

**2020 DIGITAL:** SAFETY, INNOVATION & SUSTAINABILITY CONFERENCE

ACCESSIBILITY IN RESIDENTIAL BUILDINGS Requirements & Common Compliance Errors

PRESENTED BY

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## **PRESENTATION DESCRIPTION**

 This presentation will utilize case studies to review accessibility requirements in new residential buildings as required by the 2014
 NYC Building Code and ICC/ANSI A117.1.

The presentation will cover construction requirements for accessible features in areas of common use and within dwelling units. In addition to the requirements of the Building Code, Code referenced standards will be identified, as well as a review of the required quantity of accessible dwelling units within a new residential building.



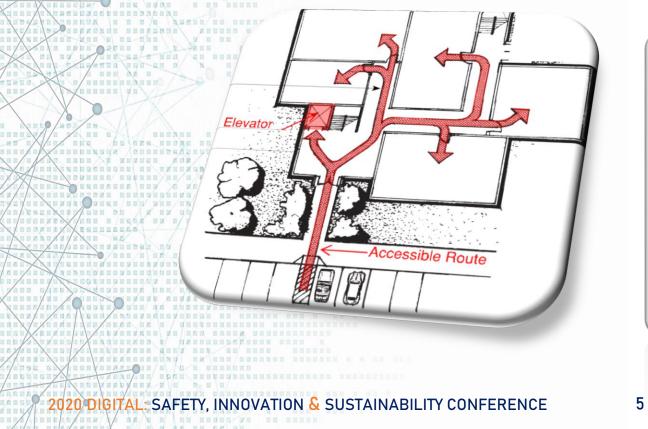


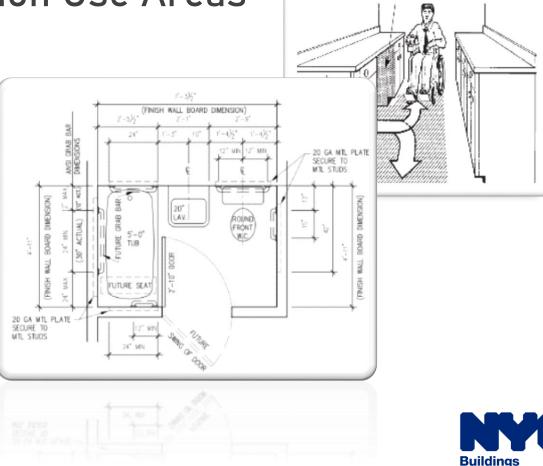
# **Accessibility in Residential Buildings**

COMMON AREA



## Accessibility in Group R Occupancies – Building Entrance, Routes Within Buildings, Common Use Areas





## ACCESSIBILITY IN RESIDENTIAL BUILDINGS: BC CHAPTER 11 OVERVIEW

- SECTION BC 1101 GENERAL
  - 1101.1 Scope
  - 1101.2 Design
  - 1101.3 Special provisions for prior code buildings.
  - 1101.3.4 Identifying accessibility signage
  - 1101.3.5 Waiver of requirements
- SECTION BC 1102 DEFINITIONS
- SECTION BC 1103 SCOPING REQUIREMENTS
  - 1103.1 Where required.
  - 1103.2 General exceptions.
- SECTION BC 1104 ACCESSIBLE ROUTE
- SECTION BC 1105 ACCESSIBLE ENTRANCES
- SECTION BC 1106 PARKING AND PASSENGER LOADING FACILITIES

- SECTION BC 1107 DWELLING AND SLEEPING UNITS
  - 1107.1 General
  - 1107.2 Design
  - 1107.3 Accessible spaces
  - 1107.4 Accessible route
  - 1107.5 Group I
  - 1107.6 Group R (Accessible units, Type B+NYC units, and Type B units)
  - 1107.7 General exceptions for Type B units
- SECTION BC 1108 SPECIAL OCCUPANCIES
  - 1108.2 Assembly area seating
  - 1108.3 Self-service storage facilities
  - 1108.4 Judicial facilities

- SECTION BC 1109 OTHER FEATURES AND FACILITIES
  - 1109.2 Toilet and bathing rooms
  - 1109.3 Sinks
  - 1109.4 Kitchens, kitchenettes and wet bars
  - 1109.5 Drinking fountains
  - 1109.6 Elevators
  - 1109.7 Lifts
  - 1109.8 Storage
  - 1109.9 Detectable warnings
  - 1109.10 Seating at tables, counters and work surfaces
  - 1109.11 Service facilities
  - 1109.12 Controls, operating mechanisms and hardware
  - 1109.13 Fuel-dispensing systems
  - 1109.14 Recreational and sports facilities
  - 1109.15 Stairways
- SECTION BC 1110 SIGNAGE
  - 1110.1 Signs.



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BC Chapter 11  $\rightarrow$  ICC A117.1 Chapter 11 Accessibility – Sec

Chapter 11 Accessibility – Section BC 1101 General

1101.2 Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1.

Q. What year edition of the ICC A117.1. is referenced in the 2014 NYC BC?

A: ICC A117.1. 2009 is referenced in the 2014 NYC BC





ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

> ICC A117.1 © Instru March Local



#### ICC (ANSI) A117.1 (2009)

2. Scoping

3. Building Blocks
Floor Surfaces
Changes in Level
Turning Space
Clear Floor Space
Knee & Toe Clearance
Protruding Objects
Reach Ranges
Operable Parts

4. Accessible Routes Walking Surfaces Doors & Doorways Ramps Curb Ramps Elevators



6. Plumbing Elements & Facilities Drinking Fountains Toilet and Bathing Rooms Water Closets & Toilet Compartments Urinals Lavatories & Sinks Bathtubs Shower Compartments Grab Bars Seats Washing Machines & Clothes Dryers

- 7. Communication Elements & Features Alarms Signs
- 8. Special Rooms and Spaces Assembly Areas Dressing, Fitting, & Locker Rooms Kitchens & Kitchenettes
- 9. Built-in Furnishings & Equipment
- 10. Dwelling Units & Sleeping Units Accessible Units Type A Units Type B Units
- 11. Recreational Facilities Swimming Pools, Wading Pools, Hot Tubs & Spas



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# Accessibility in Residential Buildings ICC (ANSI) A117. (2009)

**3. BUILDING BLOCKS** 



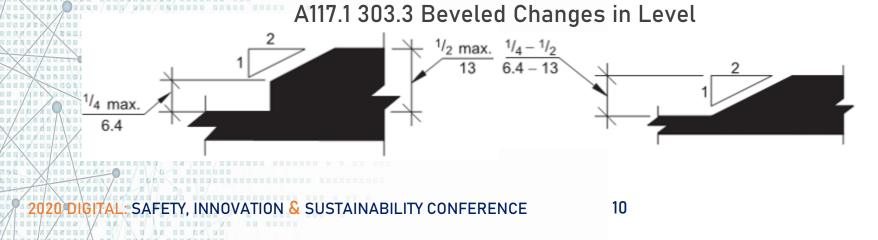
## **Building Blocks of Accessibility**

#### A117.1 303.2 Vertical Changes in Level





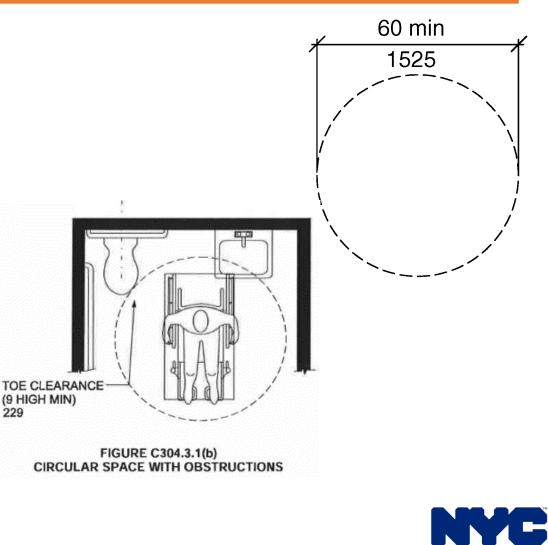
Photo Source: United Spinal Association





**Building Blocks of Accessibility** ICC A117.1 304.3 (a) Circular Wheelchair Turning space The space shall be permitted to include knee/toe clearance compliant with Section 306 Doors can swing into turning space

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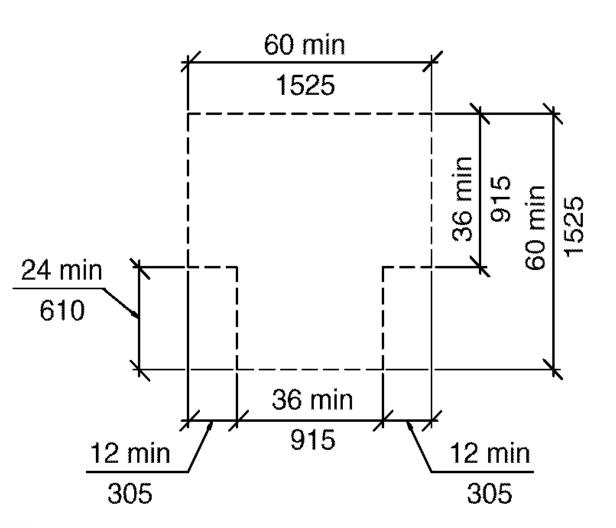
Building

11

Building Blocks of Accessibility

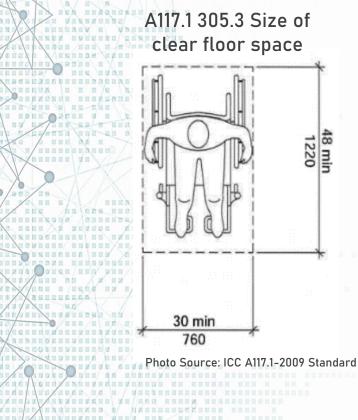
A117.1 304.3 (b) T-shaped Wheelchair Turning Space

NOTE: The 5 ft. turning diameter is not the only option for providing a wheelchair turning space. T-shaped spaces are also permitted

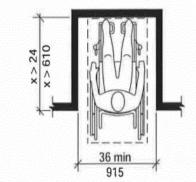




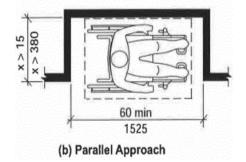
#### **Building Blocks of Accessibility**



A117.1 305.3 Position of clear floor space A117.1 305.7 Maneuvering clearance in alcove



(a) Forward Approach

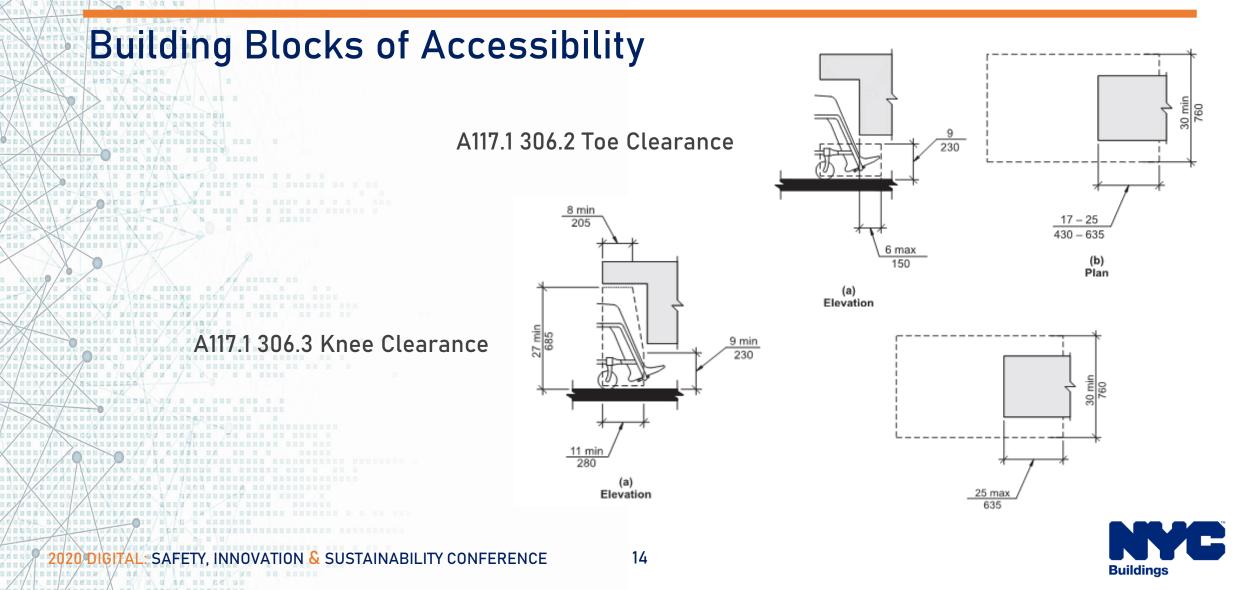




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48 min 1220

(b) Parallel

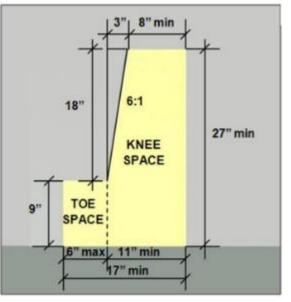


#### **Building Blocks of Accessibility**

#### A117.1 306.2 Toe clearance & A117.1 306.3 Knee clearance

Source: United States Access Board X (25" max) X (25" max) X (25" max)

**Obstructed Reach Depth** 



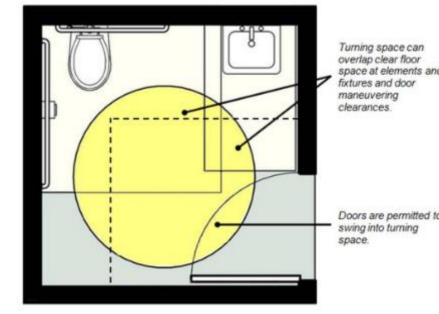
#### Knee and Toe Clearances



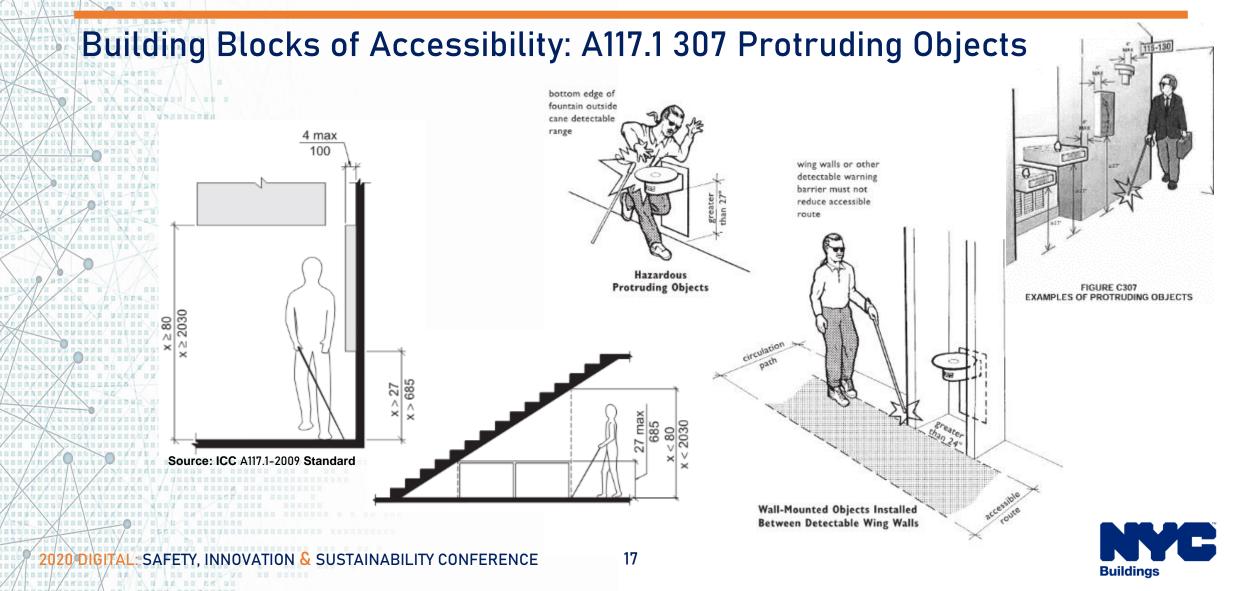
#### Building Blocks of Accessibility: ICC A117.1 304 Turning Space

- Q1. Is turning space required in all rooms and spaces?
- A1. No. Turning space is required in certain spaces, such as toilet and bathing facilities, dressing and fitting rooms, and transient lodging guest rooms. Unless addressed by a specific requirement for turning space in the standards, other spaces are not required to provide them, including lobbies, offices, and meeting rooms.
- Q2. Can clear floor/ground space or turning space overlap other space requirements?
- A2. Yes, clear floor or ground spaces and turning space can overlap other required clearances, including other clear floor spaces, door maneuvering clearances, and fixture clearances.
  - NOTE: ICC A117.1 603.2.2 Door Swing. Doors shall not swing into the clear floor space or clearance for any fixture. – This applies to common use bathrooms

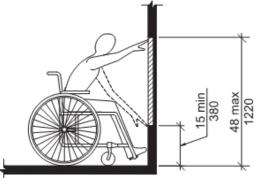




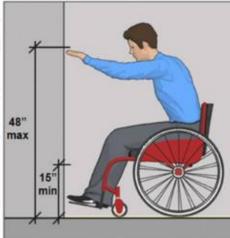


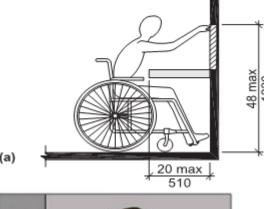


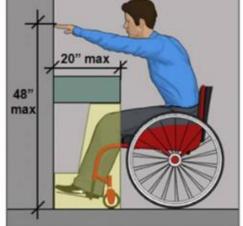
#### Building Blocks of Accessibility: A117.1 308.2 Forward Reach

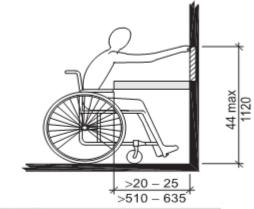


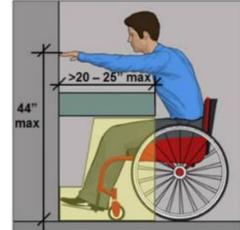
Source: ICC A117.1-2009 Standard







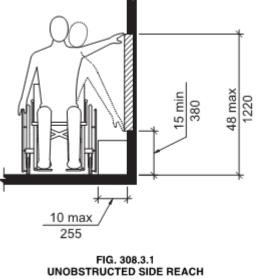




(b)



#### Building Blocks of Accessibility: A117.1 308.3 Side Reach



I IN IN AN UN

user in a position parallel to cabinet for a side reach to 112.00 control or outlet 46 max 1170 48 ma) 1220 max 34 max 865 865 34 Maximum Side Reach cabinet with no kneespace (From a Parallel Approach) >10 – 24 10 max Over an Obstruction 255 255 - 610 (a) (b) Source: ICC A117.1-2009 Standard







# **Accessibility in Residential Buildings**

**ACCESSIBLE ROUTE** 



### **Building-Blocks of Accessibility**

#### SECTION BC 1107 Group R Accessibility

2014 NYC BC 1107 accessibility requirements applicable to buildings with dwelling/sleeping units:

#### BC 1107.4 Accessible route.

BC 1107.3 Accessible/common spaces.
 BC 1107.6 DUs.

Accessible Space Accessible Space Elevator Accessible Space Accessible Space Accessible Space Accessible Space

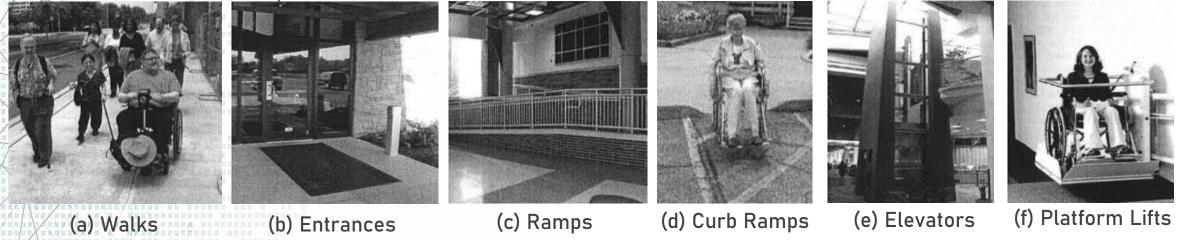


#### **Accessible Route**

2014 NYC BC 1107 accessibility requirements applicable to buildings with dwelling/sleeping units: BC 1107.4 Accessible Route.

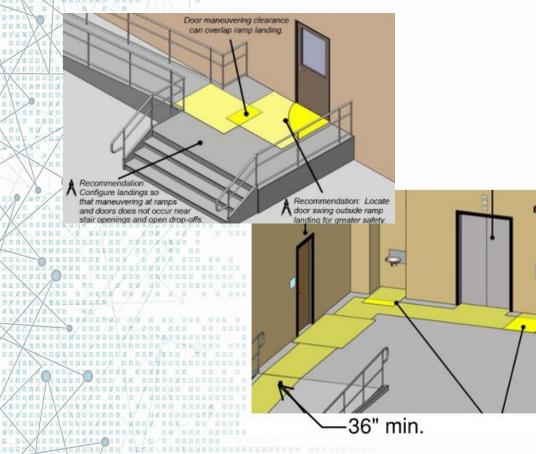
At least one accessible route shall connect accessible building or facility entrances with the required accessible entrance(s) of each Accessible unit, Type B+NYC unit, and Type B unit within the building or facility and with those exterior and interior spaces and facilities that serve the units.

Source: ICC A117.1-2009 Standard and Commentary





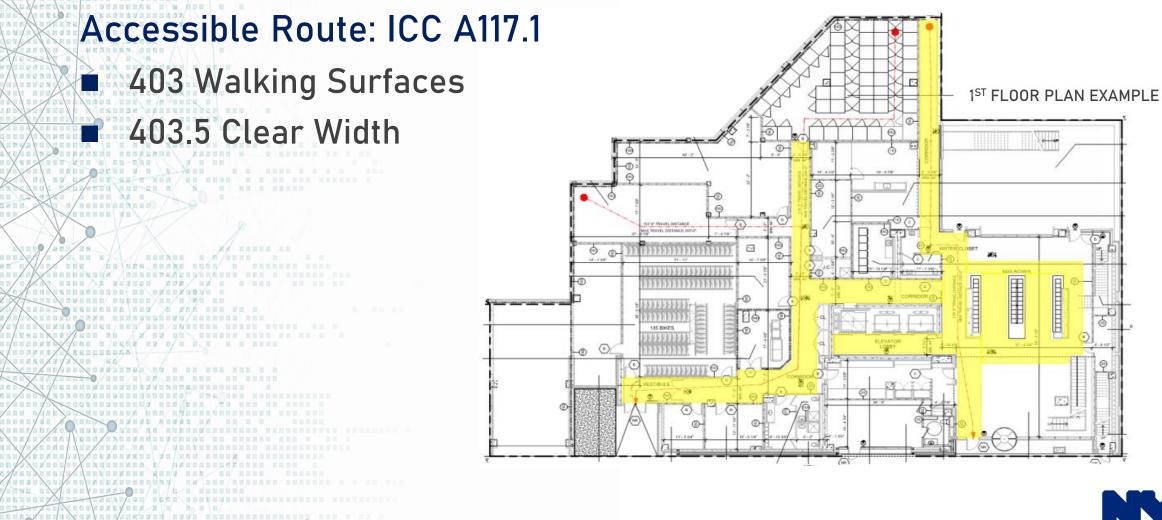
#### Accessible Route: ICC A117.1 – 402.2 Components



COMPONENT	ICC A117.1 SECTION	HIGHLIGHTS
WALKING SURFACES	403	SLOPE NOT STEEPER THAN 1:20; MOSTLY 36" CLEAR WIDTH REQD.
DOORS & DOORWAYS	404	32" MINIMUM CLEAR OPENING
RAMPS	405	SLOPE GREATER THAN 1:20 AND NOT STEEPER THAN 1:12
ELEVATORS	407	CAR SIZES
PLATFORM LIFTS	410	MOSTLY NOT PERMITTED



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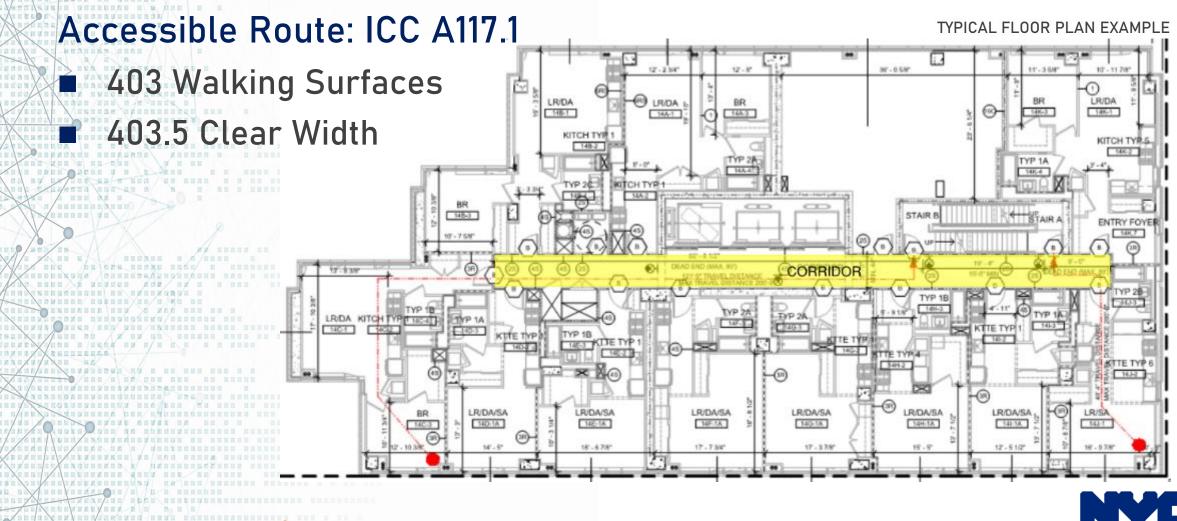


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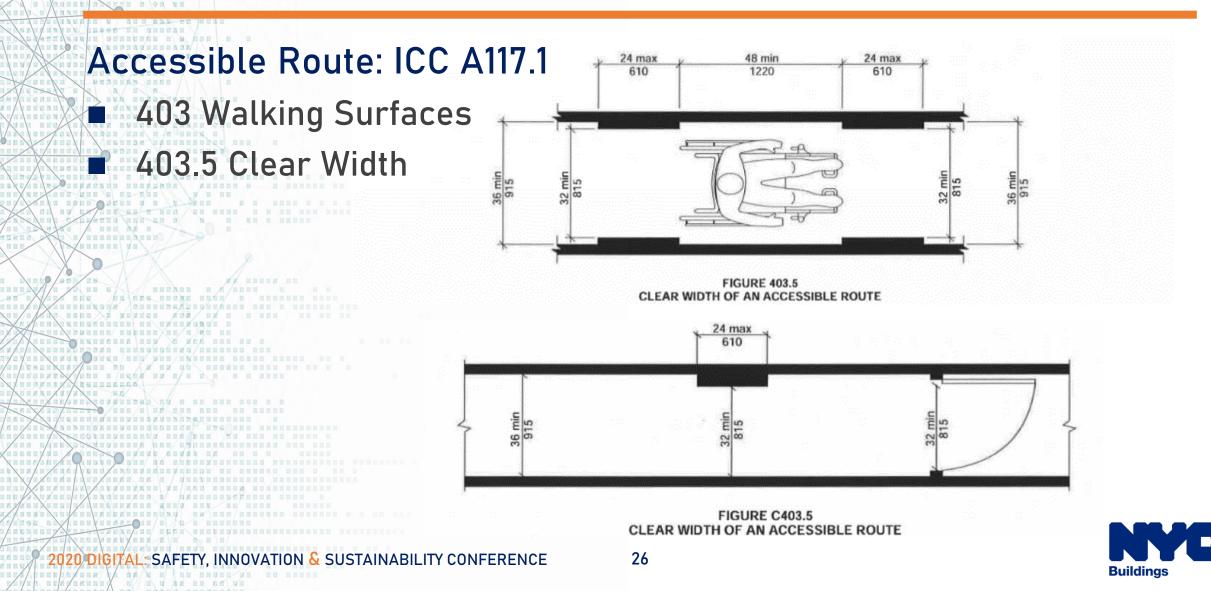
Buildings



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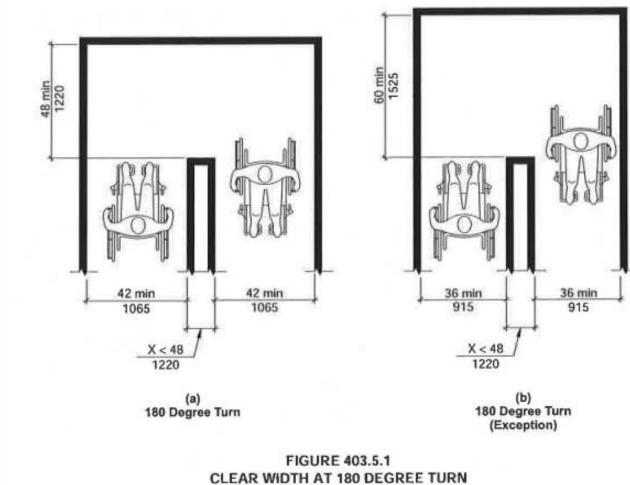
Buildings



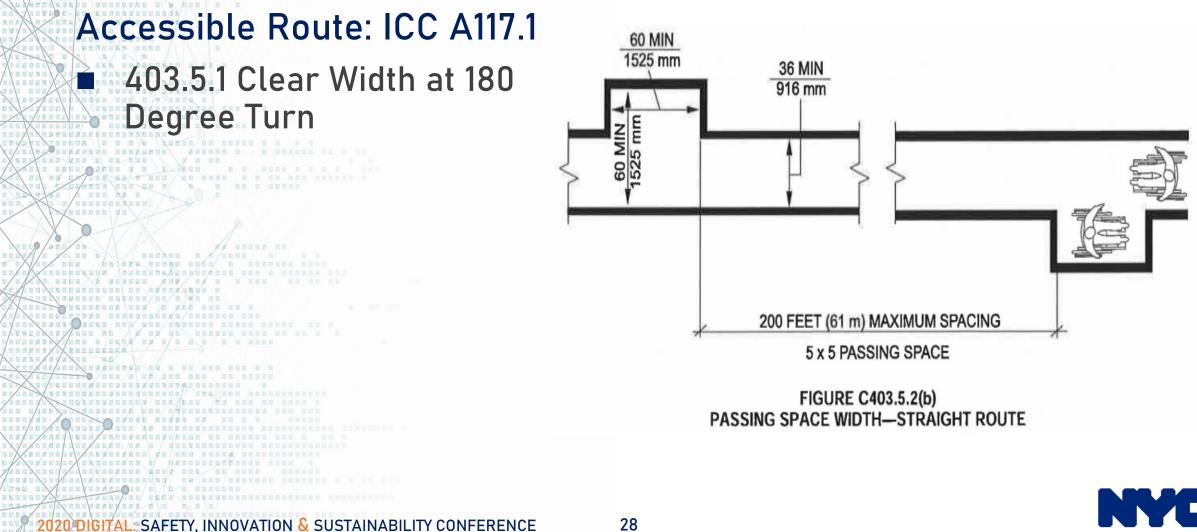
# Accessible Route: ICC A117.1 **403.5.1** Clear Width at 180 **Degree Turn**

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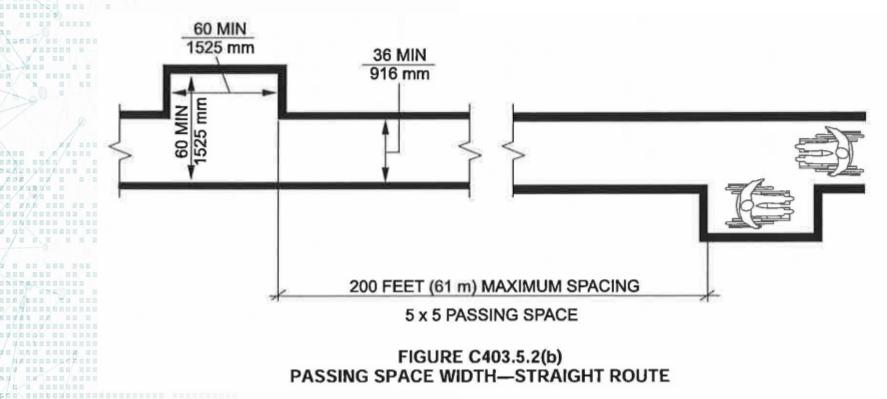
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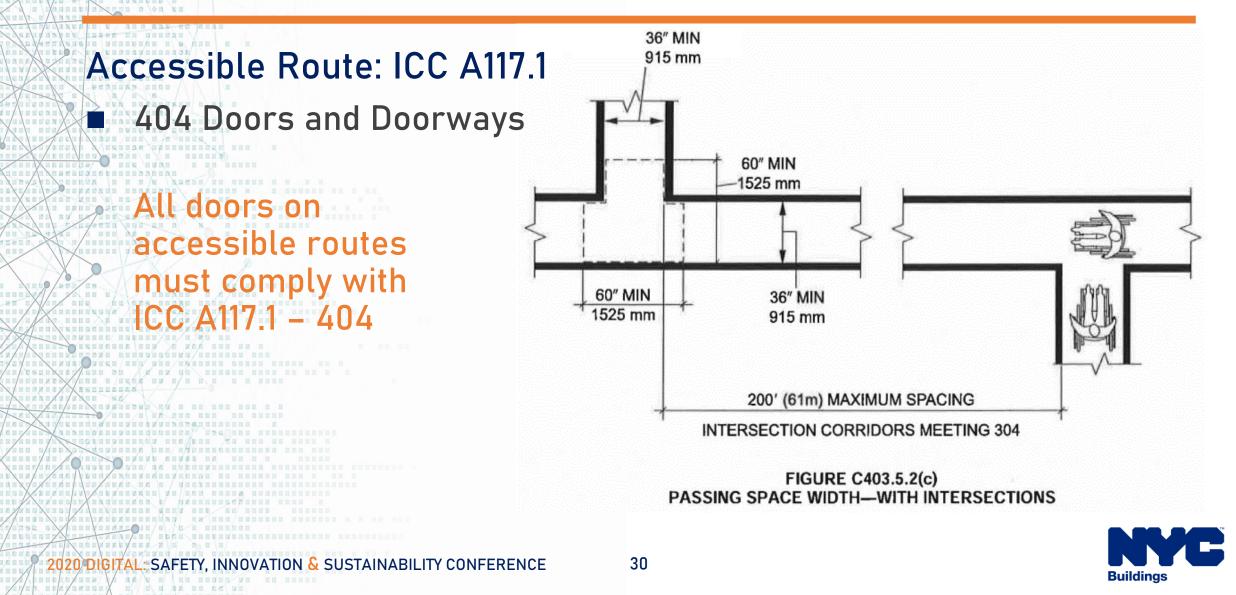
Buildings

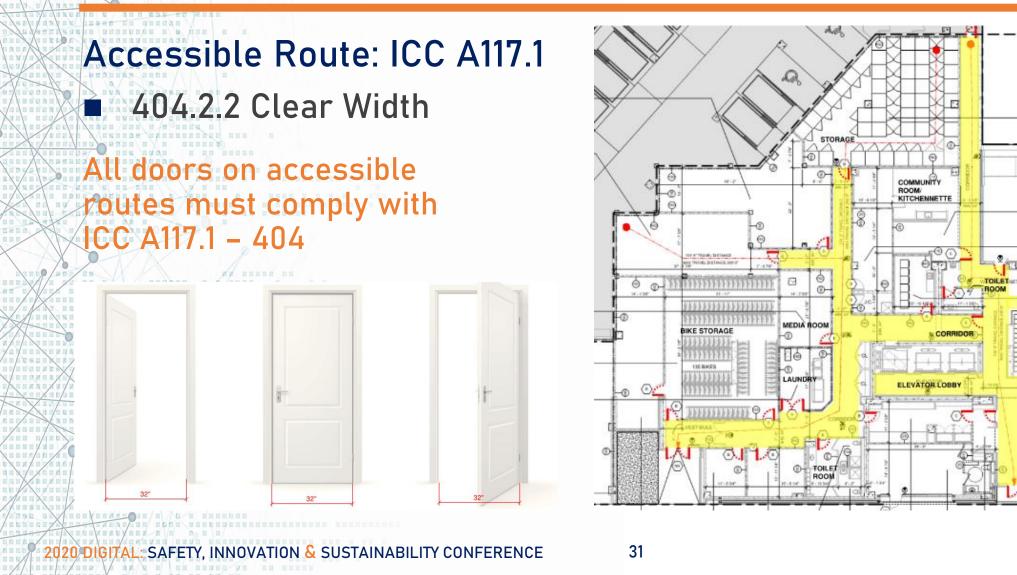
## Accessible Route: ICC A117.1

#### 403.5.2 Passing Space



Buildings





Buildings

BUILDING B

MAILBOXES

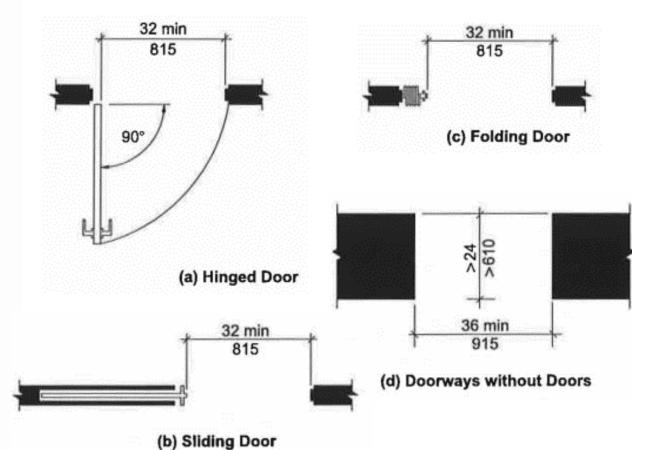
ALL BOXE

#### Accessible Route: ICC A117.1

404.2.2 Clear Width of Doorways(a),
 (b) and (c) – Doorways shall have a clear opening width of 32 inches minimum.

(a) - Clear opening width of doorways with swinging doors shall be measured between the face of door and stop, with the door open 90 degrees.

(d) – Openings more than 24 inches in depth at doors and doorways without doors shall provide a clear opening width of 36 inches minimum.





## Accessible Route: TWO DOORS IN A SERIES

**1ST FLOOR PLAN EXAMPLE** FFO. ESTIBULE O 37 -PLAY 9.9 ROOM Цего EFO WEST MEN LIBRARY WOMEN 17' - 9\* 13' - 0" 12' - 11'**.**... REFUSE ORRIDOR & RECYCLING STAIR B ROOM 1111 EZENZOR STAIR A SOUTH LIBRARY ATS DAS OPEN TO BELOW FIRE PUMP 13 22' - 11 3/8'

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#### **Accessible Route**

ICC A117.1 – 404.2.5 Two Doors in a series. Distance between two hinged or pivoted doors in series shall be 48 inches minimum plus the width of any door swinging into the space. The space between the doors shall provide a turning space complying with Section 304.

1525

#### BC 1008.1.8 Door arrangement.

Door arrangement. Space between two doors in a series shall be 48 inches minimum plus the width of a door swinging into the space. Doors in series shall swing either in the same direction or away from the space between the doors.

> 60 min 1525

> > (c)

Buildina

Exceptions apply...

60 min 1525

(b)

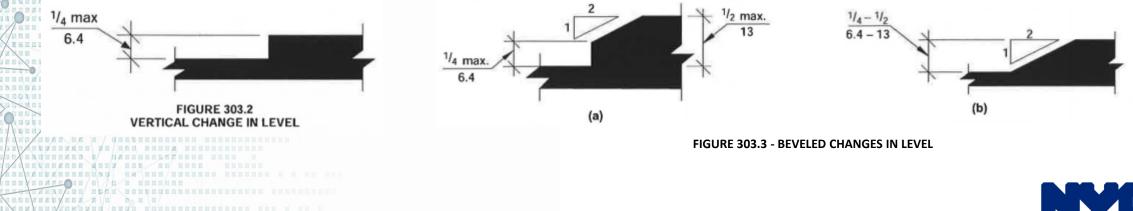


Source: ICC A117.1-2009 Standard

## Accessible Route

Change in Level - thresholds, change in floor elevations at doors

NYC BC 1008.1.7 Thresholds	ICC A117.1 303 Changes in Level
½ inches maximum AFF	½ inches maximum AFF
¾ inch at sliding door in Dus	



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Buildings

## Accessible Route

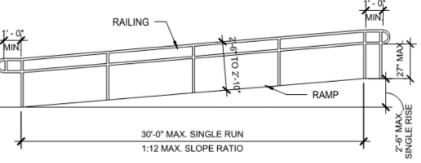
ICC A117.1 – 405 Ramps. Ramps that are part of an accessible route should have a sloped walking surface with a rise of more than 1 inch per 20 inches (1:20) of run is considered a ramp



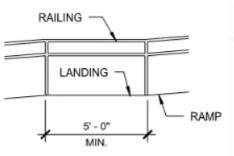


### Accessible Route

ICC A117.1 – 405 Ramps. (slope greater than 1:20 and not steeper than 1:12).



RAMP



#### INIMUM LANDING

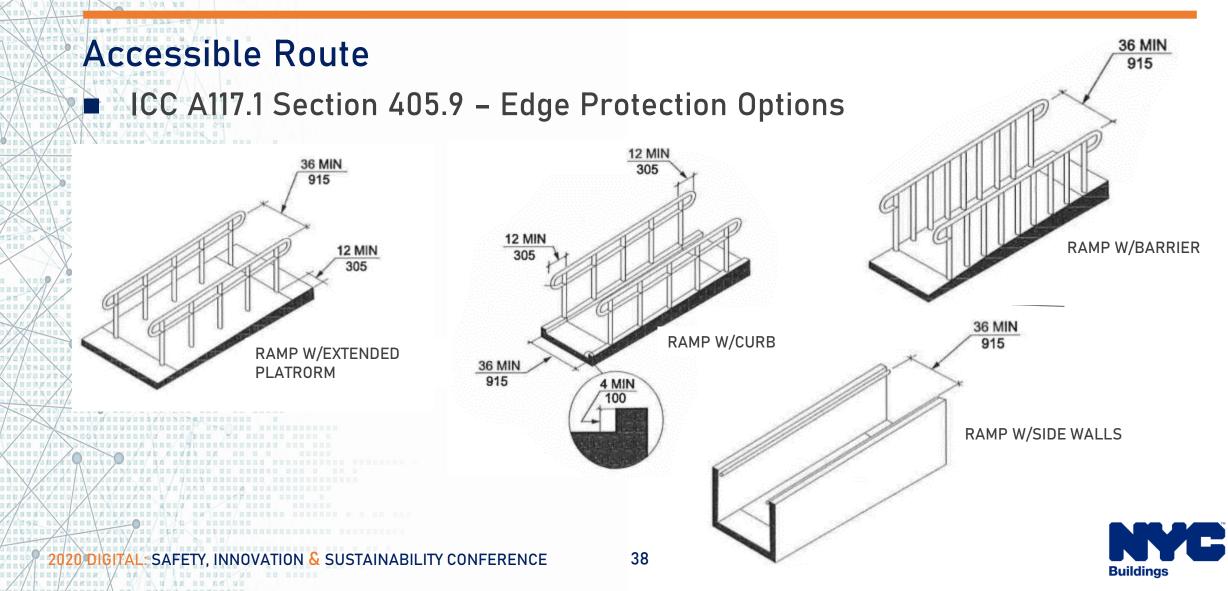
BC NOTE: <u>Handrails</u> for ramps (w/rise > 6") shall comply with BC Sections 1012.2 through 1012.8.

Height	34"-38"
Handrail extensions	12" min. beyond the top and bottom of ramp runs

BC NOTE: <u>Guards</u> shall be provided where rise is > 30" (comply with BC Sections 1013).

Height	42"
Openings	shall not allow passage of a sphere 4 inches in diameter







# **Accessibility in Residential Buildings**

## ACCESSIBLE ROUTE: ELEVATORS & PLATFORM LIFTS



### **Accessible Route**

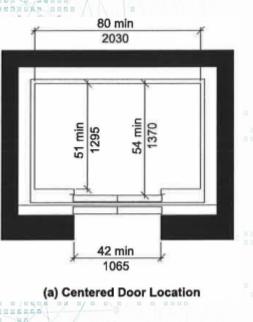
Elevators. BC1109 Other Features And Facilities

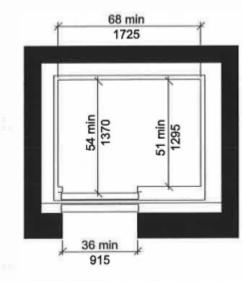
- <u>BC 1109.6 Elevators.</u> All passenger elevators on an accessible route shall be accessible and comply with Section 3001.3.
- <u>BC 3001.3 Accessibility</u>. The following elevators and lifts shall conform with ICC A117.1 (Sections 407 Elevators, 408 Limited-use/Limited-application Elevators, 409 Private Residence Elevators):
  - Passenger elevators, including destination-oriented elevators, required to be accessible by Chapter 11;
  - 2. Limited-Use/Limited-Application (LULA) elevators permitted to be installed on an accessible route pursuant to Section 1109.6.1;
  - 3. Platform lifts permitted to be installed on an accessible route pursuant to Section 1109.7; and
  - 4. Private residence elevators serving within an individual dwelling unit in Groups R-2 and R-3 occupancies on an accessible route.



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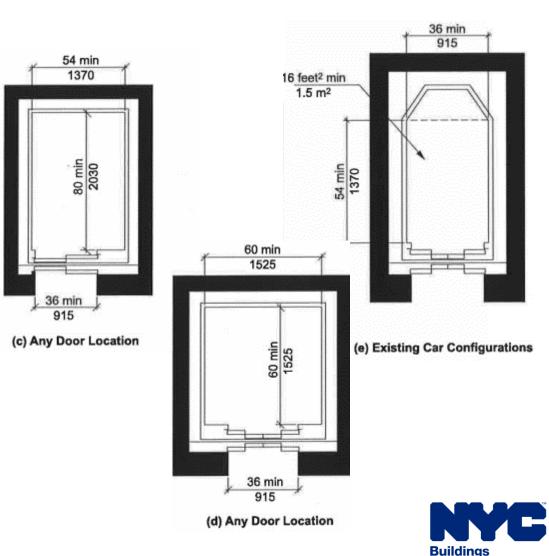
### Accessible Route: ELEVATORS





(b) Side (Off-Centered Door) Location

ICC A 117.1 FIG. 407.4.1 Inside Dimensions of Elevator Cars

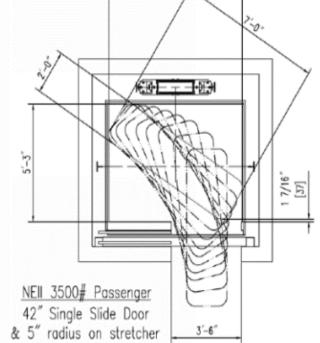


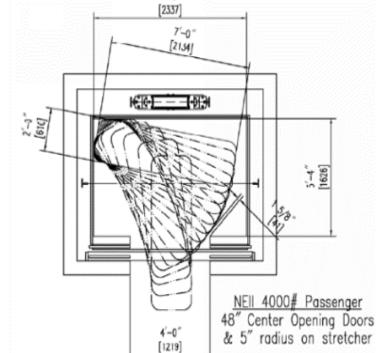
### Accessible Route: ELEVATORS

### REMINDER

BC 3002.4.2 Elevator car to accommodate ambulance stretcher.

FIGURE 1 (a) and (b) Image Source: BUILDINGS BULLETIN 2017-008 Technical; FIGURE 1 - Excerpt of FIGURES 3002.4(a) and 3002.4(b) of 2009 IBC Commentary Stretchersized elevator cars; FIGURE 2 - Symbol for Emergency Medical Services (Star of Life)

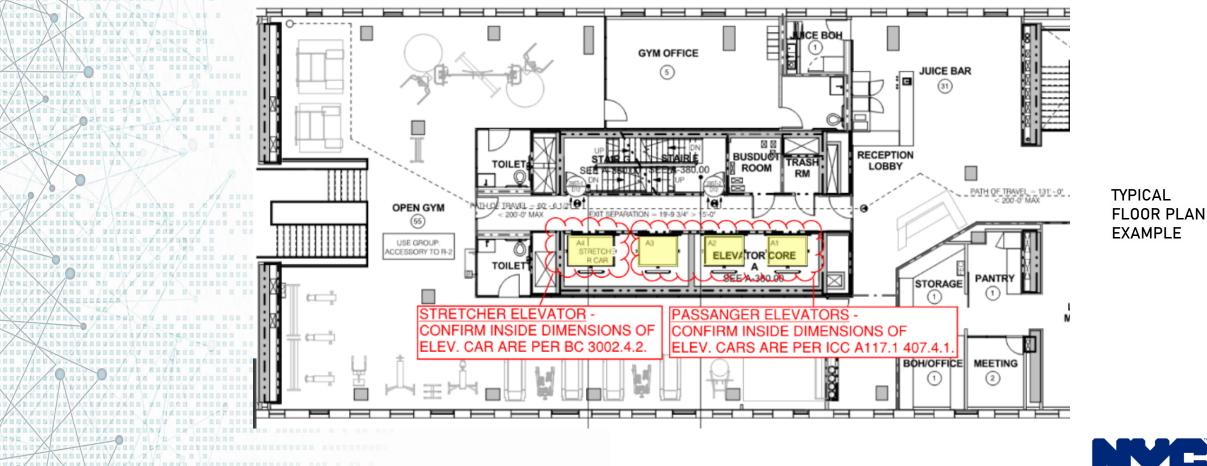




7'-8



Accessible Route: ELEVATORS

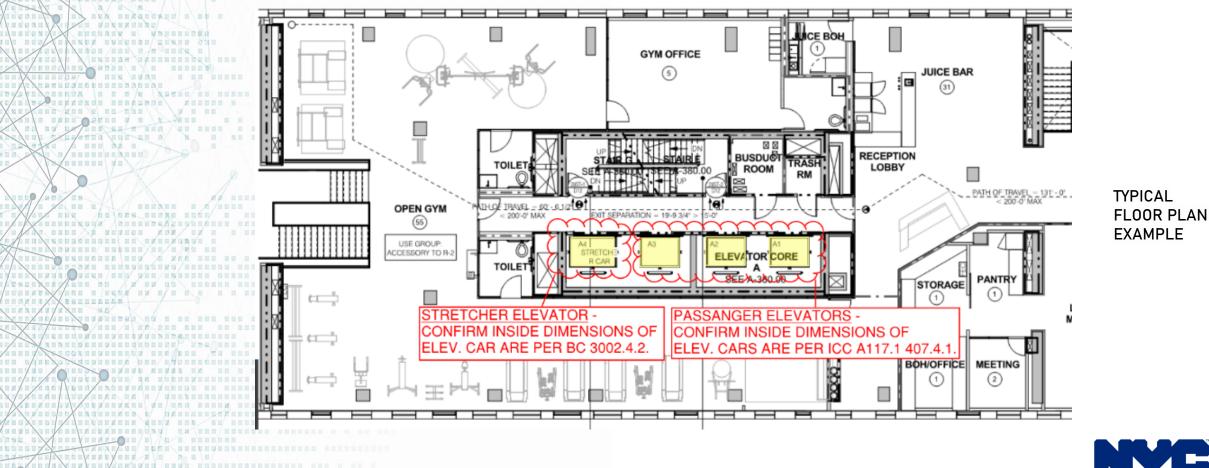


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Accessible Route: ELEVATORS



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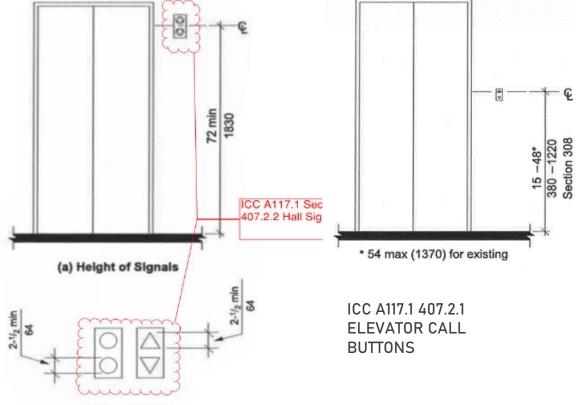
Buildings

### Accessible Route: ELEVATORS

ICC A 117.1 407.2.2 ELEVATOR VISIBLE SIGNALS ICC A117.1 Sections 407.2.1 Call Controls / 309.4 Operations; 308 Reach Ranges; 407.2.1.2 Size; 407.2.1.3 / 305 Clear Floor Space; 407.2.1.4 Location; 407.2.1.5 Signals; 407.2.1.6 Keypads.



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(b) Size of Signals



### **Accessible Route: PLATFORM LIFTS**

BC 1109.7 Lifts.

Note: Platform (wheelchair) lifts are generally not permitted to be part of a required accessible route in new construction except under certain specific circumstances. If platform lifts are permitted they shall be installed in accordance with NYC BC Chapter 30, Section 410 (Platform Lifts) of ICC A117.1 and ASME A 18.1.

- The allowable uses for lifts for accessibility are:
  - 1. Performance area in Group A
  - 2. Wheelchair spaces in assembly area
  - 3. Spaces not open to the public with no more than 5 occupants
  - 4. Within dwelling units
  - 5. Courtroom uses (interior only)
  - 6. Existing exterior sites with size constraints; refer to BB 2016-08
  - 7. Amusement rides

  - Play structures or soft contained play structures.
     Team or player seating areas serving areas of sport activity

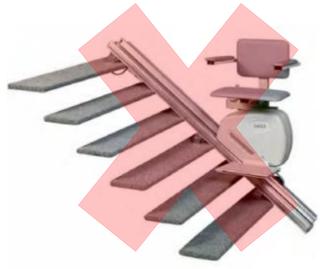


## Accessible route: PLATFORM LIFTS

BC 1109.7 Platform Lifts.



- PLATFORM (WHEELCHAIR) LIFTs are permitted in certain circumstances
- Travels along a stairway where penetration of a floor is not desirable
- Must not reduce min. egress width along path of travel in fold-down position
- Vertical travel distance of 168" max. (limited by ASME A18.1-2005).



- CHAIRLIFT can not serve as part of a required accessible route.
- It can be installed in addition to other accessible means of access.

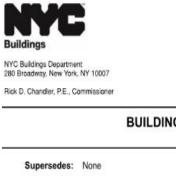
Image Source: 2015 INTERNATIONAL BUILDING CODE® COMMENTARY



### Accessible Route: PLATFORM LIFTS

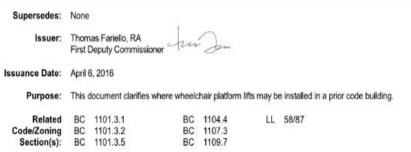
1109.7 Lifts. Refer to BUILDINGS BULLETIN 2016-008 (clarification of code for prior code buildings): I. WHERE THE USE OF WHEELCHAIR PLATFORM LIFTS IS NOT PERMITTED II. WHERE THE USE OF WHEELCHAIR PLATFORM LIFTS IS PERMITTED III. MOPD WAIVER RECOMMENDATION, BUT DOB decides...

IV. ONE- AND TWO-FAMILY BUILDINGS





BUILDINGS BULLETIN 2016-008 Technical



Subject(s): Wheelchair platform lift, new construction; Wheelchair platform lift, prior code buildings; Accessible





# **Accessibility in Residential Buildings**

ACCESSIBLE COMMON SPACES

**Buildings** 

## Accessible Common Spaces

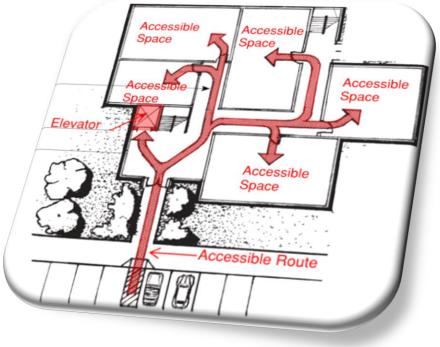
SECTION BC 1107 Dwelling Units and Sleeping Units

2014 NYC BC 1107 accessibility requirements applicable to buildings with dwelling/sleeping units:

BC 1107.4 Accessible route.

BC 1107.3 Accessible/common spaces.







### Accessible Common Spaces

2014 NYC BC 1107 accessibility requirements applicable to buildings with dwelling/sleeping units:

1107.3 Accessible spaces. Rooms and spaces available to the general public or available for common use by residents of Accessible units, Type B+NYC units, or Type B units shall be accessible. Accessible spaces shall include, but not be limited to, spaces for residents' use, such as laundry rooms, refuse disposal and storage locations, mailbox areas, recreational facilities, assembly and tenants' meeting rooms, storage rooms, parking areas, toilet and bathing rooms, kitchen, living and dining areas, any exterior spaces, including patios, terraces and balconies, management offices, and stores. EXCEPTION: In Group I-2 facilities, doors to sleeping units shall be exempted from the requirements for maneuvering clearance at the room side provided the door is a

minimum of 44 inches in width.



## Accessible Common Spaces

2014 NYC BC 1107 accessibility requirements applicable to buildings with dwelling/sleeping units.

Examples of common use areas include:

Mailboxes



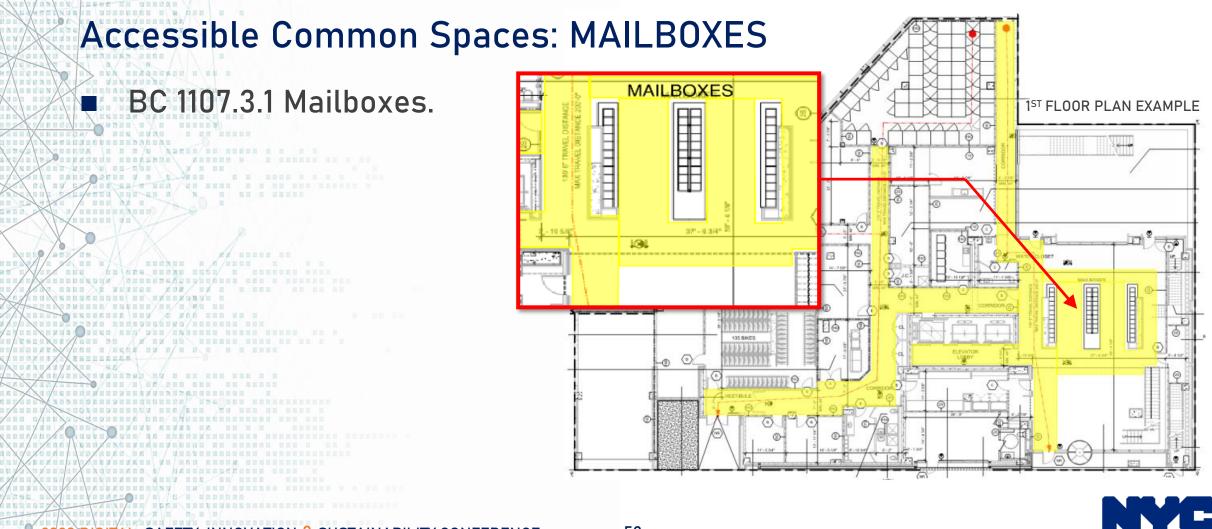
rooms Laundry rooms

Terraces/rooftops

Community rooms

- Bathrooms
- Parking
- Bicycle storage
- Fitness rooms
- Swimming pools
- Other common use spaces





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Buildings

### Accessible Common Spaces: MAILBOXES

BC 1107.3.1 Mailboxes.

Except as otherwise provided by rules of the Department for the purposes of complying with rules and regulations established by the United States Postal Service and/or the



United States Department of Housing and Urban Development, where mailboxes are provided for each dwelling unit or sleeping unit in an interior location, 100 percent of such mailboxes shall comply with ICC A117.1, and the operable parts of such mailboxes shall be no higher than 48 inches above the finished floor.

USPS STD-4C - U.S. POSTAL SERVICE STANDARD WALL-MOUNTED CENTRALIZED MAIL RECEPTACLES

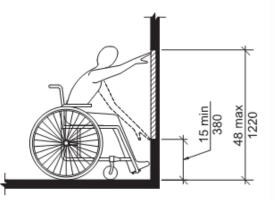
Scope – This standard covers the design, testing, and acceptance of wall-mounted, centralized mail receptacles. The use of this standard is mandatory and the receptacles shall conform to this standard in order to be approved by the Postal Service <sup>TM</sup>.

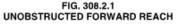


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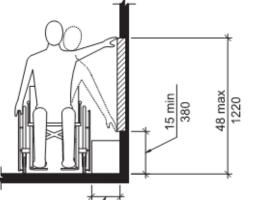




FIG. 308.3.1 UNOBSTRUCTED SIDE REACH





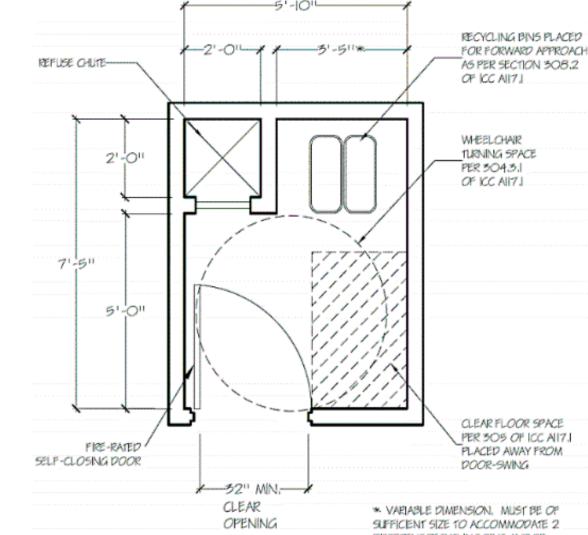
## Accessible Common Spaces

## Refuse Rooms/Recyclable

## Storage

### BUILDINGS BULLETIN 2019-001

#### A. Standard design.



DIFFERENT RECYCLING BINS AND BE WITHIN THE FORWARD REACH RANCE



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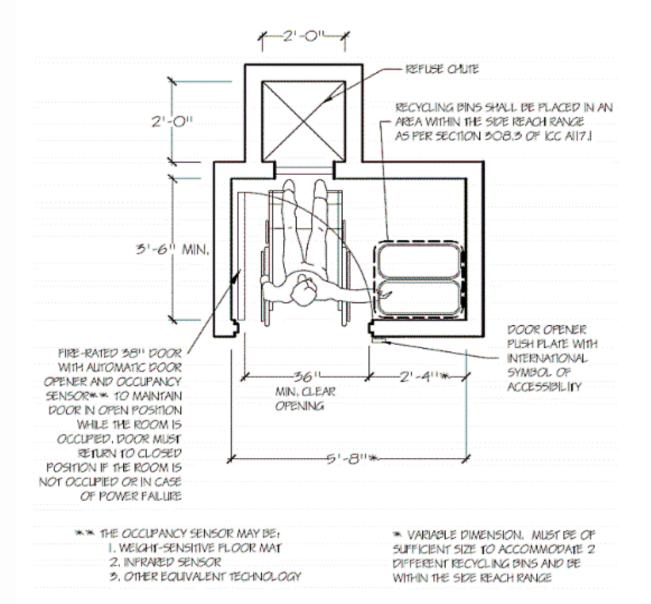
### Accessible Common Spaces

### Refuse Rooms/Recyclable

Storage

### BUILDINGS BULLETIN 2019-001

#### B. Alternative Design.





### Accessible Common Spaces

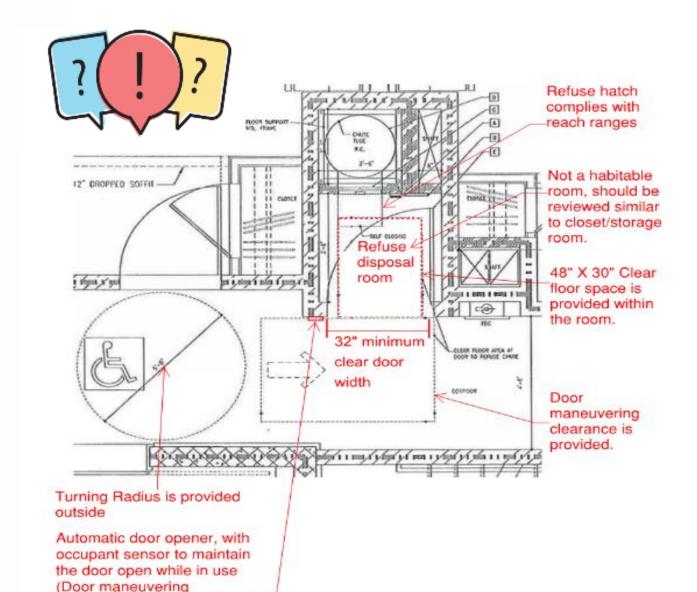
Refuse Rooms/Recyclable Storage BUILDINGS BULLETIN 2019-001 B. Alternative Design.

Q. What is wrong with the proposed floor plan?

### A. NYC BC 1213.3 -

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A minimum of 5 SF of floor area within each refuse chute access room shall be provided for the temporary holding of recyclables?

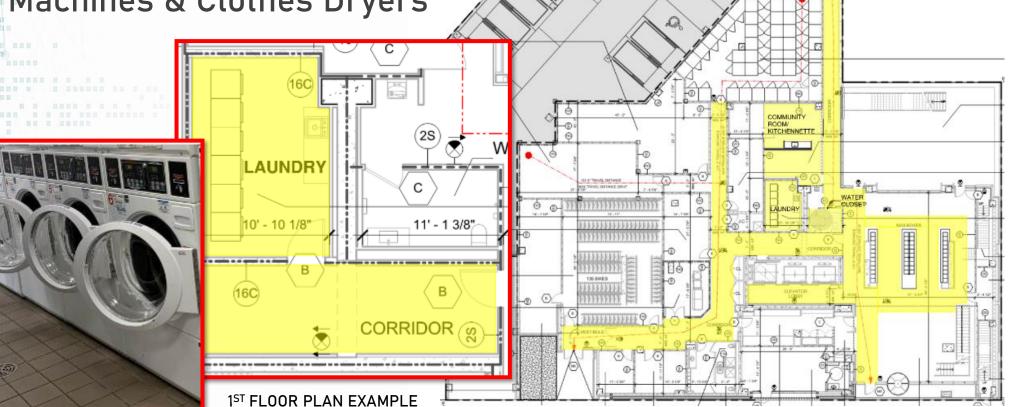


clearances are not required).



### Accessible Common Spaces: ICC A117.1 611

### Washing Machines & Clothes Dryers





Accessible Common Spaces: ICC A117.1 611 Washing Machines & Clothes Dryers Q: How many washers and dryers are required to be accessible?





### Accessible Common Spaces: ICC A117.1 611

- Washing Machines & Clothes Dryers
- A: NYC BC 1107.2.8 Laundry equipment in accessible common-use areas as required in Section 1107.3 shall comply with Section E105.2?

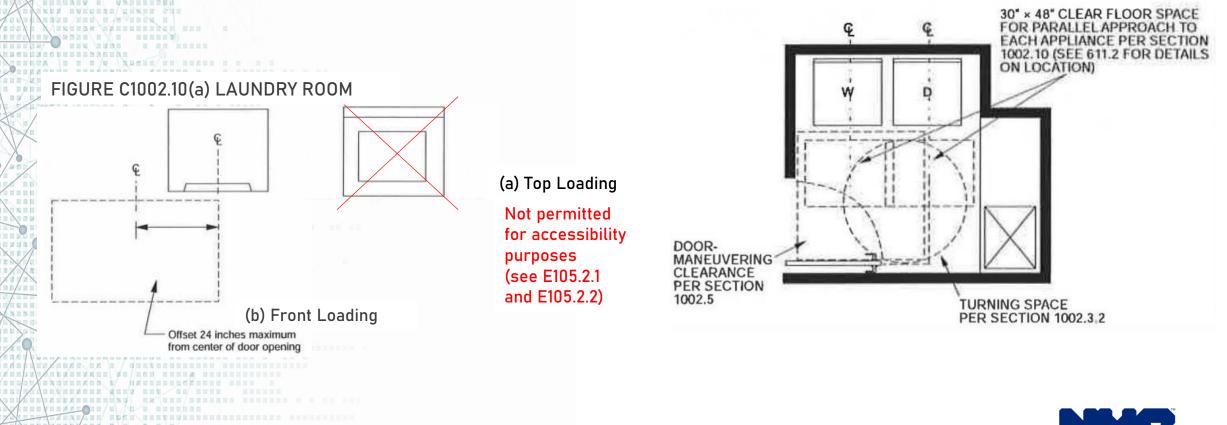
#### E105.2.1 Washing machines:

- ≤3 = at least 1 comply with ICC A117.1, including Section 611 (Washing Machines and Clothes Dryers), and shall be front loading.
- >3 = at least 2 comply with ICC A117.1, including Section 611 and shall be front loading.
- E105.2.2 Clothes dryers:
- ≤3 = at least 1 comply with ICC A117.1, including Section 611 (Washing Machines and Clothes Dryers), and shall be front loading.
- >3 = at least 2 comply with ICC A117.1, including Section 611 and shall be front loading.



### Accessible Common Spaces: ICC A117.1 611

#### Washing Machines & Clothes Dryers





Buildings

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# Accessible Common Spaces Terraces/Rooftops

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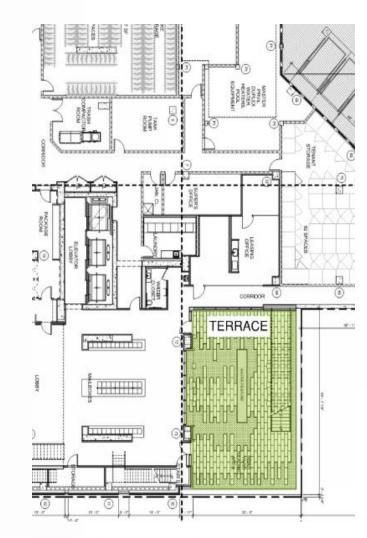




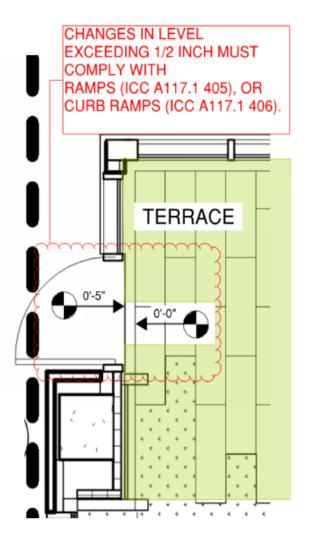
## Accessible Common Spaces

## Terraces/Rooftops

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1<sup>ST</sup> FLOOR PLAN EXAMPLE



LEVEL CHANGE PLAN DETAIL



### Accessible Common Spaces: TERRACES/ROOFTOPS

# If there is NO change in level

Provide a compliant threshold (see Building Blocks ICC A 117.1 303.2 or 303.3)





Building-blocks of Accessibility

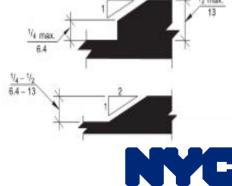


A117. 303.2 Vertical Changes In Level

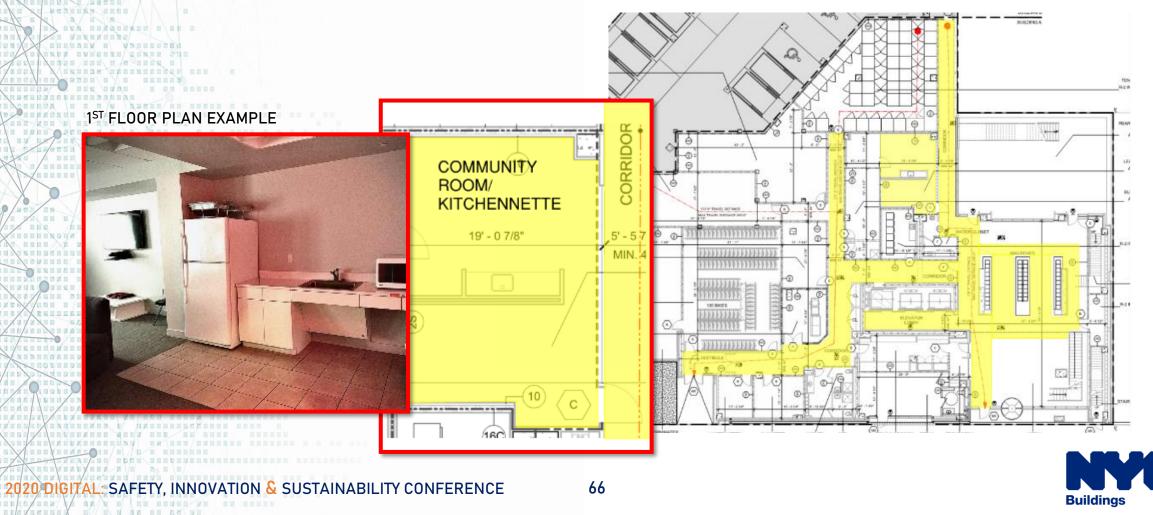
#### A117. 303.3 Beveled Changes In Level

Buildings





### Accessible Common Spaces: COMMUNITY ROOM/KITCHENETTE/WET BARS

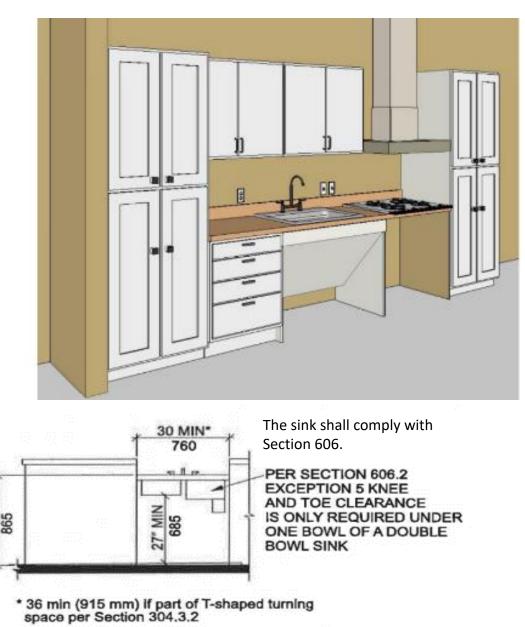


#### Accessible Common Spaces

ICC A 117.1 804 Kitchens and Kitchenettes Sink Clear Floor Space:

ICC A117.1 606.2 Clear Floor Space, A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided. Knee and toe clearance complying with Section 306 shall be provided. The dip of the overflow shall not be considered in determining knee and toe clearances.

EXCEPTION: 1. A parallel approach complying with Section 305 and centered on the sink, shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided.





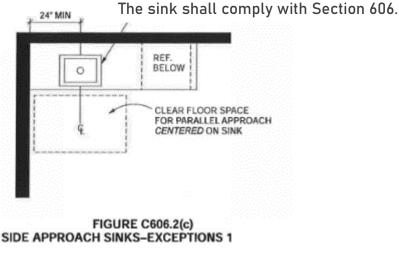
### Accessible Common Spaces

ICC A 117.1 804 Kitchens and Kitchenettes Sink Clear Floor Space:

Sink Clear Floor Space ICC A117.1 606.2 Clear Floor Space. A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided. Knee and toe clearance complying with Section 306 shall be provided. The dip of the overflow shall not be considered in determining knee and toe clearances.

EXCEPTION: 1. A parallel approach complying with Section 305 and centered on the sink, shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided.





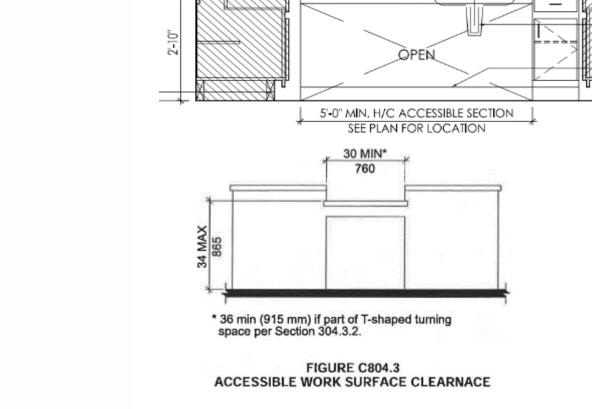


### Accessible Common Spaces

ICC A 117.1 804 Kitchens and Kitchenettes

Sink Clear Floor Space: 804.3 Work Surface. At least one work surface shall be provided in accordance with Section 902. EXCEPTION: Spaces that do not provide a cooktop or conventional range shall not be required to provide an accessible work

surface.





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### Accessible Common Spaces: TOILET ROOMS

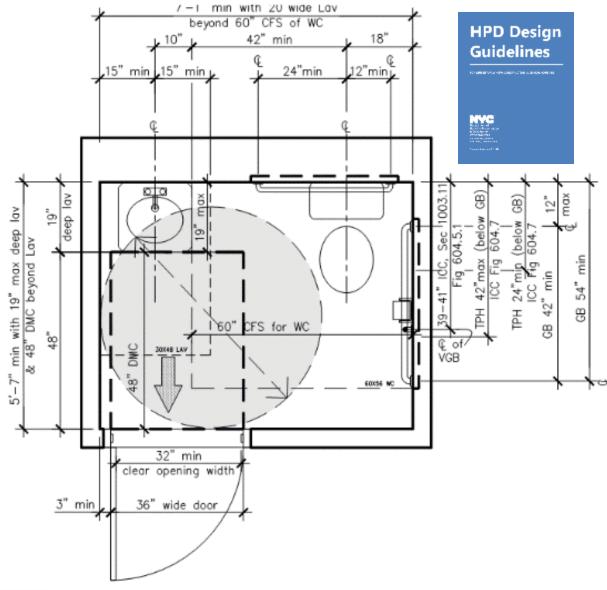


Buildings

### Accessible Common Spaces: TOILET ROOMS

ICC A 117.1 603 Toilet and Bathing Rooms. 603.2.1 Turning Space.

A 60-inch turning circle or a 60-inch T-turn space is required within the bathing room or toilet room.





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#### Accessible Common **Spaces: TOILET ROOMS**

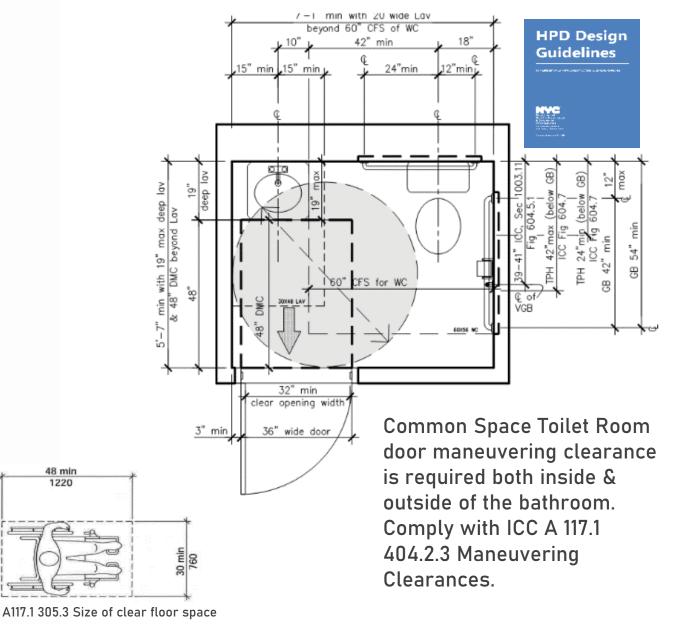
ICC A 117.1 603 Toilet and Bathing Rooms.

603.2.2 Door Swing.

Doors shall not swing into the clear floor space or clearance for any fixture.

#### **EXCEPTION 2**:

Where the room is for individual use and a clear floor space complying with Section 305.3 is provided within the room beyond the arc of the door wing, the door shall not be required to comply with Section 603.2.2.





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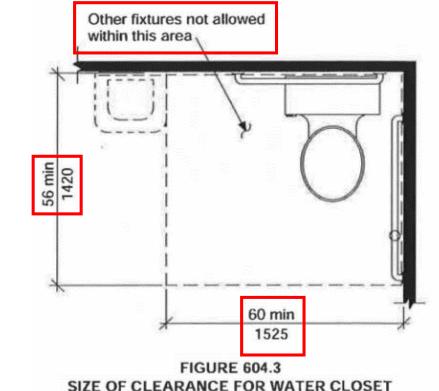
### Accessible Common Spaces: TOILET ROOMS

ICC A 117.1 604 Water Closets and Toilet Compartments

604.3.1 Clearance width. 60 inches minimum in width, measured perpendicular from the sidewall.

604.3.2 Clearance Depth. 56 inches minimum in depth, measured perpendicular from the rear wall.

604.3.3 Clearance Overlap. Items that can overlap the clear floor space of the water closet without blocking access to the water closet include grab bars and the tissue dispenser. Items that cannot overlap the clear floor space for the water closet include counters or the accessible lavatory.



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### Accessible Common Spaces: TOILET ROOMS

ICC A 117.1 604.5 Grab Bars. Grab Bars shall comply with Section 604.5 (location, dimensions) and 609 (grab bar shape, size, clearance, height and installation.).

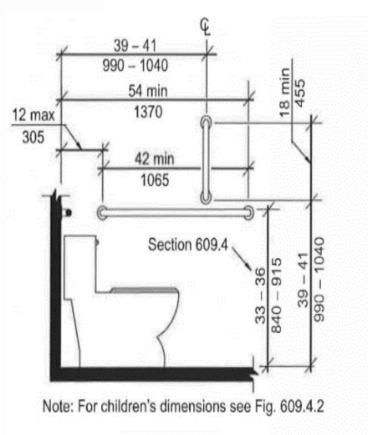
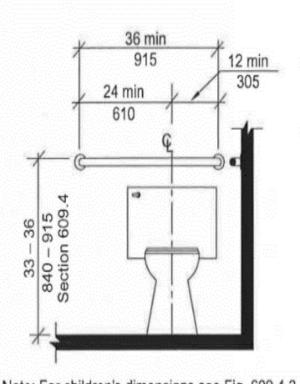


FIGURE 604.5.1 SIDE WALL GRAB BAR FOR WATER CLOSET



Note: For children's dimensions see Fig. 609.4.2

FIGURE 604.5.2 REAR WALL GRAB BAR FOR WATER CLOSET



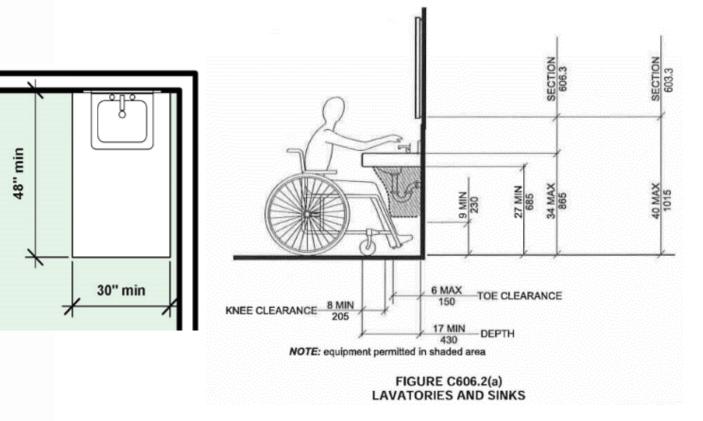
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### Accessible Common Spaces: TOILET ROOMS

The lavatory shall comply with ICC A 117.1 Section 606.

606.2 The 30-inch by 48-inch dimensions in Section 305.3 are required in front of a lavatory. *606.3 Height – 34-inch maximum height of lavatories.* 





### Accessible Common Spaces: PARKING

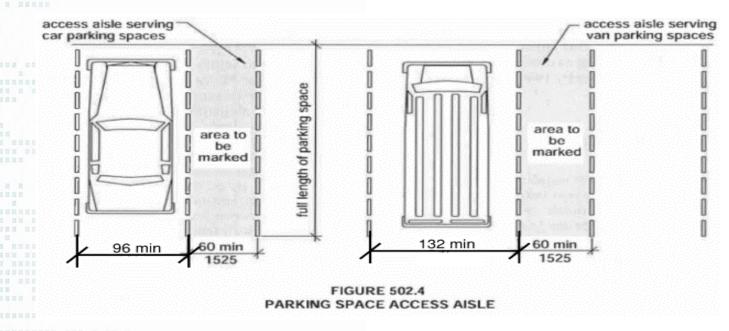
# Scope for R-2 and R-3 see BC 1106 for the number of accessible parking stalls and van spaces.



### Accessible Common Spaces: PARKING

Design – ICC A117.1 502.

 502.2 Vehicle Space Size. Car parking spaces shall be 96 inches minimum in width. Van parking spaces shall be 132 inches minimum in width.





Accessible Common Spaces: PARKING

ICC A117.1 502.2 Vehicle Space Size.

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

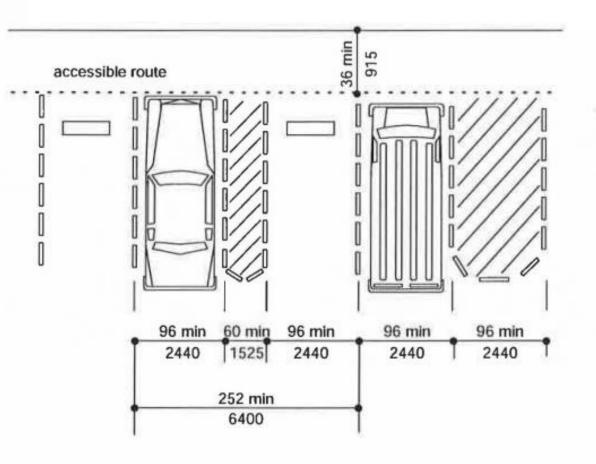


FIGURE C502.4.1(a) ACCESS AISLE CONNECTED TO AN ACCESSIBLE ROUTE



Accessible Common Spaces: PARKING

ICC A117.1 502.2 Vehicle Space Size.

EXCEPTION: Van parking spaces shall be permitted to be 96 inches minimum in width where the adjacent access aisle is 96 inches minimum in width. ICC A117.1 502.2 Vehicle Space Size.

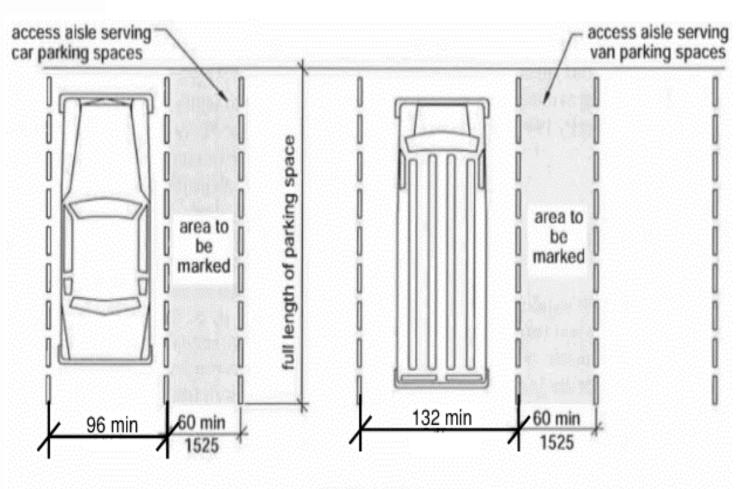


FIGURE 502.4 PARKING SPACE ACCESS AISLE



### Accessible Common Spaces: PARKING

- Q1. If only one space is required, must a van space be provided?
- A1. Yes. Refer to BC 1106.5, which states: "For every six or fraction of six accessible parking spaces, at least one space shall be a vanaccessible parking space."



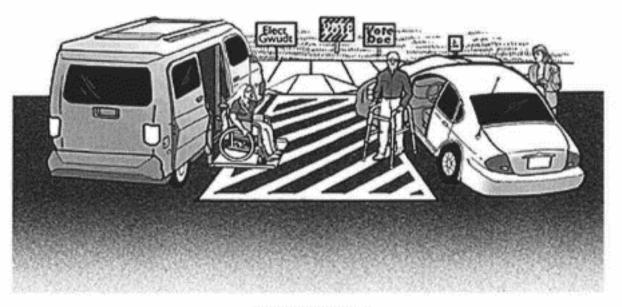


FIGURE C502.4.2 ACCESSIBLE VAN (Drawing courtesy of U.S. Acess Board)



### Accessible Common Spaces: PARKING

- Q2. Can two parking spaces share a common access aisle?
- A2. Two parking spaces shall be permitted to share a common access aisle. 502.4.2 Width. Access aisles serving car and van parking spaces shall be 60 inches minimum in width.



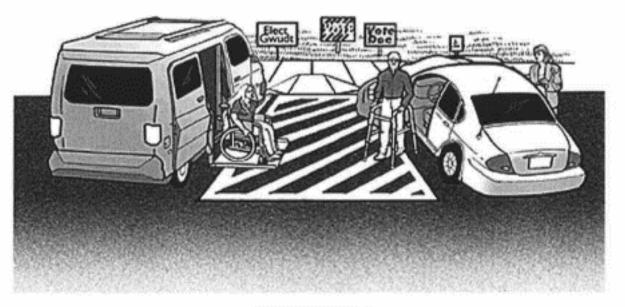


FIGURE C502.4.2 ACCESSIBLE VAN (Drawing courtesy of U.S. Acess Board)



### **Accessible Common Spaces**

**Recreational Facilities** 

EXAMPLES: Fitness Rooms, Swimming Pools, Bicycle Storage

- At least one of each type of recreational facility must
   be connected by an accessible route.
- New York City 2014 NYC Building Code ICC A117.1 1109.1.1 Swimming pools.

At least two accessible means of entry shall be provided for swimming pools. Accessible means of entry shall be swimming pool lifts complying with Section 11 09.2; sloped entries complying with Section 11 09.3; transfer walls complying with Section 1109.4, transfer systems complying with Section 1109.5; and pool stairs complying with Section 1109.6. (At least one accessible means of entry provided shall comply with Section 1109.2 be swimming pool lifts or 1109.3 sloped entries).







# **Accessibility in Residential Buildings**

PWELLING UNITS

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Dwelling Units
 Scoping
 — Requirement Applicability
 — Types of Accessible Units

### Technical Requirements

**R-1** 



## Dwelling Units *(continued)*

- Resources & References Standards, Overlaps, & HPD
   Guidelines
- Example Drawings
  - Kitchen
  - Bathing & Toilet Rooms
    - In-unit Laundry

### Balconies

### Questions



### Alterations and Accessibility

- 28-101.4.3 Optional use of the 1968 building code for work on prior code buildings. At the option of the owner, and subject to applicable provisions of this code, work on prior code buildings may be performed in accordance with the requirements and standards set forth in the 1968 building code, or where the 1968 code so authorizes, the code in effect prior to December 6, 1968.
- 5. Accessibility. Alterations, including minor alterations, of buildings and changes of use or occupancy, shall be governed by chapter 11 of the New York city building code, subject to special provisions for prior code buildings as
- set forth therein.
- §28-105.4.2.1 Definitions.
- MINOR ALTERATIONS: Minor changes or modifications in a building or any part thereof, excluding additions thereto, that do not in any way affect health or the fire or structural safety of the building or the safe use and operation of the service equipment therein. Minor alterations shall not include any of the work described as "work not constituting minor alterations or ordinary repairs."
- ORDINARY REPAIRS. Replacements or renewals of existing work in a building, or of parts of the service equipment therein, with the same or equivalent materials or equipment parts, that are made in the ordinary course of maintenance and that do not in any way affect health or the fire or structural safety of the building or the safe use and operation of the service equipment therein. Ordinary repairs shall include the repair or replacement of any plumbing fixture, piping or faucets from any exposed stop valve to the inlet side of a trap. Ordinary repairs shall not include any of the work described as "work not constituting minor alterations or ordinary repairs."
- 📕 WORK NOT CONSTITUTING MINOR ALTERATIONS OR ORDINARY REPAIRS. Minor alterations or ordinary repairs shall not include:
- 4. The addition, rearrangement, relocation, removal or replacement of any parts of the building affecting loading or exit requirements, or light, heat, ventilation, or elevator requirements or accessibility requirements, or any fire suppression ...
- §28-105.4.2.1 Definitions.
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- 4. The addition, rearrangement, relocation, removal or replacement of any parts of the building affecting loading or exit requirements, or light, heat, ventilation, or elevator requirements or accessibility requirements, or any fire suppression ...
- \$28-105.4.2.1 Definitions.

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### ons and Accessibility

1948 building code for work on prior code buildings. At the option of the owner, and subject to applicable provisions of this code, work on prior code buildings may be performed in accord building code, or where the 1968 code so authorizes, the code in effect prior to December 6, 1968.

Exceptions 5. Accessibili

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4. The addition, rearrangement, relocation, removal or replacement of any parts of the building affecting loading or exit requirements, or light, heat, ventilation, or elevator requirements or accessibility requirements, or any fire suppression ...

#### \$28-105.4.2.1 Definitions.

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- MINOR ALTERATIONS Minor changes or modifications in a build the service equipment therein. Minor alterations shall not include
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### What needs to be accessible and where?

- 1107.1 General. In addition to the other requirements of this chapter,
   occupancies having dwelling units or sleeping units shall be provided with accessible features in accordance with this section.
- INTENDED TO BE OCCUPIED AS A RESIDENCE. This refers to a dwelling unit or sleeping unit that can or will be used all or part of the time as the occupant's place of abode.
  - Multiple Dwelling Law: Class A; Class B
  - BC Chapter 11: Accessible; Type B+NYC; Type B
    - (NYC Interpretation of "Residence" differs from that contained in the



IBC)

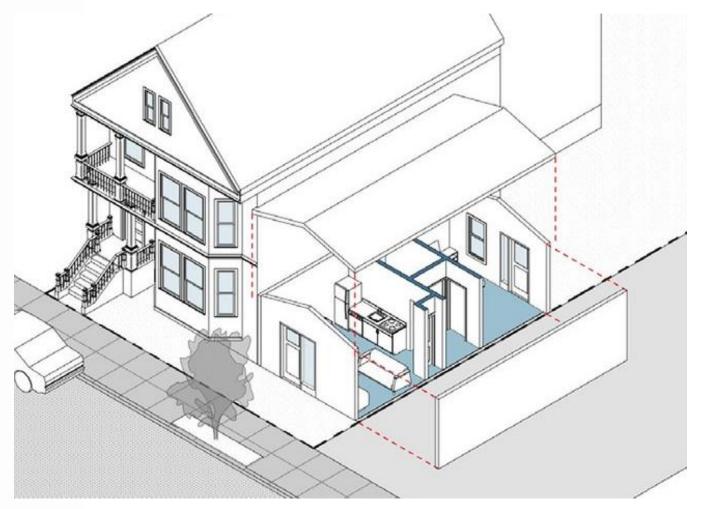


# **Accessibility in Residential Buildings**

SCOPING



**Dwelling Unit (Accessibility)** For the purposes of Chapter 11 and applicable appendices: A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.



<u>"example: garage conversion</u>" by <u>citymaus</u> is licensed under <u>CC PDM 1.0</u>



Sleeping Unit (Accessibility) For the purposes of Chapter 11 and applicable appendices: A room or space in which people sleep, which can also include permanent provisions for living, eating, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a dwelling unit are not sleeping units



"HOTEL ROOM" by binar studio, Anna Holotsvan, Sergey Baierzdorf is licensed under CC BY-NC-ND 4.0



Three Levels of Accessible Units

Accessible Units: A dwelling unit or sleeping unit that complies with this Code and the provisions for Accessible units in ICC A117.1.

Type B+NYC Units: A dwelling unit or sleeping unit designed and constructed for accessibility in accordance with this Code, Section 1004 (Type B Units) of ICC A117.1 as modified by Sections 1107.2.1 through 1107.2.8, and Appendix P of this Code.

Type B Units: A dwelling unit or sleeping unit designed and constructed for accessibility in accordance with this Code and the provisions for Type B units in ICC A117.1, consistent with the design and construction requirements of the federal Fair Housing Act.



<u>"Cookie Scoop Set of 3, Ice Cream Scoop Set of 3, Stainless Steel Ice Cream Scoop with Trigger</u> Include Small Size(1.58 Inch), Medium Size(1.97 Inch), Large Size(2.48 Inch)" by the ashadgnp is licensed under <u>CC0 1.0</u>



Predominant Unit Types by Occupancy

\* R-1 occupancies may trigger additional requirements based on occupancies in excess of one month.

\*\* R-3 occupancies only trigger accessibility requirements when constructing 4 or more units.

	Accessible	B+NYC	В
R-1*	X	\	
R-2		X	
R-3**			X



### Group R-1: Accessible Dwelling & Sleeping Units

1107.6.1 Group R-1. Accessible units, Type B+NYC units, and Type B units shall be provided in Group R-1 occupancies in accordance with Sections 1107.6.1.1 through 1107.6.1.3.

EXCEPTION: Boarding houses, dormitories, fraternity houses and sorority houses in Group R-1 occupancies shall comply with Section 1107.6.1.4.

### TABLE 1107.6.1.1 ACCESSIBLE DWELLING AND SLEEPING UNITS

TOTAL NUMBER OF UNITS PROVIDED	MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITHOUT ROLL-IN SHOWERS	MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITH ROLL-IN SHOWERS	TOTAL NUMBER OF REQUIRED ACCESSIBLE UNITS
1 to 25	1	0	1
26 to 50	2	0	2
51 to 75	3	1	4
76 to 100	4	1	5
101 to 150	5	2	7
151 to 200	6	2	8
201 to 300	7	3	10
301 to 400	8	4	12
401 to 500	9	4	13
501 to 1,000	2% of total	1% of total	3% of total
Over 1,000	20, plus 1 for each 100, or fraction thereof, over 1,000	10 plus 1 for each 100, or fraction thereof, over 1,000	30 plus 2 for each 100, or fraction thereof, over 1,000



Group R-1: Accessible Dwelling & Sleeping Units

1107.6.1 Group R-1. Accessible units, Type B+NYC units, and Type B units shall be provided in Group R-1 occupancies in accordance with Sections 1107.6.1.1 through 1107.6.1.3.

EXCEPTION: Boarding houses, dormitories, fraternity houses and sorority houses in Group R-1 occupancies shall comply with Section 1107.6.1.4.

ACCESSIBLE DWELLING AND SLEEPING UNITS					
TOTAL NUMBER OF UNITS PROVIDED	MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITHOUT ROLL-IN SHOWERS	MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITH ROLL-IN SHOWERS	TOTAL NUMBER OF REQUIRED ACCESSIBLE UNITS		
501 to 1,000	2% of total	1% of total	3% of total		
Over 1,000	20, plus 1 for each 100, or fraction thereof, over 1,000	10 plus 1 for each 100, or fraction thereof, over 1,000	30 plus 2 for each 100, or fraction thereof, over 1,000		

TABLE 1107.6.1.1

### NOTE: Percentages are minimums.

### 501 Total Units x 3% = 16 Accessible Units

6 Units With Roll-in Showers 10 Units Without Roll-in Showers NOT 6 + 11 = 17

TYPE:

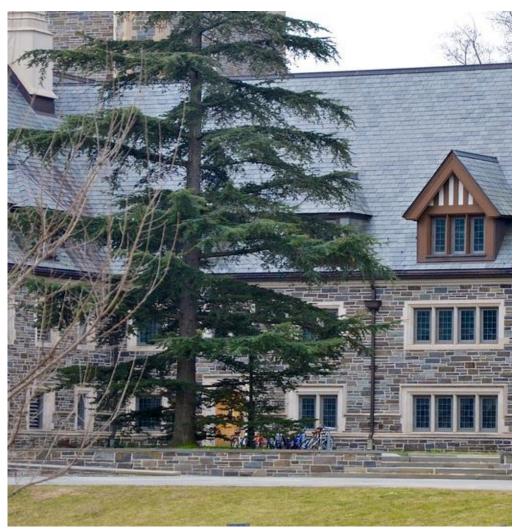
## Accessible



Group R-1: Accessible Dwelling & Sleeping Units

1107.6.1 Group R-1. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence not required to be an Accessible unit shall be a Type B+NYC unit unless the number of Type B+NYC units is permitted to be reduced in accordance with Section 1107.7.4. Where no Type B+NYC units are required per Section 1107.7.4, all units not required to be Accessible units shall be Type B units.

**EXCEPTION:** The number of Type B units is permitted to be reduced in accordance with Section 1107.7.



TYPE:

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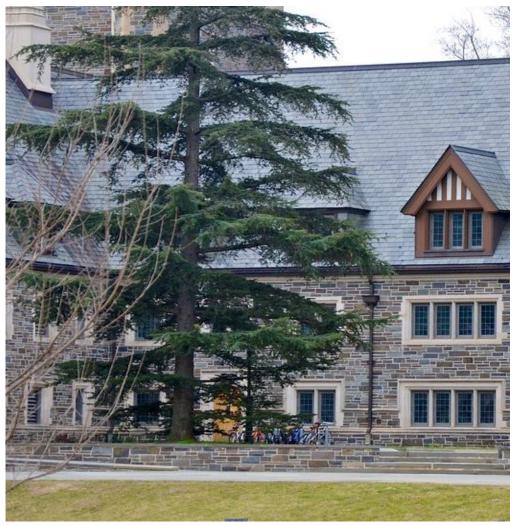




Group R-1: Accessible Dwelling & Sleeping Units

1107.6.1 Group R-1. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence not required to be an Accessible unit shall be a Type B+NYC unit unless the number of Type B+NYC units is permitted to be reduced in accordance with Section 1107.7.4. Where no Type B+NYC units are required per Section 1107.7.4, all units not required to be Accessible units shall be Type B units.

EXCEPTION: The number of Type B units is permitted to be reduced in accordance with Section



TYPE:

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Group R-1: Accessible Dwelling & Sleeping Units

1107.7.4 General exceptions for Type B+NYC units. Where specifically permitted by Sections 1107.5 and 1107.6, the required number of Type B+NYC units is permitted to be reduced in accordance with Section 1107.7.4.1.







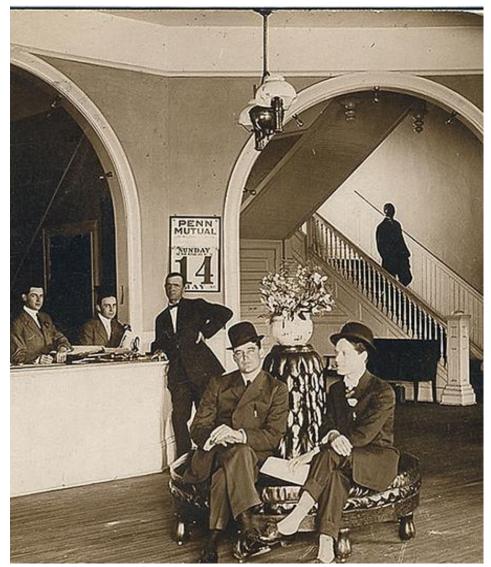
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# Group R-1: Accessible Dwelling & Sleeping Units

1107.7.4.1 Buildings or structures without elevator service where Type B+NYC units are required. In buildings or structures where no elevator service is provided or required by other sections of this Code, only the dwelling units and sleeping units that are located on stories indicated in Section 1107.7.4.1.1 are required to be Type B+NYC units.

1107.7.4.1.1 Units located in the cellar, basement, or first floor. In buildings or structures where the lowest story containing dwelling or sleeping units is the cellar, basement, or first floor, at least one such story containing dwelling or sleeping units, regardless of intent to occupy as a residence, shall be provided with an accessible entrance and accessible route from the exterior of the building or structure and all units on that story, regardless of intent to occupy as a residence, shall be Type B+NYC units. Where no dwelling units or sleeping units are located in the cellar, basement, or first floor, Type B units shall be provided where required by Section 1107.7.1 through 1107.7.3.



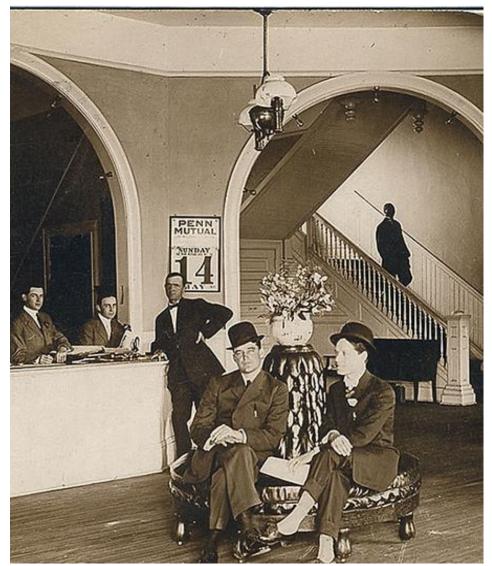
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# Group R-1: Accessible Dwelling & Sleeping Units

1107.7.4.1 Buildings or structures without elevator service where Type B+NYC units are required. In buildings or structures where no elevator service is provided or required by other sections of this code, only the dwelling units and sleeping units that are located on stories indicated in Section 1107.7.4.1.1 are required to be Type B+NYC units.

1107.7.4.1.1 Units located in the cellar, basement, or first floor. In buildings or structures where the lowest story containing dwelling or sleeping units is the cellar, basement, or first floor, at least one such story containing dwelling or sleeping units, regardless of intent to occupy as a residence, shall be provided with an accessible entrance and accessible route from the exterior of the building or structure and all units on that story, regardless of intent to occupy as a residence, shall be Type B+NYC units. Where no dwelling units or sleeping units are operated at the cellar has ement, or first floor, Type B units shall be provided where required by Section 1107.7.1 through 1107.7.3.



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Group R-1: Accessible Dwelling & Sleeping Units

1107.7 General exceptions for Type B units. Where specifically permitted by Section 1107.6, the required number of Type B units is permitted to be reduced in accordance with Sections 1107.7.1 through 1107.7.3.

1107.7.1 Structures without elevator service where Type B units are required. Where no elevator service is provided in a structure or required by other sections of this Code, only the dwelling units and sleeping units that are located on stories indicated in Sections 1107.7.1.1 and 1107.7.1.2 are required to be Type B units.



TYPE:

R

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Group R-1: Accessible Dwelling & Sleeping Units

**1107.7 General exceptions for Type B units.** Where **specifically permitted by Section 1107.6, the required number of Type B units is permitted to be reduced in accordance with Sections 1107.7.1 through 1107.7.3.** 

1107.7.1 Structures without elevator service where Type B units are required. Where no elevator service is provided in a structure or required by other sections of this code, only the dwelling units and sleeping units that are located on stories indicated in Sections 1107.7.1.1 and 1107.7.1.2 are required to be Type B units.



TYPE:

R

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Group R-1: Accessible Dwelling & Sleeping Units

1107.7.1.1 One story with Type B units required. At least one story containing dwelling units or sleeping units intended to be occupied as a residence shall be provided with an accessible entrance and accessible route from the exterior of the structure and all units intended to be occupied as a residence on that story shall be Type B units.

TYPE:

103



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Group R-1: Accessible Dwelling & Sleeping Units

1107.7.1.1 One story with Type B units required. At least one story containing dwelling units or sleeping units intended to be occupied as a residence shall be provided with an accessible entrance and accessible route from the exterior of the structure and all units intended to be occupied as a residence on that story shall be Type B units.

& SUSTAINABILITY CONFERENCE

TYPE:

104



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### Group R-1: Accessible Dwelling & Sleeping Units

1107.7.1.2 Other stories with Type B units required. If other stories containing dwelling units or sleeping units intended to be occupied as a residence are served by a building entrance that is in proximity to arrival points as indicated in Items 1 and 2, such building entrance shall be accessible and all dwelling units and sleeping units intended to be occupied as a residence served by that entrance on that story shall be Type B units.

 Where the slopes of the undisturbed site measured between the planned entrance and all vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance are 10 percent or less, and
 Where the slopes of the planned finished grade measured between the entrance and all vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance are 10 percent or less.

Where no such arrival points are within 50 feet (15 240 mm) of the entrance, the closest arrival point shall be used unless that arrival point serves the story required by Section 1107.7.1.1



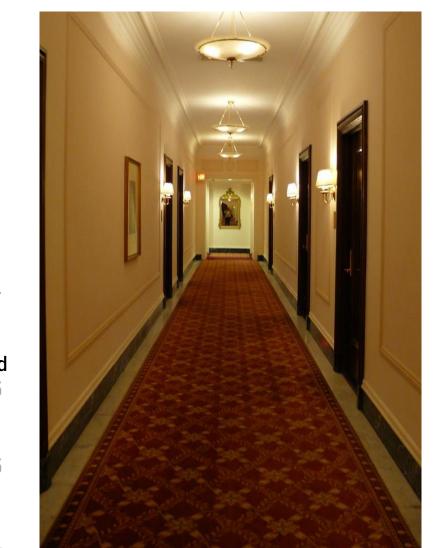
<sup>&</sup>lt;u>"Hallway"</u> by tehchixOr is licensed under <u>CC BY-NC-SA 2.0</u>



Group R-1: Accessible Dwelling & Sleeping Units

1107.7.1.2 Other stories with Type B units required. If other stories containing dwelling units or sleeping units intended to be occupied as a residence are served by a building entrance that is in proximity to arrival points as indicated in Items 1 and 2, such building entrance shall be accessible and all dwelling units and sleeping units intended to be occupied as a residence served by that entrance on that story shall be Type B units.
1. Where the slopes of the undisturbed site measured between the planned entrance and all vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance are 10 percent or less, and
2. Where the slopes of the planned finished grade measured between the entrance and all vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance are 10 percent or less.

Where no such arrival points are within 50 feet (15 240 mm) of the entrance, the closest arrival point shall be used unless that arrival point serves the story required by Section 1107.7.1.1



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## SCOPING: Group R-1: Accessible Dwelling & Sleeping Units

### EXAMPLE: 19 Story R-1 New Building 337 hotel rooms



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 TABLE 1107.6.1.1

 ACCESSIBLE DWELLING AND SLEEPING UNITS

 TOTAL NUMBER OF UNITS PROVIDED
 MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITHOUT ROLL-IN SHOWERS
 MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITH ROLL-IN SHOWERS
 TOTAL NUMBER OF REQUIRED ACCESSIBLE UNITS

 301 to 400
 8
 4
 12

### REQUIRED: Accessible units – 12

(NOTE: BC Section 1107.6.1.3 requires accessible entrances at all units.)



Group R-2: Accessible Dwelling & Sleeping Units

1107.6.2 Group R-2. Type B+NYC units and Type B units shall be provided in occupancies in Group R-2 in accordance with Section 1107.6.2.1.

1107.6.2.1 Type B and Type B+NYC units. Every dwelling unit and sleeping unit shall be a Type B+NYC unit unless the number of Type B+NYC units is permitted to be reduced in accordance with Section 1107.7.4. Where no Type B+NYC units are required in accordance with Section 1107.7.4, all units intended to be occupied as a residence shall be Type B units.

 EXCEPTION: The number of Type B units is permitted to be reduced in accordance with Section 1107.7.



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Group R-2: Accessible Dwelling & Sleeping Units

1107.6.2 Group R-2. Type B+NYC units and Type B units shall be provided in occupancies in Group R-2 in accordance with Section 1107.6.2.1.

1107.6.2.1 Type B and Type B+NYC units. Every dwelling unit and sleeping unit shall be a Type B+NYC unit unless the number of Type B+NYC units is permitted to be reduced in accordance with Section 1107.7.4. Where no Type B+NYC units are required in accordance with Section 1107.7.4, all units intended to be occupied as a residence shall be Type B units.

 EXCEPTION: The number of Type B units is permitted to be reduced in accordance with Section 1107.7.



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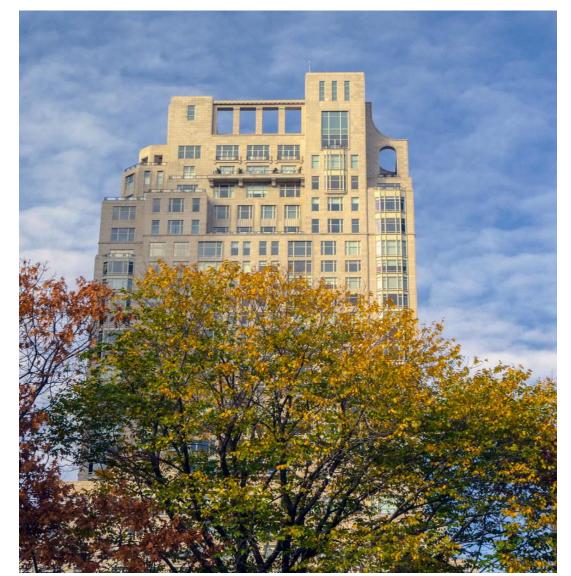


Group R-2: Accessible Dwelling & Sleeping Units

EXAMPLE: 36 Story R-2 New Building 213 apartments

#### REQUIRED: Accessible units – 0 Type B+NYC units – 213

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Group R-3: Accessible Dwelling & Sleeping Units

1107.6.3 Group R-3. In Group R-3 occupancies where there are four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

**EXCEPTION:** The number of Type B units is permitted to be reduced in accordance with Section 1107.7.



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Group R-3: Accessible Dwelling & Sleeping Units

### INTERPRETATION

An existing 2-family R-3 building did not trigger the accessibility requirements of the Prior Code, or Fair Housing.

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Group R-3: Accessible Dwelling & Sleeping Units

#### INTERPRETATION

An existing 2-family R-3 building did not trigger the accessibility requirements of the Prior Code, or Fair Housing.

Q. When a new R-3 is built, attached to a party wall, must it comply?



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Group R-3: Accessible Dwelling & Sleeping Units

#### INTERPRETATION

An existing 2-family R-3 building did not trigger the accessibility requirements of the Prior Code, or Fair Housing.

Q. When a new R-3 is built, attached to a party wall, must it comply?

A. NO The text is intended to align with the FHA, which would not require accessibility where the dwellings are not constructed together.



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# **Accessibility in Residential Buildings**

DWELLINGS



### **Reference** Standards

Accessibility requirements are contained/triggered by distinct regulations:

- DOB Plan Examination Focus
   NYC Local Law 58 of 1987 September 1, 1987
  - Reference Standard A117.1 (1986)
  - New York City Building Code
     Reference Standard A117.1 (2009)
- Design Professionals and Owners also subject to
   Fair Housing Accessibility Guidelines March 6, 1991
   Reference Standard A117.1 (1986)
  - Americans with Disabilities Act
    - Reference Standard A117.1 (2009)



https://www.archives.gov/global-pages/accessibility

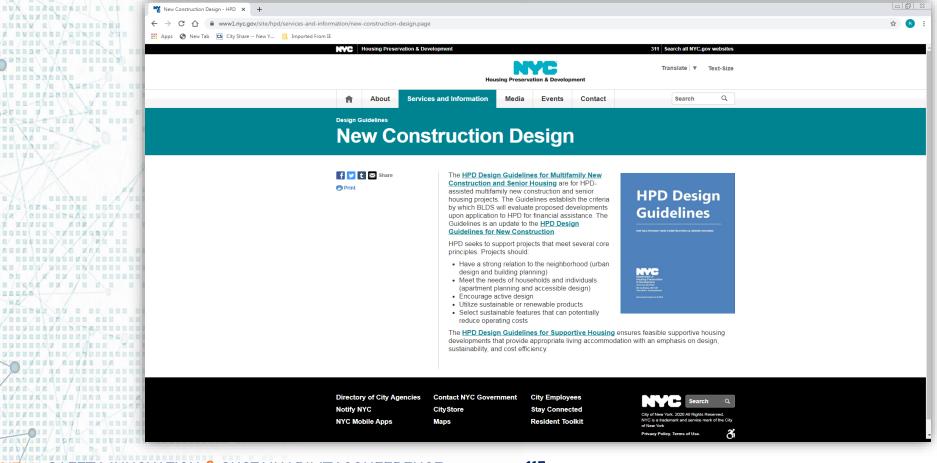


#### **ACCESSIBILITY IN RESIDENTIAL BUILDINGS** A U N H U H U

**DWELLINGS: HPD Design Guidelines** 

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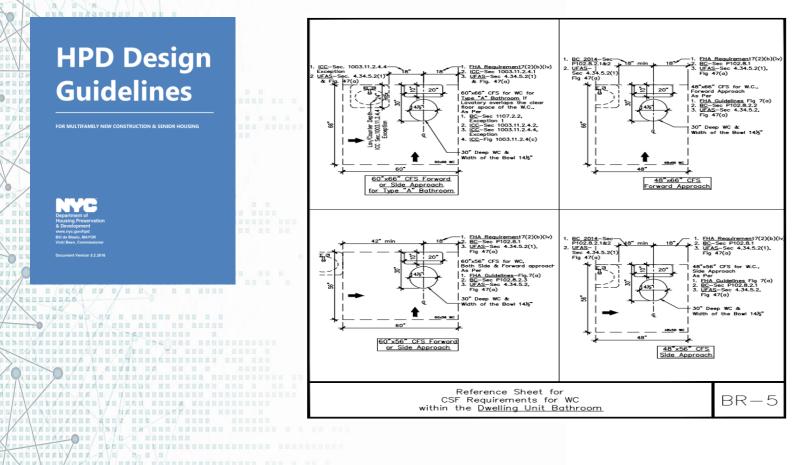




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### **DWELLINGS: HPD Design Guidelines - Components**



#### Toilet Room

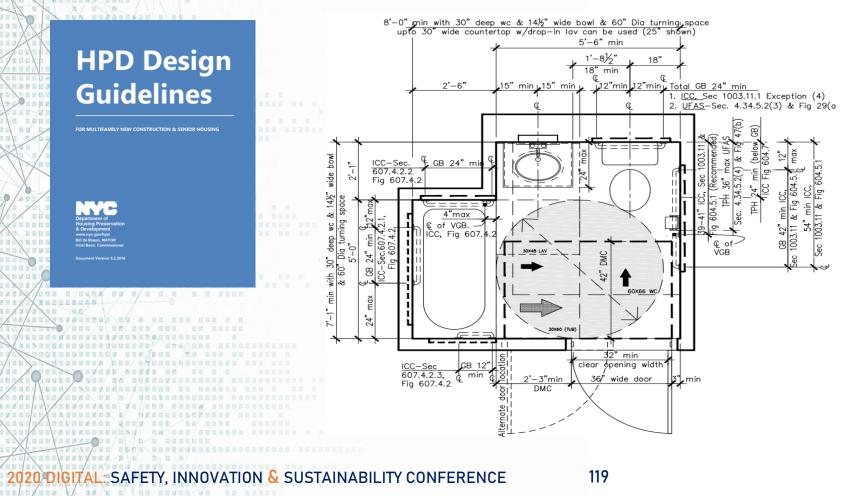
- ✓ Doors & Doorways
- ✓ Turning Space
- ✓ Water Closet
- ✓ Lavatory
- ✓ Shower
- ✓ Operable Parts



**2020 DIGITAL:** SAFETY, INNOVATION & SUSTAINABILITY CONFERENCE

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### DWELLINGS: HPD Design Guidelines – Minimum Room Sizes

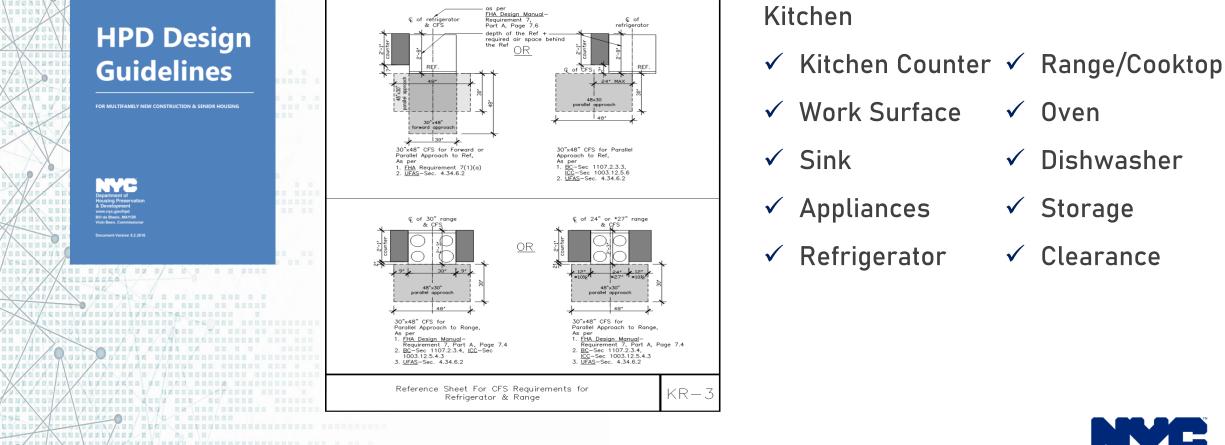


#### **Toilet Room**

- ✓ Doors & Doorways
- ✓ Turning Space
- ✓ Water Closet
- ✓ Lavatory
- ✓ Shower
- ✓ Operable Parts



### **DWELLINGS: HPD Design Guidelines - Components**

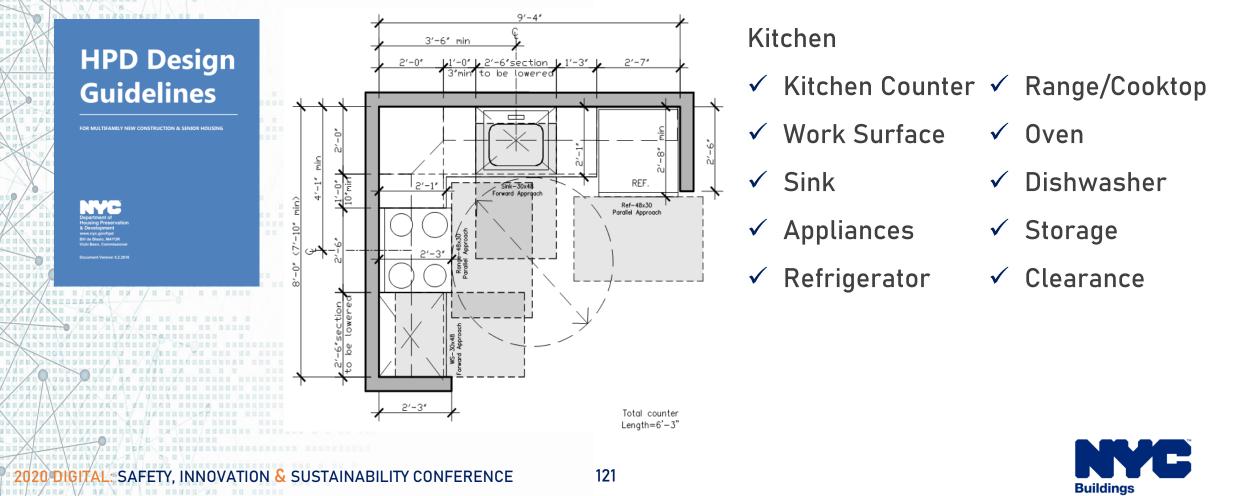


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Buildings

### DWELLINGS: HPD Design Guidelines – Minimum Room Sizes



### **DWELLINGS: ANSI A117.1 (2009)**



2. Scoping

3. Building Blocks
Floor Surfaces
Changes in Level
Turning Space
Clear Floor Space
Knee & Toe Clearance
Protruding Objects
Reach Ranges
Operable Parts

4. Accessible Routes Walking Surfaces Doors & Doorways Ramps Curb Ramps Elevators

- 5. General Site & Building Elements Parking Spaces Stairways Handrails Windows
- 6. Plumbing Elements & Facilities Drinking Fountains Toilet and Bathing Rooms Water Closets & Toilet Compartments Urinals Lavatories & Sinks Bathtubs Shower Compartments Grab Bars Seats
  Washing Machines & Clothes Dryers

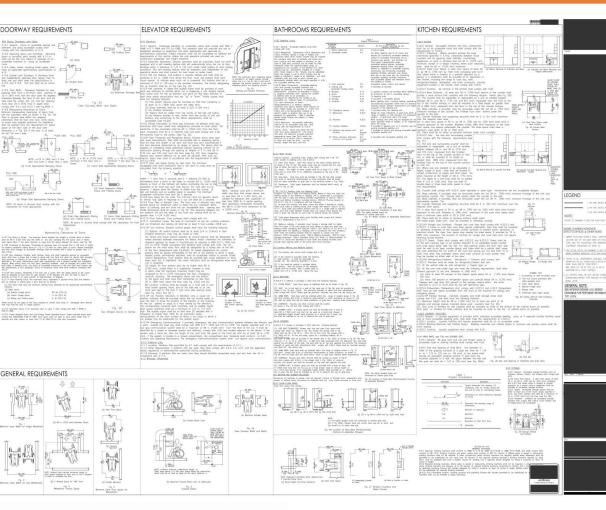
- 7. Communication Elements & Features Alarms Signs
- 8. Special Rooms and Spaces Assembly Areas Dressing, Fitting, & Locker Rooms Kitchens & Kitchenettes
- 9. Built-in Furnishings & Equipment
- 10. Dwelling Units & Sleeping Units Accessible Units Type A Units Type B Units
- Recreational Facilities
   Swimming Pools, Wading Pools, Hot Tubs & Spas



DWELLINGS

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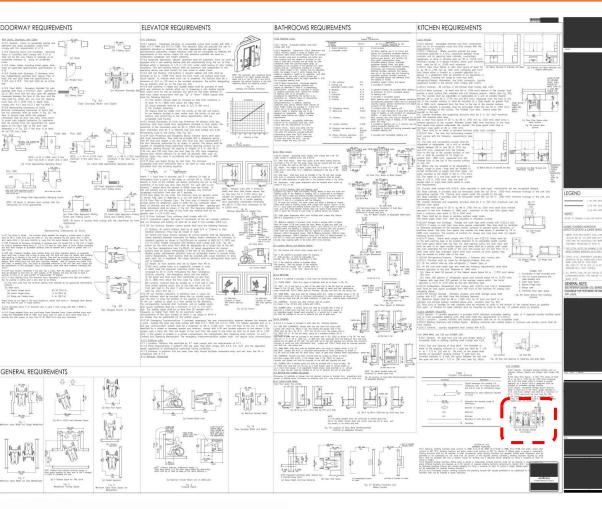


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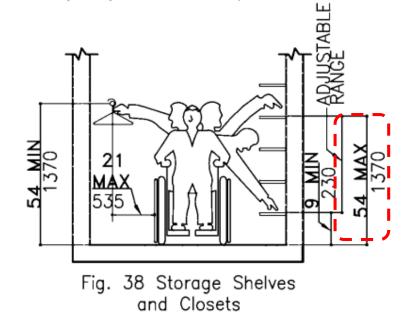


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upprouch by a person using a wheelchair shar be

provided at accessible storage facilities. 4.23.3 Height. Accessible storage spaces shall be within at least one of the reach ranges specified in 4.2.5. and 4.2.6. Clothes rods shall be a maximum of 54 in. (1370 mm) from the floor (see Fig. 38). 4.23.4 Hardware. Hardware for accessible storage facilities shall comply with 4.25.4. Touch latches and U-shaped pulls are acceptable.

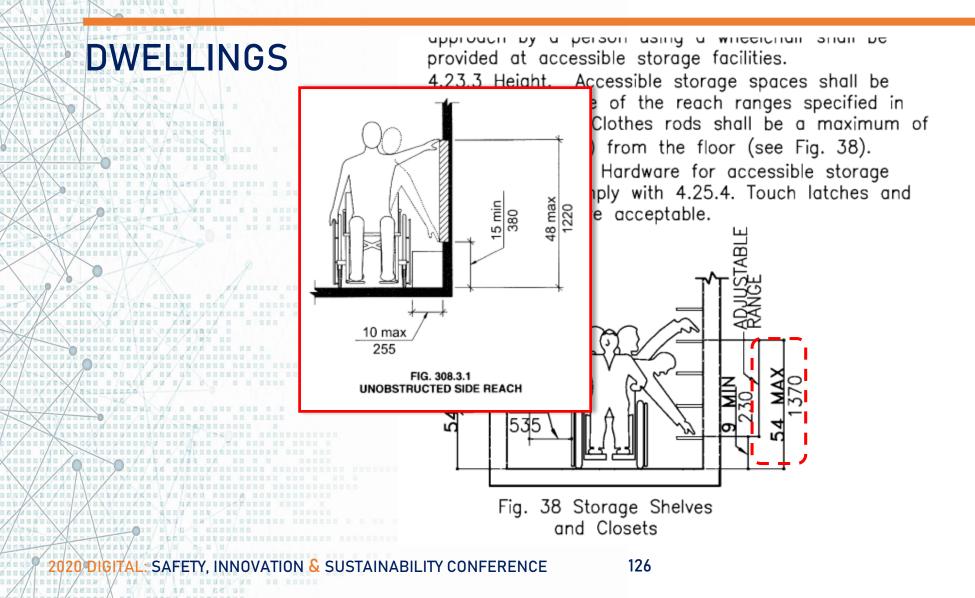




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**DWELLINGS** 

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DWELLINGS

BC Section 1107 - Accessible Dwelling and Sleeping Units

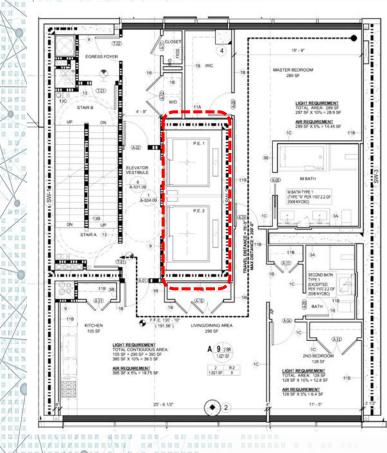
Accessible units

1107.2 Design. Dwelling units and sleeping units which are required to be Accessible units, Type B+NYC units, or Type B units shall comply with this code including Appendix P where applicable, and the applicable provisions of Chapter 10 of ICC A117.1.

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#### DWELLINGS: ANSI Chapter 10 – Accessible Units (Section 1003)



### Primary Entrance – must be on an accessible route connecting with the accessible entrance(s) and common areas

Accessible Route – all unit spaces and elements must be connected by an accessible route

Walking Surfaces – accessible route walking surfaces must comply w/Section 403

Ramps – must comply w/Section 405

Elevators / Platform lifts – elevators within units must comply w/Section 407, 408, or 409; lifts with Section 410

Doors & Doorways – all doorways intended for passage must comply w/Section 404

Turning Space – all rooms must be provided with a turning space Kitchens – must comply w/ Section 1003.12

Toilet & Bathing rooms – at least one must comply w/Section 1003.11.2; all

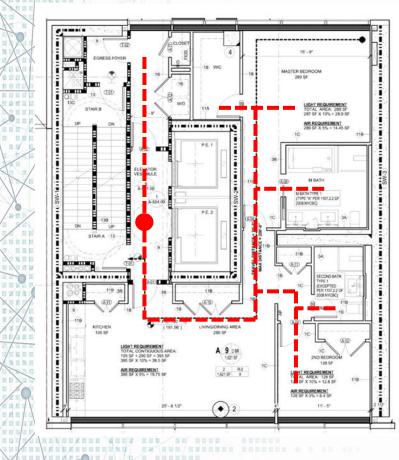
must comply w/ Section 1003.11.1

Laundry Equipment – must comply w/Section 611

Operable Parts – must comply w/Section 309



### DWELLINGS: ANSI Chapter 10 – Accessible Units (Section 1003)



Primary Entrance – must be on an accessible route connecting with the accessible entrance(s) and common areas

Accessible Route – all unit spaces and elements must be connected by an accessible route

Walking Surfaces – accessible route walking surfaces must comply w/Section 403

#### Ramps – must comply w/Section 405

Elevators/Platform lifts – elevators within units must comply w/Section 407, 408, or 409; lifts with Section 410

Doors & Doorways – all doorways intended for passage must comply w/Section 404

Turning Space – all rooms must be provided with a turning space Kitchens – must comply w/ Section 1003.12

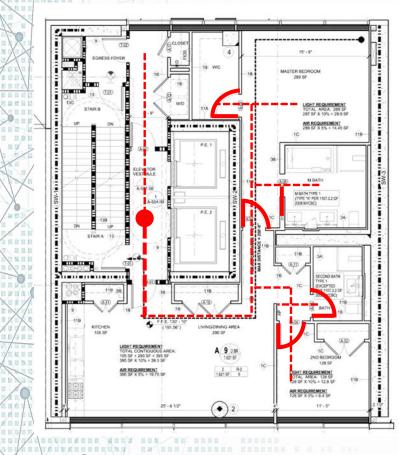
Toilet & Bathing rooms – at least one must comply w/Section 1003.11.2; all must comply w/ Section 1003.11.1

Laundry Equipment – must comply w/Section 611

Operable Parts – must comply w/Section 309



### DWELLINGS: ANSI Chapter 10 – Accessible Units (Section 1003)



Primary Entrance – must be on an accessible route connecting with the accessible entrance(s) and common areas

Accessible Route – all unit spaces and elements must be connected by an accessible route

Walking Surfaces – accessible route walking surfaces must comply w/Section 403

Ramps – must comply w/Section 405

Elevators/Platform lifts – elevators within units must comply w/Section 407, 408, or 409; lifts with Section 410

## Doors & Doorways – all doorways intended for passage must comply w/Section 404

Turning Space – all rooms must be provided with a turning space Kitchens – must comply w/ Section 1003.12

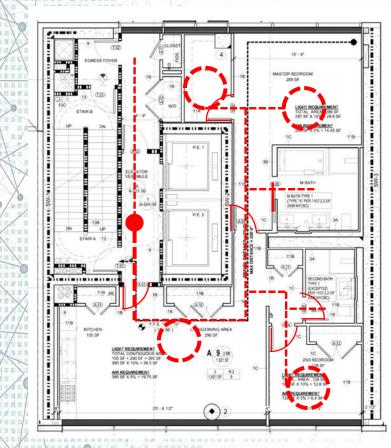
Toilet & Bathing rooms – at least one must comply w/Section 1003.11.2; all must comply w/ Section 1003.11.1

Laundry Equipment – must comply w/Section 611

Operable Parts – must comply w/Section 309



### DWELLINGS: ANSI Chapter 10 – Accessible Units (Section 1003)



Primary Entrance – must be on an accessible route connecting with the accessible entrance(s) and common areas Accessible Route – all unit spaces and elements must be connected by an accessible route Walking Surfaces – accessible route walking surfaces must comply w/Section 403

Ramps – must comply w/Section 405

Elevators/Platform lifts – elevators within units must comply w/Section 407, 408, or 409; lifts with Section 410

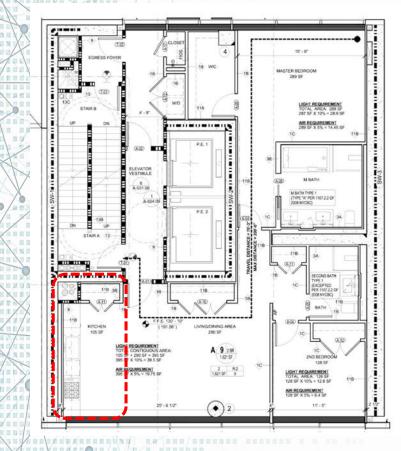
Doors & Doorways – all doorways intended for passage must comply w/Section 404

#### Turning Space – all rooms must be provided with a turning space

Kitchens – must comply w/ Section 1003.12 Toilet & Bathing rooms – at least one must comply w/Section 1003.11.2; all must comply w/ Section 1003.11.1 Laundry Equipment – must comply w/Section 611 Operable Parts – must comply w/Section 309



### DWELLINGS: ANSI Chapter 10 – Accessible Units (Section 1003)



Primary Entrance – must be on an accessible route connecting with the accessible entrance(s) and common areas Accessible Route – all unit spaces and elements must be connected by an accessible route Walking Surfaces – accessible route walking surfaces must comply w/Section 403 Ramps – must comply w/Section 405 Elevators/Platform lifts – elevators within units must comply w/Section 407, 408, or 409; lifts with Section 410 Doors & Doorways – all doorways intended for passage must comply w/Section 404 Turning Space – all rooms must be provided with a turning space

#### Kitchens – must comply w/ Section 1003.12

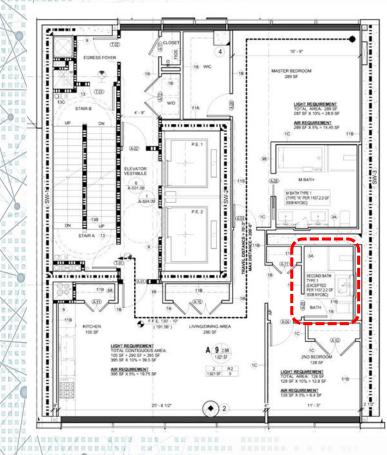
Toilet & Bathing rooms – at least one must comply w/Section 1003.11.2; all must comply w/ Section 1003.11.1

Laundry Equipment – must comply w/Section 611

Operable Parts – must comply w/Section 309



### DWELLINGS: ANSI Chapter 10 – Accessible Units (Section 1003)



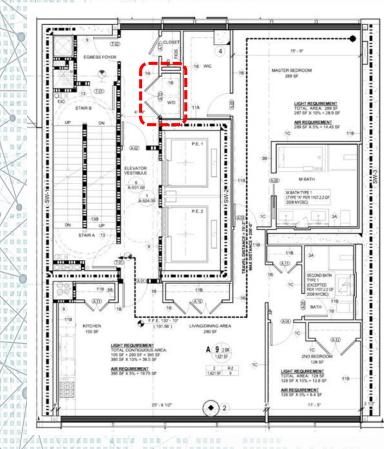
Primary Entrance – must be on an accessible route connecting with the accessible entrance(s) and common areas Accessible Route – all unit spaces and elements must be connected by an accessible route Walking Surfaces – accessible route walking surfaces must comply w/Section 403 Ramps – must comply w/Section 405 Elevators/Platform lifts – elevators within units must comply w/Section 407, 408, or 409; lifts with Section 410 Doors & Doorways – all doorways intended for passage must comply w/Section 404 Turning Space – all rooms must be provided with a turning space Kitchens – must comply w/ Section 1003.12

## Toilet & Bathing rooms – at least one must comply w/Section 1003.11.2; all must comply w/ Section 1003.11.1

Laundry Equipment – must comply w/Section 611 Operable Parts – must comply w/Section 309



### DWELLINGS: ANSI Chapter 10 – Accessible Units (Section 1003)



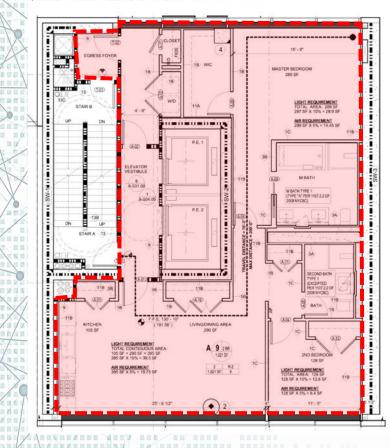
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#### Laundry Equipment – must comply w/Section 611

Operable Parts – must comply w/Section 309



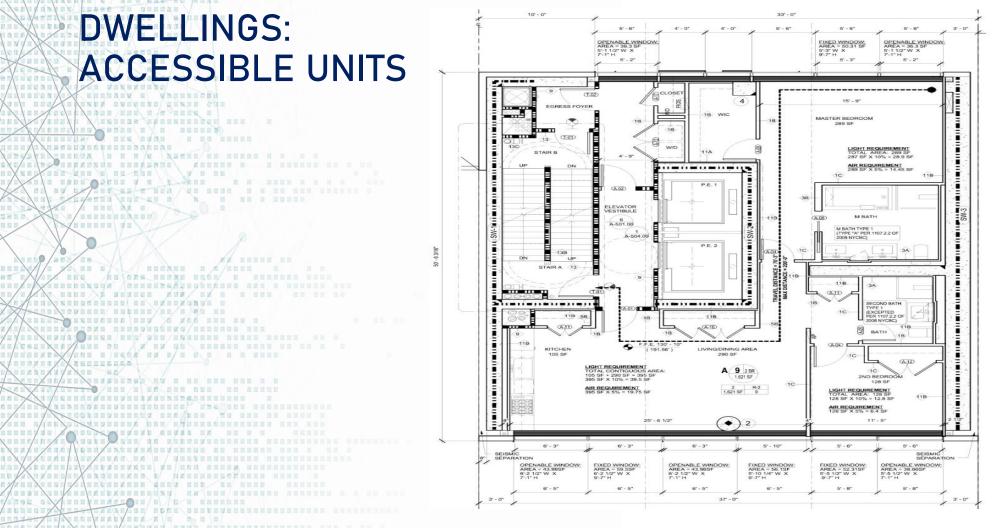
### DWELLINGS: ANSI Chapter 10 – Accessible Units (Section 1003)



Primary Entrance – must be on an accessible route connecting with the accessible entrance(s) and common areas Accessible Route – all unit spaces and elements must be connected by an accessible route Walking Surfaces – accessible route walking surfaces must comply w/Section 403 Ramps – must comply w/Section 405 Elevators/Platform lifts – elevators within units must comply w/Section 407. 408, or 409; lifts with Section 410 Doors & Doorways – all doorways intended for passage must comply w/Section 404 Turning Space – all rooms must be provided with a turning space Kitchens – must comply w/ Section 1003.12 Toilet & Bathing rooms – at least one must comply w/Section 1003.11.2; all must comply w/ Section 1003.11.1 Laundry Equipment – must comply w/Section 611

Operable Parts – must comply w/Section 309







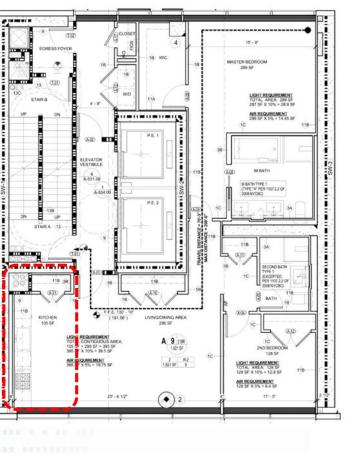
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### DWELLINGS: ANSI Chapter 10 – Accessible Units (Section 1003)



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Primary Entrance Accessible Route Walking Surfaces Ramps Elevators/Platform lifts Doors & Doorways Turning Space

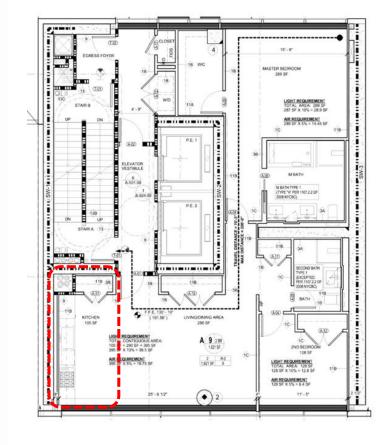
#### Kitchens

Toilet & Bathing rooms Laundry Equipment Operable Parts



### **DWELLINGS: KITCHEN**

1107.2.3 Type B+NYC unit kitchen and kitchenette. Where kitchens and kitchenettes are provided in the Type B+NYC dwelling unit or sleeping unit, the primary kitchen or kitchenette shall be constructed in accordance with the kitchen requirements of Section 1003.12 (Kitchen) of ICC A117.1 and Sections 1107.2.3.1 through 1107.2.3.5 of this code. Secondary kitchens and kitchenettes within the same dwelling unit or sleeping unit shall be required to comply only with Section 1004.12 (Kitchens) of ICC A117.1.

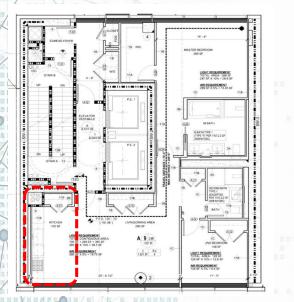


Kitchen Counter Work Surface Sink Appliances Refrigerator Range/Cooktop Oven Dishwasher Storage Clearance

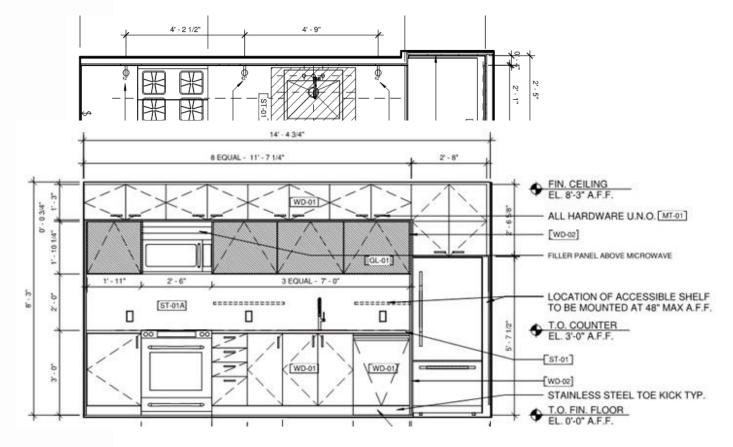


### **DWELLINGS: KITCHEN**

Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher, Storage, Clearance



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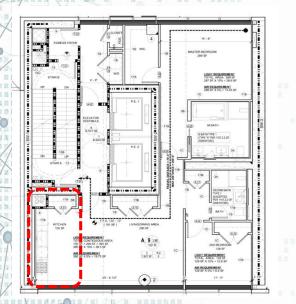




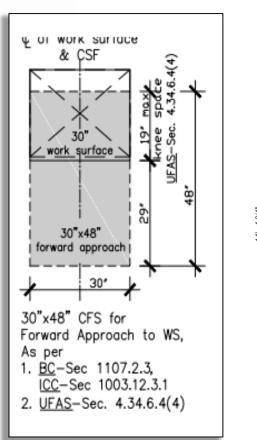
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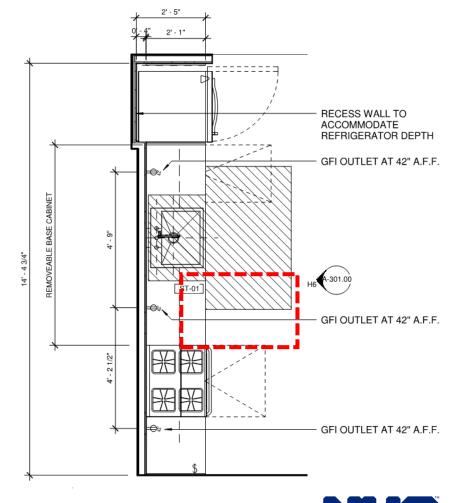
### **DWELLINGS: KITCHEN**

Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher, Storage, Clearance







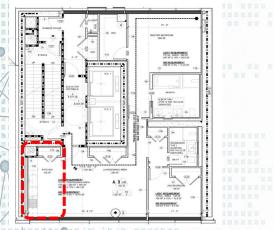




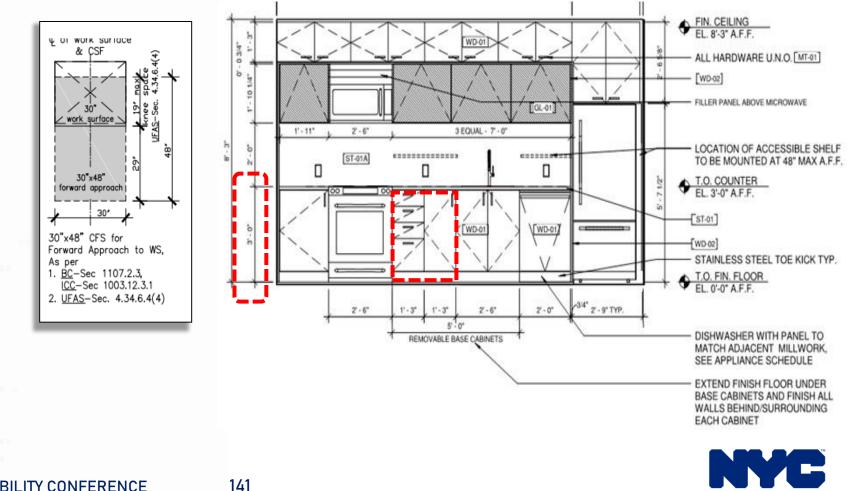
### **DWELLINGS: KITCHEN**

Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher,

Storage, Clearance





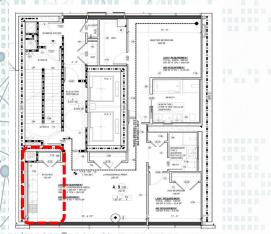


Buildings

### **DWELLINGS: KITCHEN**

Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher,

Storage, Clearance



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**1107.2.3 Type B+NYC unit kitchen and kitchenette.** Where kitchens and kitchenettes are provided in the Type B+NYC dwelling unit or sleeping unit, the primary kitchen or kitchenette shall be constructed in accordance with the kitchen requirements of Section 1003.12 (Kitchen) of ICC A117.1 and Sections 1107.2.3.1 through 1107.2.3.5 of this code. Secondary kitchens and kitchenettes within the same dwelling unit or sleeping unit shall be required to comply only with Section 1004.12 (Kitchens) of ICC A117.1.

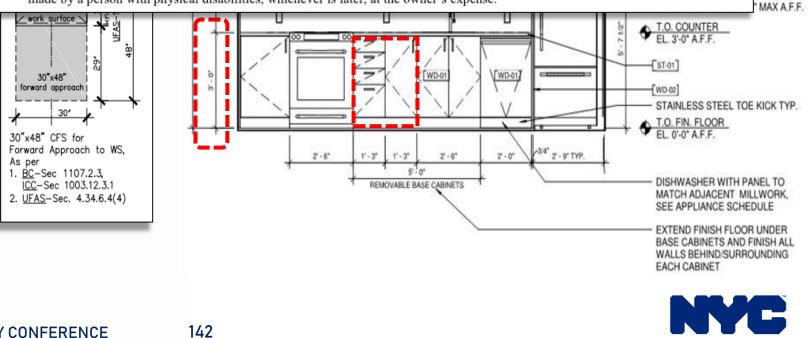
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Buildings

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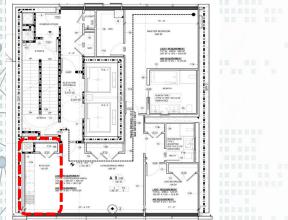
**1107.2.3.1 Kitchen counters.** A kitchen counter that is required to comply with Section 1003.12.3.2 or 1003.12.4.2 (Height) of ICC A117.1 shall be permitted to be adjustable or designed to be replaceable as a unit at variable heights between 29 inches and 36 inches (737 mm and 914 mm), measured from the floor to the top of the work surface. The owner shall adjust or replace such countertop at the time a person with physical disabilities takes occupancy of the unit, or within 10 days of the date the request is made by a person with physical disabilities, whichever is later, at the owner's expense.



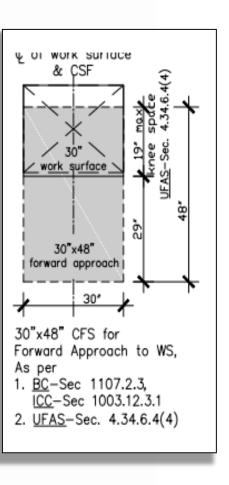
### **DWELLINGS: KITCHEN**

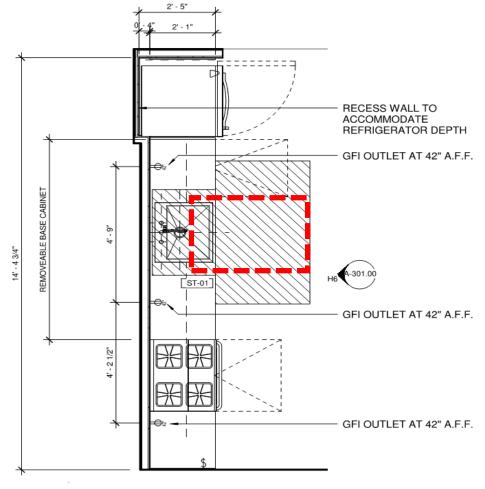
Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher,

Storage, Clearance



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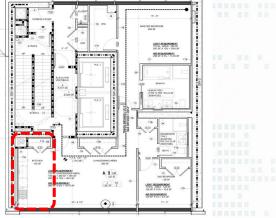




### **DWELLINGS: KITCHEN**

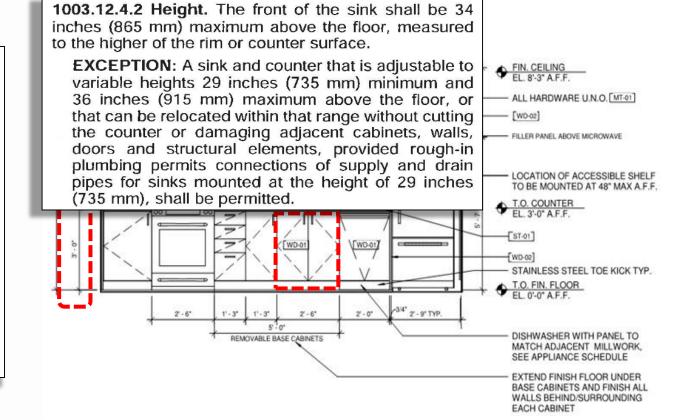
Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher,

Storage, Clearance



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y of work surface & CSF y of work surface work surface 30"x48" cFS for Forward approach to WS, As per 1. BC-Sec 1107.2.3, ICC-Sec 1003.12.3.1 2. UFAS-Sec. 4.34.6.4(4)

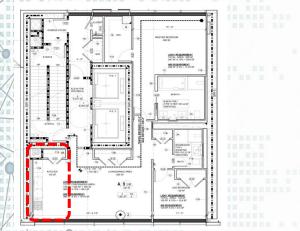




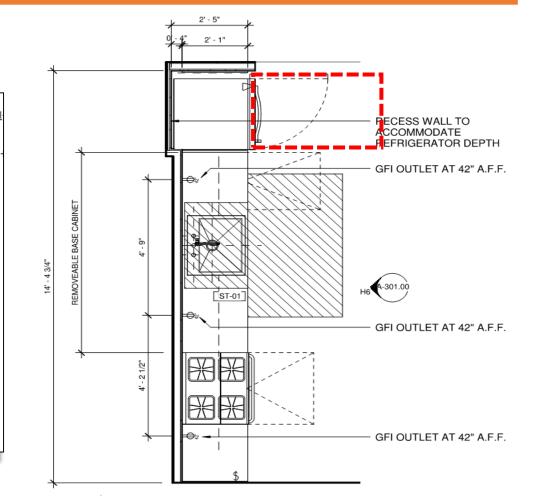
#### **DWELLINGS: KITCHEN**

Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher,

Storage, Clearance



as per FHA Design Manua € of refrigerator Requirement 7. & CFS Part A, Page 7.6 depth of the Ref required air space the Ref OR REF 30" è 30"x48" forward approad 30"x48" CFS for Forward or Parallel Approach to Ref, As per 1. <u>FHA</u> Requirement 7(1)(a) 2. UFAS-Sec. 4.34.6.2



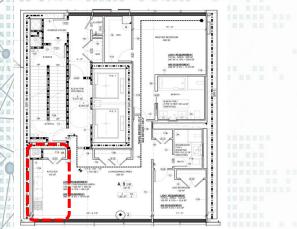


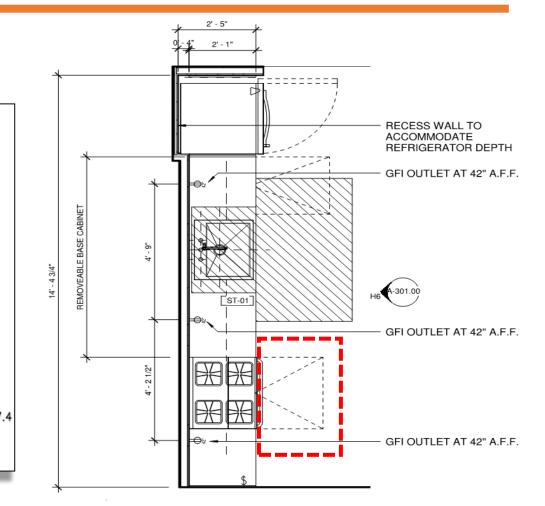
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#### **DWELLINGS: KITCHEN**

Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher,

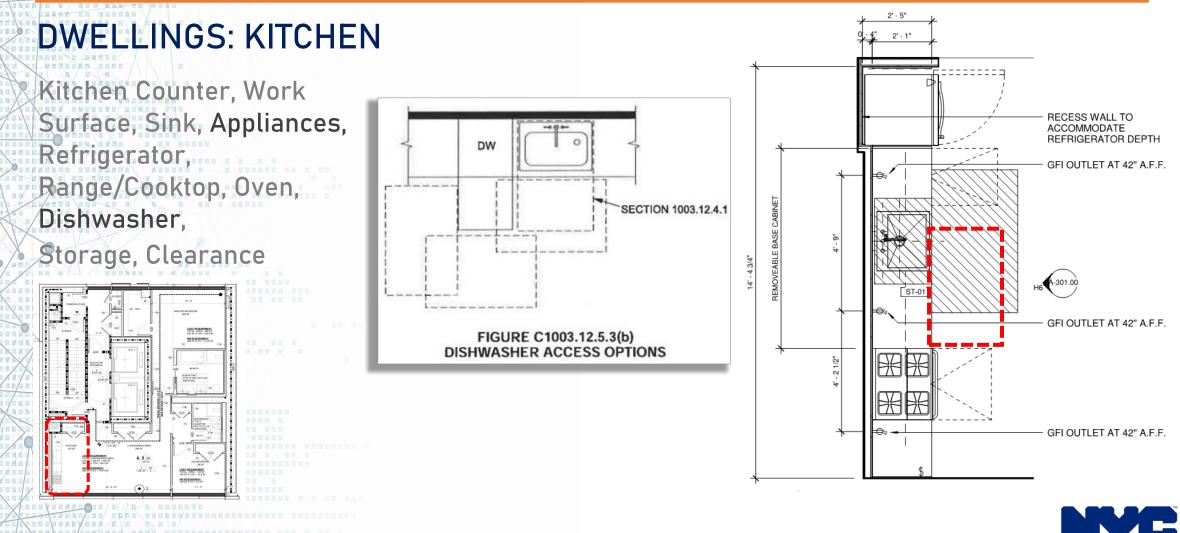
Storage, Clearance







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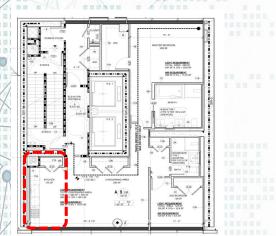


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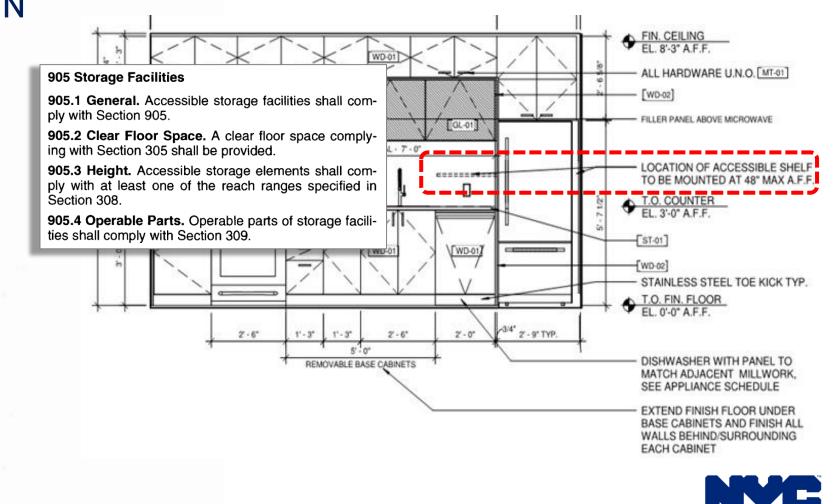
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#### **DWELLINGS: KITCHEN**

Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher, Storage, Clearance

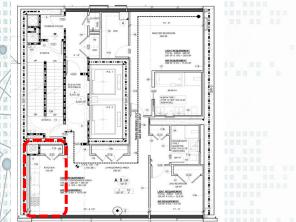


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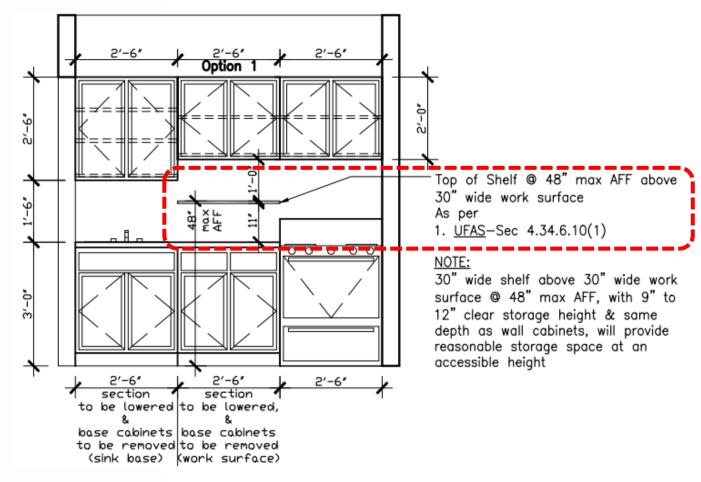


#### **DWELLINGS: KITCHEN**

Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher, Storage, Olearance



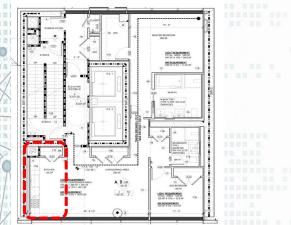
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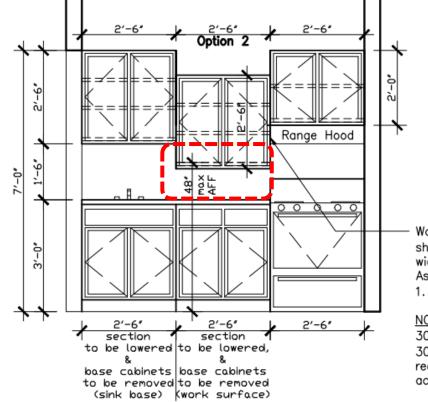
#### **DWELLINGS: KITCHEN**

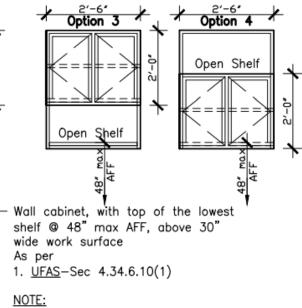
Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher, Storage, Clearance



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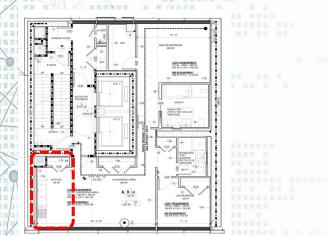
30" wide, taller wall cabinet above 30" wide work surface will provide reasonable storage space at an accessible height.



#### **DWELLINGS: KITCHEN**

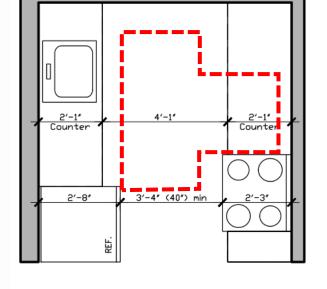
Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher, Storage,

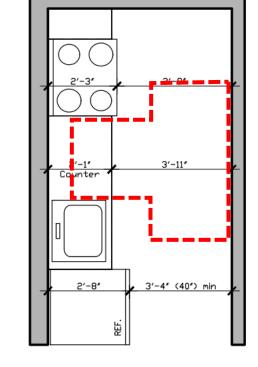
Clearance



1003.12.1.1 Minimum Clearance. Clearance between all opposing base cabinets, counter tops, appliances, or walls within kitchen work areas shall be 40 inches (1,015mm) minimum.

**NYC** Buildings

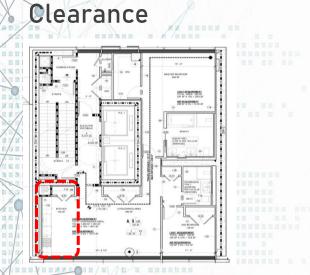


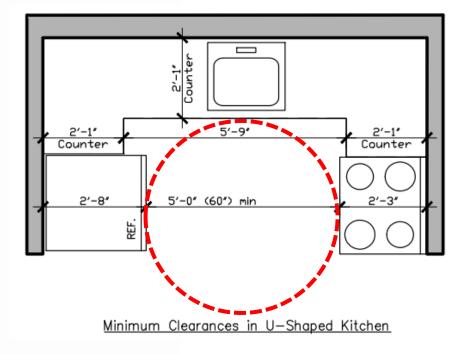


SUSTAINABILITY CONFERENCE

#### **DWELLINGS: KITCHEN**

Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher, Storage,





NOTE: Consider the most protruding element in the kitchen while calculating the clearances

#### "U" Shaped Kitchens:

- In kitchens with counters, appliances or cabinets on three contiguous sides, Clearance between all opposing base cabinets, counter tops, appliances or walls shall be is at least 40" minimum As per
- 1. FHA Requirement 7(1)(c)
- 2. <u>BC</u>-Sec 1107.2.3,
- ICC-Sec 1003.12.1.2
- 3. <u>UFAS</u>-Sec 4.34.6.1

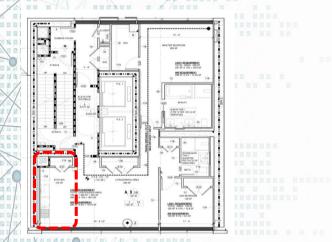
1003.12.1.2 U-Shaped Kitchens. In kitchens with counters, appliances, or cabinets on three contiguous sides, clearance between all opposing base cabinets, countertops, appliances, or walls within kitchen work areas shall be 60 inches minimum.



#### **DWELLINGS: KITCHEN**

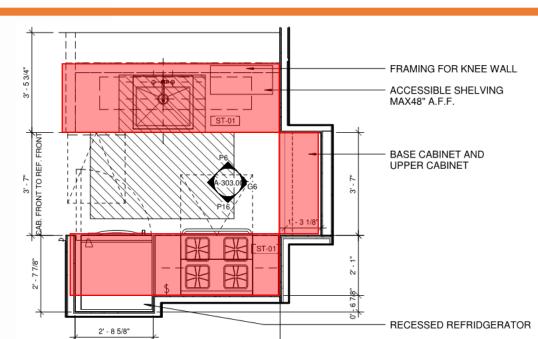
Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher, Storage,

#### Clearance



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#### QUESTION

- Is this kitchen a galley, or U-shape?
- Does it comply?

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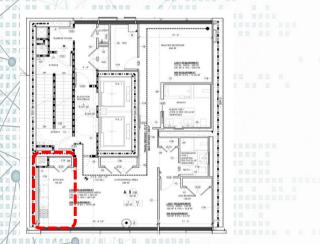
7' - 1 5/8'



#### **DWELLINGS: KITCHEN**

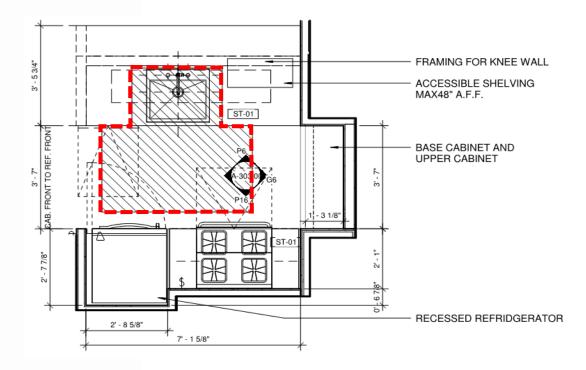
Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher, Storage,

#### Clearance



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#### QUESTION

- Is this kitchen a galley, or U-shape?
- Does it comply?

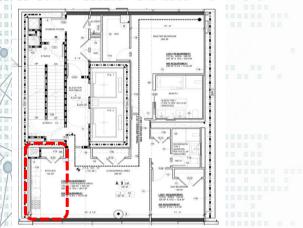


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#### **DWELLINGS: KITCHEN**

Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher, Storage,

Clearance



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QUESTION Is this kitchen a galley, or U-shape? Does it comply?



FRAMING FOR KNEE WALL

ACCESSIBLE SHELVING

BASE CABINET AND UPPER CABINET

MAX48" A.F.F.

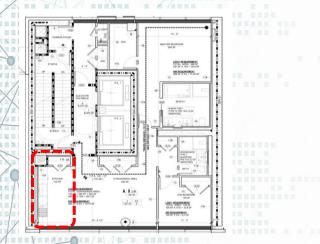
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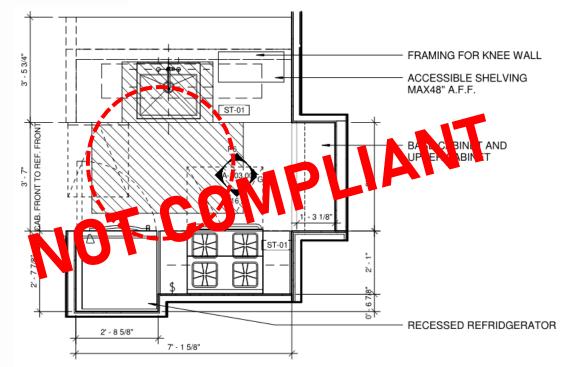
#### **DWELLINGS: KITCHEN**

Kitchen Counter, Work Surface, Sink, Appliances, Refrigerator, Range/Cooktop, Oven, Dishwasher, Storage,

#### Clearance



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#### QUESTION

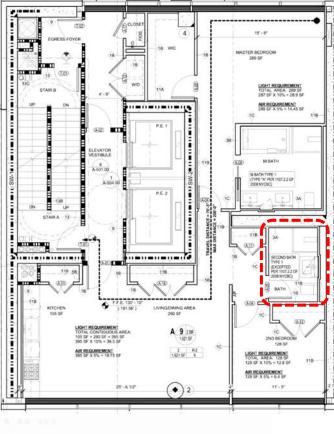
- Is this kitchen a galley, or U-shape?
- Does it comply?



#### DWELLINGS: ACCESSIBLE UNITS



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Primary Entrance Accessible Route Walking Surfaces Ramps Elevators/Platform lifts Doors & Doorways Turning Space Kitchens

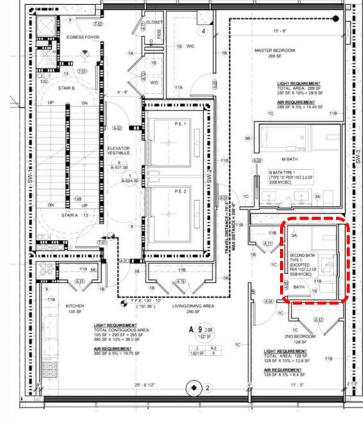
**Toilet & Bathing Rooms** 

Laundry Equipment Operable Parts



#### **DWELLINGS: TOILET & BATHING ROOMS**

1107.2.2 Type B+NYC unit toilet and bathing rooms. Where toilet and bathing rooms are provided in the Type B+NYC dwelling unit or sleeping unit, all such toilet and bathing rooms shall comply with Appendix P.

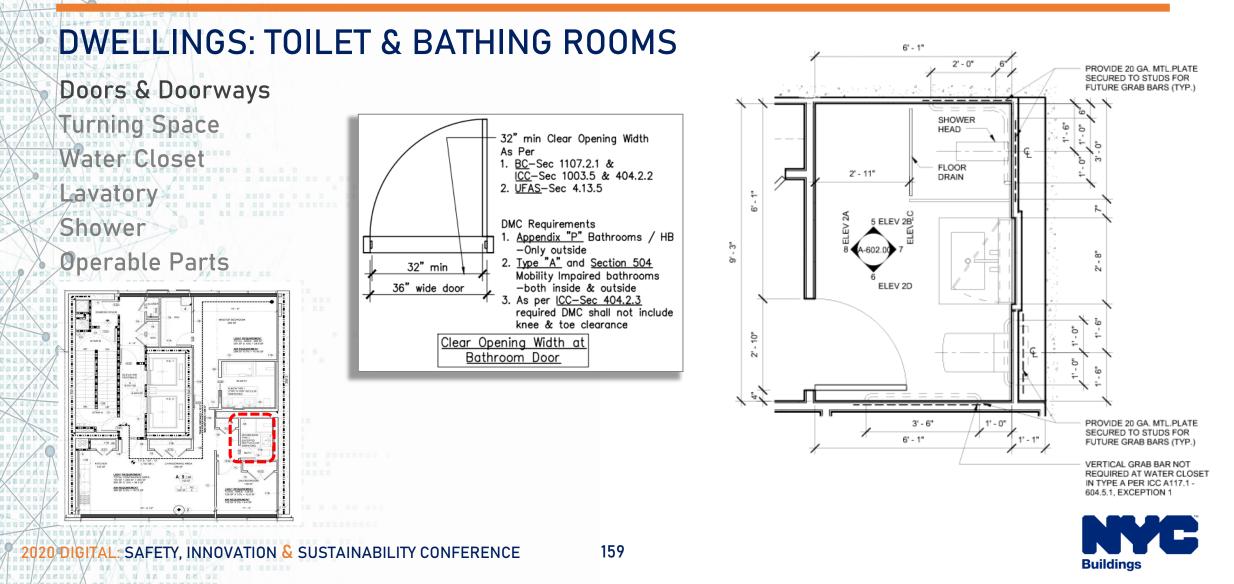


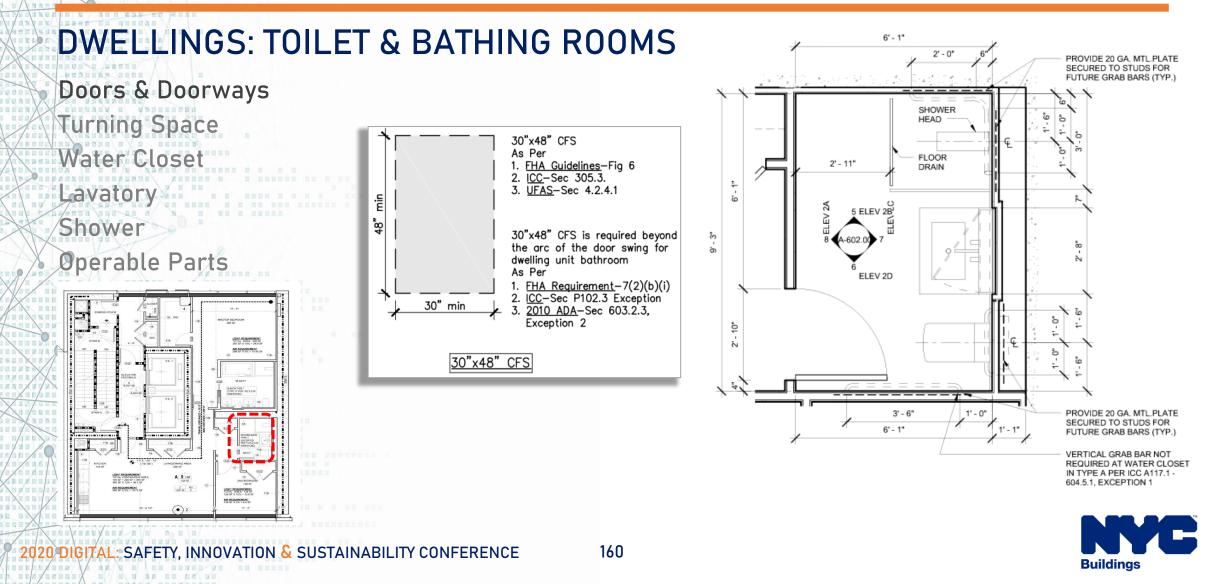
Doors & Doorways Turning Space Water Closet Lavatory Shower Operable Parts

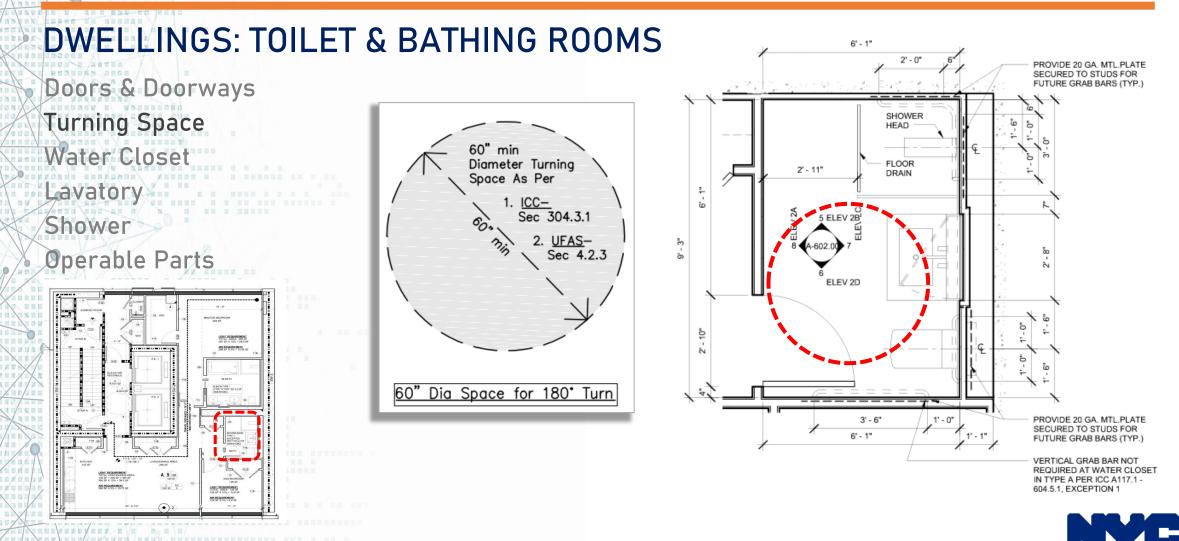


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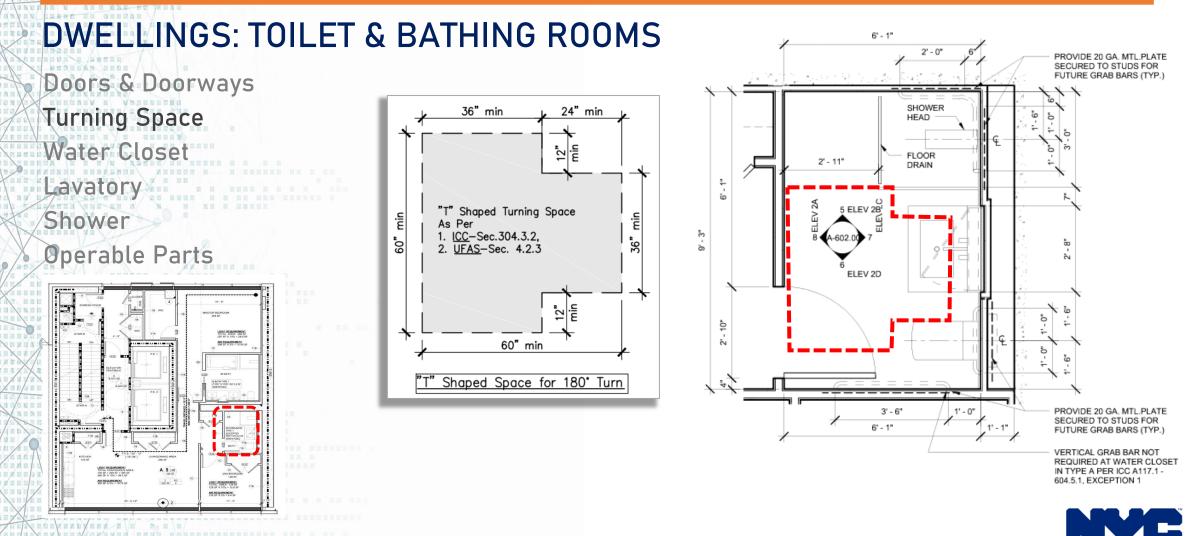




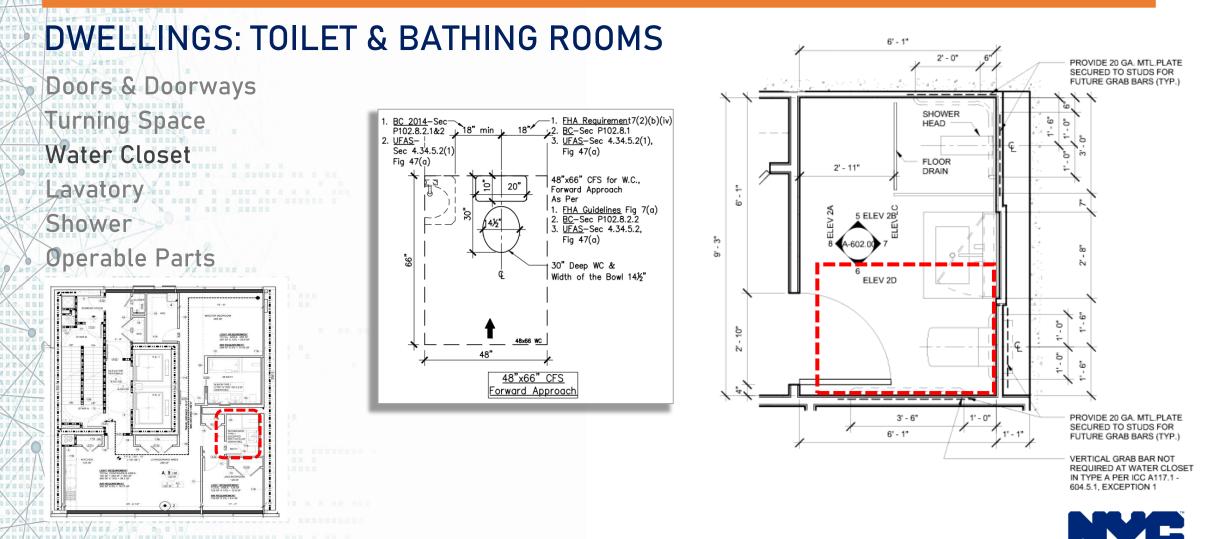


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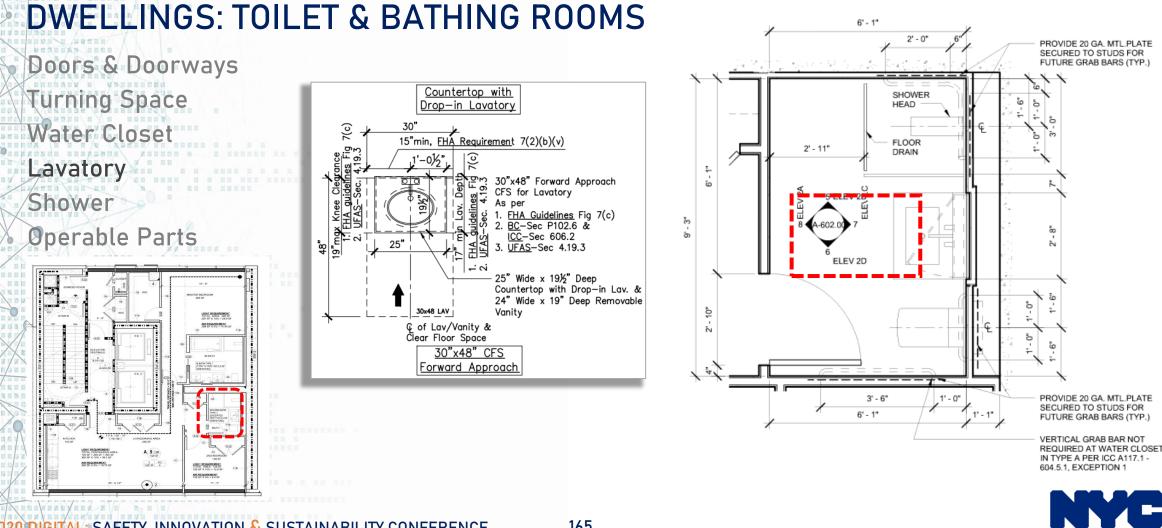
#### **DWELLINGS: TOILET & BATHING ROOMS** 6' - 1" 2' - 0" PROVIDE 20 GA. MTL.PLATE Doors & Doorways SECURED TO STUDS FOR FUTURE GRAB BARS (TYP.) **Turning Space** SHOWER 24"min Total GB 36" min را 12"min الم HEAD 1. ANSI-Sec 4.16.4, Fig 29 2. I<u>CC</u>-Sec 604.5.2, Fig 604.5.2 3. <u>UFAS</u>-Sec 4.16.4, Fig 29 4. <u>ADA</u>-Sec 604.5.2, Fig 604.5.2 Water Closet FLOOR 2' - 11" DRAIN Lavatory 604. έρ Shower ICC, Se iq 604.5 5 ELEV 2B ш **Operable** Parts A-602.0 € of VGB ELEV 2D 1. <u>ANSI</u>-Sec 4.16.4, Fig 29 → 2. ICC-Sec 604.5.1, Fig 604.5.1 3. <u>UFAS</u>-Sec 4.16.4, Fig 29 4. <u>ADA</u>-Sec 604.5.1, Fig 604.5.1 LIGHT REGARDEMENT TOTAL AREA: 289 SP 287 SF X 10% - 28.9 SP è AR REQUIREMENT Ň Horizontal & Vertical Grab Bar Placement 3' - 6 1' - 0' PROVIDE 20 GA. MTL.PLATE SECURED TO STUDS FOR FUTURE GRAB BARS (TYP. VERTICAL GRAB BAR NOT A 9 288 REQUIRED AT WATER CLOSET 2 H2 18215F 9 IN TYPE A PER ICC A117.1 -NR REQUIREMENT 604.5.1, EXCEPTION 1



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SAFETY. INNOVATION & SUSTAINABILITY CONFERENCE

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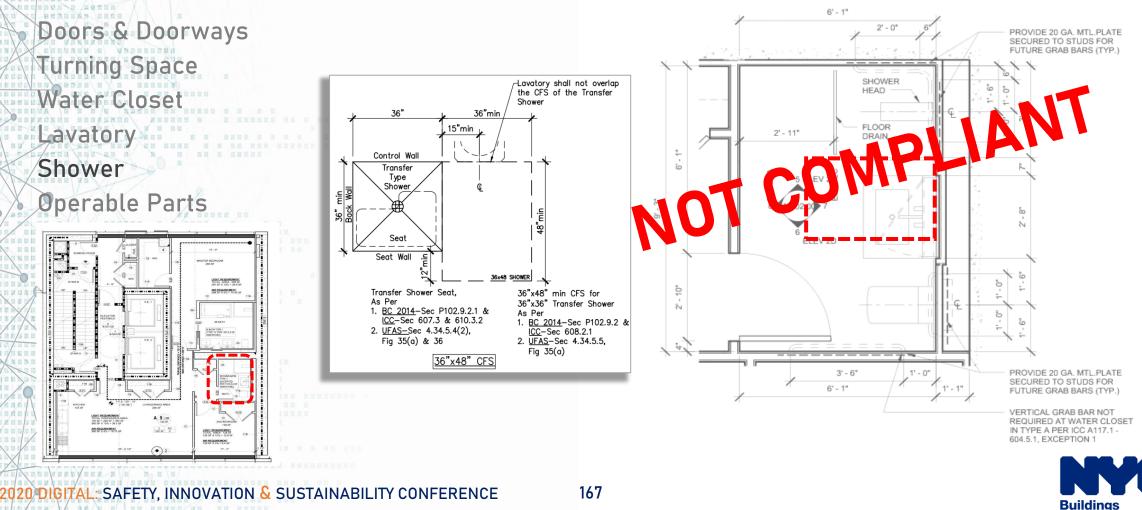
#### **DWELLINGS: TOILET & BATHING ROOMS** 6' - 1" 2' - 0" PROVIDE 20 GA. MTL.PLATE Doors & Doorways SECURED TO STUDS FOR FUTURE GRAB BARS (TYP. **Turning Space** Lavatory shall not overlap the CFS of the Transfer SHOWER HEAD Shower Water Closet 36' 36"min 15"min FLOOR 2' - 11" DRAIN Lavatory Control Wall Transfer Type ê Shower Shower ELEV 2B<sup>1</sup> 36" min Back Wall Ъ **Operable** Parts ā Seat Seat Wall 36x48 SHOWER Transfer Shower Seat, 36"x48" min CFS for ъ As Per 36"x36" Transfer Shower LIGHT REGUIREMENT TOTAL AREA: 289 59 1. BC 2014-Sec P102.9.2.1 & As Per AR REQUIREMENT ICC-Sec 607.3 & 610.3.2 1. <u>BC 2014</u>-Sec P102.9.2 & <u>ICC</u>-Sec 608.2.1 2. <u>UFAS</u>-Sec 4.34.5.5, έN 2. UFAS-Sec 4.34.5.4(2), Fig 35(a) & 36 8 Fig 35(a) 36"x48" CFS 1' - 0" 3' - 6" PROVIDE 20 GA. MTL.PLATE SECURED TO STUDS FOR 6' - 1" FUTURE GRAB BARS (TYP. VERTICAL GRAB BAR NOT A 9 288 REQUIRED AT WATER CLOSET IN TYPE A PER ICC A117.1 -2 H2 18215F 9 604.5.1, EXCEPTION 1 NR REQUIREMENT

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#### **DWELLINGS: TOILET & BATHING ROOMS**

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#### **DWELLINGS: TOILET & BATHING ROOMS**

Doors & Doorways Turning Space Water Closet Lavatory Shower

# Operable Parts

1107.2.2 Type B+NYC unit toilet and bathing rooms. Where toilet and bathing rooms are provided in the Type B+NYC dwelling unit or sleeping unit, all such toilet and bathing rooms shall comply with Appendix P.

Exception for Type A toilet and bathing room:

1. Where at least one toilet and bathing room in the Type B+NYC dwelling unit or sleeping unit is constructed in accordance with the Type A toilet and bathing facilities requirements of Section 1003.11 (Toilet and Bathing Facilities), including Section 1003.3.2 (Turning Space), of ICC A117.1 and is in compliance with the following:

1.1. At least one lavatory, one water closet and either a bathtub or shower within such toilet or bathing facility shall comply with Section 1003.11 of ICC A117.1. Such toilet and bathing fixtures shall be in a single toilet or bathing area, such that travel between fixtures does not require travel beyond the area in which the fixtures of such toilet or bathing room are located.

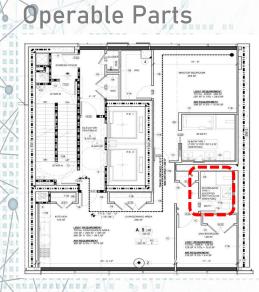
1.2. Toilet paper dispensers within such rooms shall comply with Section 604.7 (Dispensers) of ICC A117.1.

1.3. Medicine cabinets, if provided, must include a storage shelf no higher than 44 inches (1118 mm) above the floor.

2. Where at least one toilet and bathing room complying with Sections 1003.11 and 1002.3.2 of ICC A117.1 is provided within the Type B+NYC dwelling unit or sleeping unit in accordance with Item 1 of this exception, other toilet and bathing rooms in the same unit shall be required to comply only with Sections 1004.3 (Accessible route), 1004.4 (Walking Surfaces), 1004.5.2 (User Passage Doorways), 1004.9 (Operable Parts) and 1004.11.1 (Grab Bar and Shower Seat SUSTAREINFORCEMENT) of FCC A117.1. 100 Section 5

#### **DWELLINGS: TOILET & BATHING ROOMS**

Doors & Doorways Turning Space Water Closet Lavatory Shower



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1107.2.2 Type B+NYC unit toilet and bathing rooms. Where toilet and bathing rooms are provided in the Type B+NYC dwelling unit or sleeping unit, all such toilet and bathing rooms shall comply with Appendix P.

Exception for Type A toilet and bathing room:

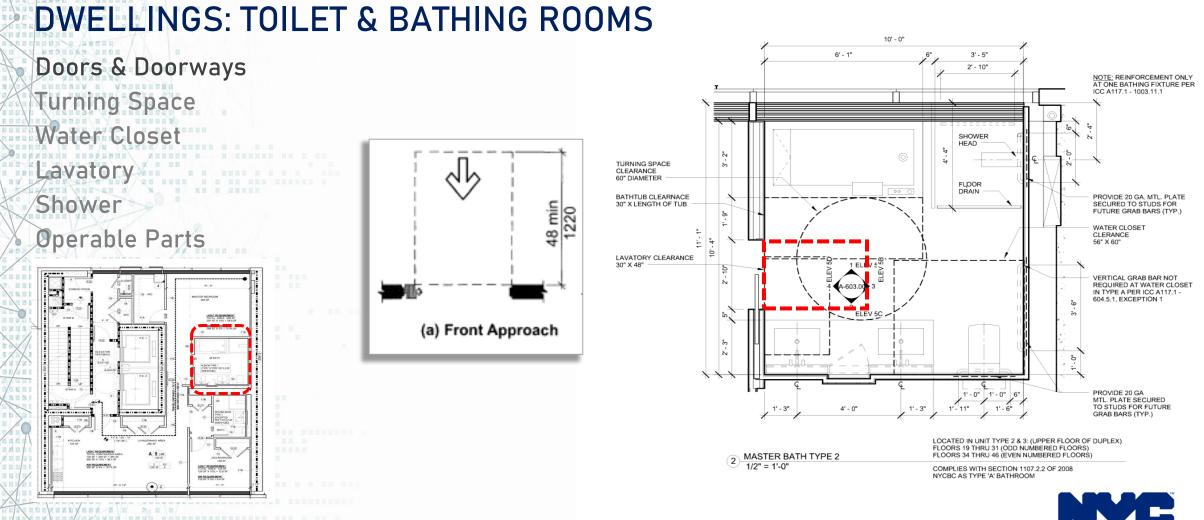
1. Where at least one toilet and bathing room in the Type B+NYC dwelling unit or sleeping unit is constructed in accordance with the Type A toilet and bathing facilities requirements of Section 1003.11 (Toilet and Bathing Facilities), including Section 1003.3.2 (Turning Space), of ICC A117.1 and is in compliance with the following:

1.1. At least one lavatory, one water closet and either a bathtub or shower within such toilet or bathing facility shall comply with Section 1003.11 of ICC A117.1. Such toilet and bathing fixtures shall be in a single toilet or bathing area, such that travel between fixtures does not require travel beyond the area in which the fixtures of such toilet or bathing room are located.

1.2. Toilet paper dispensers within such rooms shall comply with Section 604.7 (Dispensers) of ICC A117.1.

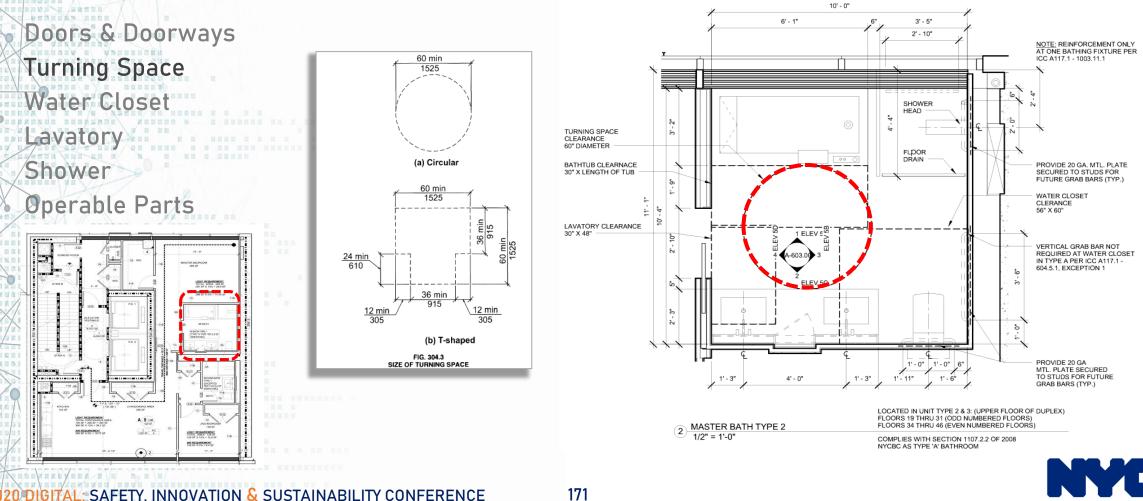
1.3. Medicine cabinets, if provided, must include a storage shelf no higher than 44 inches (1118 mm) above the floor.

2. Where at least one toilet and bathing room complying with Sections 1003.11 and 1002.3.2 of ICC A117.1 is provided within the Type B+NYC dwelling unit or sleeping unit in accordance with Item 1 of this exception, other toilet and bathing rooms in the same unit shall be required to comply only with Sections 1004.3 (Accessible route), 1004.4 (Walking Surfaces), 1004.5.2 (User Passage Doorways), 1004.9 (Operable Parts) and 1004.11.1 (Grab Bar and Shower Seat SUSTAREINFORCEMENT) of FCC A117.1. Boors and doorways to such toilet and bathing rooms shall be subject to Section 1107.2.1 Exception 5

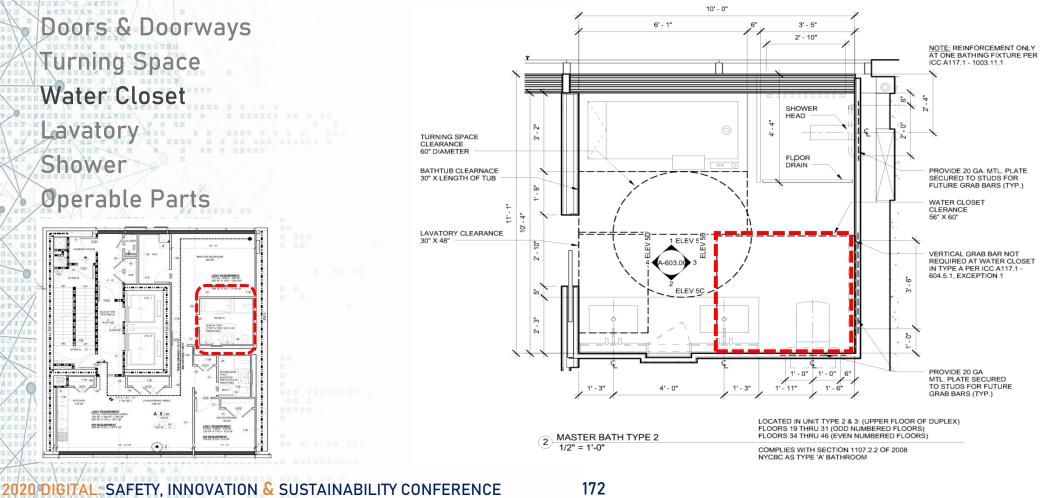


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#### **DWELLINGS: TOILET & BATHING ROOMS**



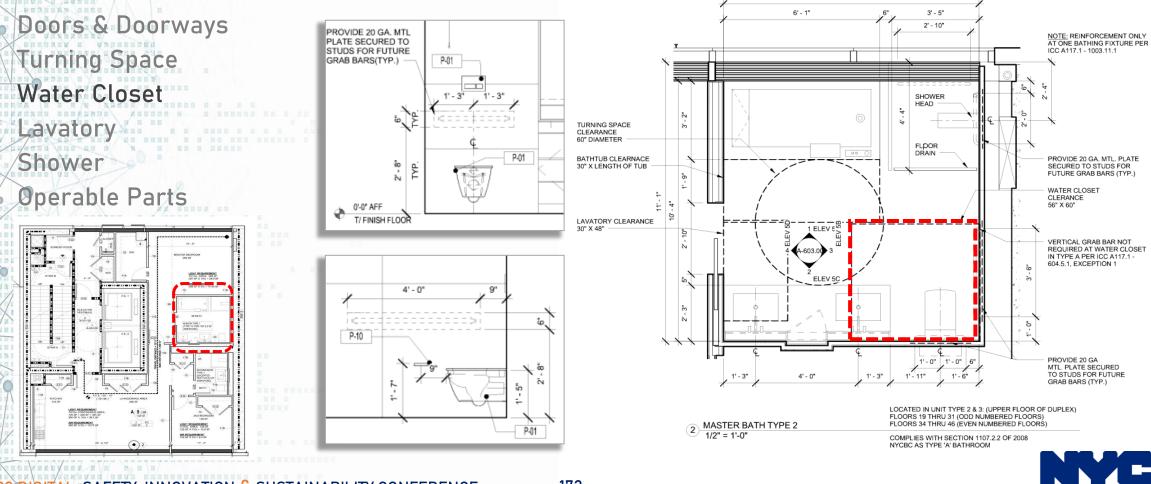
#### **DWELLINGS: TOILET & BATHING ROOMS**



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Buildings

#### **DWELLINGS: TOILET & BATHING ROOMS**



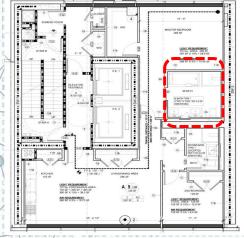
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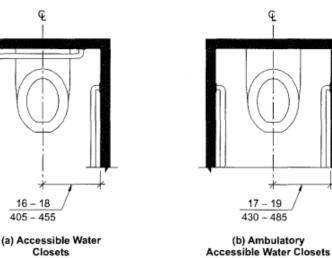
#### **DWELLINGS: TOILET & BATHING ROOMS**

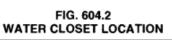
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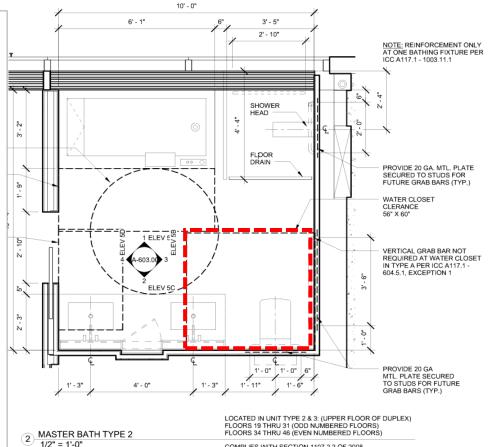
Doors & Doorways **Turning Space** Water Closet Lavatory Shower **Operable** Parts



604.2 Location. The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches (405 mm) minimum and 18 inches (455 mm) maximum from the side wall or partition. Water closets located in ambulatory accessible compartments specified in Section 604.10 shall have the centerline of the water closet 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition.



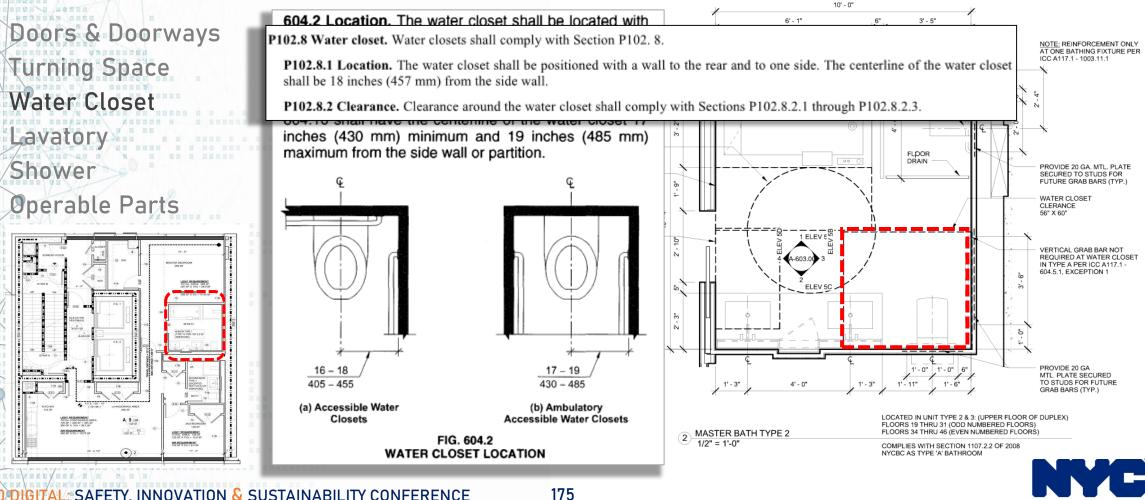




COMPLIES WITH SECTION 1107.2.2 OF 2008 NYCBC AS TYPE 'A' BATHROOM



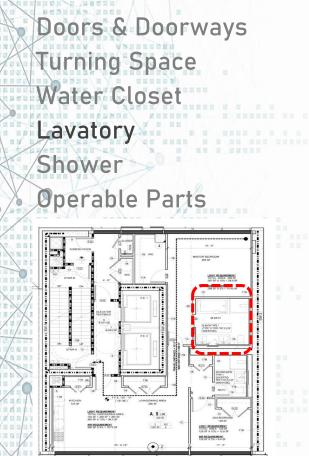
#### **DWELLINGS: TOILET & BATHING ROOMS**



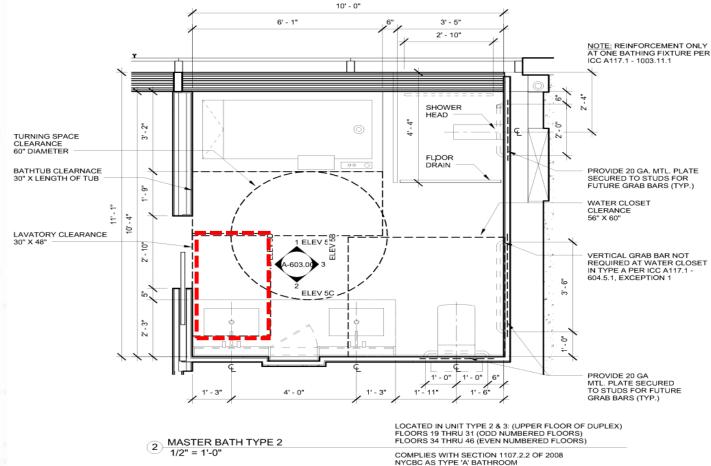
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#### **DWELLINGS: TOILET & BATHING ROOMS**



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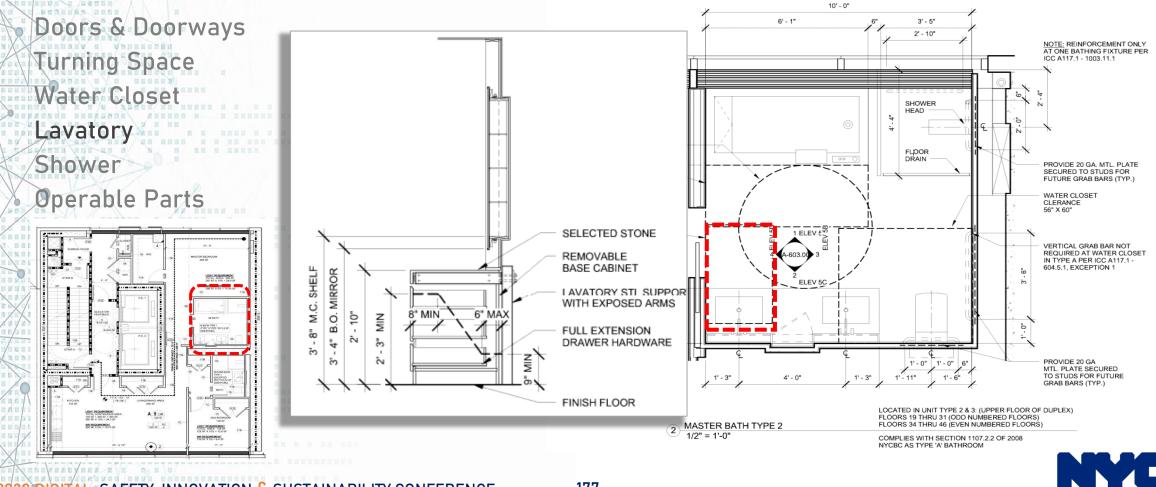


Buildings

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#### **DWELLINGS: TOILET & BATHING ROOMS**



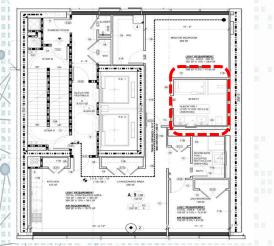
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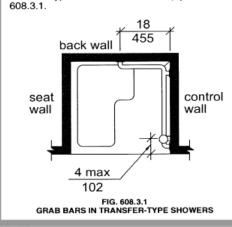
#### **DWELLINGS: TOILET & BATHING ROOMS**

Doors & Doorways Turning Space Water Closet Lavatory Shower

#### Operable Parts

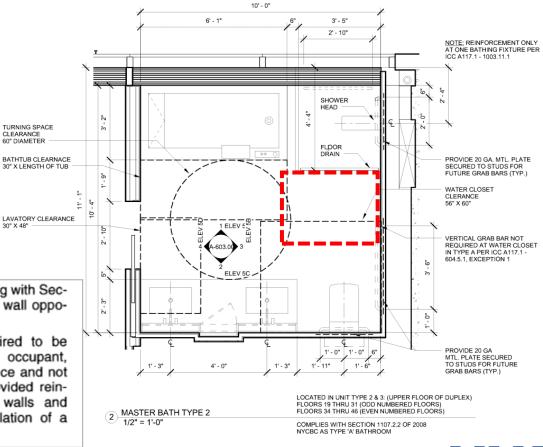


608.3.1 Transfer-Type Showers. Grab bars for transfer type showers shall comply with Section



**608.2.3.2 Seat.** A folding seat complying with Section 610 shall be provided on the seat wall opposite the back wall.

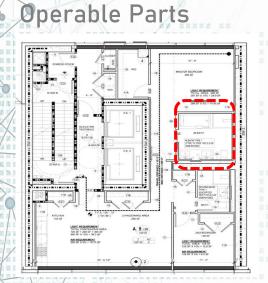
**EXCEPTION:** A seat is not required to be installed in a shower for a single occupant, accessed only through a private office and not for common use or public use, provided reinforcement has been installed in walls and located so as to permit the installation of a shower seat.





#### **DWELLINGS: TOILET & BATHING ROOMS**

Doors & Doorways Turning Space Water Closet Lavatory Shower



1107.2.2 Type B+NYC unit toilet and bathing rooms. Where toilet and bathing rooms are provided in the Type B+NYC dwelling unit or sleeping unit, all such toilet and bathing rooms shall comply with Appendix P.

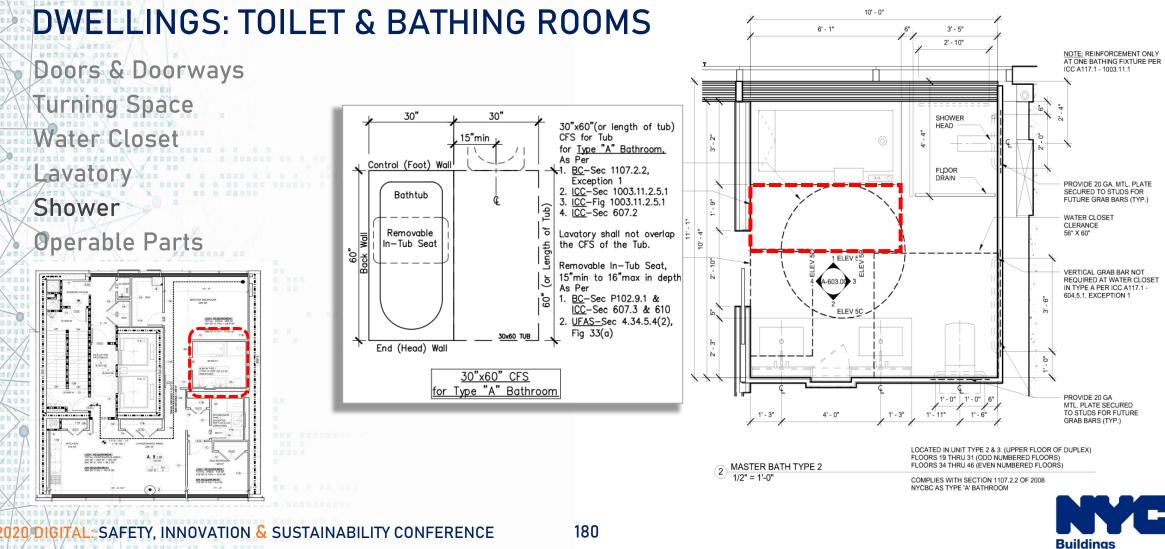
Exception for Type A toilet and bathing room:

1. Where at least one toilet and bathing room in the Type B+NYC dwelling unit or sleeping unit is constructed in accordance with the Type A toilet and bathing facilities requirements of Section 1003.11 (Toilet and Bathing Facilities), including Section 1003.3.2 (Turning Space), of ICC A117.1 and is in compliance with the following:

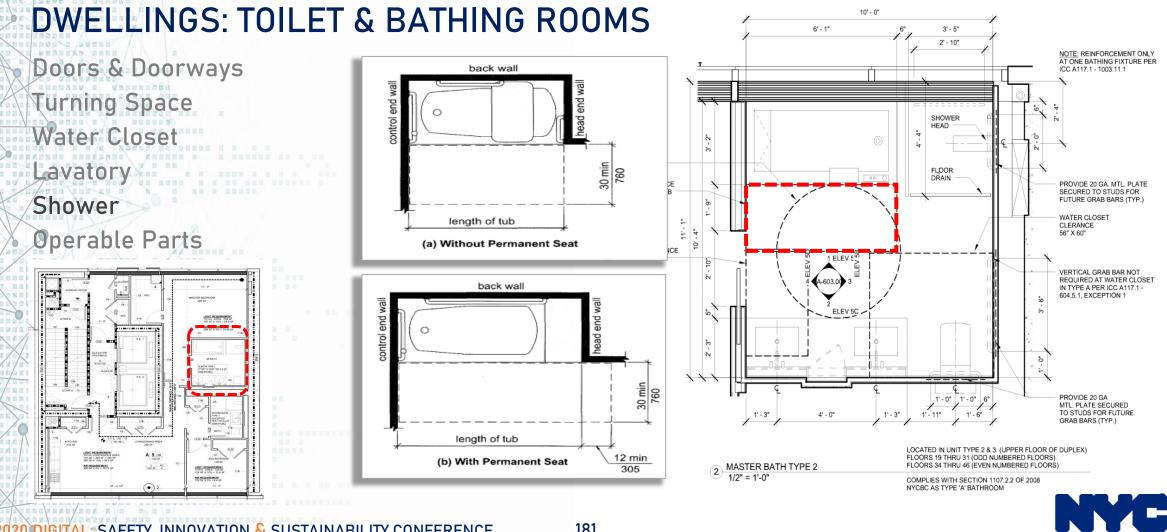
1.1. At least one lavatory, one water closet and either a bathtub or shower within such toilet or bathing facility shall comply with Section 1003.11 of ICC A117.1. Such toilet and bathing fixtures shall be in a single toilet or bathing area, such that travel between fixtures does not require travel beyond the area in which the fixtures of such toilet or bathing room are located.

1.2. Toilet paper dispensers within such rooms shall comply with Section 604.7 (Dispensers) of ICC A117.1. 1.3. Medicine cabinets, if provided, must include a storage shelf no higher than 44 inches (1118 mm) above the floor. 2. Where at least one toilet and bathing room complying with Sections 1003.11 and 1002.3.2 of ICC A117.1 is provided within the Type B+NYC dwelling unit or sleeping unit in accordance with Item 1 of this exception, other toilet and bathing rooms in the same unit shall be required to comply only with Sections 1004.3 (Accessible route), 1004.4 (Walking Surfaces), 1004.5.2 (User Passage Doorways), 1004.9 (Operable Parts) and 1004.11.1 (Grab Bar and Shower Seat Reinforcement) of ICC A117.1. Doors and doorways to such toilet and bathing rooms shall be subject to Section 1107.2.1, Exception 5.





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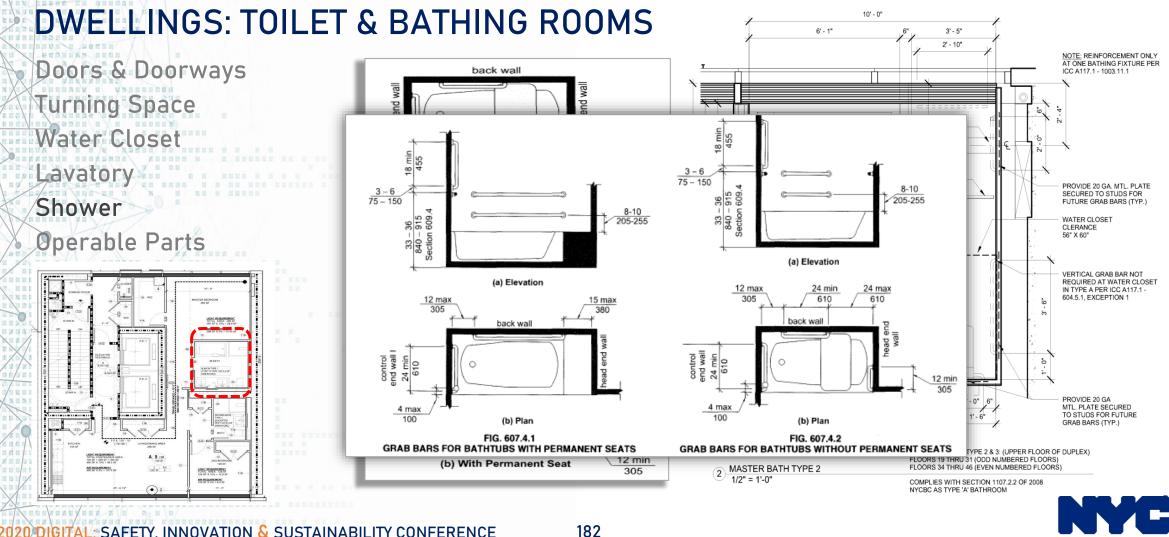


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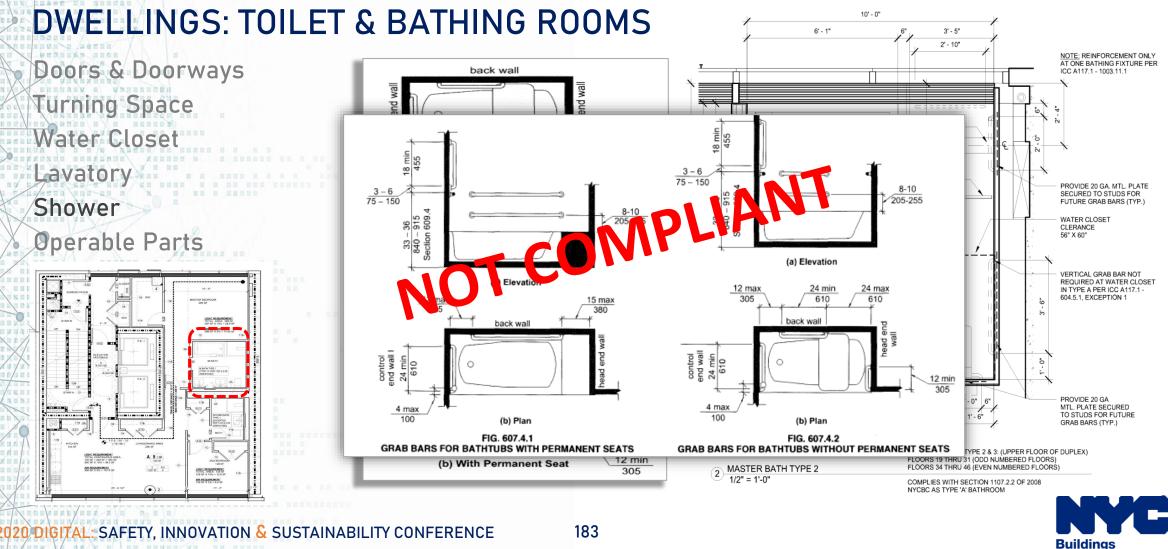
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Buildings

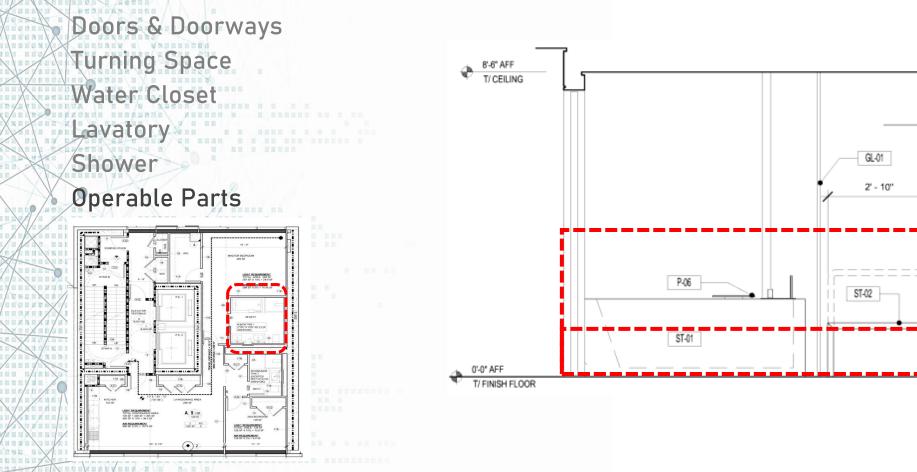


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**Buildings** 

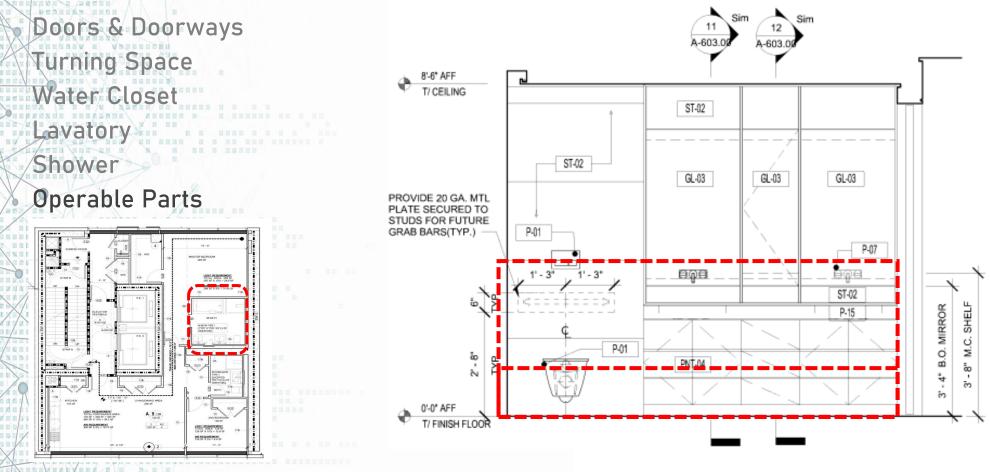


### **DWELLINGS: TOILET & BATHING ROOMS**



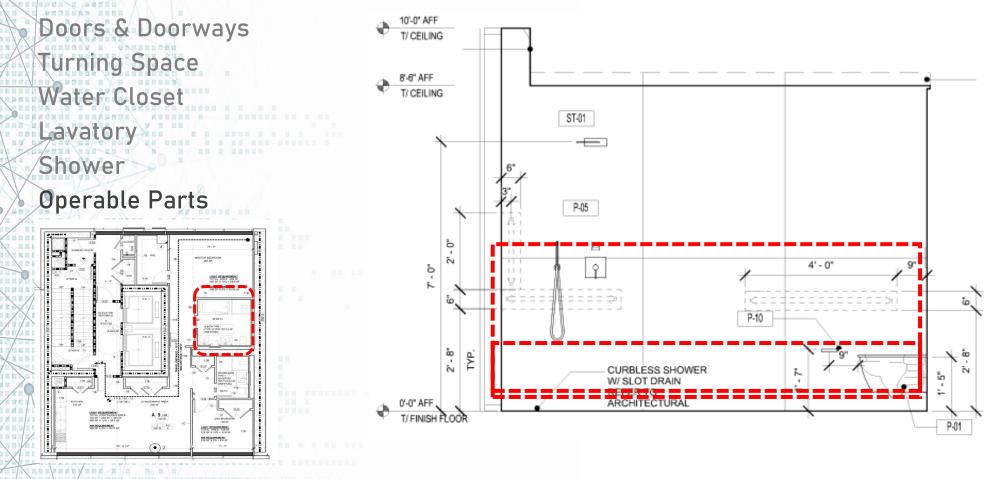


### **DWELLINGS: TOILET & BATHING ROOMS**



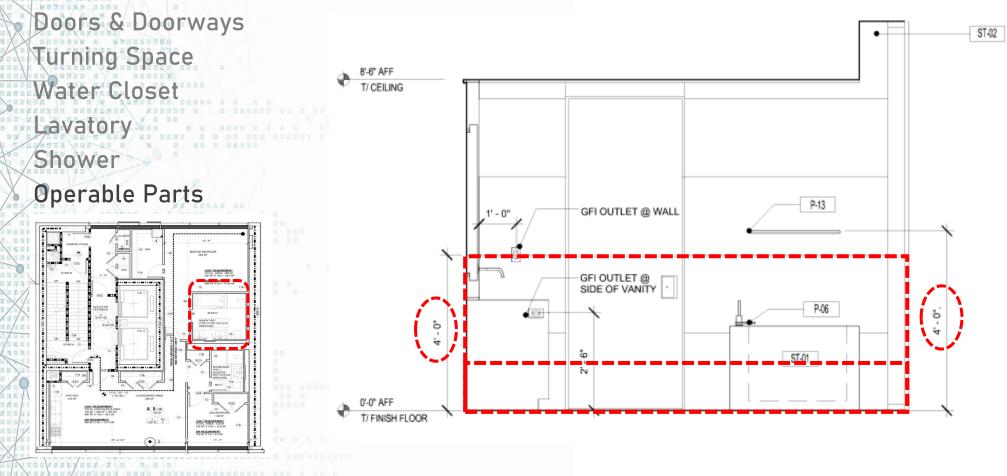


#### **DWELLINGS: TOILET & BATHING ROOMS**





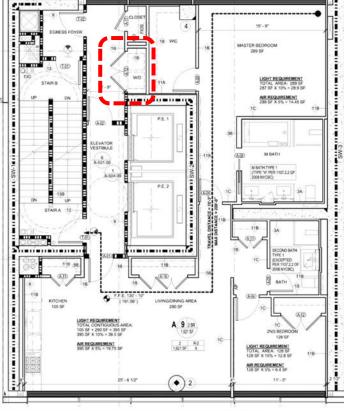
#### **DWELLINGS: TOILET & BATHING ROOMS**





#### **DWELLINGS: ACCESSIBLE UNITS**

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**Primary Entrance** Accessible Route Walking Surfaces Ramps Elevators/Platform lifts Doors & Doorways **Turning Space** Kitchens **Toilet & Bathing Rooms** Laundry Equipment **Operable Parts** 

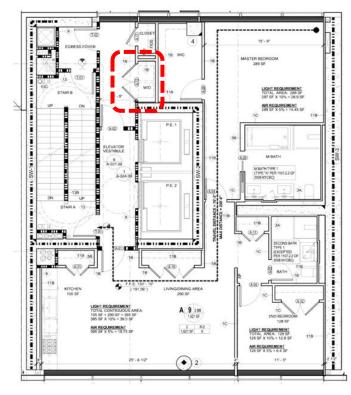
**Buildings** 

#### **DWELLINGS: LAUNDRY EQUIPMENT**

1107.2.8 Type B+NYC unit laundry equipment. Where washing machines or clothes dryers are provided within the Type B+NYC dwelling unit or sleeping unit, such equipment shall comply with Section 611 (Washing Machines and Clothes Dryers) of ICC A117.1 and shall be front loading. Laundry equipment in accessible common-use areas as required in Section 1107.3 shall comply with Section E105.2.

#### EXCEPTION:

At the option of the owner, laundry equipment conforming to this section within the dwelling unit or sleeping unit may be provided at the time a person with physical disabilities takes occupancy of the unit, or within 10 days of the date the request is made by a person with physical disabilities, whichever is later, at the owner's expense. However, the owner shall not be responsible to provide a particular model or type of equipment provided such equipment complies with this section.

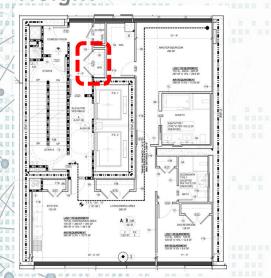


Clear Floor Space Operable Parts Height

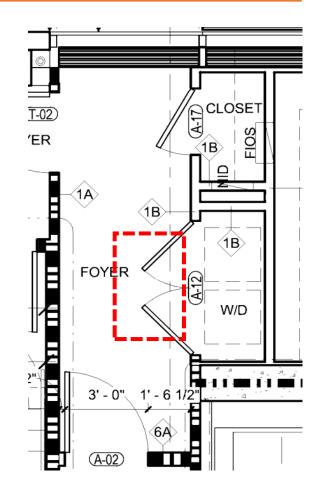


### **DWELLINGS: LAUNDRY EQUIPMENT**

Clear Floor Space Operable Parts Height



611.2 Clear Floor Space. A clear floor space complying with Section 305, positioned for parallel approach, shall be provided. For top loading machines, the clear floor space shall be centered on the appliance. For front loading machines, the centerline of the clear floor space shall be offset 24 inches (610 mm) maximum from the centerline of the door opening.





### **DWELLINGS: LAUNDRY EQUIPMENT**

**Clear Floor Space** 

**Operable Parts** 

Height

611.3 Operable Parts. Operable parts, including doors, lint screens, detergent and bleach compartments, shall comply with Section 309.

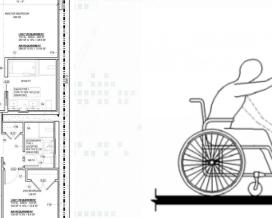


Figure 308.2.1 Unobstructed Forward Reach

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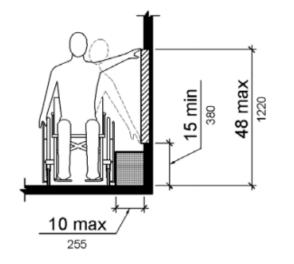
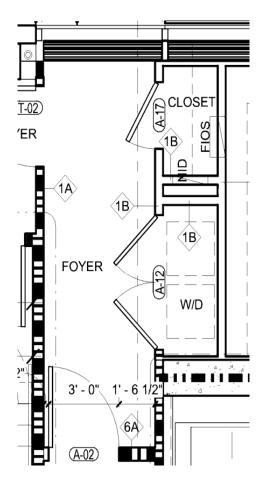


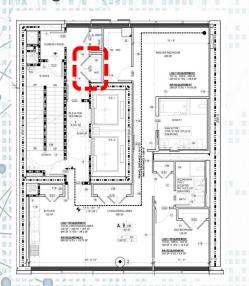
Figure 308.3.1 Unobstructed Side Reach





#### **DWELLINGS: LAUNDRY EQUIPMENT**

Clear Floor Space Operable Parts Height



611.4 Height. Top loading machines shall have the door to the laundry compartment 36 inches (915 mm) maximum above the floor. Front loading machines shall have the bottom of the opening to the laundry compartment 15 inches (380 mm) minimum and 36 inches (915 mm) maximum above the floor. clear floor space complying with Section 305, positioned for parallel approach, shall be provided. For top loading machines, the clear floor space shall be centered on the appliance. For front loading machines, the centerline of the clear floor space shall be offset 24 inches (610 mm) maximum from the centerline of the door opening.

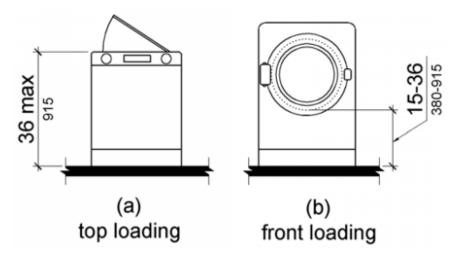


Figure 611.4 Height of Laundry Compartment Opening



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DWELLINGS: DUPLEX	(	
		BALCONY Ú
		LIVING AREA 379 SF
	10 10 10 10 10 10 10 10 10 10	Light Requirement           TOTAL AREA 379 GF           5         379 SF X 10% = 37.9 SF           4         ARREQUEREENT           379 SF X 5% = 18.95 SF
	13         12         10<	B 18 287 UPLEX ESSE PES
	(A) (A) (A) (A) (A) (A) (A) (A)	b 8 21/2* 15-9* 15-9* 15-9*
		iii
	2. L TOTAL TRAVEL DISTANCE = 70-17 MAY ALLOWED DISTANCE = 200-07 KITCHENDINKO AREA 776 SF	
	TOTAL TRAVEL DISTANCE = 70-1 MAX ALLOWED DISTANCE = 200-0 NITO-ENIONING AREA 778 SF 1 - 2 34 	

**Primary Entrance Accessible Route** Walking Surfaces Ramps Elevators/Platform lifts **Doors & Doorways Turning Space** Kitchens **Toilet & Bathing Rooms** Laundry Equipment **Operable Parts** 



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#### DWELLINGS: DUPLEX

1107.2.5 Type B+NYC multistory units. Multistory Type B+NYC dwelling units or sleeping units shall comply with the following:

- 1. One of the stories with an accessible entrance shall be designated as the primary entry story to the unit;
- 2. All rooms, spaces and doors on the primary entry story shall comply with Section 1107.2; and
- 3. Rooms, spaces or doors located on other than the primary entry story, and interior routes thereto, need not comply with Section 1107.2 where the primary entry story contains equivalent functional facilities. Functional facilities shall include cooking facilities, bathing facilities, laundry equipment, sleeping areas, living areas, dining areas, and outdoor areas such as balconies or terraces.
  - Exception: Functional facilities in compliance with Section 1107.2 need not be located on the primary entry story, but may be located on any story within the dwelling unit or sleeping unit, provided that all rooms, spaces and doors located on such story containing such functional facilities comply with Section 1107.2.
  - Notwithstanding the above, at least one toilet room complying with Section 1107.2.2 shall be provided on the primary entry story. In addition, one of the following conditions shall be met:
    - 1. An accessible external elevator is provided to connect all such stories of the multistory dwelling unit or sleeping unit; or
    - 2. A stairway complying with Section 504 (Stairways) of ICCA117.1 with a minimum clear width of 36 inches is provided within the multistory dwelling unit or sleeping unit to connect all such stories of the unit; or
    - 3. An accessible route complying with Section 402 (accessible routes) of ICC A117.1 is provided within the dwelling unit or sleeping unit to connect all such stories of the unit.



#### **DWELLINGS: DUPLEX**

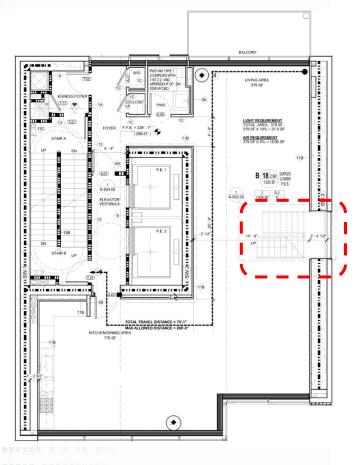
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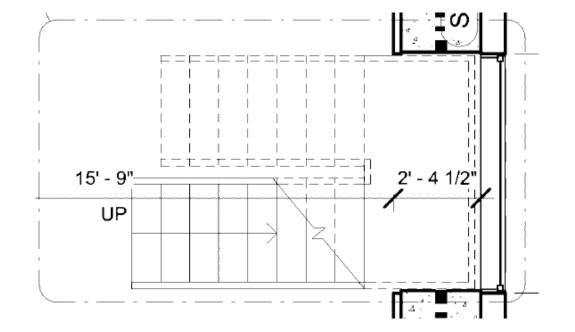
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#### DWELLINGS: DUPLEX

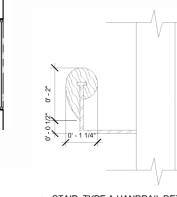


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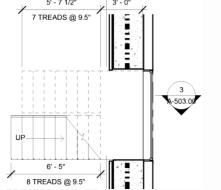
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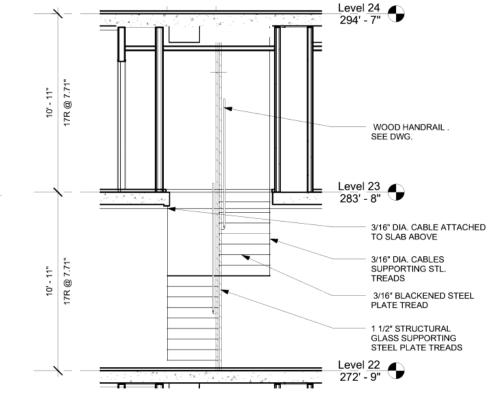
5'-7 1/2" 7 TREADS @ 9.5"

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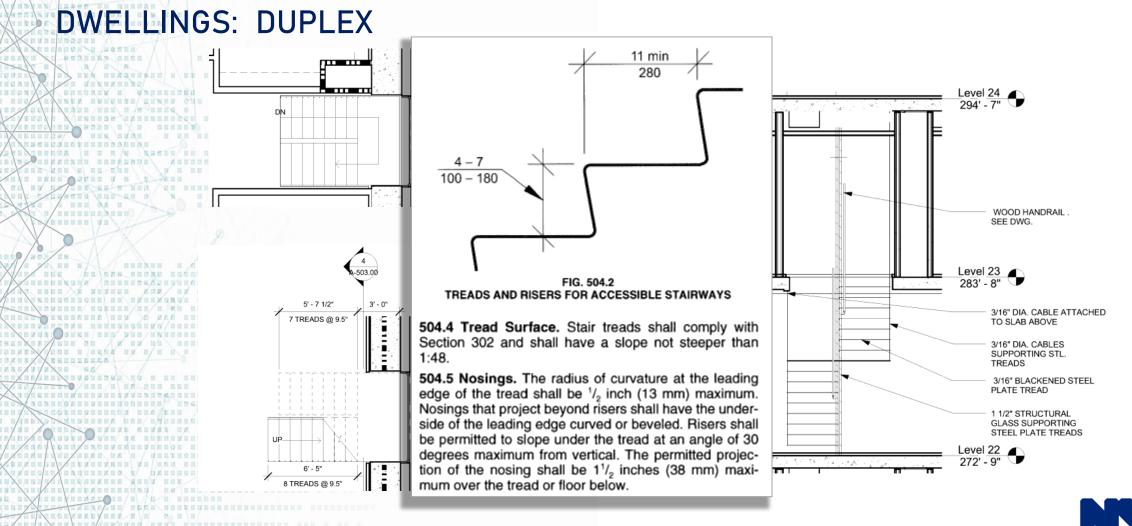


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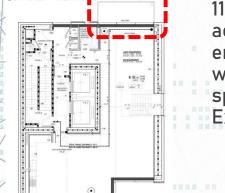




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Buildings

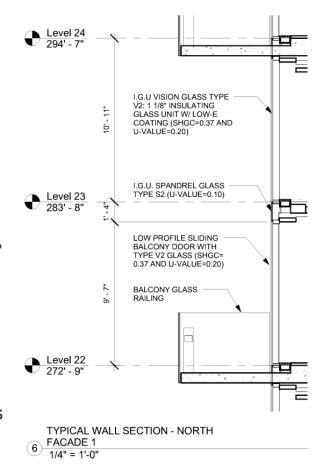
#### DWELLINGS: DUPLEX



1107.4 Accessible route. At least one accessible route shall connect accessible building or facility entrances with the required accessible entrance(s) of each Accessible unit, Type B+NYC unit, and Type B unit within the building or facility and with those exterior and interior spaces and facilities that serve the units.

Exception:

Exterior spaces, including but not limited to roof terraces, exterior decks, patios or balconies that are part of Type B+NYC units or Type B units, that are not for public use or common use, that have impervious surfaces, and that are not more than 4 inches below the finished floor level of the adjacent interior space of the unit. Such roof terraces, decks, patios or balconies shall be designed so that accessibility can be readily provided, without modifications to the guard rail heights and structural supports, by the installation of a noncombustible ramp in compliance with Section 405 (Ramps) of ICC A117.1, or a noncombustible level platform, with removable panel for access to floor drainage, that is permeable to weather and in compliance with Section 302 (Floor Surfaces) and Section 303 (Changes in Level) of ICC A117.1.

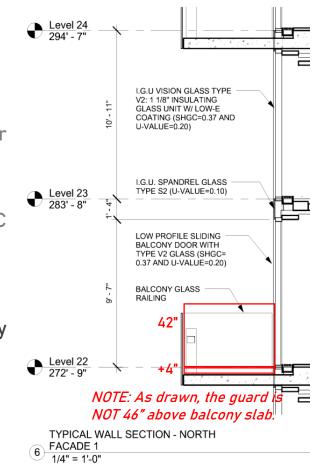




#### DWELLINGS: DUPLEX

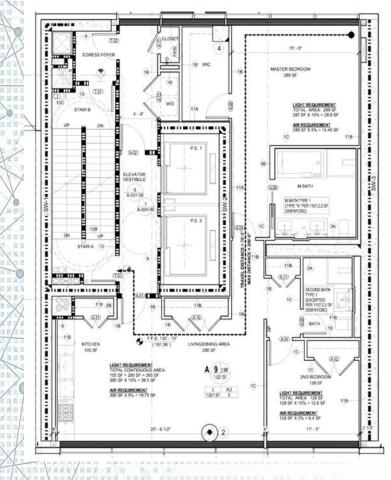
1107.4 Accessible route. At least one accessible route shall connect accessible building or facility entrances with the required accessible entrance(s) of each Accessible unit, Type B+NYC unit, and Type B unit within the building or facility and with those exterior and interior spaces and facilities that serve the units. Exception:

Exterior spaces, including but not limited to roof terraces, exterior decks, patios or balconies that are part of Type B+NYC units or Type B units, that are not for public use or common use, that have impervious surfaces, and that are not more than 4 inches below the finished floor level of the adjacent interior space of the unit. Such roof terraces, decks, patios or balconies shall be designed so that accessibility can be readily provided, without modifications to the guard rail heights and structural supports, by the installation of a noncombustible ramp in compliance with Section 405 (Ramps) of ICC A117.1, or a noncombustible level platform, with removable panel for access to floor drainage, that is permeable to weather and in compliance with Section 302 (Floor Surfaces) and Section 303 (Changes in Level) of ICC A117.1.





#### DWELLINGS: ANSI Chapter 10 – Accessible Units (Section 1003)



Primary Entrance – must be on an accessible route connecting with the accessible entrance(s) and common areas Accessible Route – all unit spaces and elements must be connected by an accessible route Walking Surfaces – accessible route walking surfaces must comply w/Section 403 Ramps – must comply w/Section 405 Elevators/Platform lifts – elevators within units must comply w/Section 407, 408, or 409; lifts with Section 410 Doors & Doorways – all doorways intended for passage must comply w/Section 404 Turning Space – all rooms must be provided with a turning space Kitchens – must comply w/ Section 1003.12 Toilet & Bathing rooms – at least one must comply w/Section 1003.11.2; all must comply w/ Section 1003.11.1 Laundry Equipment – must comply w/Section 611 Operable Parts - must comply w/Section 309



For further technical questions, email: ConstructionCodes@buildings.nyc.gov

