be provided to all spaces and elements within the unit except for unfinished attics and basements
- ▶ If there is only one *accessible route* in the unit it can not pass thru the bathroom, closet, or other similar spaces to get to another space
- ▶ Each room that is served by an *accessible route* must have a 60" turning space including bathrooms, powder rooms and walk-in closets in units with mobility features
 - ◇ A turning space is not required inside of a walk-in closet or pantry that is 48" maximum in depth [A117.1]
- ▶ 30" maximum depth exterior spaces such as patios or balconies are not required to have a turning space

Kitchens in Mobility Feature Dwelling Units

- ▶ Kitchens in mobility feature dwelling units comply with other accessible requirements for kitchens except as modified below
- ▶ In residential mobility feature dwelling units, cabinetry can be located in the knee/toe clearance under the sink and work surface, presuming the cabinets can be removed without specialized knowledge or tools and in the former case, without also having to remove the sink
- ▶ The flooring, wall, and sides of the sink and work surface cabinets are to be finished
- ▶ A 30" minimum clear width below the sink and work surface is to be provided
- ▶ If the counter depth at the work surface or the sink is greater than 24", then the clear width under the counter-top is to increase to be 36"

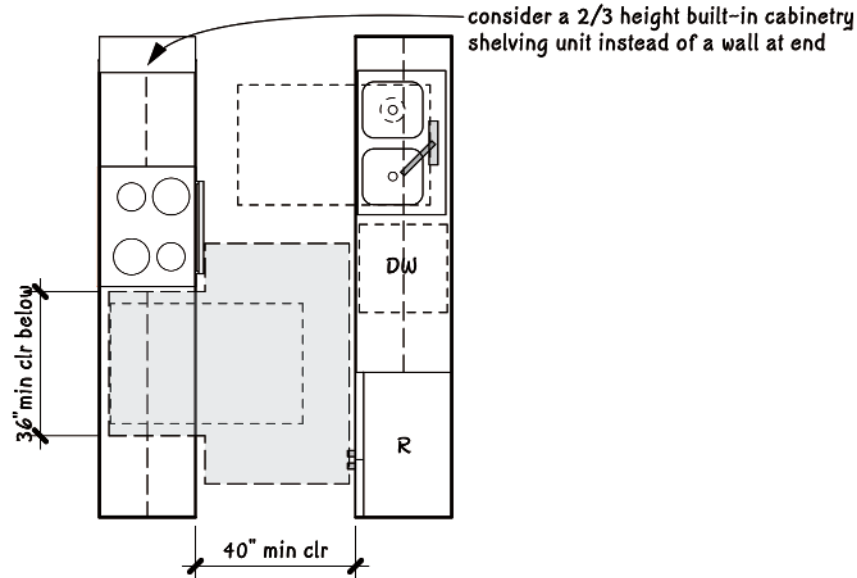


Work Surface Section – Example

- ▶ Knee/toe clearance below is to 27" minimum above the floor with a 34" maximum counter-top or sink rim height, whichever is higher, or they can be an adjustable height from 29" minimum to 36" maximum to the top
- ▶ If the sink is an adjustable height, the rough-in plumbing must allow for the 29" minimum height installation
- ▶ The sink is to have all pipes and rough surfaces insulated below to prevent contact, even if there is cabinetry underneath
 - ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.5 Residential Under the ADA

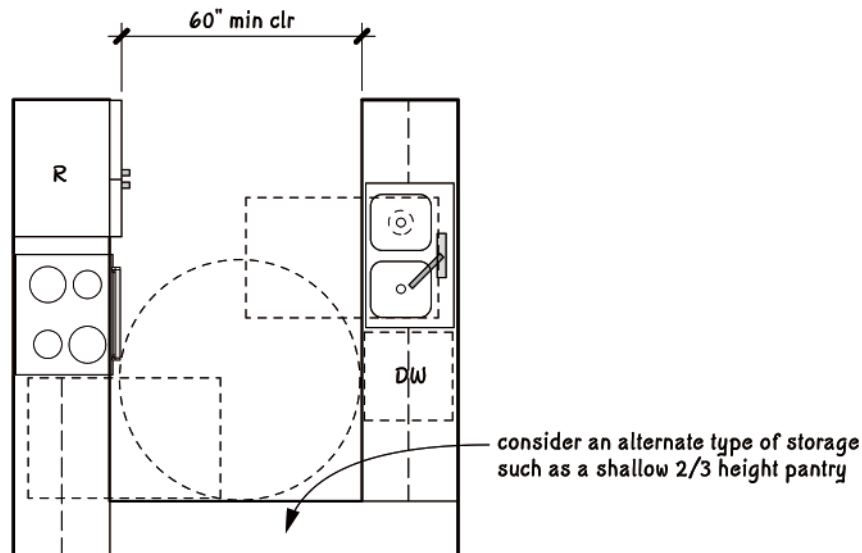
- ▶ The 30" minimum clear floor space for the work surface is to be centered
- ▶ Pass-thru kitchens having two entries with a cooktop or range, are to provide 40" minimum clear from the face of the counter, appliances, or walls excluding the hardware or appliance pulls, but a 60" turning space is to be provided – this can include kitchens with islands
- ▶ If the knee/toe space below the work surface is used as part of the required turning space, the clear width needs to be increased to be 36" minimum



Mobility Feature Pass-Thru Kitchen – Example

NOTE: If the clearance under the sink is used as part of the turning space, be aware of the depth of the knee/toe space below. If there is a garbage disposal, the pass-thru kitchen may need to be widened in order to get the 60" dimension for the turning space. The clear width below the sink would also need to be widened to be 36".

- ▶ 'U'-shaped kitchens that have a cooktop or range are to provide 60" minimum clear from the face of the counter, appliances, or walls excluding the hardware or appliance pulls



Mobility Feature 'U'-Shaped Kitchen Example

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

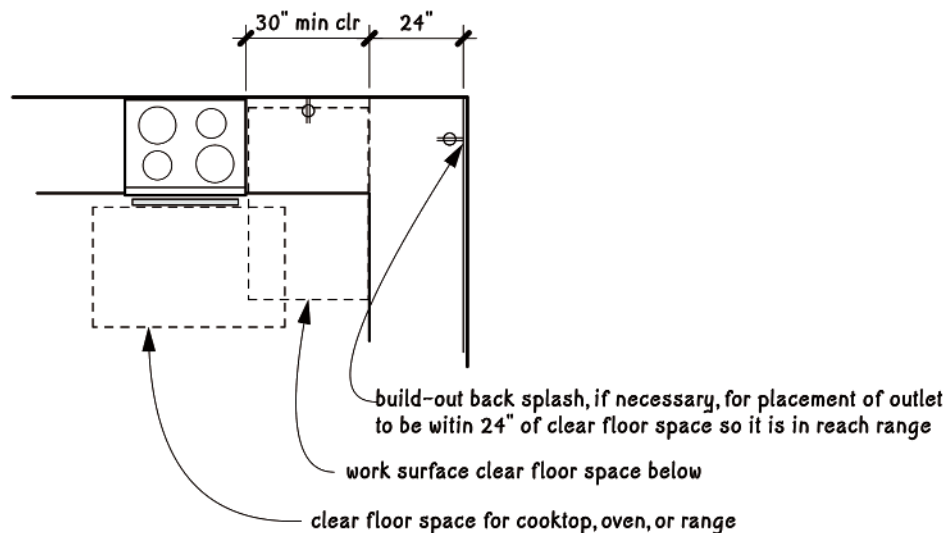
1.5 Residential Under the ADA

- ▶ No cabinetry can be placed below the sink or work surface in common use space kitchens supporting mobility feature dwelling units or sleeping rooms

NOTE: Cabinet doors are cabinetry, so even if they are self-pocketing, it really does not meet the requirements in a common-use space where no cabinetry below the sink or work surface is allowed.

- ▶ The work surface is to be located adjacent to and on the same wall as the oven or range

NOTE: Under the CBC, all electrical outlets in a kitchen need to be within reach range, whereas the ADA allows an exception of one receptacle to be exempt from reach range in each section of counter. If the counter is an 'L'-shaped counter, the work surface itself should be placed at the inside corner adjacent to the range or cooktop. This allows the use of the knee/toe clearance below the work surface to be used so the outlets are within reach range at the corner.



Kitchen with Work Surface at Inside Corner

Bathrooms in Mobility Feature Dwelling Units

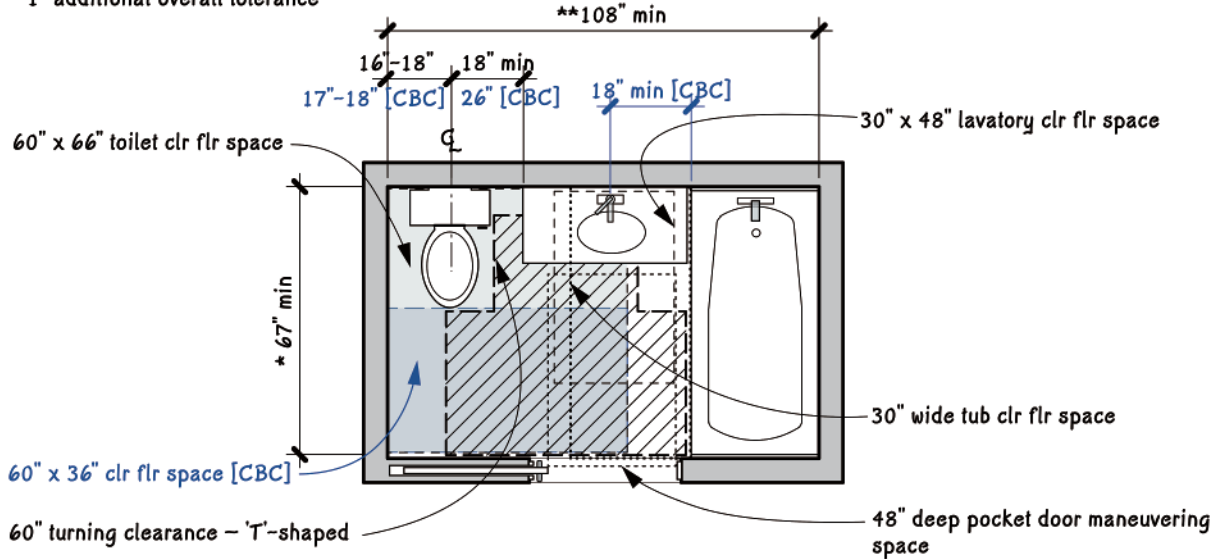
- ▶ Residential bathrooms comply with other accessibility requirements except as modified below
- ▶ The bathroom door can swing into the turning space without limitation
- ▶ The door can swing into the clear floor spaces of other fixtures if there is a 30" x 48" clear floor space beyond the door swing, but a fixture can not be located within the door maneuvering space
- ▶ One bathroom minimum is to be mobility accessible
- ▶ The mobility accessible bathroom is to have one of each type of fixture located within the same area without having to travel to other parts of the dwelling unit
 - If there is more than one bathroom and only one has a shower, the one with the shower is really to be the accessible bathroom [CBC]
- ▶ The other secondary bathrooms are to be on an *accessible route*, have a turning space, door maneuvering space, blocking for future compliant grab bar location, and outlets and switches within reach range – the fixtures are not required to have clear floor spaces

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.5 Residential Under the ADA

Presuming:

- 30" deep toilet with 10" wide tank
- 32" wide tub
- 19" deep lavatory counter with knee/toe clearance for full width below
- 1" additional overall tolerance



* depth controlled by 66" toilet clr flr space + 1" tolerance

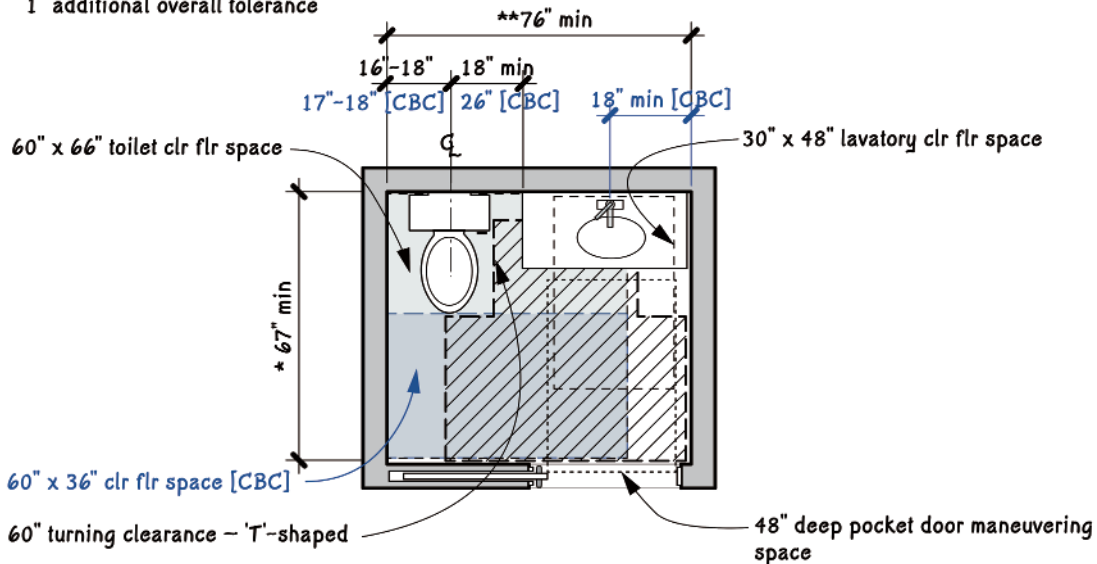
** width controlled by 17" to toilet CL + 10" for 1/2 of toilet tank width + 48" for portion of 'T'-turn + 32" w tub + 1" tolerance

Mobility Accessible Bathroom with Bathtub Example

- Powder rooms are not required to have clear floor spaces at the fixtures unless it is a multi-level dwelling unit and is the only toilet facility on the entry level

Presuming:

- 30" deep toilet with 10" wide tank
- 19" deep lavatory counter with knee/toe clearance for full width below
- 1" additional overall tolerance



* depth controlled by 66" toilet clr flr space + 1" tolerance

** width controlled by 17" to toilet CL + 10" for 1/2 of toilet tank width + 48" for portion of 'T'-turn + 1" tolerance

Mobility Accessible Powder Room Example

- – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.5 Residential Under the ADA

- ▶ The plumbing fixtures are to comply with other toilet and bathing room requirements except as modified below
- ▶ If other dwelling units have vanity counter-tops, the mobility lavatory is to have equivalent space on a counter-top in the same area
- ▶ Cabinetry can be located in the knee/toe clearance under the lavatory if the cabinets can be removed without specialized knowledge or tools without also having to remove the lavatory, and once removed, the sides of the cabinet are not in the toilet or tub clear floor area
- ▶ The lavatory is to have all pipes and rough surfaces insulated below to prevent contact even if there is cabinetry below
- ▶ The flooring, wall, and sides of the lavatory cabinet are to be finished
- The lavatory is to be centered 18" minimum from a side wall, if a side wall exists, or centered 24" from a side wall if there is removable cabinetry below [CBC]
- ▶ The lavatory and its counter can be placed in the toilet clear floor space if there is 18" from the toilet centerline to the edge of the lavatory or counter, and the toilet clear floor space increases to 66" minimum deep from the toilet plumbing wall
 - The edge of the lavatory can be placed in the toilet clear floor space if there is 26" from the toilet centerline to the edge of the lavatory or counter, and the toilet clear floor space increases to 66" minimum deep from the toilet plumbing wall [CBC]
- ▶ Toilet seat height is 15" to 19" above the finished floor
- The toilet is to have a 36" deep by 60" wide maneuvering space in front of the toilet [CBC]
- ▶ Grab bars are not required to be installed but blocking is to be provided for future compliant installation at the toilet, tub, and shower
- Transfer-type showers are now allowed in residential dwelling units [CBC]
- ▶ Tub seats are to be provided in mobility feature residential and social service center dwelling units including housing at a place of education for graduate students and faculty leased on a year-round basis
- ▶ Shower seats are not required in residential dwelling units, but blocking is to be provided for a compliant installation in the future

Social Service Center Establishments

- ▶ Types of social service center establishments include group homes halfway houses, shelters, or similar facilities that provide either temporary sleeping accommodations or residential dwelling units
- ▶ These types of sleeping accommodations or dwelling units are to comply with the residential technical and scoping requirements, regardless of the funding sources
 - The sleeping accommodations or dwelling units are to comply with the residential technical and scoping requirements under ADA and under 11B for mobility, communication, and adaptable regardless of the funding sources [CBC]

DISCUSSION

There are many questions on how to treat multi-family residential facilities that also have offices and other services, and whether these are considered mixed-use facilities. And of course the answer is – it depends. There is a category under the ADA Standards that is often missed and is becoming much more prevalent for supportive housing – social service center establishments. The ADA Standards define it as;

Group homes, halfway houses, shelters, or similar social service center establishments that provide either temporary sleeping accommodations or residential dwelling units that are subject to this section shall comply with the provisions of the 2010 Standards applicable to residential facilities, including, but not limited to, the provisions in sections 233 and 809 (pp. 91 and 212).

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1.5 Residential Under the ADA

Many get stuck on the first portion of the definition of "...group homes, halfway houses, shelters..." and do not look further at the following "...or similar...that provide either temporary sleeping accommodations or residential dwelling units...". And the question comes up of – what does this actually mean and do the funding sources have impact.

Some examples are, transitional living centers, emergency shelters, special needs housing, some senior housing, and other facilities that provide a significant level of social services along with living accommodations. Living accommodations can be anything from dorm-like rooms with multi-beds, to individual bedrooms with shared facilities, to dwelling units, and can be either temporary or permanent. The services can include counseling, education and training, transportation, assistance with daily living activities, providing meals, or recreational activities. Provision of just one type of service does not necessarily mean the facility is a social service center establishment but rather provision of a 'significant level' of services. A 'significant level' is not defined, but it is a balance of the nature, the level, and the amount of services provided. So there is a judgment call here.

I have seen some housing facilities that provide counseling, education, job skill training, child care, fitness classes, and even some with medical or therapeutic support for their residents. Many times this is in support of getting families back on their feet and into the work environment. Or it can be for homeless youth to assist them back into education and self-sufficiency. Or for battered women and their children for safety and support for independence. Other programs can be transitions from institutions, or from homelessness. If the facility falls into any of these categories, you would follow the residential requirements under the ADA Standards and other ADA requirements as applicable regardless of funding sources, whether public or private. And this is as modified by the ADA implementing regulations under either § 35.151(e) if public funding or a program of a public entity, or § 36.406 (d) if privately funded.

The residential space, whether a dwelling unit for a single family or a shared dwelling unit, follows requirements for dwelling units and will need to meet the 5% mobility and 2% communication feature requirements even if totally privately funded. If there are large sleeping rooms with multi-beds, a certain number of beds are required to have a clear floor space adjacent, and if there are common use bathrooms then a roll-in or alternate roll-in shower with installed grab bars and a seat are to be provided. You might also need to meet the FHA Guidelines with a selected safe harbor if it falls under the requirements of a covered facility. The common use spaces and social service center areas will need to meet the ADA Standards requirements as well.

Be sure to follow residential requirements for both audible and visual doorbells. Kitchens in dwelling units with mobility features are to include a work surface and in common use spaces supporting mobility sleeping rooms. A work surface might not be required in shared common use space kitchens if the dwelling units and sleeping rooms have their own kitchens – but that is a gray area. The kitchen sink and the work surface in common use space kitchens can not have cabinetry below.

Previously, the Department of Justice had social service establishment under transient lodging and with the 2010 ADA Standards changed it to a new designation for either temporary sleeping accommodations or residential dwelling units placing it under residential with some modifications. How and when to implement these requirements do not appear to be well defined, but rather a judgment call is necessary of how many social services trigger the facility into a social service center establishment with residential dwelling units. So be aware of this type of facility and consider the types and quantities of services being offered before you proceed with design. And remember, even if the dwelling units are not publicly funded, it would still fall under residential under the ADA and CBC 11B.

-
- ▶ The sleeping accommodations and dwelling units are to comply with residential requirements, including bathrooms and kitchens
 - Shower seats are required in social service center establishment dwelling units [CBC]
 - ▶ If a sleeping room has more than 25 beds, 5% minimum are to have a clear floor space adjacent to both sides of the length of the bed similar to transient lodging requirements, or it can be one space shared between two beds
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1.5 Residential Under the ADA

- ▶ If the facility has more than 50 beds and provides common use space bathing facilities, a minimum of one roll-in shower is to be provided with a seat and grab bars, and if separate showers are provided for men and women, then a roll-in shower is to be provided in each
- ▶ A transfer shower can not be substituted for a roll-in shower in common use space bathing facilities
- ▶ Common use kitchens supporting accessible sleeping rooms, have no cabinetry under the sink or work surface

Housing at a Place of Education

- ▶ Housing at a place of education can be dormitories, suites, or clustered sleeping rooms with a common use kitchen, whether in the suite or on the floor
- ▶ Housing at a place of education is to comply with the transient lodging technical and scoping requirements equating the term sleeping room with a guest room for both communication and mobility feature rooms
- ▶ If the units have multiple sleeping rooms including a mobility feature sleeping room, then an *accessible route* is to be provided similar to within residential dwelling units
- ▶ If the unit has a communication feature sleeping room, it complies with the transient lodging requirements including a visual door notification device – doorbell
- ▶ Housing units that contain mobility feature sleeping rooms, whether suites or clustered sleeping rooms, are to have accessible kitchens with a turning space and a work surface
 - On floors containing mobility feature or adaptable feature sleeping rooms, the kitchens in the common use space are to have a work surface [CBC]
- ▶ Since these are considered transient lodging and not residential, the lavatories, sinks, and work surfaces in the mobility feature units can not have any cabinetry below

NOTE: It appears that the CBC is treating dormitory rooms and sleeping suites as dwelling units, although there is a conflict with wording from 11B-224.7 and 11B-224.7.2. If this is true, it means that all non-mobility feature units or units that have non-mobility feature sleeping rooms are to comply with 11B adaptable dwelling unit requirements. Be careful of the required units with overlapping mobility and communication features, that you do follow the transient lodging requirements for the sleeping room, suite, or clustered sleeping room unit. The issue is, some of the requirements might be in conflict with ADA which treats these as transient lodging guest rooms and would over-rule local requirements. This can include door hardware, door clearances, and turning spaces. Since CBC 11B adaptable units are now required to have doorbells, all sleeping rooms or suites without any mobility features are to have doorbells. This means that you would probably need to provide them for the mobility sleeping rooms/suites as well so they have equivalent features. Another item is, transient lodging requires just visual notification devices (doorbells) only, and only in communication feature rooms, whereas residential adaptable requires both visual and audible. If working on this project type, you will need to dig down further to understand the differences and look out for future supplement clarifications. [CBC]

- ▶ The bathrooms are to have grab bars and shower or tubs seats installed since they are considered transient lodging and the lavatory can not be located in or overlapping the toilet clear floor space
- ▶ The exception is facilities with apartments or townhouses provided by or on behalf of a place of education that are leased on a year-round basis to either graduate students or faculty – these are defined as residential, regardless of the funding sources, as long as there are no common use or public use areas for educational programming, and are to comply with residential technical and scoping requirements

Adaptable Dwelling Units [CBC]

- Other than the mobility feature dwelling units, all units including those with communication features, are to meet the adaptable requirements under 11B if the building meets the requirements for covered adaptable units under 11B-233.3.1.2 – this is for units in public-type housing, not private multi-family housing which still is under 11A [CBC]
- An *accessible route* is required within the unit similar to mobility units, but it also connects to an attached garage, if any, from a door either within the unit or accessed from a separate exterior door, or an *accessible route* from the unit primary entrance to the vehicular garage door entry [CBC]
- If the dwelling unit is multi-story, an *accessible route* is not required to the spaces not on the primary level [CBC]
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1.5 Residential Under the ADA

- Passage doors are to comply with mobility requirements for clear width, hardware, closing speed, door surfaces, vision lights, and everything under 11B-404.2, with the exception of doors to mechanical closets with furnaces or hot water heaters [CBC]
- Operating force on doors is to follow mobility requirements with the exception of exterior doors at the primary and secondary entries which are allowed to have 8.5 lbs maximum operating force [CBC]
- The maneuvering space on the public side of the doors are to follow mobility requirements [CBC]
- The maneuvering space inside the dwelling unit of the primary entry, secondary entries, and required exit doors is to be 44" minimum deep with 18" on the pull strike side [CBC]
- The maneuvering space for interior doors is to be 42" deep on both sides for the width of the door, or if the door has a clear opening width of 34" minimum, the maneuvering space depth can be reduced down to 39", and on all interior doors the pull strike side has an additional 18" clear width [CBC]
- There are several exceptions to the exterior side of door landings if there is a change in elevation depending on the exterior landing finish – whether impervious or pervious, or whether it is a secondary door to a deck, patio, or balcony [CBC]
- Thresholds are to follow mobility requirements with the exception at secondary exterior doors, including tracks for sliding doors which can be ¾" in height as long as it has a 1:2 slope [CBC]
- Each primary entry door is to have a doorbell, chime, or equivalent, that is located at 48" maximum above the floor and is permanently wired [CBC]
- Electric outlets, controls and switches are to comply with mobility requirements except that the reach can be over a 36" height cabinet or work surface and the counter can be 25½" maximum in depth [CBC]
- Electric outlets at inside corners of kitchen counters are to have one located 36" from the corner [CBC]
- Circuit breakers and all electrical outlets in adaptable units on branch circuits of 30 amps or less, will now need to be within reach range, except if they are dedicated to a specific appliance, located on the appliance, or floor and baseboard receptacles [CBC]

Kitchens in Adaptable Dwelling Units [CBC]

- All kitchens are to provide 48" minimum clear from the face of the counter, cabinetry, walls, and appliances not including hardware or controls, unless it is a 'U'-shaped kitchen having appliances and fixtures at the base of the 'U' without knee/toe clearance below that requires a parallel approach which then requires 60" minimum clear [CBC]
- A sink and a work surface are to be provided with a minimum clear width below of 30", each with a 36" maximum height above the floor to the top of the work surface or the top of the sink rim [CBC]
- Cabinetry can be located in the knee/toe clearance under the sink and the work surface if the cabinets can be removed without specialized knowledge or tools [CBC]
- The sink is to have all pipes and rough surfaces insulated below to prevent contact, even if there is cabinetry underneath [CBC]
- The flooring, wall, and sides of the cabinets under the sink and work surface cabinets are to be finished [CBC]
- All appliances, plumbing fixtures, and the work surface are to have a clear floor space of 30" by 48" centered on the element for either a forward or a parallel approach, except that the range always has a parallel approach [CBC]
- The kitchen is to have either lower shelving or drawer space at 48" maximum above the finished floor [CBC]
- If the sink has hand-operated metered faucets, it is to remain open for 10 seconds minimum [CBC]

Bathrooms in Adaptable Dwelling Units [CBC]

- All bathrooms that are located on an *accessible route* are to comply with door clearances, reinforcement for shower grab bars, reinforcement for toilet grab bars, and all switches and electrical outlets are within reach range with a clear floor space in front [CBC]
- Powder rooms that are located on an *accessible route* are to have reinforcing for grab bars, are to comply with door clearances, and all switches and electrical outlets are within an accessible reach range [CBC]

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1.5 Residential Under the ADA

- If the powder room is the only toilet facility on the accessible level, it is also to provide a 30" x 48" maneuvering space outside of the door swing which can include the knee/toe clearance under a fixture, and to comply with the adaptable requirements for the toilet and lavatory [CBC]
- One bathroom is to be fully adaptable with one of each type of fixture, but if the bathroom has both a separate shower and a tub in that bathroom, only one is to comply [CBC]
- If there is more than one bathroom and additional bathrooms have a shower, one shower is to comply [CBC]
- The other secondary bathrooms are to be on an *accessible route*, have a turning space, door maneuvering space, blocking for compliant grab bar locations, and outlets and switches within accessible reach range – the fixtures are not required to have clear floor spaces
- The primary bathroom is to have a 30" x 48" maneuvering space outside of the door swing which can include the knee/toe clearance under a fixture [CBC]
- The top of a lavatory is to be 34" maximum above the floor and centered 18" minimum from a side wall or 24" if there is cabinetry underneath, even if removable, to allow for a parallel approach [CBC]
- The clear floor space is to be centered on the lavatory [CBC]
- Cabinetry can be located in the knee/toe clearance under the lavatory if the cabinets can be removed without specialized knowledge or tools and if the flooring, wall, and sides of the cabinets are finished [CBC]
- The lavatory is to have all pipes and rough surfaces insulated below to prevent contact, even if there is cabinetry underneath [CBC]
- The bathtub has a clear floor space of 30" x 48" parallel to the length of the tub, with the short end contiguous to the control end wall – the lavatory with knee/toe clearance below of 19" clear depth can encroach on the tub clear floor space [CBC]
- If a shower is provided, it is to comply with mobility requirements for a transfer shower, a 30" x 60" minimum roll-in shower where a toilet can project 12" maximum into the clear floor space opposite the control wall, or a roll-in shower of 36" deep by a minimum of 60" long with a 36" minimum opening on the long side [CBC]
- The slope for the shower floor is 4.167% maximum (½" per foot) with carborundum or an equivalent anti-slip finish [CBC]

NOTE: Carborundum is a hard man-made crystal which has a number of uses due to its durability and abrasive qualities. If embedded in flooring it provides an anti-slip surface that is durable.

- The shower has a clear floor space of 30" x 48" parallel to the length of the shower, with the short end contiguous to the control end wall [CBC]
- Thresholds can be provided at showers of 2" maximum in height with a beveled edge having a 1:2 maximum slope or can have a ½" maximum height threshold with a 1:1 maximum slope [CBC]
- All controls for plumbing fixtures are to be operable with one hand with 5 lbs maximum operating force, without tight grasping, pinching, or twisting of the wrist – shower spray unit is not required in a tub [CBC]
- There are further requirements for grab bar reinforcement and enclosures [CBC]

NOTE: Adaptable bathrooms have the length and height of grab bar backing specified in the code, but it does not state the requirements for attachment nor the required force it is to withstand. This is different than the requirements for mobility unit bathrooms where the grab bar blocking is to withstand a specific minimum force and should have the backing and its attachment engineered. Do not confuse the two.[CBC]

- A toilet is to be located 17" to 18" from the side wall that is 54" minimum in length [CBC]
- The toilet clear floor space is 48" minimum in width with 36" minimum depth in front of the toilet – the 48" width can be reduced to 36" minimum for a depth of 24" maximum by lavatories, cabinets, wing walls, or partitions [CBC]
- The toilet seat height is 15" to 19" above the floor with the controls at 44" maximum above the floor and requiring 5 lbs maximum operating force [CBC]
- There are further requirements for grab bar reinforcement which can also include floor-mounted or fold-away if a side wall is not long enough [CBC]
- If a mirror is provided, the bottom of the reflective surface is 40" maximum above the floor [CBC]

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1.5 Residential Under the ADA

- If towel bars are provided, the top of the bar is to be at 40" maximum above the floor
- The flooring, wall, and sides of the cabinets under the sink and work surface cabinets are to be finished [CBC]

Senior Housing [CBC]

- Senior housing in California has a number of additional requirements under the Unruh Civil Rights Act, Section 51.2 thru 51.4 with requirements under 51.3 for intergenerational housing [CBC]
- If the senior housing project is built or altered after January 1, 2001 the following requirements apply, except for projects in the County of Riverside [CBC]
- The requirements are applicable whether or not there are any public programs or funding [CBC]

DISCUSSION

The requirements are written in general language, not specific code language, but the regulations are basically pointing to CBC 11B and the ADAS.

1. Entries, walkways, and hallways in common use areas are to meet the requirements for wheelchair access, as well as doorways and circulation paths to and within dwelling units.
2. Walkways and hallways in common use areas are to have railings or grab bars to assist people who have difficulty walking.
3. Walkways and hallways in common use areas are to have sufficient lighting to assist people who have difficulty seeing.
4. All common use areas and dwelling units are to be located on an *accessible route*
5. One common use room is to be provided and some common use open space to encourage interaction
6. Trash collection should be provided that requires minimum physical effort by residents

1. Implementing the above requirements is somewhat straight forward. Using ADAS and 11B for wheelchair access for common use space hallways, corridors, and doors is more appropriate than 11A, since 11A is for adaptability, not accessibility. Inside the dwelling units, though, it would depend upon whether the unit is a mobility dwelling unit or an adaptable unit. Although an adaptable unit requires less space for door clearances, it may not be as accessible.

2. Installing handrails in common use space walkways and hallways should also follow 11B for accessibility, not adaptability. As a note, according to both the ADA and CBC, two handrails are only required on stairs or a ramp. By inverse, only one handrail is required along walkways and hallways, not two, presuming the slope is 5% maximum.

11B-505.2 Where required. Handrails shall be provided on both sides of stairs and ramps.

Generally someone who is using a walkway or corridor handrail also would have a cane or a walker. They may be using the railing to lean against as well, but it is not the same as mobility on a vertical rise such as a ramp or stairs which may affect stability. And this is for all interior and exterior walkways. There are different requirements for a rail where the slope is 5% maximum. Namely, the bottom of the railing can be obstructed for the full length if it is integral to a crash rail or bumper guards and extensions are not required to the railing.

3. Providing sufficient lighting would require higher lumens than used by the younger population. Generally about 50% more ambient light would be considered good – so 30 fc or 300 lux for ambient light in living environments. Transitional spaces such as hallways and foyers should not have much less illuminance than the adjacent spaces since it takes longer for the eye to adapt for older adults, although entries should have intermediate levels from outside to inside to ease the transition.

Note that sufficient light is not specifically stated under the Unruh Act, but AARP Andrus Foundation supported a study and article by Mariana Gross Figueiro "Lighting the Way: A Key to Independence" available at:

<https://www.lrc.rpi.edu/programs/lightHealth/AARP/pdf/AARPbook2.pdf>

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1.5 Residential Under the ADA

4. Having all common use areas on an *accessible route* provides for more access than 11B. Generally under 11B, if there are 2, let's say laundry rooms, that everyone can use, only one needs to be accessible, although under HUD's Deeming Notice all are to be accessible.

5. Provision of a prescribed common use space is not under 11B or ADAS, so be sure to incorporate at least one common use space on the interior and other open common use areas that could include the exterior that encourages social interaction.

6. And trash collection may be more of a facility management type of issue. If there is a trash collection or trash chute on each floor that would be less effort than having to walk outside to a trash enclosure, which would be preferred. A judgment call here.

The other aspect for senior housing is that it pertains to a development with 35 or more dwelling units. A qualifying resident or older adult is considered someone who is 62 years or older, or who is 55 years or older and living in a senior housing development. There are also requirements for a qualified permanent resident depending upon their relationship to the qualifying resident or older adult, ie spouse, caretaker, etc, and can include a child or grandchild who has a disability. If there is an Allotment letter for California TCAC for senior projects, there are other requirements as well, over and above the Unruh Act.

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Regulation Sources

2010 ADA Sources

106.5 Definitions > Defined Terms > Alteration
 106.5 Public Building or Facility
 106.5 Residential Dwelling Unit
 203.8 General Exceptions > Residential Facilities
 206.2.3 **except 4** Accessible Routes > Where Required > Multi-Story Buildings and Facilities
 224 Transient Lodging Guest Rooms
 229.1 **except 1** Windows > General
 233.3 Residential Facilities > Residential Dwelling Units Provided by Entities Not Subject to HUD Section 504 Regulations
 505.2 Handrails > Where Required
 505.6 **except 1** Gripping Surface
 505.10 Handrail Extensions
 604.3.2 **except** Water Closets and Toilet Compartments > Clearance > Overlap
 604.4 **except 2** Seats
 604.5 **except 2** Grab Bars
 606.2 **except 3** Lavatories and Sinks > Clear Floor Space
 606.3 **except 3** Height
 607.4 **except 2** Bathtubs > Grab Bars
 608.3 **except 2** Shower Compartments > Grab Bars
 708.4 Two-Way Communication Systems > Residential Dwelling Unit Communication Systems
 804 Kitchens and Kitchenettes
 804.3 Kitchen Work Surface
 806.2.3 Transient Lodging Guest Rooms > Guest Rooms with Mobility Features > Sleeping Areas
 809.1 Residential Dwelling Units > General
 809.2 Accessible Routes
 809.3 Kitchen
 809.4 Toilet Facilities and Bathing Facilities
 809.5 Residential Dwelling Units with Communication Features

 Advisory 233.1 Residential Facilities > General
 Advisory 233.3.4 Alterations Exception
 Advisory 233.3.4.2 Alterations to Individual Dwelling Units
 Advisory 809.4 Toilet Facilities and Bathing Facilities

2022 CBC Sources

(Sources shown in italics differ from ADA)
 202 Definitions > Public Building or Facility
 202 *Public Housing*
 202 *Residential Care Facility for the Elderly*
 202 Residential Dwelling Unit
 202 *Residential Facility*
 11B-203.8 *General Exceptions > Residential Facilities*
 11B-206.2.3 **except 4** *Accessible Routes > Where Required > Multistory Buildings and Facilities*
 11B-208.3.2 *Parking Spaces > Location > Residential Facilities*
 11B-215.5 *Fire Alarm Systems and Carbon Monoxide Alarm Systems > Residential Facilities*
 11B-224 *Transient Lodging Guest Rooms, Housing at a Place of Education and Social Service Center Establishments*
 11B-224.7 *Housing at a Place of Education*
 11B-224.7.2 *Accessible Dwelling Units with Adaptable Features*
 11B-224.8 *Social Service Center Establishments*
 11B-229.1 **except 1** Windows > General
 11B-233.3 *Public Housing Facilities > Public Housing Facilities*
 11B-233.3.1.2 *Minimum Number: New Construction > Residential Units with Adaptable Features*
 11B-233.3.2 *Residential Dwelling Units for Sale*
 11B-233.3.4.3 *Alterations > Alterations to Residential Dwelling Units with Adaptable Features*
 11B-233.3.6 *Graduate Student and Faculty Housing at a Place of Education*
 11B-505.2 Handrails > Where Required
 11B-505.6 **except 1** Gripping Surface
 11B-505.10 Handrail Extensions
 11B-604.3.2 **except** *Water Closets and Toilet Compartments > Clearance > Overlap*
 11B-604.4 **except 2** Seats
 11B-604.5 **except 2** Grab Bars
 11B-606.2 **except 3** Lavatories and Sinks > Clear Floor Space
 11B-606.3 **except 2** Height
 11B-607.4 **except 2** Bathtubs > Grab Bars
 11B-608.3 **except 2** Shower Compartments > Grab Bars
 11B-708.4 Two-Way Communication Systems > Residential Dwelling Unit Communication Systems

1.5 Residential Under the ADA

Regulation Sources

ADA Implementing Regulations

Title II 28 CFR Part 35

- § 35.104 Definitions > Housing at a Place of Education
- § 35.151 (b)(4)(i) New Construction and Alterations > Alterations > Path of Travel > Primary Function
- § 35.151 (e) Social Service Center Establishments
- § 35.151 (f) Housing at Place of Education

Title III 28 CFR Part 36

- § 36.104 Definitions > Housing at a Place of Education
- § 36.403 (c)(2) Alterations: Path of Travel
- § 36.406 (d) Standards for New Construction and Alterations > Social Service Center Establishments
- § 36.406 (e) Housing at a Place of Education

DOJ Guidance on the 2010 ADAS for Accessible Design

- § 35.151 (e) Social Service Center Establishments
- § 35.151 (f) Housing at Place of Education
- § 36.406 (d) Standards for New Construction and Alterations > Social Service Center Establishments
- § 36.406 (e) Housing at Place of Education
- 233 Residential Facilities > Homeless Shelters, Group Homes, and Similar Social Service Establishments
- 233 Housing Operated by or on Behalf of Places of Education

Other Federal Regulations

- Fair Housing Act Design Manual Rev 1998 Introduction** Examples of Covered Multi-Family Dwellings > New Construction Behind Old Facades
- 7.33 Usable Kitchens and Bathrooms > Part B: Usable Bathrooms > Powder Rooms

HUD 24 CFR Part 8

- HUD Section 504 24 CFR § 8.23 Alterations of Existing Housing Facilities

Deeming Notice, May 23, 2014 <https://www.govinfo.gov/content/pkg/FR-2014-05-23/pdf/2014-11844.pdf>

2017 A117.1 Sources

(Sources shown in italics differ from ADA)

- 1102.3.2 excepts Accessible Units > Accessible Route > Turning Space*

2022 CBC Sources (cont)

- 11B-804 Kitchens, Kitchenettes and Wet Bars*
- 11B-804.3 Kitchen Work Surface*
- 11B-806.2.3 Transient Lodging Guest Rooms > Guest Rooms with Mobility Features > Sleeping Areas*
- 11B-809.1 Residential Dwelling Units > General*
- 11B-809.2 Accessible Routes*
- 11B-809.3 Kitchen*
- 11B-809.4 Toilet Facilities and Bathing Facilities*
- 11B-809.5 Residential Dwelling Units with Communication Features*
- 11B-809.6 to 11B-809.12 Residential Units with Adaptable Features*

Unruh Civil Rights Act

Section 51.2 thru 51.4

1.6

The Youngers, the Olders, & In-Between

Considerations for the Youngers

- ▶ The direction provided for children is by age grouping and are applicable to 12 years and younger – over 12 years of age, adult requirements are to be followed
- ▶ None of the suggested dimensions are required, but if using, be sure to be consistent with the age group range
- ▶ Reach ranges for children are the same for forward and for parallel approach and are helpful for coat hooks, lockers, and other operable parts

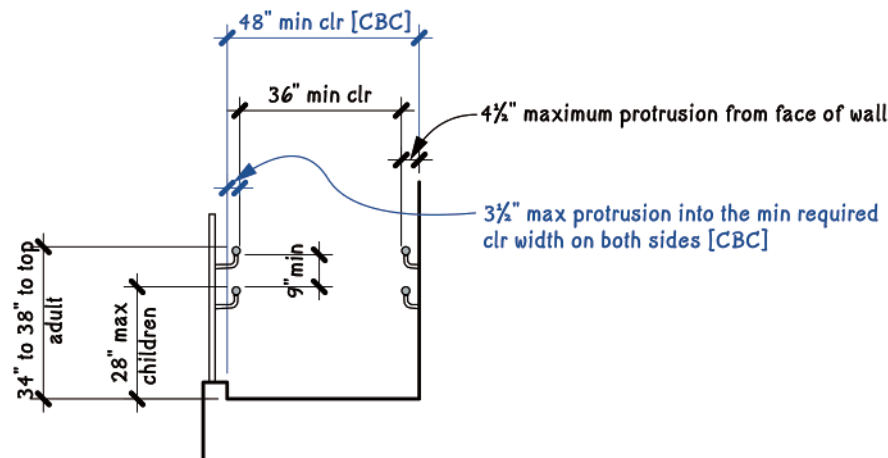
Ages 3 & 4 20" to 36" AFF

Ages 5 thru 8 18" to 40" AFF

Ages 9 thru 12 16" to 44" AFF

Handrails for Children

- ▶ If children are the primary users of handrails on stairs and ramps, a second set of handrails can be placed at 28" maximum above the stair nosing or ramp surface – allow 9" minimum clear between the adult and the children set of handrails



Handrails at Stairs & Ramps for Children

Drinking Fountains for Children

- ▶ Drinking fountains for children can have a parallel approach with the spout at 30" maximum above the floor and located 3½" back maximum from the furthest projection on the front edge
- ◆ The clear floor space for parallel approach is to be centered on the drinking fountain [A117.1]

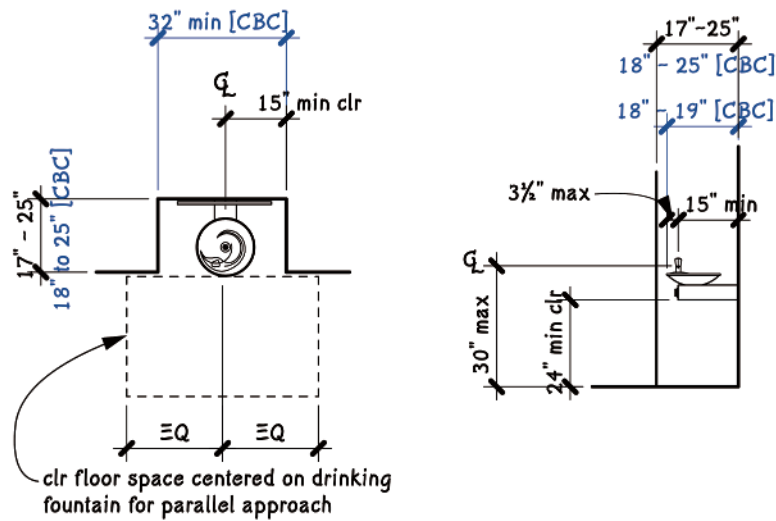
NOTE: In order to comply with the ADA, the centerline of the spout at a drinking fountain used predominantly by children is to be at 30" above the floor. IBC states 30" minimum for standing children and it allows adult wheelchair accessible drinking fountains which are 36" maximum.

- ◆ Drinking fountains for standing children can have the spout outlet between 30" minimum to 43" maximum above the floor [A117.1]
- Adult wheelchair accessible drinking fountains can also be used for children if there is a clear floor space centered on the fountain for parallel approach and the spout is centered 30" above the floor [IBC]

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.6 The Youngers, the Olders, & In-Between

- Drinking fountains with the spout located at 30" minimum above the floor can be used for standing children [IBC]



Plan View

Side View

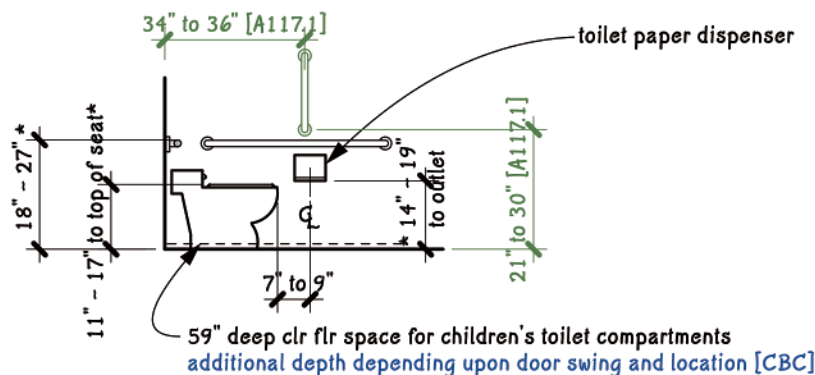
Drinking Fountain for Children

Toilet Rooms & Fixtures for Children

- ▶ Toilets and their respective grab bars have varying requirements by age – if suggested locations are not stated, adult requirements are to be followed

	Toilet CenterLine	Toilet Seat Ht	Grab Bar Ht	Dispenser Ht
Ages 3 & 4	12"	11" to 12" AFF	18" to 20" AFF	14" AFF
Ages 5 thru 8	12" to 15"	12" to 15" AFF	20" to 25" AFF	14" to 17" AFF
Ages 9 thru 12	15" to 18"	15" to 17" AFF	25" to 27" AFF	17" to 19" AFF

- ▶ Flush controls are to be 36" maximum above the floor
- ▶ Grab bar locations are the same as for adults with the exception for the height at toilets
- ◆ The vertical grab bar at a toilet is to be located so the bottom is between 21" minimum to 30" maximum above the floor, and its centerline located 34" to 36" from the back wall [A117.1]



* range of dimensions dependent upon age of predominant user group & are applied consistently

Toilet Grab Bar Location for Children

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
- – 2021 IBC only | ◆ – 2017 ICC A117.1 only | ● – 2022 CBC (California) only

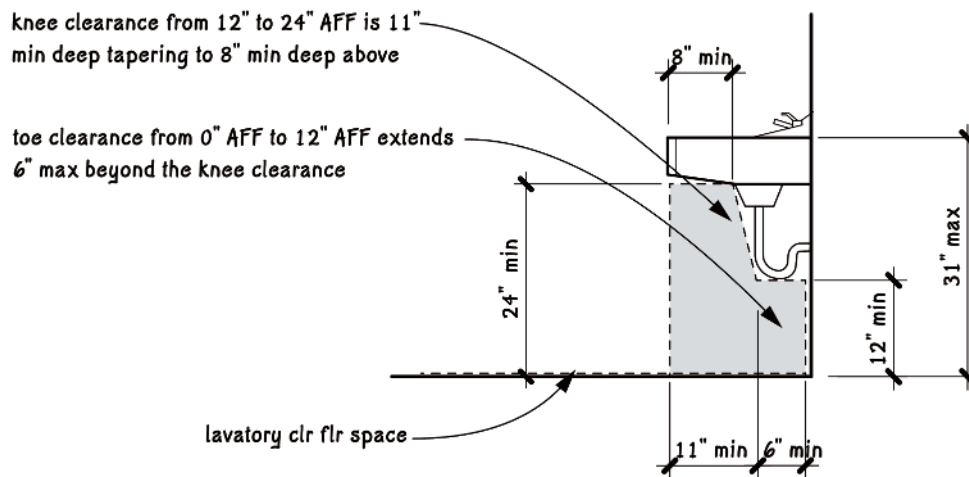
1.6 The Youngers, the Olders, & In-Between

- ▶ Toilet compartments are to be 59" minimum deep from the plumbing wall regardless of whether the toilet is wall hung or floor-mounted
- ▶ Toe clearance under the partition is to be 12" minimum height clear and is not required on the end partition if the compartment is more than 65" deep
- ◆ Toe clearance extends 8" beyond the compartment partition [A117.1]

NOTE: For children's toilet paper dispensers, A117.1 states the location is to be between 24" from the back wall to 42". This does not comply with the ADA requirement of being centered 7" to 9" in front of the toilet. The 7" to 9" is allowed under A117.1 for a double-roll dispenser with 5" maximum diameter rolls. Care should be taken to place the dispenser to meet the ADA requirements for location and not use the complete range allowed under A117.1.

- ▶ Ambulatory toilets are to be located 17" min to 19" maximum from the side wall
- ▶ A lavatory can have a parallel approach for children 5 years and younger
- ▶ A lavatory can provide 24" minimum clear height below for ages 6 thru 12 if the counter or the lavatory rim is at 31" maximum above the floor

NOTE: It is not entirely clear what the required knee/toe clearance is under a lavatory for children. For instance the top clearance is 24" not 27". And if you look at the clear height for toes under a toilet compartment partition, it is 12" minimum not 9" as designated for adults. This means that instead of an 18" height sloped portion for knee clearance at a 1:6 slope inseting 3", there is a 12" height sloped portion. If the sloped portion remains at 1:6, then the inset is 2". The question is, does that slope increase to 1:4 so the inset is 3" or does it remain at the same slope. This will impact the knee/toe clearance below. My guess is that the slope changes to 1:4. But then there are the other aspects of how to overlay the CBC and A117.1. So your guess is as good as mine. Below is my best guess under ADA.



Lavatory Side View for Children 6 to 12 Years of Age

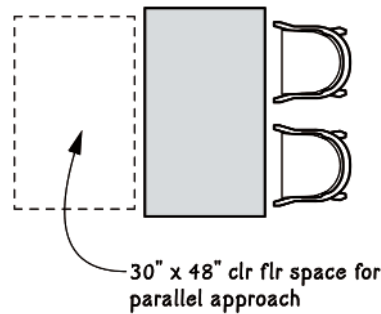
Tables, Counters, & Play Surfaces for Children

- ▶ A dining or play surface can have a parallel approach for children 5 years and younger with no clearance below or height requirements above

NOTE: A117.1 allows the top of the bench to be located between 11" to 17" above the floor, if predominantly for children's use. In an advisory, ADA does acknowledge that some wheelchair seats for children or people who are short of stature can be lower than the bench height of 17" to 19" above the floor, but does not provide an exception for bench height.

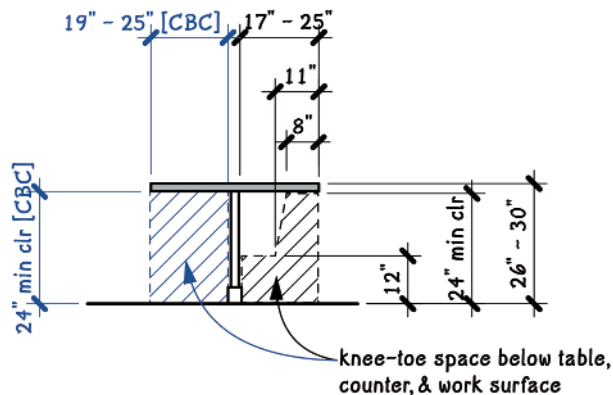
- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.6 The Youngers, the Olders, & In-Between



Tables, Counters, & Play Surfaces for Children 5 Years & Younger

- ▶ Play tables for children 5 years and younger can have a parallel approach without knee/toe clearance below
- ▶ Play tables for children over 5 years of age have knee/toe clearance below of 17" minimum deep by 30" minimum wide by 24" minimum in height with the top of the edging or rim at 31" maximum
- ▶ Clear floor space for forward approach is to be provided at dining and play surfaces with a clear height of 24" minimum for the knee/toe space below
- ▶ Tables, counters, and play surface heights are to be 26" minimum to 30" maximum above the floor



Tables, Counters, & Play Surfaces for Children 6 Years & Older

Play Areas for Children

- ▶ Amusement rides designed for children who are assisted by an adult on and off the ride, are not required to have wheelchair spaces, transfer seats, or transfer systems, but the load/unload area is still required to be on an *accessible route* with a turning space

NOTE: A117.1 exempts all requirements for amusement rides for children where they are assisted on and off the ride by an adult. This does not fully comply with the ADA requirements of having the load/unload area being on an *accessible route* and also having a turning space. [A117.1]

- ▶ Play areas for ages 2 and over, whether on the interior or exterior, are to comply at each location and be on an *accessible route*, unless they are for the same age group and are adjacent to each other
- ▶ If there are separate play areas for different age groups, each area is to comply as well
- ▶ If play areas are located in a family child care facility where the proprietor resides, they are exempt

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
■ □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

Considerations for the Olders

- ▶ In the year 2000, people over 65 years of age comprised 12.5% of the population – the 2030 projection is 20%
- ▶ For people 73 years of age and over, the leading cause of injury-related death is due to trip and falls at 41%, and is the second-most cause for those 60 to 72 year olds

NOTE: While there are suggested recommendations for children under the ADA, nothing is specifically stated for older adults. There have been numerous studies on the impact of aging on sight and the need for higher levels of lighting. There are also a number of studies for toileting and bathing needs whether for independent use or assisted use. While studies have been done and are continuing, they have not yet made their way into the federal regulations, although are starting to show up in local codes.

Light & the Aging Eye

- ▶ As one ages, our eyes also age – due to various eye-type of diseases, more light is required in order to see and even for our bodies to be able to function
- ▶ Middle age adults average 58 minutes per day of daylight; those in assisted living have about 35 minutes a day; and those in nursing homes have about 2 minutes

DISCUSSION

We have heard so much about sun light not being good for us that we have missed the impact of natural light, in particular narrow spectrum blue light, and what it does for our health and even our well-being. We have also become energy efficient with lower artificial lighting levels on the interior that could adversely affect us as we age.

So how does natural light, in particular, narrow spectrum blue light correlate with health? There have been numerous studies which show not having enough can cause a higher incidence of cancer. A study of night-shift nurses shows a 20% higher incidence of breast cancer than their day shift peers. Same goes for prostate cancer. Older adults, who many times are restless sleepers, are shown to have quicker sleep onset with deeper and longer sleep when they have more day-time light. Even those with dementia, have shown a marked slow-down to cognitive decline similar to medications without the medication side effects (although this does not stop the progressive cognitive worsening of the disease). And there is a lowering of blood pressure as well as increased resistance to colds, just to name a few.

If our eyes are closed, we do not receive and synthesize the effects of this narrow spectrum blue light. Likewise if we are blind, although if the blindness is caused by neurological issues we would still receive benefit since it is not the receptor that is damaged. If we are wearing sunglasses or in a building that has tinted windows we would receive the benefits since these only filter out light intensity. Some windows and sunglasses, though, can filter out these beneficial light waves and the specifications should be reviewed. But for the most part, glazing and sun glasses just filter out light intensity and glare.

So how does this work? Visible light enters our eyes thru rods and cones. Narrow spectrum blue light enters our eyes thru a similar receptor, but the signals connect thru the suprachiasmatic nucleus (SCN) which acts as our biological clock. If we have predominantly cool light during the day and warm light at night, there is less disruption in our normal day/night cycles. This allows our body to produce the correct balance of day-time alert transmitters and night time restorative hormones affecting our circadian rhythms. Quite a mouthful, but basically it affects a number of items related to our health and natural cycles. And note, this narrow spectrum blue light is not about the color, but rather about the wave length of 450–500 nanometers (470 nm is optimum) – so a blue painted room has no effect nor does a light with a colored screen.

Night lights might also affect our circadian rhythms – if it is bright enough for us to see, it is bright enough to have an effect on our night time melatonin production. Marker lights, on the other hand, such as the controls on a range or light switch, do not produce enough light to have an affect.

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 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.6 The Youngers, the Olders, & In-Between

As we age, we take in less light due to changes in the eye structure so we need more day time lighting, either more intense or for longer periods of time, in order to compensate. Assisted living homes typically have lower light levels and nursing homes even lower yet, hence a more rapid decline. Studies have shown that when cool day light levels are increased during the day, within a short period of time, residents rapidly respond with improved moods, better health, a lessening of functional limitations, and better sleep.

So what does this mean about our own environment whether young or old? Perhaps we should consider placing ourselves in environments where there is more natural light. If we are in rooms that are dark and gloomy, we should consider upping the daytime artificial light level. More light and more narrow spectrum blue light during the day leads to better night time sleep. And as numerous studies over the last two decades have shown, this in turn leads to all kinds of positive things regarding our health and well-being.

- ▶ Some of the diseases and conditions that affect our eyes as we age make for less light entering the eye requiring higher light levels
- ▶ Yellowing of the lens with increased floaters causes more light scatter which increases glare and reduces detail
- ▶ Darkening of the lens, filters out and reduces narrow spectrum blue light compromising our circadian rhythms
- ▶ A 60 year-old requires 3 times the amount of light as a 20 year-old
- ▶ Light to dark adaption time increases from 30 minutes in a 20 year-old to over 45 minutes in a 60 year-old

NOTE: So what can we do in regards to design that will provide environments that assist with health and sight not only for older adults, but for everyone? Provide cool bright light during the day and warm dim light at night with even illumination. Balance daylight with artificial light eliminating glare and high contrast from shadows caused by direct sunlight and clear glazing. Providing sufficient lighting requires a higher amount for older adults than used by younger people. Generally about 50% more ambient light would be considered good – so 30 fc or 300 lux for ambient light in living environments. Transitional spaces such as hallways and foyers should not have much less illuminance than the adjacent spaces since it takes longer for the older eye to adapt, although entries should have intermediate levels from outside to inside to ease the transition. Provide gradual changes in lighting level from one room to another and provide contrast in finishes not lighting. In summary, provide lots of light! Dimmers can always be used by the occupant to adjust as necessary. And if there is not enough natural light, then the amount of artificial light will need to be increased. The AARP Andrus Foundation supported a study and article by Mariana Gross Figueiro which goes more in depth on the topic, *Lighting the Way: A Key to Independence* available at: <https://www.lrc.rpi.edu/programs/lightHealth/AARP/pdf/AARPbook2.pdf>

- ▶ Other considerations are that at age 70, differentiating some colors becomes difficult due to the aging eye
- ▶ About 45% of the population in their mid-70's have difficulty differentiating colors of the blue-yellow spectrum which affects being able to differentiate blue from purple and yellow from green, as well as light pastels, but they do not appear to have much difficulty with differentiating the red-green spectrum – so be aware of this color loss when designing for olders, and this does increase with age

Toileting & Bathing Needs As One Ages

- ▶ The requirements in the ADA Standards apply to toilets, bathing, and grab bars used by people for independent use and include medical and long-term care facilities
- ▶ The ADA does not address assisted-use such as needed in nursing homes and assisted living
- ▶ The requirements would still need to be followed for accessible spaces, so suggestions and information from studies for assisted-use would need to be applied in units other than the required mobility rooms and it can be applied in private homes as well
- ▶ One of the issues that many times comes up is that people do not want to admit that they are aging so do not feel there is a need to install grab bars at toilets or bathing fixtures, and sometimes even if installed, they do not remember to make use of them

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.6 The Youngers, the Olders, & In-Between

NOTE: Bathrooms are one of the spaces where accidents oftentimes occur. While grab bars are effective in preventing falls, often even if installed, older adults do not use them. A Canadian study was done on 'smart' grab bars showing if there was a visual or audible cue to use the grab bar, its use increased significantly. A lit grab bar 'reminded' people the bar was there and it triggered more use. An audible cue was also tested. While people did not prefer the audible, this cue was more successful in increasing its use.

<https://www.tandfonline.com/doi/abs/10.1080/10400435.2012.732654>

- ▶ Older adults do not have as much upper body strength as their younger counterparts, so how they independently transfer differs from someone who is younger
- ▶ Generally an independent transfer for an older adult would be made from the front of a toilet preferably with 2 grab bars, one on each side – the back grab bar was shown to rarely have been used
- ▶ Several studies show that placing 2 fold-down grab bars centered on the toilet was beneficial and providing more space from the center of the toilet to the wall for a caregiver for assisted transfer was helpful

NOTE: All studies performed to date on what dimensions work best for grab bar placement for older adults need further research. Some of the variance is due to whether one pushes up or pulls up from the toilet, whether the person is short of stature or tall, and the person's body strength in their legs, shoulders, and arms - quite complex to test. Having a second set of lower rails attached to the sides of the toilet was rated as the safest toilet model and assisted with the sit to stand transitions. Toilet paper dispensers are suggested to be mounted on the bar, not the wall and 3" behind the toilet front edge.

- ▶ Some other items that are easily implemented include installation of floors that are not slippery when wet, so avoid polished stone or smooth glazed ceramic tile
- ▶ Faucets with thermostatic controls in showers and tubs also make it easier to use to avoid burning
- ▶ Towel bars and shelves many times are used for partial support so have them secured adequately to be able to withstand force loads greater than just a wet towel

The In-Betweens – Employees

- ▶ An employee work area is defined as all or a portion of a space used only by employees and used only for work and has limited access requirements with requirements for *circulation paths*
- ▶ Employee *common use* spaces such as corridors, toilet rooms, kitchenettes, break rooms, and parking are not considered work areas and are to be made fully accessible in new construction
- An employee workstation is defined as an area set by equipment or work stations, used by one or a small number of employees – examples are ticket booths, store check stands, area behind a bar, a restaurant kitchen counter and equipment area, and file rooms [CBC]
- ▶ Accessible parking designated for employees is based on the *Parking Spaces* table and is to be scoped separately from the parking provided for the public
- An EVCS is not required to comply if assigned to a specific employee [CBC]
- ▶ Operable parts used only by service and maintenance personnel are not required to meet accessible control requirements
- ▶ Book stacks for employee-use only are not required to be within reach range

DISCUSSION

The question often arises about what to do for employee only spaces, and the answer is it depends. Is it an existing employee only space, or is it new, or is it an alteration? The other component – is it an employee only work area, or is it an employee only *common use* space such as an employee restroom or an employee break room, or even a corridor for employees only? Also, if it is a federal facility or has federal funds, there is a requirement for a higher level of access provided to employees under ABA.

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.6 The Youngers, the Olders, & In-Between

The 1991 ADA required employee only work areas to be on an *accessible route* so someone can approach, enter, and exit the space. With the new 2010 ADA Standards, this has increased to include an *accessible route* within common use employee-only work areas. The requirement states that all elements within the work area are located on a 36" wide *accessible route* aside from a few exceptions and other requirements.

Employee common use spaces are required to be fully accessible. Smaller areas of less than 1,000 SF or work stations, and spaces such as stock rooms, file rooms, or storage rooms accessed only by employees are to be on an *accessible route* and have the ability to be approached, entered, and exited, but access is not required within the space. An area such as an employee research library used by more than the librarian is considered a common use space requiring accessible common use aisles, but if used only by the librarian, it might be considered a work station where this may not be required.

Typically a space such as a private office or a trash enclosure needs only to be on an *accessible route* and be able to be approached, entered, and exited – in other words, get to the door, open the door, and get completely over the threshold. This presumes one backs out of the room. Machinery rooms such as mechanical, electrical, and communication equipment rooms used by service personnel are specifically exempt from the requirement of being on an *accessible route*.

- Toilet facilities for employees are to be located 1 story maximum above or below the space it serves with a maximum of 500 LF from the space it serves or 300 LF maximum if in a mall with some exceptions for buildings of commerce [IBC]

Employee Only Work Areas

- ▶ Common use *circulation paths* within employee only work areas and connecting to spaces and elements within are required to be accessible and have walking surfaces that are stable, firm, and slip resistant, with compliant clearances, turning and passing spaces, and height changes
- An employee-work station is also to have walking surfaces that are firm, stable, and slip resistant with compliant height changes connecting to the elements within [CBC]
- ▶ Employee-only work areas of less than 1,000 SF that are defined by permanent partitions, casework, counters, or furnishings are exempt from the accessible *common use circulation path* requirements
 - Employee-only work areas of less than 1,000 SF that are defined by permanent partitions, casework, counters, or furnishings are not exempt from accessible *common-use circulation path* requirements [CBC]
- ▶ *Common use circulation paths* and ramps within employee-only work areas that are an integral component of work area equipment are exempt from the required minimum width if the decrease is essential to the function of the required work
- ▶ Employee work areas that are elevated 7" minimum in order for the space to function and are less than 300 SF are exempt from accessible *circulation path* requirements, approach/enter/exit requirements, and wiring for future visible alarms with the exception of raised courtroom stations
 - Employee only work areas that are elevated 7" minimum in order for the space to function and are less than 300 SF are not exempt from any of the requirements [CBC]
 - In judicial facilities, the judge's bench, clerk's station, bailiff's station, deputy clerk's station, and court reporters station are located on an *accessible route* but elevated judicial employee work stations do not require access if a ramp or lift can be installed at a later date without reconfiguration, but the litigant and counsel stations and lectern are to be accessible [IBC]
- ▶ Ramps within employee only work areas are not required to have handrails installed if it is designed for a future compliant installation, but handrails are not required if the ramp is reduced by work area equipment that is essential to the function of the required work
 - Ramps within employee only work areas are required to have handrails installed [CBC]
 - ◇ Ramps within employee only work areas are not required to have handrails installed if it is used for the movement of equipment and is designed for a future compliant installation, but handrails are not required if the ramp is reduced by work area equipment that is essential to the function of the required work [A117.1]

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1.6 The Youngers, the Olders, & In-Between

- ▶ Employee-only work areas that are exposed to the weather are exempt from accessible *common use circulation paths* within the space, although the entry does need to be located on an *accessible route*
- Employee-only work stations that are exposed to the weather are also exempt from accessible *common use accessible routes* within the space, although the entry does need to be located on an *accessible route* [CBC]
- Electrical outlets, controls, and switches that are integral to work stations are not required to be within reach range [CBC]
- In a facility, if the only elevator provided is a freight elevator which is used by both the public and employees, it is required to be accessible [CBC]
- Walk-in coolers and freezers accessed only from an employee work area are not required to be accessible [IBC]
- In dining and drinking areas, an *accessible route* is not required to employee-only work areas [IBC]
- ▶ Work areas for employee-only use are not required to provide 5% of permanently built-in work surfaces to be accessible since this can be provided as a *reasonable accommodation* under Title I

NOTE: If the project is federal under ABA, the requirement of 5% accessible permanently installed work surfaces is to be provided for employees at work stations.

- ▶ Home offices used for business are required to meet both interior and exterior requirements for access if used by employees and business visitors

DISCUSSION

Do I need to make my home office accessible? The answer is, of course, it depends. If you never have employees or clients come to your home, then there are no accessibility requirements. This presumes you do all of your work on the internet, or phone, or go to your client's office for meetings or some other type of conferencing to interface with people.

On the other hand, if someone comes to your home office, whether clients or employees, then the portion of the house used for work, or the area overlapping work with residential areas, are considered a *place of public accommodation* and are to be accessible. This would include the *path of travel* from the street to the entry to the office space including the hallway and bathroom used by a visitor. All of these elements are to be accessible. If you have parking on your property used for clients and employees, then an accessible parking space is also to be provided.

For a home office where the public does come, be aware of height changes in the *path of travel*, whether steps, thresholds, or uneven walkways, or thick carpeting, as well as clear widths along the full path. Doors with compliant maneuvering space, hardware, and force to operate are required. Provide cane detectable barriers under protruding objects which can include wall sconces or overhanging light fixtures or landscaping needing to be trimmed below 80". A restroom if available and a parking space if provided need to comply. But remember, there is no barrier removal for employees, but there is if your clients or the public can come to the work space.

- ▶ Existing employee-only areas do not have a requirement for *barrier removal*, but when altered, the area being altered is to comply with current requirements

NOTE: There is no *barrier removal* program for employee-only areas in commercial facilities or *places of public accommodation* for existing facilities. *Barrier removal* is for the public and customers only in places of *public accommodation* as well as those limited areas in commercial facilities where customers and clients might come, which would be considered a *place of public of accommodation*. Employees, though, do have a measure of protection under Title I of the ADA, since employers with 15 or more employees are required by Title I to provide *reasonable accommodation* in its workplace for those employees needing consideration. This is a different concept from *barrier removal* and is individualized to the specific employee's needs.

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.6 The Youngers, the Olders, & In-Between

- ▶ In both public buildings and *places of public accommodation*, employee lounges, locker rooms, supply storage rooms, and janitors closets are not considered primary function areas for purposes of alterations
- ▶ Where audible alarms are provided in employee-only work areas, the wiring is to be provided capable of future installation for visual alarms integrated into the system
- Where audible alarms are provided in employee work stations, the wiring is to be provided capable of future installation for visual alarms integrated into the system [CBC]

▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
■ □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

Regulation Sources

2010 ADA Sources

- 102 Dimensions for Adults and Children
 - 106.5 Definitions > Defined Terms > Children's Use
 - 106.5 Employee Work Area
 - 106.5 Work Area Equipment
 - 203.9 General Exceptions > Employee Work Areas
 - 206.2.8 Accessible Routes > Where Required > Employee Work Areas
 - 215.3 Alarm Systems > Employee Work Areas
 - 234.3 **except 2** Amusement Rides > Minimum Number
 - 240.1 Play Areas > General
 - 403.5 **except** Walking Surfaces > Clearances
 - 405.5 **except** Ramps > Clear Width
 - 405.8 **except** Handrails
 - 602.2 **except** Drinking Fountains > Clear Floor Space
 - 604.8.1.1 Water Closets and Toilet Compartments > Toilet Compartments > Wheelchair Accessible Compartments > Size
 - 604.8.1.4 Toe Clearance
 - 606.2 **excepts 4 & 5** Lavatories and Sinks > Clear Floor Space
 - 902.4 Dining Surfaces and Work Surfaces > Dining Surfaces and Work Surfaces for Children's Use
 - 1008.4.3 Play Areas > Play Components > Play Tables
- Advisory 202.4** Existing Buildings and Facilities > Alterations Affecting Primary Function Areas
- Advisory 216.12** Signs > Amusement Rides
- Advisory 240.1** Play Areas > General
- Advisory 308.1** Reach Ranges > General
- Advisory 505.4** Handrails > Height
- Advisory 803.1** Dressing, Fitting, and Locker Rooms > General
- Advisory 604.9** Water Closets and Toilet Compartments for Children's Use
- Advisory 902.1** Dining Surfaces and Work Surfaces > General

ADA Implementing Regulations

Title II 28 CFR Part 35

- § 35.151 (b)(4)(i)(A) New Construction and Alterations > Alterations > Path of Travel > Primary Function

2022 CBC Sources

(Sources shown in italics differ from ADA)

- 202 Definitions > Children's Use
- 202 Employee Work Area
- 202 Work Area Equipment
- 202 *Work Station*
- 11B-102 Dimensions for Adults and Children
- 11B-203.9 *General Exceptions > Employee Work Areas*
- 11B-206.2.8 Accessible Routes > Where Required > Employee Work Areas
- 11B-215.3 *Alarm Systems and Carbon Monoxide Alarm Systems > Employee Work Areas*
- 11B-225.2.3 **except** *Storage > Library Book Stacks*
- 11B-228.3.2 **except** *Depositories, Vending machines, Change Machines, Mail Boxes, Fuel Dispensers, and Electric Vehicle Charging Stations > Electric Vehicle Charging Stations > Minimum Number*
- 11B-234.3 **except 2** Amusement Rides > Minimum Number
- 11B-240.1 Play Areas > General
- 11B-248 *Common Use Areas and Employee Work Areas*
- 11B-308.4 Reach Ranges > Suggested Reach Ranges for Children
- 11B-403.5 **except** Walking Surfaces > Clearances
- 11B-405.5 **except 1** Ramps > Clear Width
- 11B-602.2 **except** Drinking Fountains and Bottle-Filling Stations > Clear Floor Space
- 11B-604.8.1.1 *Water Closets and Toilet Compartments > Toilet Compartments > Wheelchair Accessible Compartments > Size*
- 11B-604.8.1.4 *Toe Clearance*
- 11B-606.2 **excepts 4 & 5** Lavatories and Sinks > Clear Floor Space
- 11B-902.4 Dining Surfaces and Work Surfaces > Dining Surfaces and Work Surfaces for Children's Use
- 11B-1008.4.3 Play Areas > Play Components > Play Tables

2021 IBC Sources

(Sources shown in italics differ from ADA)

- 202 Definitions > Employee Work Area
- 1103.2.2 Scoping Requirements > General Exceptions > Employee Work Areas

1.6 The Youngers, the Olders, & In-Between

Regulation Sources

Title III 28 CFR Part 36

§ 36.403 (b)(4)(i)(A) Alterations: Path of Travel > Primary Function

2017 A117.1 Sources

(Sources shown in italics differ from ADA)

103 Human Factor Provisions

107.5 Definitions > Defined Terms > Children's Use

107.5 Employee Work Area

405.5 **except** Ramps > Clear Width

405.8 **except** Handrails

602.2 *Drinking Fountains and Bottle-Filling Stations > Drinking Fountains for Persons Using Wheelchairs*

602.3.2 **except** *Drinking Fountains for Persons Who Are Standing > Spout Outlet Height*

604.9.2.2 Water Closets and Toilet Compartments > Wheelchair Accessible Toilet Compartments > Size > Compartment for Children's Use

604.9.5.2 Toe Clearance > Toe Clearance at Wheelchair Accessible Toilet Compartments for Children's Use

604.11.2 Water Closets and Toilet Compartments for Children's Use > Location

604.11.4 Height

604.11.7.1 *Dispensers > Location*

606.2 **excepts** 3 and 4 Lavatories and Sinks > Clear Floor Space

609.4.2 *Grab Bars > Position of Grab Bars > Position of Children's Grab Bars*

902.5 Dining Surfaces and Work Surfaces > Dining Surfaces and Work Surfaces for Children's Use

903.5 **except** Benches > Height

1001.2.1 **except** 9 *Recreational Facilities > Special Provisions > General Exceptions*

1008.3 *Play Areas > Age Groups*

1008.4.3.3 Accessible Routes Within Play Areas > Play Components > Play Tables

2021 IBC Sources (cont)

1103.2.14 *Walk-In Coolers and Freezers*

1104.3 **except** 3 *Accessible Route > Connected Spaces*

1104.3.1 **excepts** *Employee Work Areas*

1109.2.9 **except** *Special Occupancies > Assembly Area Seating > Dining and Drinking Areas >*

1109.4.14 *Judicial Facilities > Courtrooms > Employee Work Stations*

1109.4.15 *Other Work Stations*

1110.2 **except** 9 *Toilet and Bathing Facilities*

1110.5 *Other Features and Facilities > Drinking Fountains*

1111.4.8.3 *Recreational Facilities > Recreational Facilities > Amusement Rides > Minimum Number*

1111.4.13 *Play Areas*

[P] 2902.3.3 *Minimum Plumbing Facilities > Employee and Public Toilet Facilities > Location of Toilet Facilities in Occupancies Other Than Malls*

[P] 2902.3.4 *Location of Toilet Facilities in Malls*

[P] 2903.1.1 **except** *Installation of Fixtures > Water Closets, Urinals, Lavatories and Bidets*

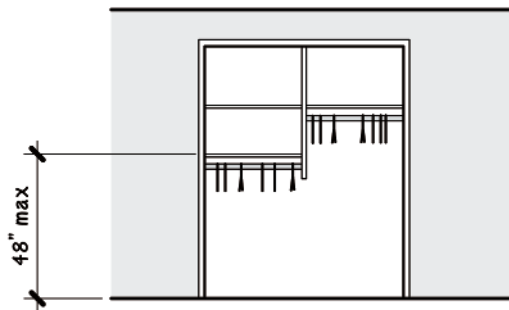
Storage, Locker & Dressing Rooms

Storage – In General

- ▶ A level clear floor space is to be provided in front of any storage required to be accessible and it is to be on an *accessible route*
- ▶ All parts including handles and locks for accessible storage is to be within reach range, operable with one hand without tight grasping, pinching, or twisting of the wrist and 5 lbs maximum operating force
- ▶ Where storage is provided in a space, one minimum of each type of storage is to be accessible
 - ▣ Where fixed or built-in storage is provided, 5% with one minimum of each type is to be accessible and the accessible spaces are to be equivalent as to what is provided in non-accessible spaces [IBC]

NOTE: The question comes up as to what is a type of storage. Generally, shelves, drawers, towel bars, clothes hang-rods, shoe racks, and robe or coat hooks are some common types. If some of these are in an enclosed closet or cabinet and others are open, those are different types – one is more private and prevents dust collection on the stored objects, whereas the open storage is easier to access but not as private nor as dust/dirt free. This would also include those that are secured by a lock versus non-secured such as safes and lockers.

- ▶ In common use storage space for employees, one of each type of storage should also be within reach range and on an *accessible route*
- ◆ Wheelchair storage spaces are not to overlap any required egress route or *accessible route* which includes load/unload areas adjacent to amusement rides [A117.1]
- If there is only one *accessible route* provided, it does not pass thru storage rooms or closets [IBC]
- The *accessible route* to public toilet facilities does not pass thru closets or storage rooms [IBC]
- ▶ If an accessible space has a closet, not all of the storage within the closet needs to be accessible, but one of each type is to be within reach range, such as a hang rod and a shelf



Clothes Closet

- ▶ If the space has more than one closet, a portion of each is required to have accessible storage
- ▶ A linen closet in a mobility feature dwelling unit is to have at least one shelf within reach range

NOTE: Full pull-out extensions on lower shelves are helpful for everyone, but it is not required. Although, it does provide much more usable space for storage.

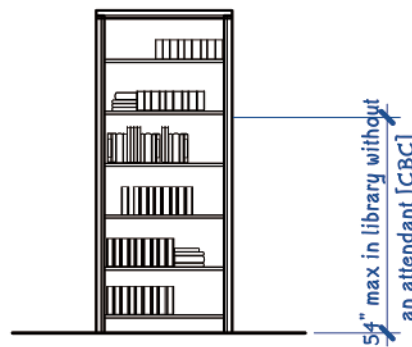
- ▶ In mobility feature dwelling units and guest rooms, if a closet has a shelf and a hangrod, then one of each or a portion of each is to be within reach range

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - ▣ – 2021 IBC only | ◆◆ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.7 Storage, Locker & Dressing Rooms

NOTE: Many times I see all of the shelves and hang-rods lowered in a closet with no upper storage. This may be fine as an accommodation if requested, but many times the closets are shared with someone who is able-bodied. Only a portion needs to be lowered within reach range and the hang-rods can be split with a high portion and a low portion. When providing construction documents, this should be indicated on the drawings and not left up to the contractor for installation. Consideration should also be given as to the best location for access within the closet to the lower elements within reach range.

- ▶ In mobility guest rooms items such as irons, ironing boards, extra blanket and bedding storage should all be located within reach range
- ▶ If a safe is provided, be sure the controls and at least one shelf are within reach range and that they are not blocked by hanging clothes above
- ▶ If a counter is provided in a space without any built-in cooking elements, items stored on the counter, such as glasses or mugs, towels, soap, or counter-top appliances, are to have at least one of each within reach range
- ▶ In mobility dwelling units, if there is a medicine cabinet, then one shelf minimum should be within reach range
 - One shelf minimum is to be at 44" maximum to the top [CBC]
- ▶ Storage space in a kitchen or kitchenette is to have 50% of the shelving within reach range – this is a complex topic which this book goes more in depth in chapter 8.4
 - Storage space in a kitchen, kitchenette, and a wet bar has 50% of the shelving within reach range [CBC]
- ▶ Book shelves should have one minimum shelf within reach range
 - Library book stacks have the shelving at 54" maximum above the floor unless there is an attendant who is available to assist – reach range is not applicable for book stacks in employee use only areas [CBC]



Shelving & Displays

- ▶ In retail, self-service shelving is not required to be within reach range but it is required to be on an accessible route – this includes shelving and displays in stores and other retail areas including in post offices

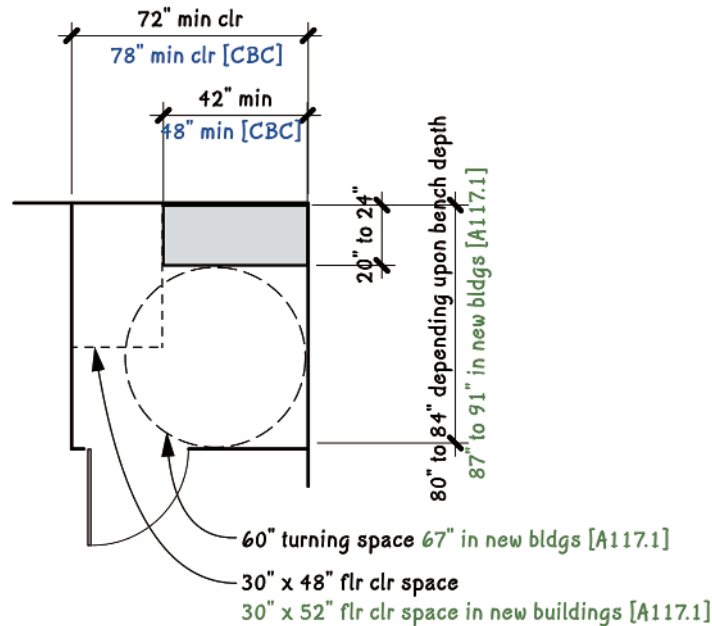
Self-Storage Facilities

- ▶ Facilities for self-storage are to have 5% of the units accessible with a minimum of one – rounding up
- ▶ If the facility has more than 200 units, provide 10 plus an additional 2% based on the total number over 200 units
- ▶ The accessible units are to be dispersed by type or class, but additional units are not required if there are more types of units than numbers required to be accessible
- ▶ Accessible units are to have accessible hardware and doors, and are to be on an *accessible route*, but are not required to be dispersed by buildings on multi-building sites
- ▶ If other units have parking to access their individual unit, then the accessible ones are to have an accessible parking space as well
- ▶ Other public-use features at a self-storage facility are to be accessible, although non-accessible units are not required to have an *accessible route* to the unit

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

Locker, Dressing, & Fitting Rooms

- ▶ Locker rooms are not considered a primary function area which means if altered, an accessible *path of travel* is not required to be provided to the room as part of the scope according to both Title II and Title III
- ▶ Where locker, dressing, or fitting rooms are provided, 5% with one minimum of each type, in each cluster is to be accessible – a type can include a private room or a multi-user room for changing, and a cluster is when there is adjacency of several rooms in an area



Private Dressing & Fitting Room Plan

- If not all locker, dressing, and fitting rooms are accessible, the accessible ones are to have a sign with an ISA [IBC]
 - If storage facilities are provided for gender-specific bathing rooms, accessible storage is to be provided for family and assisted-use bathing rooms [IBC]
 - ▶ In alterations if it is technically infeasible to provide 5% accessible, one room for each sex is to be provided on each level as the other non-accessible rooms, or if the other rooms are unisex then a single unisex accessible room can be provided instead on each level
 - ▶ If coat/robe hooks or shelves are provided in multi-user rooms, one minimum of each is to be within reach range with the shelf located between 40" to 48"
 - ▶ If coat/robe hooks or shelves are provided within private rooms, the accessible room is to also have a hook within reach range, and the shelf is to be between 40" to 48" above the floor
 - Coat/robe hooks are not to be located over the bench or other seating [CBC]
 - If mirrors are provided in multi-user or private dressing, fitting, or locker rooms, one of each type is to be located with the bottom of the reflecting surface at 20" maximum above the floor by 18" minimum wide, and 54" minimum in height and located so someone seated on the bench and standing can view themselves [CBC]
 - ▶ Each accessible room is to have a turning space within the room
 - ▶ Doors can only swing into the room if there is a clear floor space beyond the arc of the door swing
 - Doors can only swing into the room if there is a 60" turning space beyond the arc of the door swing [CBC]
 - ▶ The room is to have a compliant bench provided within the space
 - ▶ The bench is to meet the specific minimum requirements for bench height, size, seat back support, and clearance along the end with the length of the clear floor space aligned with the end of the bench for a side transfer
- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 ■ □ – 2021 IBC only | ◆ ◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

1.7 Storage, Locker & Dressing Rooms

Storage Lockers

- ▶ Where lockers are provided 5% are to be accessible with one minimum of each type, even if that increases the overall percentage
- ▶ A type of locker can include a partial-height or a full-size, a sports equipment locker, a package locker, a ventilated locker
- ▶ If a lock or handle is provided on the locker, it is to meet the requirements of not requiring tight grasping, pinching, or twisting of the wrist
- ▶ Each accessible locker is to have a clear floor space in front with its elements being within reach range, whether shelf, hook, lock, or handle

- ▶ – 2010 ADA Standards, or where A117.1, IBC, CBC are equivalent unless modified by notations below
 - □ – 2021 IBC only | ◆◇ – 2017 ICC A117.1 only | ● ○ – 2022 CBC (California) only

Regulation Sources

2010 ADA Sources

206.4.5 except Accessible Routes > Entrances > Tenant Spaces

222 Dressing, Fitting, and Locker Rooms

225.2 Storage > Storage

225.3 Self-Storage Facilities

803 Dressing, Fitting, and Locker Rooms

804.5 Kitchens and Kitchenettes > Storage

811 Storage

903 Benches

Advisory 202.4 Existing Buildings and Facilities > Alterations Affecting Primary Function Areas

ADA Implementing Regulations

Title II 28 CFR Part 35

§ 35.151 (b)(4)(i)(A) New Construction and Alterations > Alterations > Path of Travel > Primary Function

Title III 28 CFR Part 36

§ 36.403 (b) Alterations: Path of Travel > Primary Function

2017 ICC A117.1 Sources

(Sources shown in italics differ from ADA)

803 Dressing, Fitting, and Locker Rooms

903 Benches

905 Storage Facilities

1002.5.4 Amusement Rides > Amusement Ride Transfer Devices and Seats Designed for Transfer > Wheelchair Storage Space

1102.14 Accessible Units > Storage Facilities

CBC Sources

(Sources shown in italics differ from ADA)

11B-206.4.5 except Accessible Routes > Entrances > Tenant Spaces

11B-222 Dressing, Fitting and Locker Rooms

11B-222.3 *Mirrors*

11B-225.2 Storage > Storage

11B-225.2.3 *Library Book Stacks*

11B-225.3 Self-Service Storage Facilities

11B-803 *Dressing, Fitting and Locker Rooms*

11B-804.5 Kitchens, Kitchenettes and Wet Bars > Storage

11B-811 Storage

11B-903 *Benches*

2021 IBC Sources

(Sources shown in italics differ from ADA)

202 Definition > Self-Service Storage Facility

1104.5 *Accessible Route > Location*

1105.1.7 except Accessible Entrances > Public Entrances > Tenant Spaces

1109.3 Special Occupancies > Self-Service Storage Facilities

1110.2.1.3 *Other Features and Facilities > Toilet and Bathing Facilities > Family or Assisted-Use Toilet and Bathing Facilities > Family or Assisted-Use Bathing Rooms*

1110.10 *Storage*

1110.14 Dressing, Fitting and Locker Rooms

1112.1 7. Signage > Signs

[P] 2902.3.1 *Minimum Plumbing Facilities > Employee and Public Toilet Facilities > Access*

