



Finance Authority

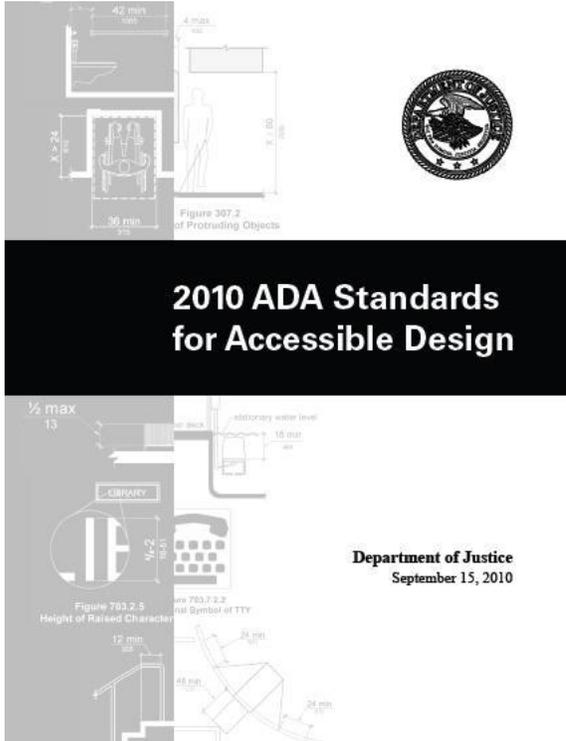
Using Accessible Design in Affordable Housing

IFA / IEDA Programs

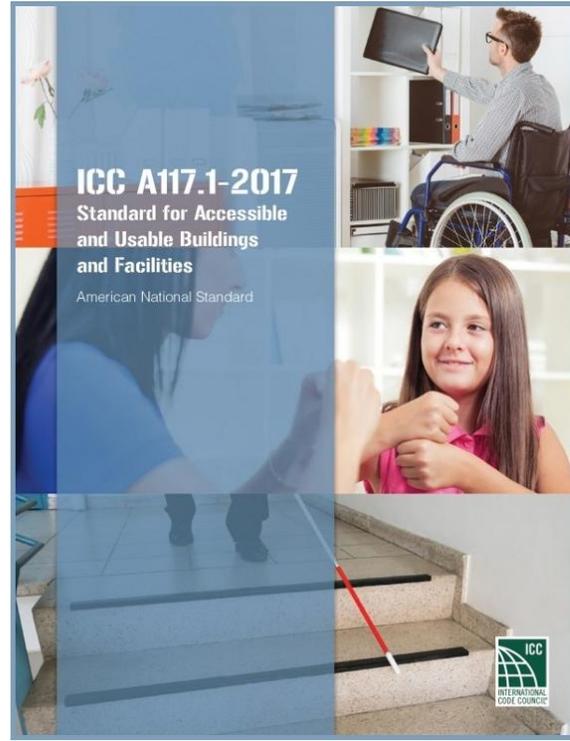
LEARNING OBJECTIVES

1. Overview of Accessible Codes
2. Introduction to UFAS
3. Common Pitfalls – UFAS/ANSI

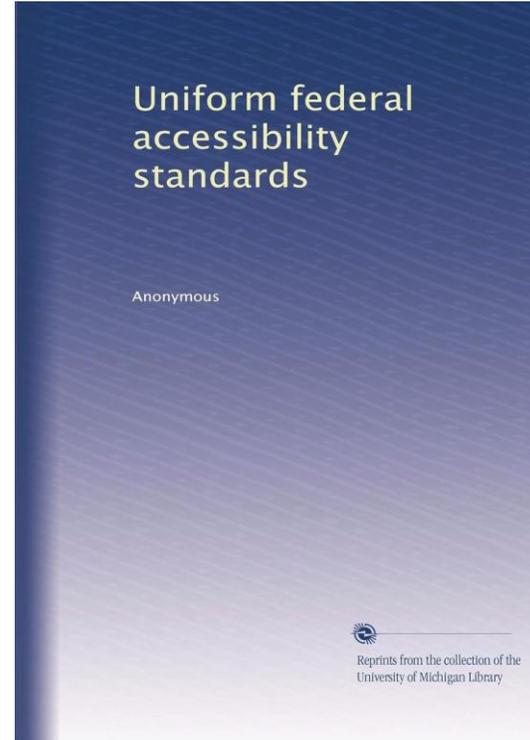




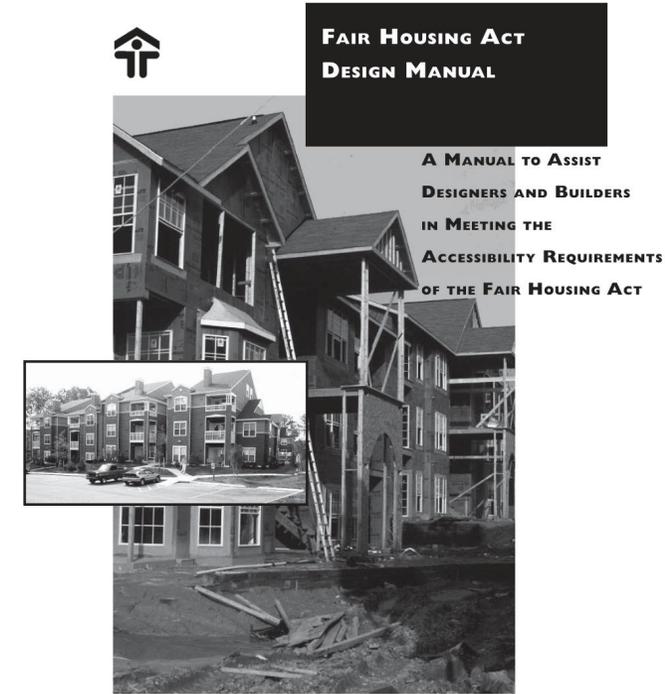
2010 ADA



IBC ENFORCED



IFA'S ENFORCED

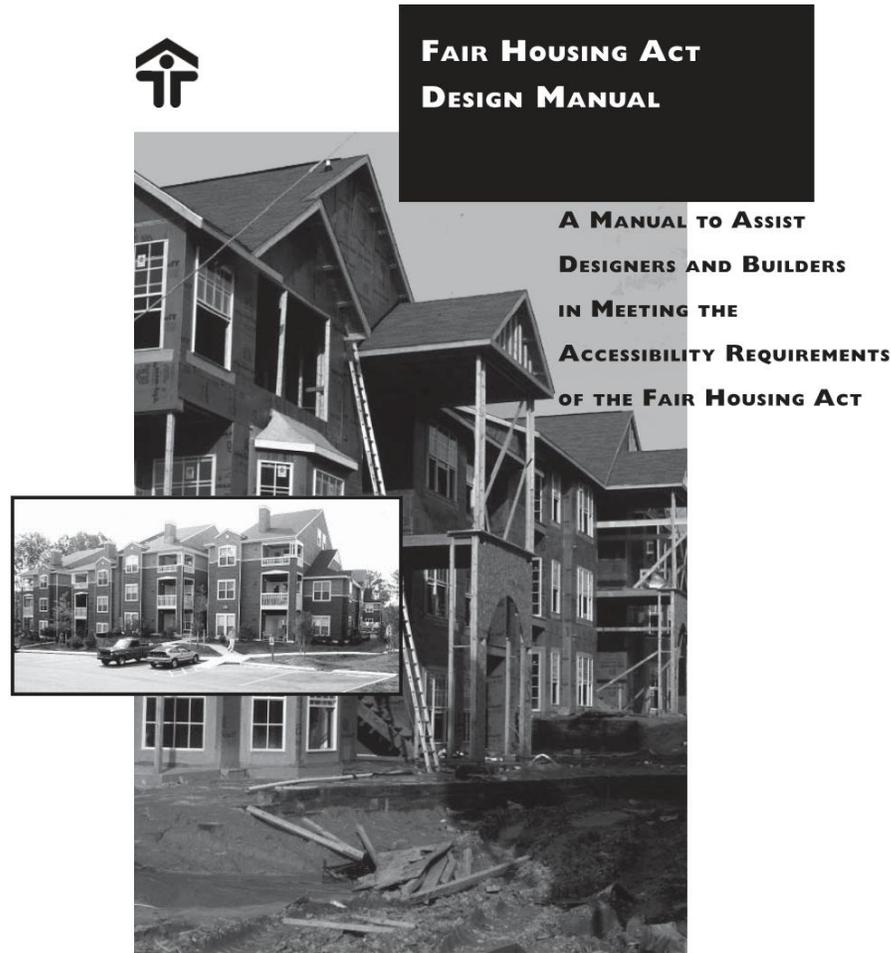


FAIR HOUSING DESIGN MANUAL

CODES....



FAIR HOUSING DESIGN ACT



Covers all projects-

- 4 or more units within a multifamily buildings
- First Occupancy after 1991
- 15 HUD approved Safe Harbors
 - HUD FHA Accessible Guidelines
 - HUD Fair Housing Act Design Manual
 - ANSI A117.1 (1986)
 - CABO/ANSI A117.1 (1992)
 - Code Requirements for Housing Accessibility 2000 (CRHA)
 - IBC 2000
 - IBC 2003
 - ANSI A117.1.-2003
 - IBC 2006
 - ANSI A117.1 - 2009
 - IBC 2009
 - IBC 2012
 - IBC 2015
 - IBC 2018

ADA 2010 & SECTION 504



- 2010 ADA Standard Design Manual
 - Published by the Department of Justice (DOJ)
 - Enforced Accessible Standards for Title 1 and II of the 1990 Americans Disabilities Act
 - Enforceable for Public Spaces
- Section 504 of Rehabilitation Act
 - Receiving Federal Assistance
 - 5% Fully Accessible Units
 - 2% Sensory Impairment Units
 - Aligned with UFSA/ADA 2010

LOW INCOME HOUSE TAX CREDIT (LIHTC)



- New Construction –
 - 10% Accessible Units
 - 2% Sensory Impairments Units
- Existing Buildings / Rehabilitation
 - 5% Accessible Units
 - 2% Sensory Impairment Units
- Program follows UFAS standards, with ANSI as secondary code.

IACC A117.1 (ANSI) – 2017

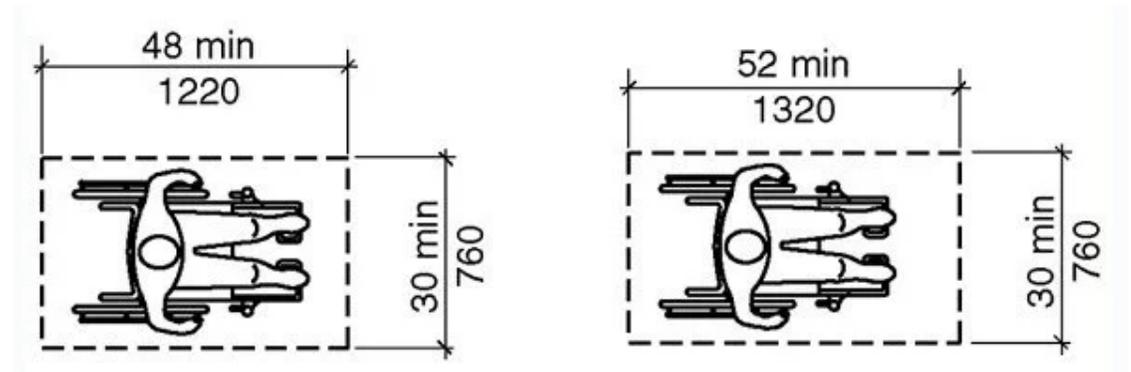


- American National Standards Institute (ANSI) – first published 1961
- Enforced with 2021 IBC / IEBC
 - Some local jurisdiction may be on older versions
 - State of Iowa Adopted 2024 IBC
- Not an adopted HUD listed Safe Harbor
 - Previous version (2009 is a Safe Harbor)
- Increased clearances for New Construction – greater than UFAS's
- Type A / B Units -
 - 2% Type A (IBC) Other units typically Type B
 - Existing buildings may allow reduction in type B units depending the total work area of the altered spaces
 - Historic Buildings – exempted from Type B units
- The required type A accessible units to be distributed in location and among various types of units

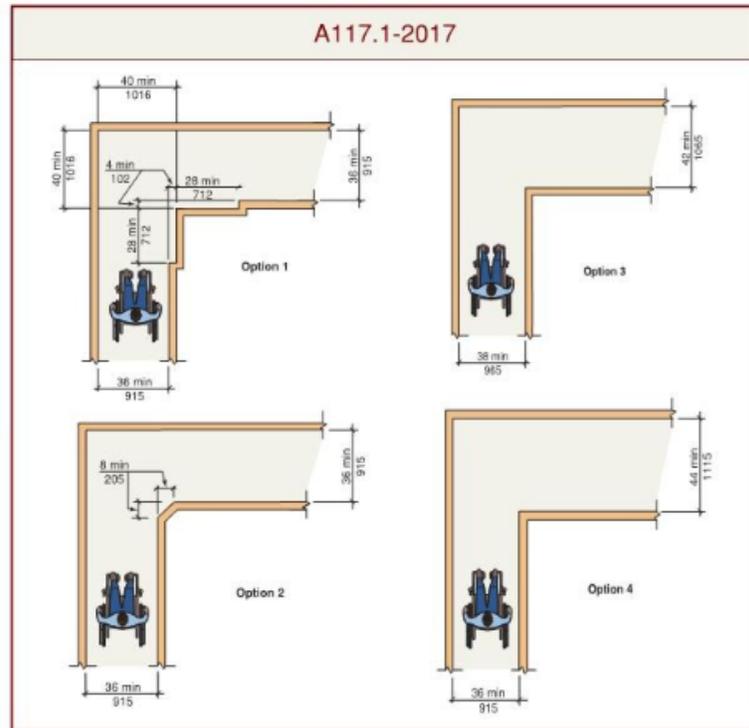
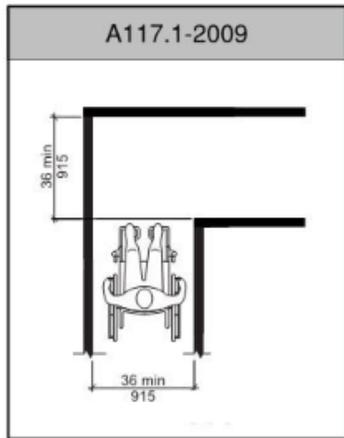
ANSI 2017 - CLEARANCES

Microsoft PowerPoint - Full day version 2017 A117 Significant Changes.pptx

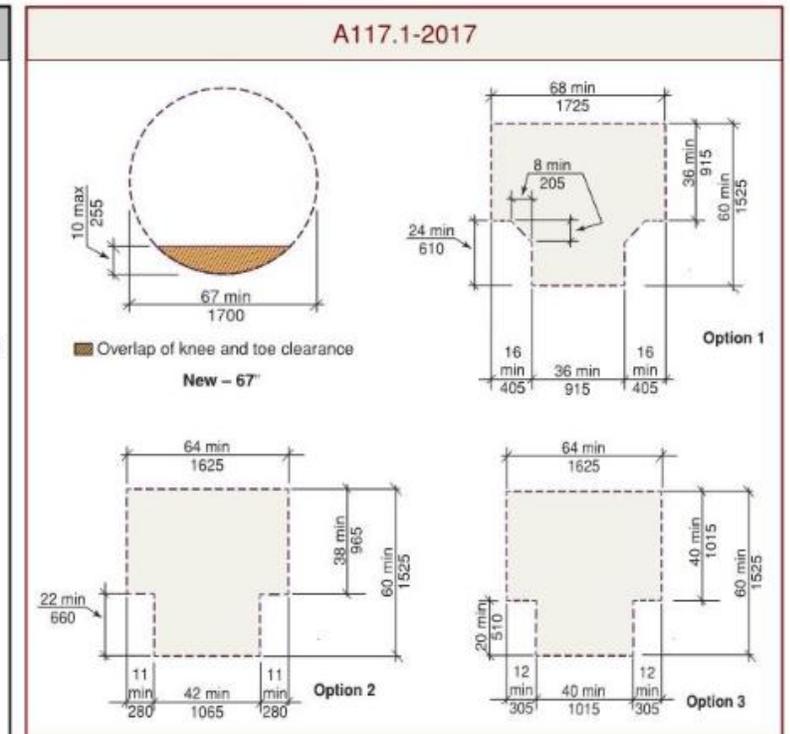
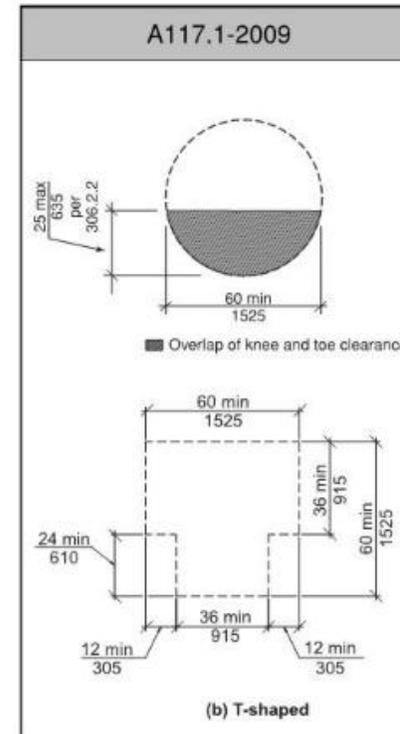
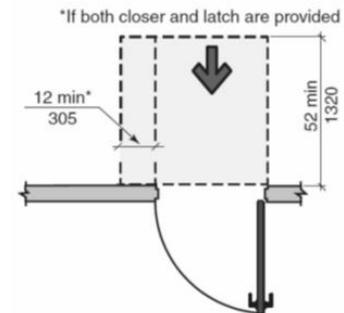
- Increased Clearances – doors, turning space, clear floor, maneuvering, ext..
- Increased sizes do not apply existing buildings
- Type B accessible units have limited increases of sizes



Updated Clear Floor Space Requirements



New Buildings



UFAS – UNIFORM FEDERAL ACCESSIBILITY STANDARDS



- Purpose – document sets standards for accessibility for federal and federally-funded facilities
- Apply to design, construction, and alterations of a building to the extent required by the Architectural Barriers Act of 1968 as amended.
- Additional Accessible Units
 - 5% Accessible
 - 2% Sensory Impaired Units
- Not a Safe Harbor – Fed Preferred Standard – FHA Design Manual
- Any residential development (includes single family)

UNIFORM FEDERAL ACCESSIBLE STANDARDS (UFAS)

<https://www.access-board.gov/aba/ufas.html>

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5. Restaurants And Cafeterias	+
6. Health Care	+
7. Mercantile	+
8. Libraries	+
9. Postal Facilities	+
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4.34 Dwelling Units

4.34.5.3 Lavatory, Mirrors, And Medicine Cabinets

- (1) The lavatory and mirrors shall comply with 4.22.6.
- (2) If a cabinet is provided under the lavatory in adaptable bathrooms, then it shall be removable to provide the clearances specified in 4.22.6.
- (3) If a medicine cabinet is provided above the lavatory, then the bottom of the medicine cabinet shall be located with a usable shelf no higher than 44 in (1120 mm) above the floor.

4.34.5.4 Bathtubs

If a bathtub is provided, then it shall have the following features:

- (1) Floor space. Clear floor space at bathtubs shall be as shown in Fig. 33.
- (2) Seat. An in-tub seat or a seat at the head end of the tub shall be provided as shown in Fig. 33 and 34. The structural strength of seats and their attachments shall comply with 4.26.3. Seats shall be mounted securely and shall not slip during use.
- (3) Grab bars. Structural reinforcement or other provisions that will allow installation of grab bars shall be provided in the locations shown in Fig. 48. If provided, grab bars shall be installed as shown in Fig. 34 and shall comply with 4.26.



UNIFORM FEDERAL ACCESSIBLE STANDARDS (UFAS)

<https://www.access-board.gov/aba/ufas.html>

4.13 Doors

4.14 Entrances

4.15 Drinking Fountains And Water Coolers

4.16 Water Closets

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4.23 Bathrooms, Bathing Facilities, And Shower Rooms

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4.27 Controls And Operating Mechanisms

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4.34 Dwelling Units



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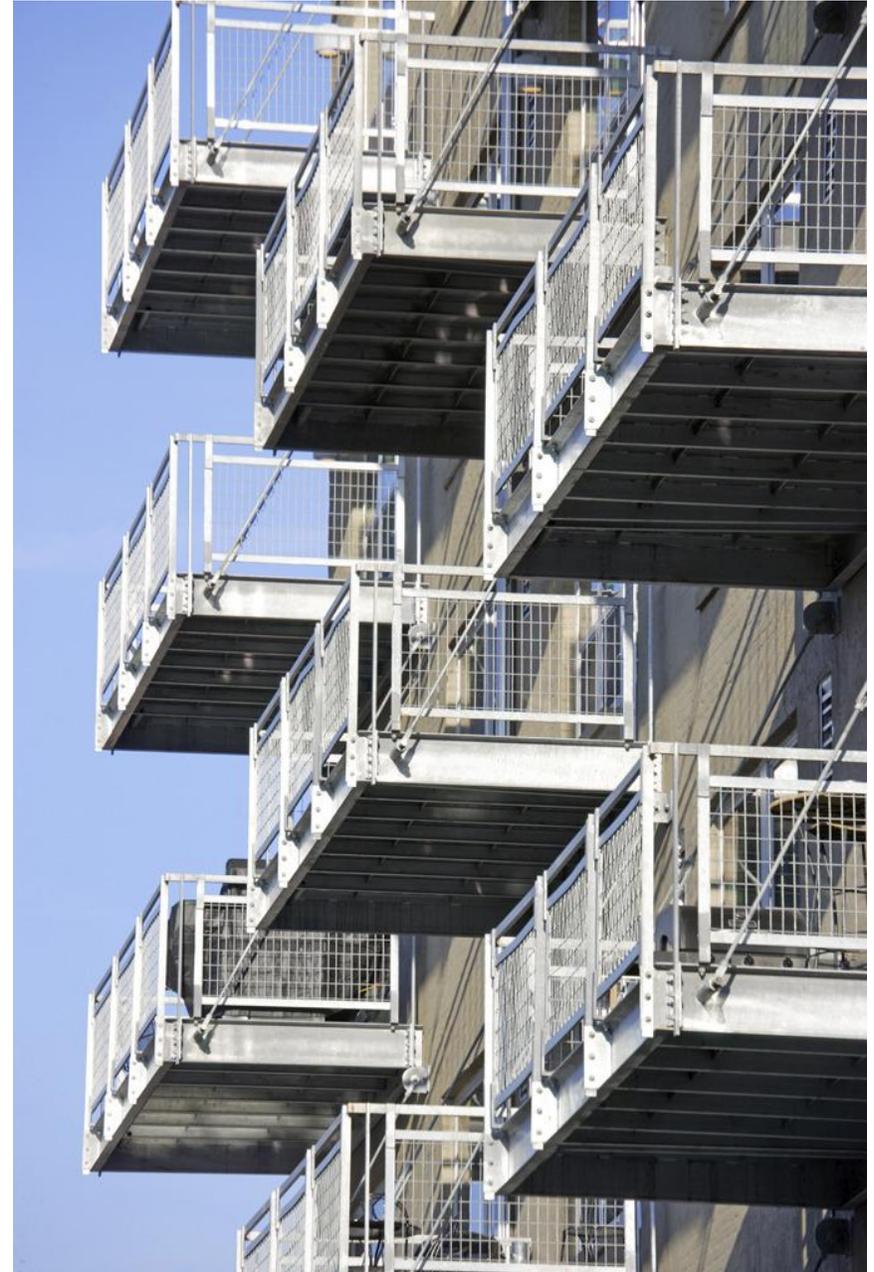
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MINIMUM REQUIREMENT- 4.34-2

Accessible unit to be on accessible route. (min. requirements)

- Common Spaces and facilities serving the unit are accessible
- Accessible Spaces have maneuvering clearances
- Parking
- Doors Clearances
- Accessible Storage
- All controls are accessible – included elements requiring periodic maintenance and adjustment by resident. (registers in ceiling are exempt)
- Emergency Alarms
- At least 1 full restroom in the accessible unit
- Kitchen
- Landry Facility
- Following spaces be accessible and on accessible route
 - Living Room, Dining Room, One bedrooms, and additional amenities (patios, terraces, balconies, garages)



CONSUMER INFORMATION – 4.34-4

To ensure that existence of adaptable features will be known to the owner/occupant of the unit, consumer information shall be provided

- Existence of removable cabinets
- Installation of grab bars at toilets, bathtubs and showers
- Notification unit is equipped to have visual emergency alarm installed
- Notification the unit has been designed in accordance with UFAS

Provide information to the individuals making adaptations

- Scale drawings /Installation Instructions



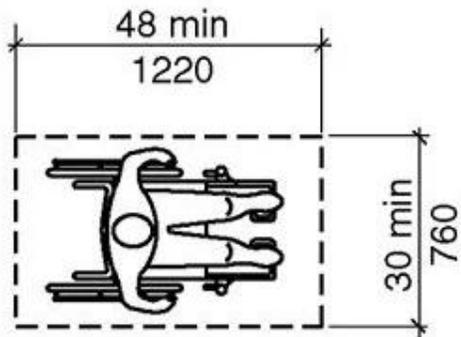
COMMON PITFALLS

DESIGN ELEMENTS

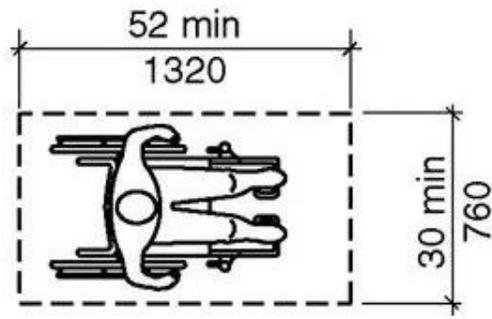
ACCESSIBLE UNIT RESTROOM

CLEAR FLOOR - CLEARANCES

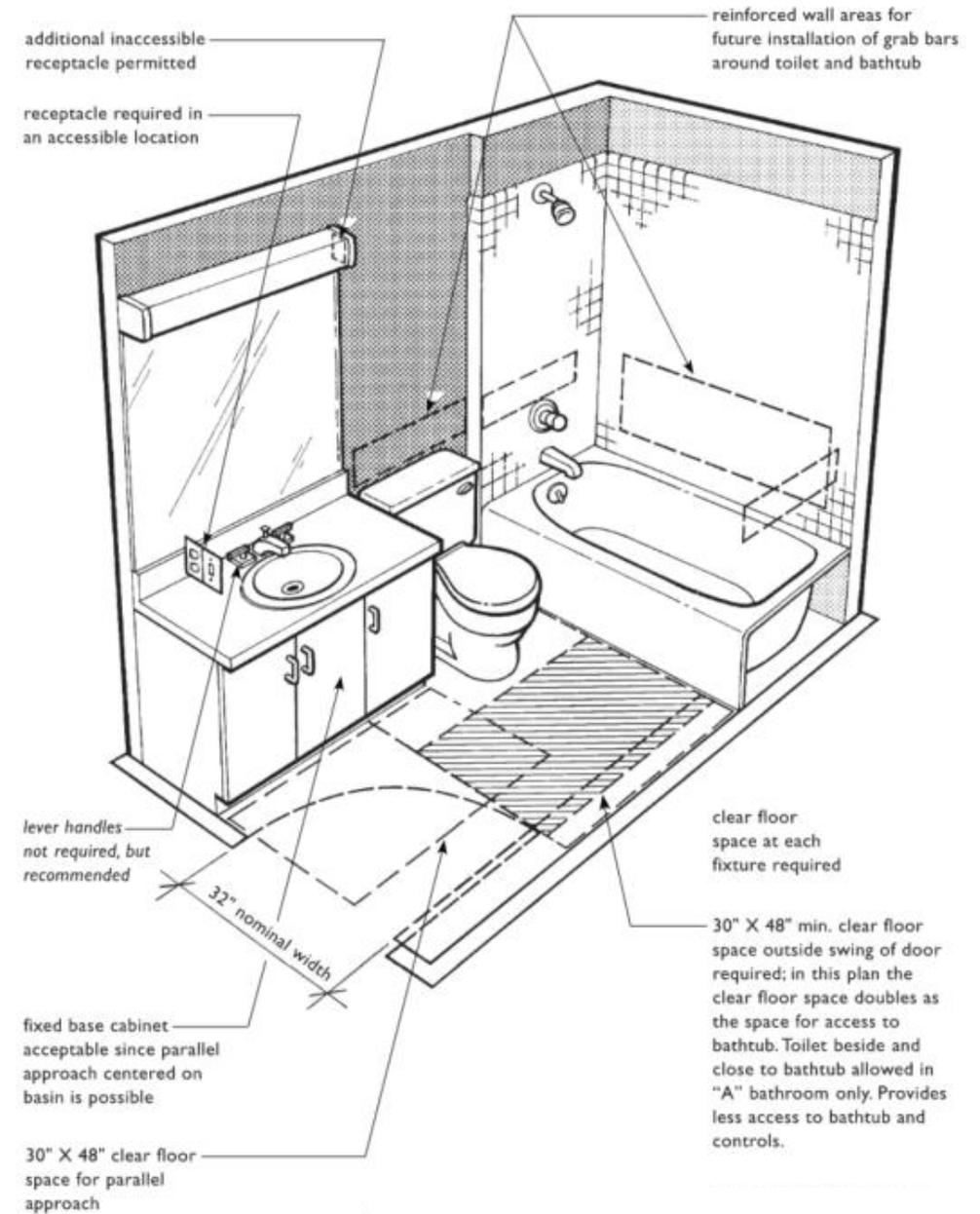
- Doors must swing out if clear floor not provided
- Type A unit – larger turning circle and limited overlap allowances
- Minor changes to transfer shower clearances
- UFAS – does not allow doors to swing into any fixture clearances



ANSI – TYPE B ACCESSIBLE

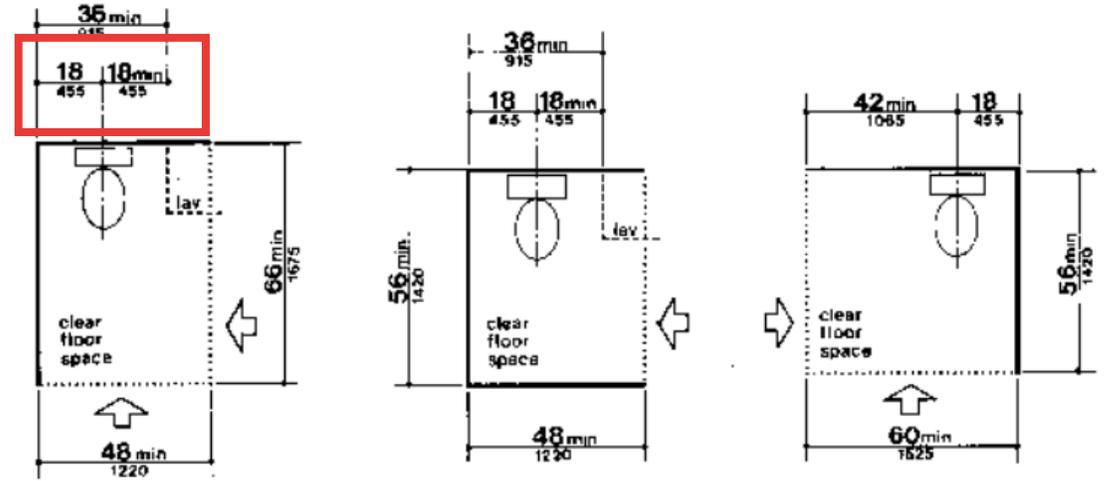


ANSI – TYPE A ACCESSIBLE

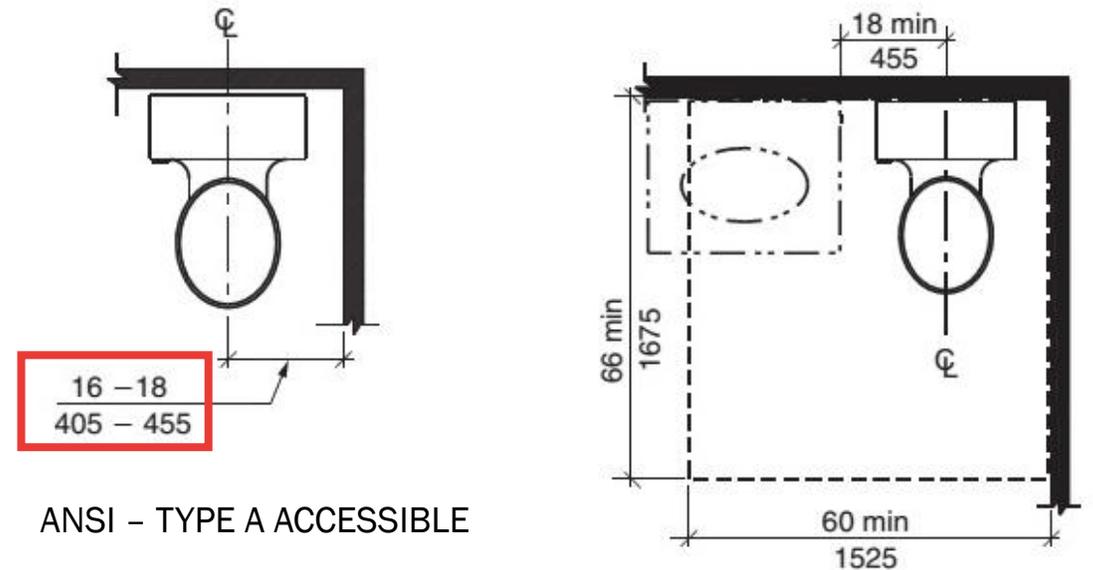


ACCESSIBLE RESTROOM

- Flush Controls – required on side of the approach
- Distance from wall to must be 18” (ANSI 16”-18”)
- Understand the approach, clearance requirements vary
- Toilet Paper Dispenser – with reach ranges
 - Min 19” AFF + 36” Max from the back wall



UFAS - ACCESSIBLE



ANSI - TYPE A ACCESSIBLE

ACCESSIBLE RESTROOM

- Medicine cabinets above lavatory – a usable shelf to not be higher than 44" AFF (IFA Required)
- Rim of counter / sink no higher than 34" AFF
- Min 29" clearance from the floor to apron (ANSI 27"). Shallower sink depth (less than 5")
- Tub Clearances vary based on condition – larger clearance than ANSI when permanent seat is provided

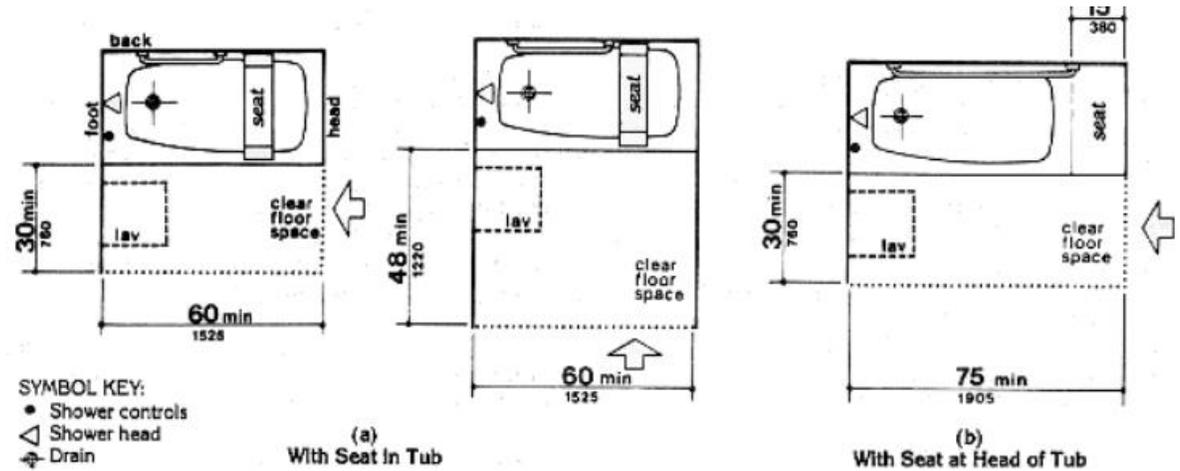
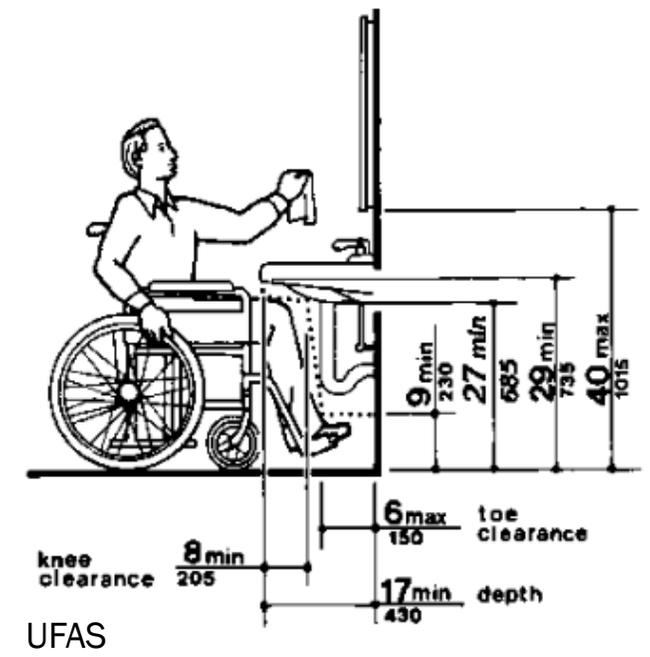
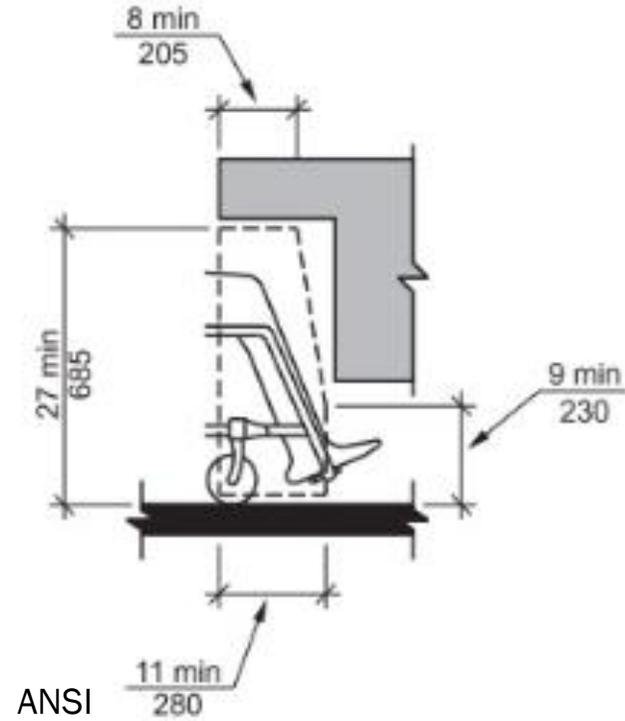


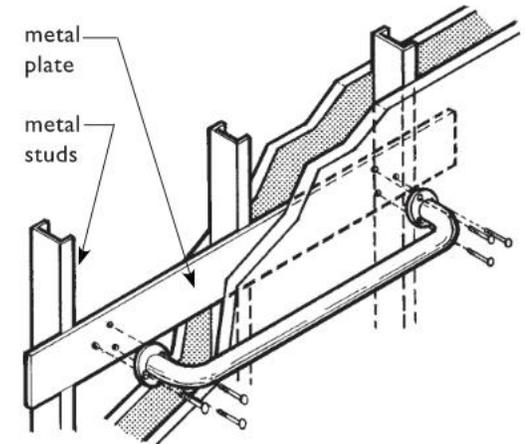
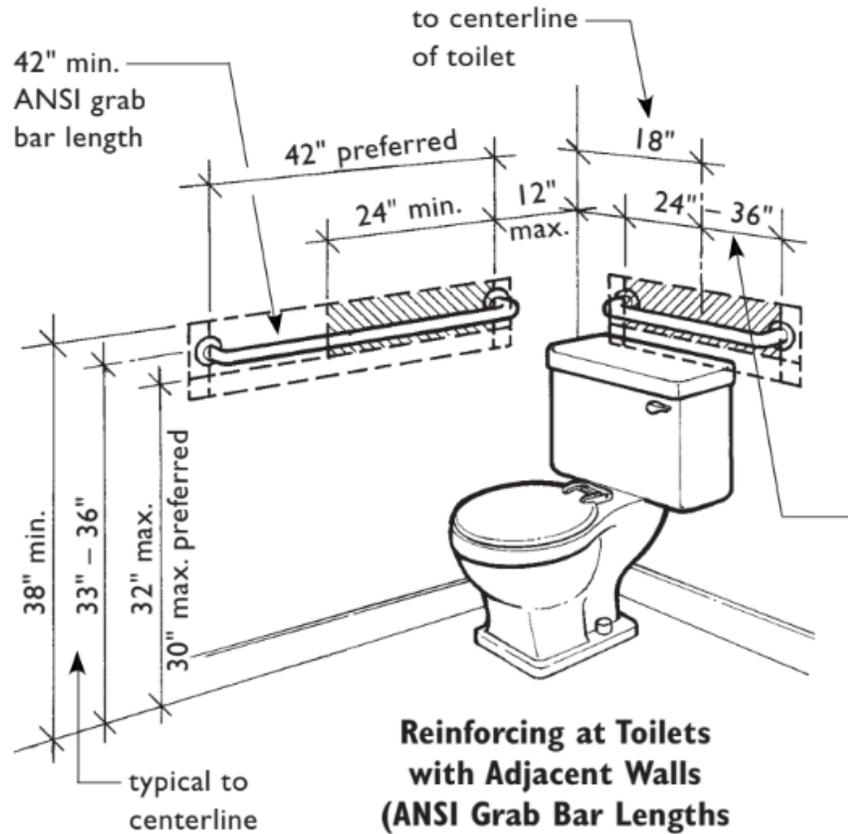
Figure 31: Lavatory Clearances



WALL BLOCKING

Blocking must cover (6") range

- 2x6 actual width = 5 1/2"
- 2x8 should be used to cover full range

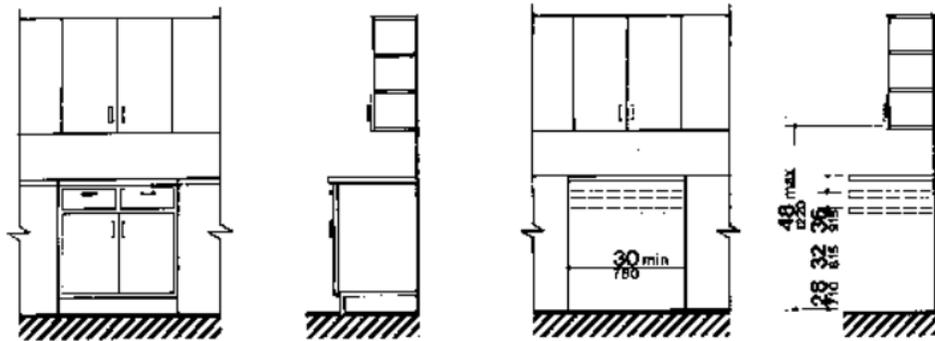


Reinforcing at Metal Studs

KITCHEN

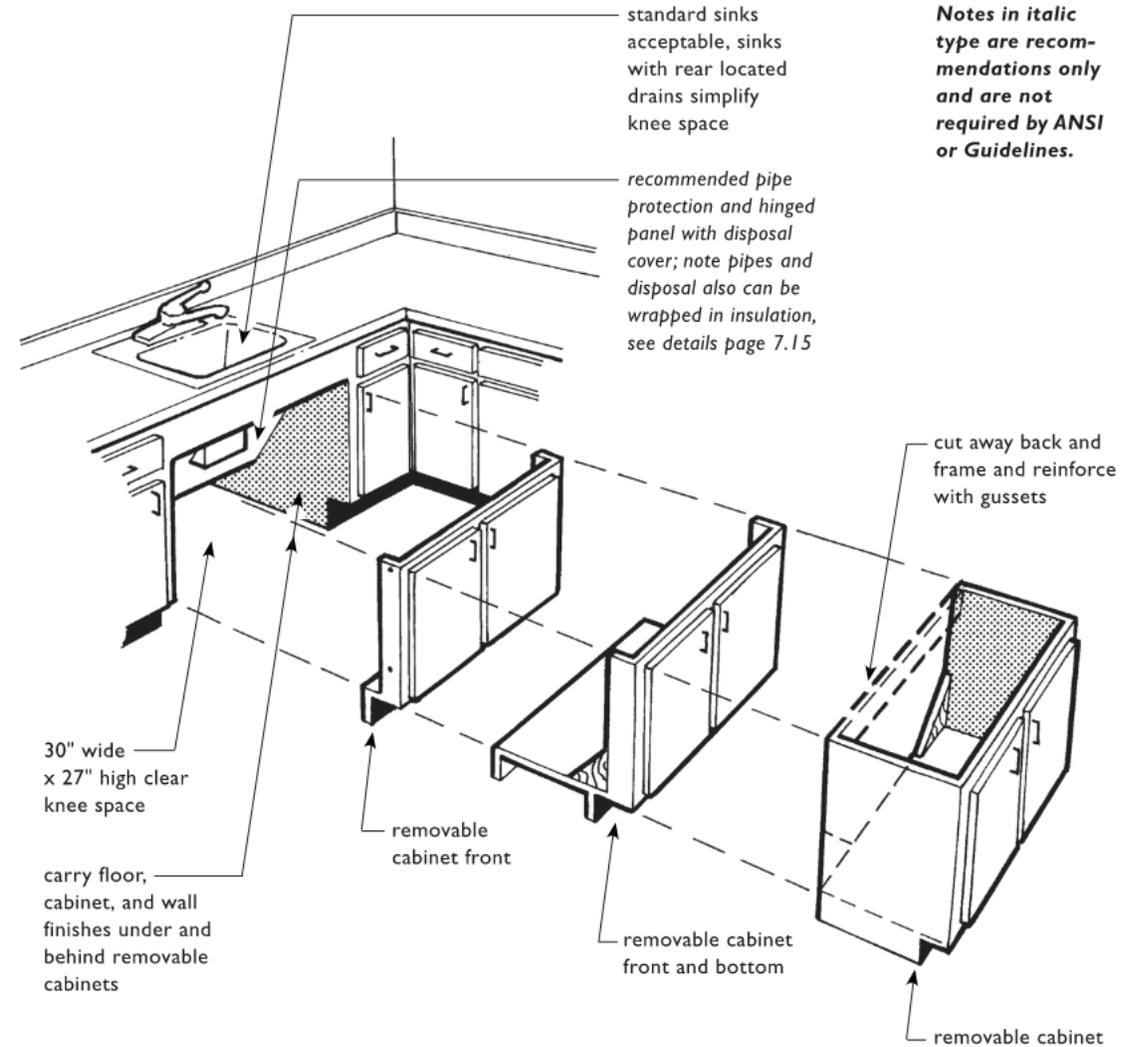
KITCHEN CABINETS

- Kitchen Storage – Max height of 48” for a least one shelf in all cabinets and shelves mounted above work counters
- Open knee space or removeable cabinet for sink and work surface
- Consider 33” or 36” base cabinet when using removable
- Cabinet Pulls or Handles must be provided
- Sink Exposed Pipes – insulated or protected



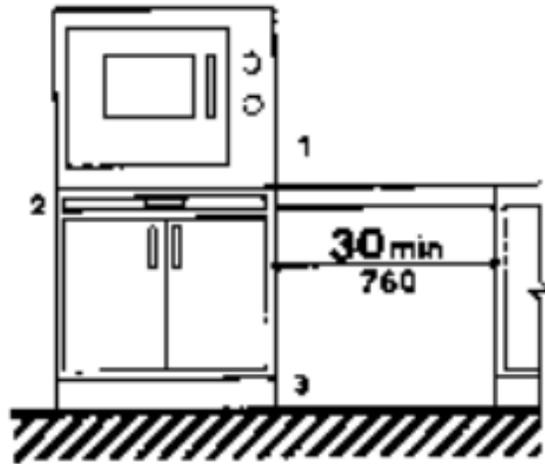
(a) Before Removal of Cabinets and Base

(b) Cabinets and Base Removed and Height Alternatives



KITCHEN OVENS

- Front Controls
- Either – Self Cleaning or Clear New Space Adjacent to Oven
- Oven Hood – controls need to be accessible – consider wiring hood to outlet controls



(a)
Side-Hinged Door



KITCHEN REFRIGERATORS

Provide one of the Following

- Vertical Side by Side Refrigerator/Freezer
- Over-Under Typers Comply with:
 - 50% of freezer space below 54".
 - 100% of the refrigerator space and controls below 54"
- Caution – accessible sign may not mean accessible to all codes



GENERAL ELEMENTS

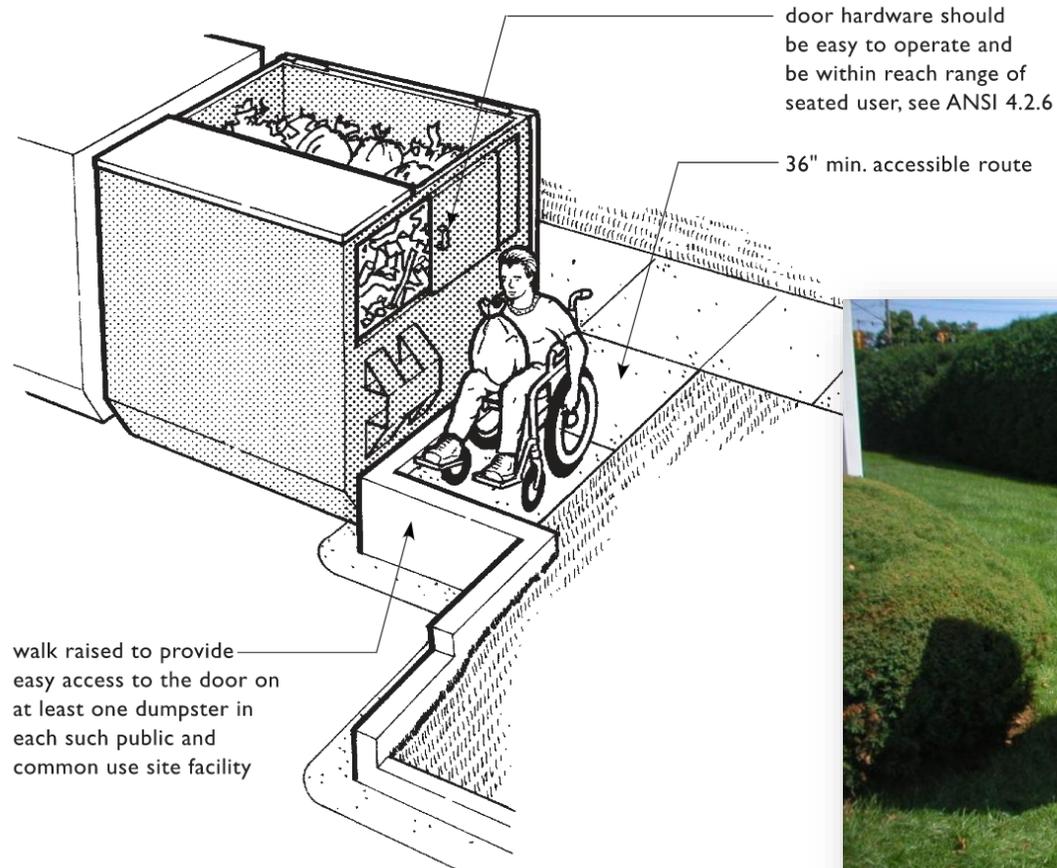
SITE AMENITIES

Trash Disposal Facilities must be Accessible

- Accessible Route
- Accessible Entry
- Reach Ranges

Mailboxes –

- Accessible Route
- Maneuvering space centered on the locks
- UFAS – only specifies accessible units within the reach range.
- ANSI requires all Type A & B within reach ranges. Type B max 54" AFF to lock



WASHING MACHINES

- Must be front loading (ANSI allows for top loading)
 - Some IFA funding sources may allow for front load
- Requirements on the controls

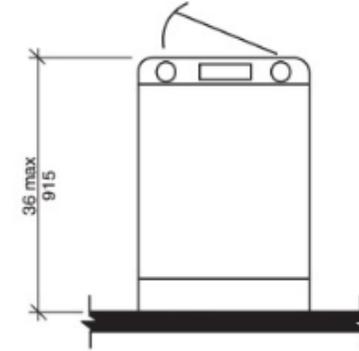
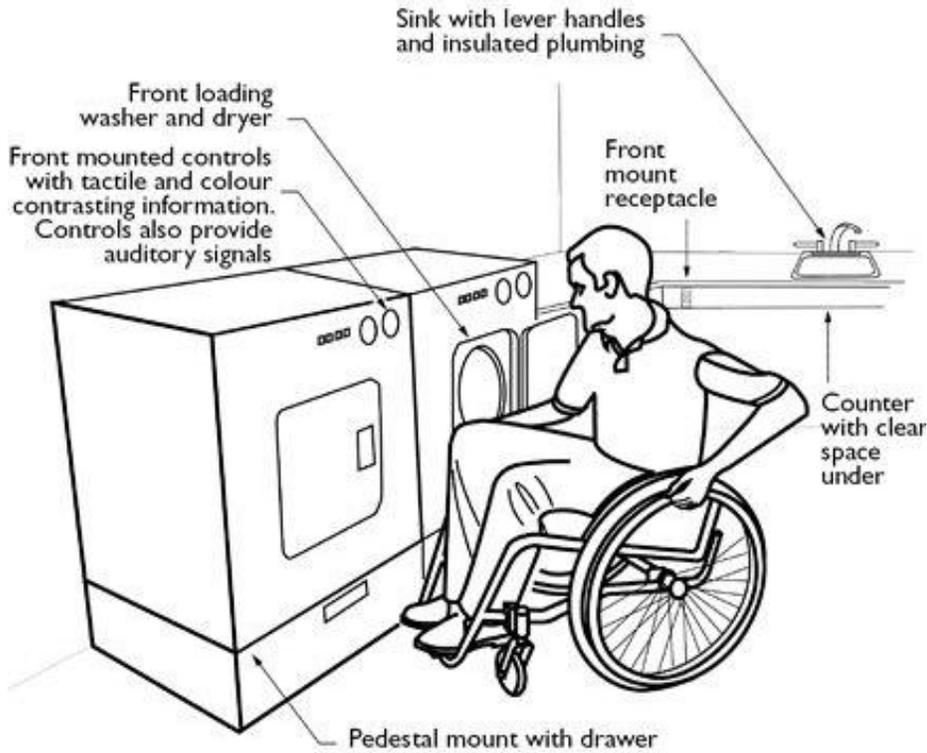


FIGURE 611.4(A) HEIGHT OF LAUNDRY EQUIPMENT - TOP LOADING

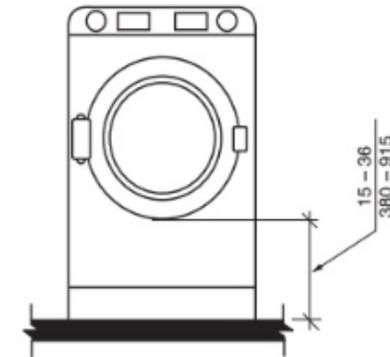


FIGURE 611.4(B) HEIGHT OF LAUNDRY EQUIPMENT - FRONT LOADING

ANSI - Type A / Common Laundry Requirements

UNIT SIGNAGE



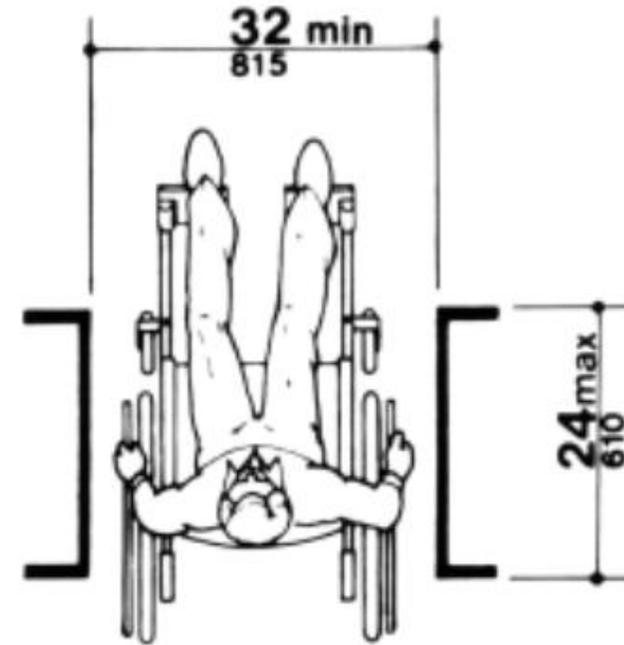
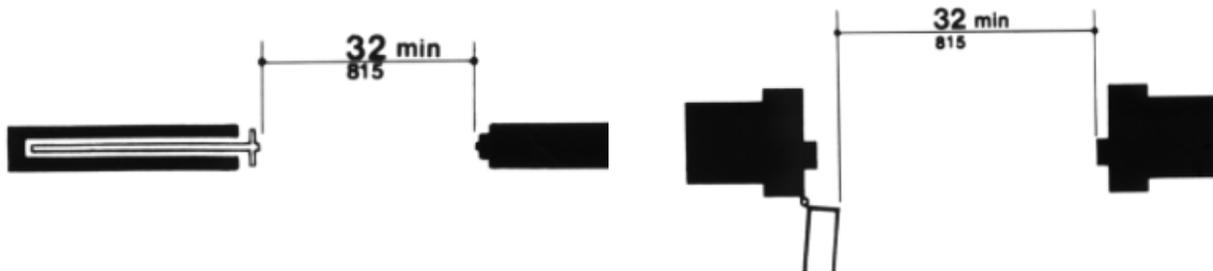
CLOSET DEPTH

Door not requiring full user passage – min 20” clear opening

Openings more than 24” in depth shall comply with 4.2.1 and 4.3.3. (figure 24e)

- DOJ has interpreted this to apply to closets depths.
- When closets are over 24” deep consider providing min 32” clear (min 5’-6” bi-pass door)
- Recommended 36” door kit

Figure 24(e): Clear Doorway Width and Depth, Maximum Doorway Depth



CONTROLS

All controls are accessible –

- 44” max light switches/controls at kitchen base cabinet walls
- Fire Alarms
- Environment Controls
- Appliance Controls
- Operable Windows (not covered in UFAS – required in ANSI)
- Mail Boxes



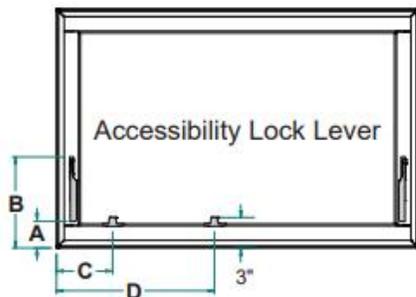
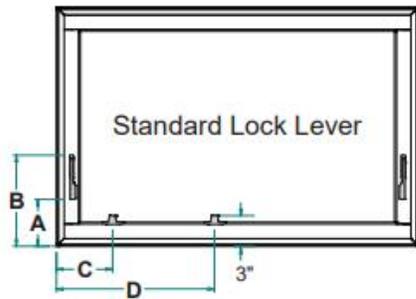
ACCESSIBLE WINDOWS EXAMPLES

Americans with Disabilities Act (ADA) Options

Accessibility Lock Lever

When paired with the Easy-Slide Operator, the optional Accessibility Lock Lever enables ADA specifications to be met on Pella® Impervia® casement and awning windows. Available on select sizes.

- The design combination of our Easy-Slide Operator paired with our accessibility lock lever keeps operational forces during the lock/unlock and open/close motion under five pounds.
- The Easy-Slide Operator hardware originated through universal design principles. The operator can be operated with one hand and does not require tight grasping, pinching or twisting of the wrist.
- The accessibility lock lever is a six-inch curved design that provides the leverage needed to easily lock and unlock the window.



Awning Lock Handle Operator Height

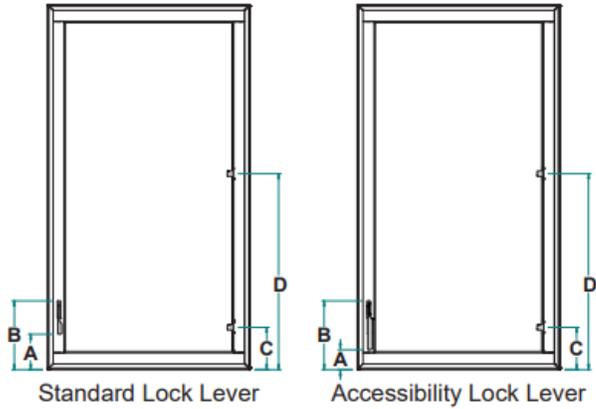
Frame Height	Standard Locked Location (A)	Standard Unlocked Location (B)	Accessibility Locked Location (A)	Accessibility Unlocked Location (B)
≥ 17.50" to < 24"	9-5/8"	14-3/8"	7-1/2"	14-7/8"
≥ 24" to ≤ 59.5"	4-5/8"	9-3/8"	2-1/2"	9-7/8"

Awning Easy-Slide Operator Travel

Frame Width	Closed Location (C)	Open Location (D)
≥ 23.5" to < 34.75"	3-7/8"	15-1/2"
≥ 34.75" to ≤ 59.5"	3-7/8"	19-7/8"

Height is measured from the bottom of the frame, proper installation height is required for ADA compliance.

ACCESSIBLE WINDOWS EXAMPLES



Casement Lock Handle Operator Height

Frame Height	Standard Locked Location (A)	Standard Unlocked Location (B)	Accessibility Locked Location (A)	Accessibility Unlocked Location (B)
≥ 20" to ≤ 59.5"	4-5/8"	9-3/8"	2-1/2"	9-7/8"
> 59.5" to < 72.5"	9-5/8"	14-3/8"	7-1/2"	14-7/8"
≥ 72.5" to ≤ 79.5"	30-9/16"	35-5/16"	—	—

Casement Easy-Slide Operator Height

Frame Height	Closed Location (C)	Open Location (D)*
≥ 20" to < 30.5"	5-1/2"	15-1/2"
≥ 30.5" to < 72.5"	5-1/2"	25-1/2"
≥ 72.5" to ≤ 79.5"	21-1/2"	41-1/2"

Height is measured from the bottom of the frame. Proper installation height is required for ADA compliance. Review local and federal requirements for guidance on installation height and other considerations to meet ADA compliance.

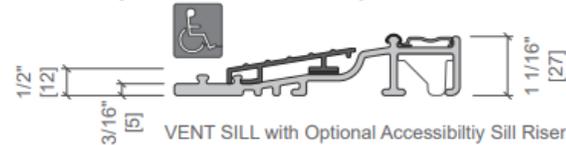
*Limited Opening Limited Travel and Window Opening Control Device Hardware will reduce the open location by 5".

Accessibility Sill Riser

Optional adapter enables ADA specifications to be met on Pella Impervia sliding patio doors.

- The sill riser is designed to reduce the change in height of the sill and achieve the necessary slope requirements.
- 32" clear opening standard size widths available in 2- and 3-panel configurations, starting at 79.875" wide.
- Sill riser dependent on interior and exterior floor heights. Review local and federal requirements for guidance on floor heights and other considerations to meet ADA compliance.

Optional Accessibility Sill Riser



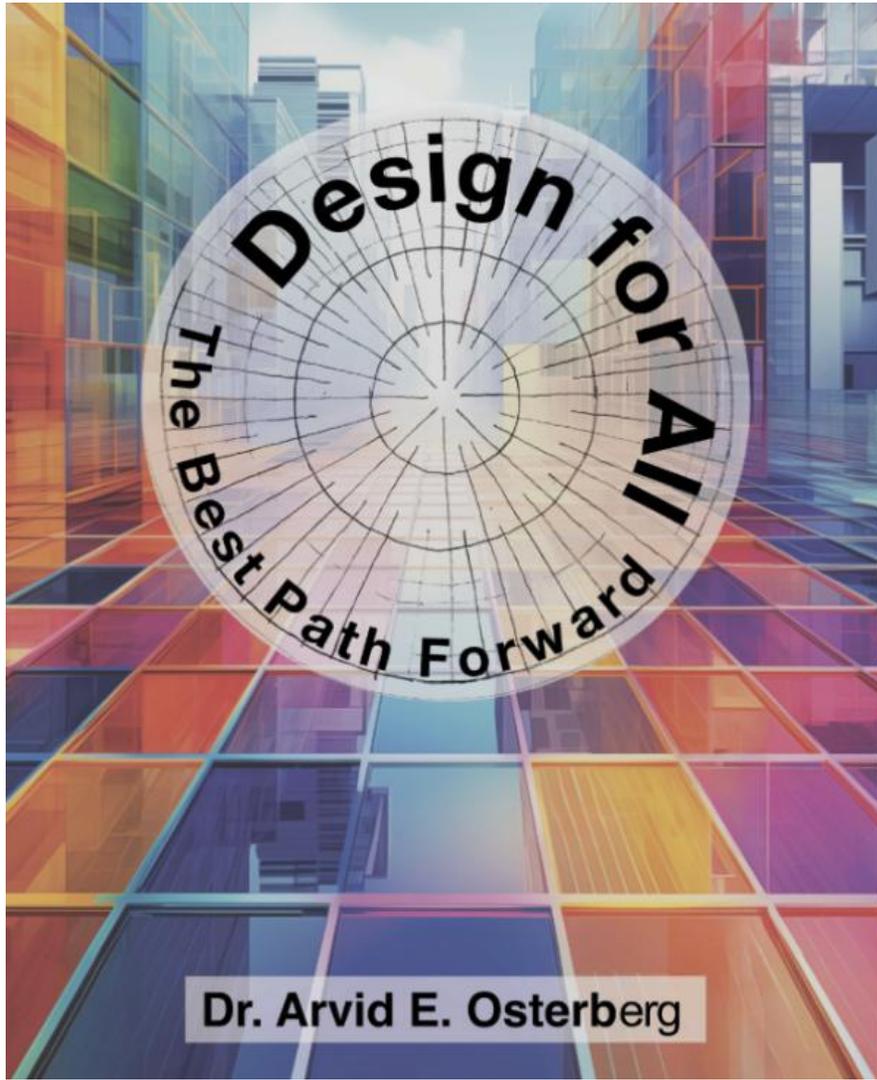
Pella® Impervia® Brand Overview



Casement Window Opening Control Devices



RESOURCES



Osterberg – Design for All – The Best Path Forward – Culicidae Architectural Press (digit copy \$5)

Fair Housing Act vs. Section 504 Quick Reference



General Requirements		
ADA		
ADA Coverage	Only spaces open to general public (e.g. rental office)	
Element	FHA	Section 504
New Construction	Yes, Effective Date: March 13, 1991	Yes, Effective Dates: HUD– July 11, 1988; RD– June 10, 1982
Alteration of Existing Construction	No	Yes substantial alteration or renovation of elements made after the effective date
What types of developments are covered in new construction?	Buildings containing four or more dwelling units & public and common use areas serving those units	HUD– projects with five or more dwelling units & public and common use areas serving those units USDA/RD– projects with two or more units (except for Farm Labor Housing, which is 3 or more units) & public and common use areas serving those units
What units are covered within a covered development for Substantial Alteration?	None	HUD– projects with 15 or more units & public and common use areas serving those units
What units are covered within a covered development?	Elevator Buildings: All units Non-elevator Buildings: Ground-floor Units Only	5% of total units accessible to persons with mobility disabilities 2% of total units accessible to persons with sensory disabilities (2% recommended but NOT required for alterations or renovations)
Multi-story Units (Townhomes)	Not covered unless in an elevator building	Covered
Requirements for Covered Dwelling Units?		
What is covered in the unit?		
Element	FHA	Section 504
Bedrooms	All bedrooms	All bedrooms in one- and two- bedroom units. At least two bedrooms in units with three or more bedrooms. All bedrooms are covered in HUD housing.
Patios and Balconies	Patios and balconies covered (may have a 4" drop on outside threshold from unit if impervious surface)	Accessible, if provided
Bathrooms	All bathrooms are covered (certain clear floor space exceptions if Spec B bathroom used, see FHAAG)	At least one full bathroom (water closet, lavatory, and tub/shower) must be accessible. All bathrooms are covered in HUD housing.
Dwelling Unit Carports and Garages	Attached garages not covered	Accessible, if provided
In-Unit Storage/Shelving	None	Side Approach– between 9" and 54" AFF Front Approach– between 15" and 48" AFF

Fair Hsg. Act vs. Sec. 504 Quick Reference – INSTANT DOWNLOAD – E&A Team Shop (digit copy \$5)



CONTACT INFORMATION



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QUESTIONS?



IOWATM
Finance Authority

RDg...
PLANNING • DESIGN