06-84 - 2021

611(New)

**Proponent:** Amy Carpenter, representing Assisted Toileting and Bathing work group

Add new text as follows:

#### SECTION 611 ASSISTED TOILET AND BATHING ROOMS

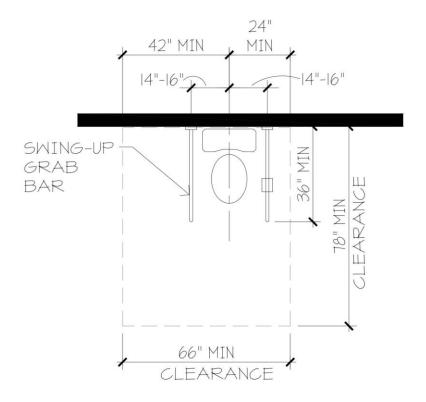
<u>**611.1 General.**</u> Individual use bathrooms for assisted toileting and bathing shall comply with Section 611.

#### 611.2 Clearances.

- <u>**611.2.1 Turning Space.**</u> A turning space shall be provided within the room.
- **611.2.2 Door Swing**. Doors shall not swing into the bathroom.

Exception: Where a clear floor space complying with Section 305.3 is provided in the room beyond the arc of the door and emergency rescue door hardware, that allows the door to be swung out of the room, is provided.

- <u>611.3 Mirrors</u>. A mirror shall be mounted with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the floor.
- <u>611.4 Coat Hooks.</u> Coat hooks shall be located within one of the reach ranges specified in Section 308.
- **611.5 Water Closets.** Water closets for assisted toileting shall comply with Section 611.5.



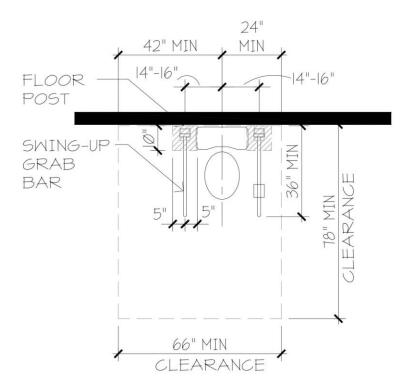
#### FIGURE 611.5 ASSISTED USE WATER CLOSET

- <u>611.5.1 Clearance width.</u> Clearance around the water closet shall be 66 inches (1676 mm) minimum. A minimum dimension of 24 inches (609 mm) shall be provided on each side, measured from the centerline of the water closet.
- <u>611.5.2 Clearance depth.</u> Clearance around the water closet shall be 78 inches (1981 mm) minimum in depth, measured perpendicular from the rear wall.
- 611.5.3 Clearance overlap. The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, paper dispensers, sanitary napkin receptacles, coat hooks, shelves, accessible routes, clear floor space at other fixtures and the turning space. Towel bars that meet the strength requirements of Section 609.8 shall be permitted to overlap the clearance at the water closet. No other obstructions shall be within the required water closet clearance.
- **611.5.4 Height.** The height of the water closet shall comply with Section 604.4
- <u>611.5.5 Grab bars</u>. Grab bars for assisted toileting shall comply with Sections 611.5.5.1 through 611.5.5.6
  - **611.5.5.1** Swing up grab bars shall be provided at both sides of the water closet.

- <u>611.5.5.2</u> Swing up grab bars shall be located 14 to 16 inches (355 to 406 mm) from the centerline of the water closet.
- 611.5.5.3 Swing up grab bars shall extend a minimum of 36 inches (915 mm), measured perpendicular from the rear wall to the furthest projection of the bar.
- <u>611.5.5.4</u> The height of the Swing up grab bar, when in the down position, shall be 30 inches (760 mm) minimum and 34 inches (865 mm) maximum measured from the floor to the topmost portion of the bar.
- <u>611.5.5.5 Swing up grab bars shall meet structural strength requirements per Section</u> 609.8.

**Exception:** Swing up bars are not required to resist required forces when being moved upward to the vertical position.

- 611.5.5.6 A floor-mounted support post, complying with Section 611.5.6 shall be permitted as an alternate to mounting swing up grab bars directly to a reinforced wall behind the toilet.
- 611.5.6 Floor-mounted support post. A floor-mounted support post, used as an alternate means of support for swing up grab bars shall be designed to meet the structural strength requirements of Section 609.8 and shall be permitted to be located within the clearance around the water closet provided it meets all of the following:
  - 1. The floor plate and post shall not extend more than 10 inches (254 mm) in depth measured perpendicular to the back wall,
  - 2. The floor plate and post shall not extend more than 5 inches (127 mm) in width, measured from the centerline of the grab bar to either side,
  - 3. The post location shall not block access to the flush controls, and
  - 4. The floor plate and post shall not overlap any other required clearances or turning space.



### FIGURE 611.5.6 ASSISTED USE WATER CLOSET FLOOR-MOUNTED SUPPORT POSTS

611.5.7 Flush Controls. Flush controls shall comply with Section 604.6

611.5.8 Dispensers. Toilet paper dispensers shall be mounted on at least one of the swing up grab bars and shall be located at 24 inches (610 mm) minimum to 36 inches (915 mm) maximum measured perpendicular to the rear wall. Dispensers shall not be of a type that control delivery or do not allow continuous paper flow.

<u>611.6 Lavatories and Sinks.</u> Where a lavatory or sink is provided inside the room used for assisted toileting and bathing, it shall comply with Section 606.

**611.7 Showers**. Roll-in showers for assisted bathing shall comply with Section 611.7.

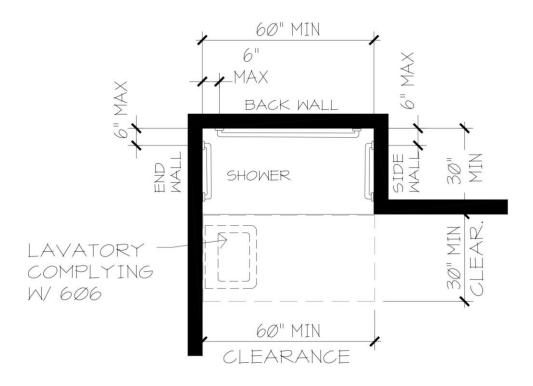
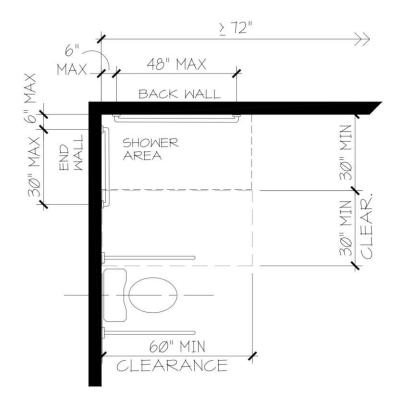
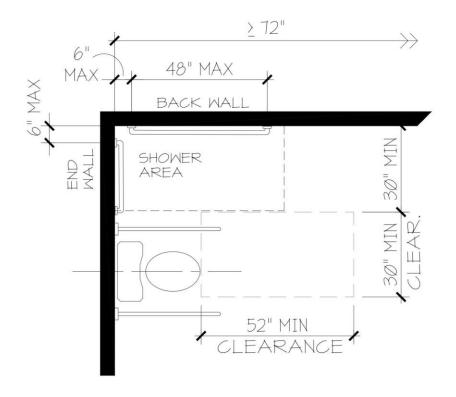


FIGURE 611.7(A)
ROLL-IN SHOWERS FOR ASSISTED BATHING
OPTION 1



# FIGURE 611.7(B) ROLL-IN SHOWERS FOR ASSISTED BATHING OPTION 2



## FIGURE 611.7(C) ROLL-IN SHOWERS FOR ASSISTED BATHING OPTION 3

- <u>611.7.1 Size.</u> A roll-in shower area for assisted bathing shall have a clear inside dimension of 60 inches (1525 mm) minimum in length and 30 inches (760 mm) minimum in depth, measured at the center point of opposing sides.
- <u>611.7.2 Clearance.</u> A clearance of 60 inches (1525 mm) minimum in length adjacent to the long side of the shower area, and 30 inches (760 mm) minimum in depth, shall be provided.

#### **Exceptions:**

- 1. A lavatory complying with Section 606 shall be permitted at one end of the clearance
- 2. Where the shower area exceeds minimum sizes, the clear floor space shall be placed 30 inches (760 mm) minimum from the back wall and the length shall be parallel to the back wall.
- **611.7.3 Seat**. A fixed folding or non-folding wall-mounted seat is not permitted.
- <u>611.7.4 Grab bars.</u> Grab bars shall comply with Section 609 and shall be provided in accordance with Section 611.7.4.1

611.7.4.1 Horizontal grab bars in roll-in showers for assisted bathing shall be provided on the back wall, end wall and side wall. Grab bars shall extend within 6 inches (150 mm) maximum from adjacent walls.

#### **Exceptions:**

- 1. The back-wall grab bar shall not be required to exceed 48 inches (1220 mm) in length.
- 2. End-wall and side-wall grab bars shall not be required to exceed 30 inches (760 mm) in length.
- 3. If the back-wall length is 72 inches (1830 mm) or greater, a side-wall grab bar is not required.
- 611.7.5 Controls. On/off and temperature adjustment controls for roll-in showers for assisted bathing shall comply with Section 309.4 and shall comply with all of the following:
- 1. <u>Installed at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor,</u>
- 2. <u>Located either on the end wall or side wall, 18 inches (455 mm) minimum and 48 inches (1220 mm) maximum from the back wall, and</u>
- 3. <u>Located to allow access by a caregiver and minimize reaching through the</u> water stream

Exception: Where the back wall length is 72 inches (1830 mm) or greater, controls are permitted to be located on the back wall at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor and 27 inches (685 mm) minimum and 60 inches (1525 mm) maximum from the end wall.

- 611.7.6 Hand Showers. At least one hand shower complying with Section 309.4, Section 608.5 and Section 611.7.6 shall be provided in roll-in showers for assisted bathing. The hand shower shall be located:
  - 1. At a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor, and
  - 2. On the end wall, back wall or side wall within the shower area.
  - <u>611.7.7 Thresholds.</u> Thresholds in roll-in showers for assisted bathing shall comply with Section 608.6
  - 611.7.8 Shower enclosures. Shower area enclosures shall not obstruct access to controls or hand shower from outside the shower area. Floor mounted enclosures shall maintain a minimum clear opening width of 41.5 inches (1054 mm) with no added threshold.
  - **611.7.9** Water Temperature shall comply with Section 608.8.

**REASON:** This proposed new section is meant to provide an alternative compliance path for a percentage of the fully accessible units that are required in Nursing Homes and Assisted Living

residences. These changes are specifically aimed at addressing the needs of older adults who live in care settings (receiving custodial care and/or medical care). It is our intent that Owners/Operators of these care settings can choose have some units comply with these alternatives in lieu of complying with traditional accessible unit requirements. A rehabilitation facility that serves primarily younger people, with spinal cord injuries, would likely not choose to have any units meet this alternate standard. However, many nursing homes serving elders, where the average age of resident is usually around 88 – 90 years old, would likely choose to have as many units as possible meet this alternate standard.

The 2021 International Building Code, Chapter 11 introduced these measures into the code as the deadline for inclusion in the last edition of the Standard had passed. We are hoping to include this language in the Standard this cycle and remove the language from IBC Chapter 11. The ICC A117.1 committee approved a work group to develop criteria for assisted toileting and bathing. Meetings were held every two weeks and were open to the public. In addition to the members of the task group, there was participation by a variety of interested parties. The language contained within this proposal was developed and reviewed by the work group and a consensus was reached.

The language contained in this proposal is based on research sponsored by the Mayer-Rothschild Foundation as well as direct experience and feedback from caregivers and gerontologists, along with the input of the task group. The intent of the language is to be flexible to cover the needs of elders as they decline in ability over time and gradually need more support and caregiver assistance in all activities of daily living. While they may be able to independently shower or transfer to the toilet when they first move in to a care community, their needs do increase over time. Many do become completely dependent on assistance by one or more caregivers. The proposal seeks to strike a balance between the accessibility needs of both the elder resident as well as the needs of the care staff.

It was decided to place all requirements around assisted bathing and toileting into a distinct section to aid with use of the Standard and keep all requirements together. If the Committee would prefer to disperse the requirements into Section 604 and 608, we would be OK with that change.

#### **Assisted toileting:**

Current existing accessibility provisions contained in the standard do not adequately the needs of older adults as they lose upper body strength and mobility. They simply do not have the strength to use wall-mounted grab bars at toilets to accomplish a transfer. Additionally, many have balance issues that require additional support on both sides of the toilet. Further, most residents in care settings, although they may use wheelchairs for mobility, still have some use of their legs and most can bear weight on one or both legs. Therefore, the requirements meant to address the needs fully paralyzed or quadriplegic persons is not necessarily beneficial to elders.

A search of CMS data shows only 1% of residents in nursing homes, nationwide, have a diagnosis of quadriplegia or paraplegia. With a minimum of 50% of nursing home resident rooms being required to meet current standards, an average of 49% of these rooms are simply not working well for the residents who live there. Falls in bathrooms are one of the largest risks of injury and death in nursing homes.

Research sponsored by the Mayer-Rothschild foundation studied how elders in care settings transfer on and off the toilet, both independently and with staff assistance. The dimensions and clearances contained in this proposal are all based on these recommendations. Most important is

the additional space provided on both sides of the toilet over the traditional 18 inches contained in the Standard. This added space is critical for allowing care staff to stand alongside the toilet to assist with sitting and standing without injuring themselves. This additional clearance around the toilet also makes maneuvering of various lift devices easier, along with giving residents using mobility devices more space to maneuver.

The inclusion of a floor mounted support post to attach the swing-up grab bars to was considered to be an important component for both new and existing construction. The Rothschild study calls for the grab bard to extend 6-9" beyond the front edge of the toilet. With most elongated bowl toilets extending approximately 30 inches from the back wall, this requires a minimum length swing-up bar at 36", which is difficult to find on the market today. This also brought up concerns about structural stability of wall blocking and proper connections. One of the task group alerted the group to the support posts that are currently available on the market. Benefits of the support post include the ability to use standard, shorter swing-up bars to still achieve the desired distance in front of the toilet, better structural stability, and the ability of users to better customize the height of the mounting to their specific needs. (people do shrink as they age)

Research and practical experience showed the task group that very few lifetime wheelchair users complete a side-slide transfer with the wheelchair completely parallel to the toilet and the back wheels all the way back to the rear wall. The majority of wheelchair users angle towards the toilet, using the space in front and to the side of the toilet. With elders who can bear weight and stand to transfer, the space adjacent to the toilet along the rear wall is rarely accessed or needed. In addition, the toilet tank or space for the flush valve assembly push the "seat" of the toilet out a certain distance from the wall. It was felt that a floor mounted post and associated mounting plate could overlap the clearance around the toilet by a small amount, provided that the flush controls were still easily accessed.

#### **Assisted Bathing:**

Many residents in Assisted Living and Nursing Home care settings are assisted, to varying levels, with their bathing activities as they may not be able to safely accomplish this on their own. Traditionally, roll-in-type showers have been used in care settings because of the ease of access they provide (low/no threshold). However, there are some requirements in the current Standard that can make it more difficult for care staff to assist with bathing.

For example, a wall mounted seat can be difficult for an elder to transfer on and off and many are fearful of falling off. Additionally, with the seat against the side wall and back wall, it is difficult, if not impossible for a caregiver to adequately access and wash all parts of a resident. For this reason, wall mounted seats are typically folded up and a mobile shower chair or stool is brought in. However, the folded seat still takes up space, and there are sharp edges and protrusions that can tear delicate elder skin or cause other injuries to the resident or caregiver. Mobile shower chairs are also better as they have arms that provide support and balance assistance for residents when standing/sitting and while seated. Caregivers can either turn the resident's chair while bathing, or walk around the person in the chair to be able to reach and wash all areas.

Similarly, the location of the controls on the back wall of a standard roll-in shower makes it more difficult for a caregiver to access them to turn the water on/off as well as to adjust the temperature during a shower. They either need to reach across the resident being bathed, which is awkward, or often need to reach through the water stream, which gets them wet. Some people

might think it's not a big deal for the caregiver to get wet, and that should be expected as part of their job. However, what everyone needs to remember is that in care settings such as Assisted Living and Nursing communities, the caregiver may have to bathe up to eight residents per shift. If they need to go change out of wet clothes after each shower, that takes them away from their duties and away from the residents they need to serve. It just isn't practical.

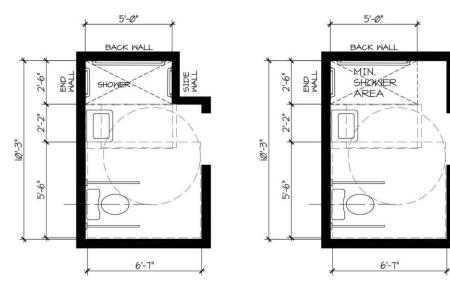
The language proposed removes the requirement for a permanent seat, in favor of allowing for the community to determine what is the best type of bench or chair to meet the resident's needs. It also allows for the controls that regulate on/off and temperature to be located such that they can be reached from outside the shower area, but also could be reached by a resident from inside the shower, should they be able to be more independent. The dimensions for the location of controls are meant to assume that a shower chair might be placed towards one corner of the shower and the areas behind that chair location would not be reachable. It also prohibits controls on the back wall of the shower in a typical 3-wall shower compartment.

The shower size and clearance language is meant to recognize that showers that often work best for assisted bathing are not simply the standard size, but sometimes larger, more open configurations work better. Larger, open showers also work better for care recipients that must be bathed in a semi or fully-reclined position. Sometimes the showers only have two walls or the entire bathroom is designed as a wet room and the designated shower "area" is in one corner. This is often called a "European shower".

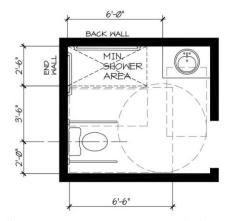
We maintained the language for clearance needed to access the shower area as well as the allowance for a lavatory to overlap the clearance similar to standard roll-in-type showers.

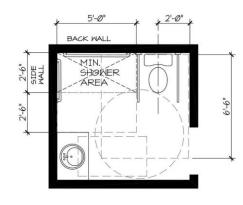
The grab bar language is similar to the standard roll-in-type shower, but with an additional bar where the seat would normally be. We chose to be intentionally silent on providing a vertical grab bar, as we felt that the location of a vertical bar would be highly dependent on the access point to the shower and location of the controls. In addition, if a resident has assistance in bathing, the vertical grab bar is not as needed for getting in and out of the shower enclosure. There is nothing prohibiting a vertical grab bar from being added.

#### Example layouts:

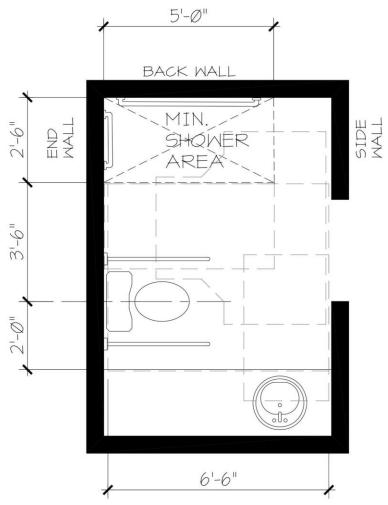


Sample bathroom layout A & B





Sample Bathroom layout C & D



### Sample bathroom layout E

Committee Action:

AS

AM

D

611 NEW-CARPENTER.doc

Report for 06-84- 2021		
Committee decision: AS/AM/D	Committee Vote at Meeting:	Committee Vote on Ballot:

Report for 06-84- 2021		
REPORT OF HEARING:		
Modification (if any):		
Committee Reason:		
PUBLIC COMMENT- FIRST DRAFT:		
Proponent:		
Desired Action:		
Modification:		
Reason:		
Committee decision: AS/AM/D	Committee Vote at Meeting:	Committee Vote on Ballot:
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		
Committee Reason:		
PUBLIC COMMENT- SECOND DRAFT:		
Proponent:		
Desired Action:		
Modification:		
Reason:		
Committee decision: AS/AM/D	Committee Vote at Meeting:	Committee Vote on Ballot:
FINAL ACTION:		
Modification (if any):		
Committee Reason:		