

06-90 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-90	Wright-Adult changing	106.2.2 (New), 106.2.4 (New), 106.2.5 (New), 613(New)	AM-26-0-0	5-19-2022	

Comment	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
PC1	Skulski	AM			
PC2	Wright	AM			
PC3	Terminology	AM			Editorial

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

06-90 – 2021

106.2.2(New), 106.2.4(New), 106.2.5(New), 613(New)

Proponent: Laurel Wright, representing the Adult Changing Facilities work group

Add new text as follows:

106.2.2 Assistive products for personal hygiene (APPH) that support users – Requirements and test methods. ISO/FDIS 17966: 2016(E) (International Organization for Standardization, Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland)

106.2.4 Medical Electrical Equipment - Part 1: General requirements for basic safety and essential performance – IEC 60601-1: 3.2 edition August 2020: International Electrotechnical Commission (IEC) 3 rue de Varembe, PO Box 131, CH-1211 Geneva, Switzerland.

106.2.5 Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests: 60601-1-2:2014 + ADM1: 2020 CVS: International Electrotechnical Commission (IEC) 3 rue de Varembe, PO Box 131, CH-1211 Geneva, Switzerland.

SECTION 613 **ADULT CHANGING STATIONS**

613.1 General. Adult changing stations shall comply with Section 613.2 through 613.4.

613.2 Safety and performance. Adult changing stations shall comply with the following standards:

1. ISO 17966 Sections: 5 Materials; 7 Electromagnetic compatibility; 8 Electrical safety; 11 Safety of moving and folding parts; 11.2 Prevention of traps for parts of human body; 16 Static strength, impact, durability; 17 Stability listed in Section 106.2.2.

2. IEC 60601-1 listed in Section 106.2.4.
3. IEC 60601-1-2 listed in Section 106.2.5.

613.3 Changing surface. A changing surface shall be provided and shall comply with Section 613.3.

613.3.1 Size. The changing surface shall be 70 inches (1778mm) minimum in length and 30 inches (762mm) minimum in width.

613.3.2 Clearances. Clearances complying with Sections 613.3.2.1 and 613.3.2.2 shall be provided adjacent to the changing surface, measured when the surface is in the operational position.

613.3.2.1 Side clearance. A 36 inch (914mm) deep minimum clearance shall be provided along the length of one long side of the changing surface and shall extend 36 inches (914mm) minimum past the surface on at least one end.

613.3.2.2 End clearance. A 36 inch (914mm) deep minimum clearance shall be provided on at least one end of the changing surface and shall extend the width of the changing surface.

Exception: A 24 inch (610 mm) deep minimum clearance shall be permitted on at least one end of the changing surface where a clear floor space complying with Section 305.3 is provided within the room outside the clearances for the changing surface.

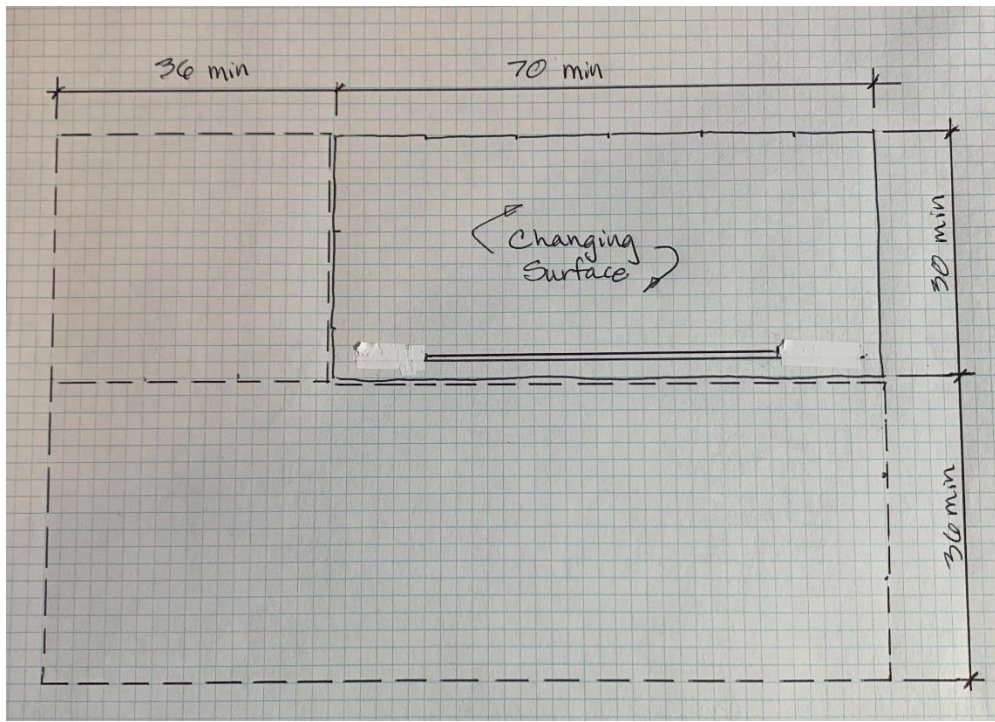


Figure 613.3.2
Changing surface and clearances

613.3.3 Height adjustability. The changing surface height shall be continuously adjustable from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.

Exception: Where approved by the authority having jurisdiction, a fixed height changing surface shall be permitted and shall be mounted with the top of the changing surface 17 inches (432mm) minimum and 19 inches (483mm) maximum above the floor.

613.3.3.1 Operation. Operable controls for height adjustment and, where provided, on and off shall comply with Section 309.4.

613.3.4 Capacity. Allowable stresses for materials, fastening mounting devices, and support structure shall support a downward force of not less than 350 lbs. (159 kg) applied to any point on the changing surface.

613.3.5 Changing surface. The changing surface shall be comprised of non-porous and durable materials.

613.3.6 Side rail. Side rails shall be provided at the changing surface in accordance with Sections 613.3.6.1 and 613.3.6.2.

613.3.6.1 Size and location. Side rails shall be a minimum of 2/3 of the length of the changing surface and shall be centered +/- 1 inch (25mm) along the long open sides of the changing surface.

Exception. A side rail shall not be required on the long side opposite the side clearance required by Section 613.3.2.1, provided that side abuts a wall or is otherwise protected.

613.3.6.2 Rail positioning. Side rails shall be capable of being raised and lowered and, when in the raised position, shall lock in place. The top of the side rail shall extend 5 inches (127mm) minimum above the top of the changing surface. When in the lowered position, the rail shall not obstruct transfer to or from the changing surface.

613.4 Installation location. Where provided, adult changing stations shall be installed in accordance with the locations specified in Section 613.4.1, 613.4.2 or 613.4.3.

Exception: Where installed in locations specified in Section 613.4.3, side and end clearances compliance with Section 613.3.2 are not required.

613.4.1. Single user or family or assisted use toilet or bathing room. Where adult changing stations are provided in a toilet room with only one water closet and one lavatory, or in a family or assisted-use toilet or bathing room, the room shall provide all of the following components:

1. A dispenser for soap complying with Section 308.
2. A hand towel dispenser or hand dryer complying with Table 603.6.
3. A coat hook located in close proximity to the changing surface.
4. A waste receptacle.
5. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.

613.4.2 Multi-user toilet or bathing room. Where adult changing stations are provided in a multi-user toilet or bathing room, the adult changing station shall be located in a compartment that includes all of the following components:

1. Privacy provided by walls, curtains or partitions enclosing the compartment.
2. A turning space complying with Section 304.
3. A lavatory complying with Section 606.
4. A dispenser for soap complying with Section 308.
5. A hand towel dispenser or hand dryer complying with Table 603.6.
6. A coat hook in close proximity to the changing surface.
7. A waste receptacle.

8. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.

613.4.3 Room or space other than a toilet room. Where adult changing stations are provided in a room or space other than a toilet or bathing room and including, but not limited to, nurses’ work areas, therapist work areas, or special education classrooms, the adult changing station shall be located in a compartment or room that includes all of the following components:

1. Privacy provided by walls, curtains or partitions.
2. A turning space complying with Section 304.
3. A lavatory complying with Section 606 or an alcohol-based hand sanitizer dispenser.
4. Where a lavatory is provided in the compartment or room, provide a dispenser for soap.
5. Where a lavatory is provided in the compartment or room, provide a hand towel dispenser or hand dryer complying with Table 603.6.
6. A waste receptacle.

613.5 Clearances. An adult changing station and its supporting structure shall not obstruct required clear floor spaces and clearances at accessible elements, maneuvering clearances at doors, or the wheelchair turning spaces.

REASON: The purpose of this standard proposal is to develop criteria for adult changing tables and the rooms in which they are installed. This is intended to coordinate with scoping provisions provided to the I-codes in proposals E141-21(AMPC1), E142-21(AMPC 1 and 2), P37-21(AMPC1) and M20-21(AS). This proposal is a result of the meetings held by the Adult Changing Facilities work group set up by the ICC A117.1 committee. The work group met every two weeks to develop this criteria. Participation included work group members and interested parties with a wide range of interests, and included representatives of manufactures of adult changing tables and parents of adult persons with disabilities that need to use adult changing tables. The work group reviewed eighteen proposed state laws, two already adopted, and four guidelines in European, Australian and North American countries for adult changing tables. While there is interest in many states to provide such facilities, investigations by this work group showed either no technical guidance or very inconsistent information and application. The end result currently is limiting access to children with disabilities who have grown up with accessibility in schools and public places since the ADA went into effect, as well as disenabling a significant number of adults with disabilities who have experienced a different type of life-changing event, accidents, injuries or wars.

The following is an impact statement on the benefits of having these facilities in buildings and facilities.

- Limiting access to those who need adult changing stations decreases the community size dramatically. Nationally, the Centers for Disease Control and Prevention (CDC) reports 61 Million adults (26% of the US population) have some form of disability, with 24.1% affected in the areas of mobility, independent living, and self care. Further, each of those folks need assistance, and likely travel with additional family members. Once this population is taken out of the community, businesses are also losing a large potential of support and income. Providing our citizens more opportunities to participate in the community and patronize local establishments strengthens communities, allowing all family members to engage or travel together as one family nucleus. Currently many families have to make the choice to participate in activities outside of the home with only a portion of their family.
- Individually, families from many states are pushing for the adult changing facilities. A national campaign, Changing Spaces, has been activated, with chapters in at least 10 states, advocating for height adjustable changing tables to be required in public places. At least 12 states have proponents actively proposing and working toward legislation, while as many as 18 states have draft language in play.

California has already enacted legislation requiring adult changing stations. Maryland has legislation that goes into effect next year. Accepting this proposal will show wide-spread acceptance of the need along with a consistent set of standards across the country for users to rely on.

- We are all part of an aging population and the elderly still want to be able to attend family gatherings and travel in a car to be with relatives. These adult changing facilities would be valued not only by families with adult disabled children but also be aging adult family members.
- Without appropriate changing facilities, families cannot travel more than 30-40 miles from home. Additionally, trips that involve more than a few hours of time are also a risk. As a result, vacations, trips to zoos, aquariums, museums, concerts, and similar events are eliminated.
- The addition of adult changing tables will present a tremendous change in the quality of life for so many people who were unable to get out and participate in many activities before due to the lack of adequate facilities.

The following are reasons for the portions of the proposal dealing with the adult changing table/surface:

The work group compared the recommended changing surface technical requirements with changing tables on the market and verified that the requirements recommended are available from multiple sources. The following are specific to the sections for the changing surface.

613.2 Safety and performance.

Adult changing stations shall comply with the following:

- 1) ISO 17966 Sections: 5 Materials; 7 Electromagnetic compatibility; 8 Electrical safety; 11 Safety of moving and folding parts; 11.2 Prevention of traps for parts of human body; 16 Static strength, impact, durability; 17 Stability;
- 2) IEC 60601-1 Medical electrical equipment – Part 1: General requirements for basic safety and essential performance; and
- 3) IEC 60601-1-2 Collateral Standard: Electromagnetic disturbances.

These standards were referenced because compliance assures changing station' design and operation will provide electrical and mechanical safety, structural strength, durability, safety of moving parts, prevent entrapment of human body parts and side rail safety for people with disabilities and their caregivers.

613.3.1 Size.

ICC A117.1 has requirements for benches to change clothes with a depth of 24" (Section 903.3). The 30" minimum width is thought to be most appropriate for a person laying down. The 70" length is based on the average height of an adult male.

613.3.2.1 Side clearance.

A 36" deep minimum side clearance along the length of one long open side allows for an accessible route with space to park a wheelchair to support transfer to/from changing surface.

613.2.2.2 End clearance.

A 36" deep minimum clearance on at least one end of the changing surface allows space for individual to move around the table to manipulate clothing and change the individual. It also allows for the wheelchair to be located at that end while a care giver is changing someone. The exception would allow for a 24" clearance at the end (based on information from Assisted Toileting and Bathing work group and study from the Rothchild's Foundation) if there was another location in the room to move the wheelchair. (The California Code requires 36" deep minimum clearance on both ends of the changing surface.)

613.3.3 Height adjustability.

The 17” lowest height is consistent with the ADA 17” to 19” water closet seat height requirement. The average height of a wheelchair seat is 19” above the floor. Lateral transfer to 17” changing surface height is practical. Adjustable height range is consistent with eight states’ (FL, NH, OK, WI, CA, MN, IA, MI) published height requirements.

The exception allows a fixed height surface. Fixed height changing surface is: (1) better than no changing surface; (2) a solution for vandalism of adjustable height adult changing surface.

613.3.3.1 Operation.

Controls of height adjustment comply with ADA Section 309.4 since operation is by the care giver, not the person on the table. Raising and lowering folding changing surface and side rails are not covered by ADA Section 309.4

613.3.4 Capacity.

“Not less than 350 lbs.” was selected as changing surface capacity because it covers 99% of the general population. Six states (FL, IL, MN, NH, OK and WI) of ten listing load capacity, state 350 lbs. One state (CA) of ten listing load capacity, states 300 lbs. Four states (IA, MI, ND and OH) of ten listing load capacity, state 440 lbs.

CDC data for body weight for the time period 2015-2018 indicates the following. For adult males age 20 and over, the data for all males examined (n=5,085) indicated a mean body weight of 199.8 lbs., and a body weight of 287.2 lbs. at the 95th percentile. When this data is analyzed by age range, body weight at 95th percentile ranged from 238.0 lbs. for males 80 years and over to 308.5 lbs. for males 30 -39 years of age.

One private sector website offers a body weight percentile calculator, based on the CDC’s 2015-2016 NHANES survey. The site specifies that the 99th percentile for adult males as being 341.1 lbs.

Specification of capacity at 350 lbs. seems reasonable, to account for clothing and any supplies that need to be available during the changing activity. Additionally, the 350 lbs. capacity offers a factor of safety of 1.21 when applied to the 287.5 lbs., 95th percentile figure, and 1.02 when applied to the 341.1 lbs., 99th percentile figure.

Anthropometric Reference Data for Children and Adults: United States, 2015-2018. Analytical and Epidemiological Studies. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

National Health and Nutrition Examination Survey, NHANES 2015-2016. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention cited on website <https://dqydj.com/weight-percentile-calculator-men-women/#:~:text=At%20the%20lowest%20extremes%20for%20adults%2C%20the%201st,for%20men.%20Weight%20alone%20doesn't%20tell%20you%20enough.>

613.3.5 Changing surface. The surface shall be non-porous surface for easy, thorough cleaning. Surface shall be durable to provide multiple years of service under normal conditions of use.

613.3.6.1 Side rail, size and location.

Relate side rail length to changing surface length without referring to a specific inch dimension. Allows for shorter length changing surfaces and rails.

613.3.6.2 Side rail positioning.

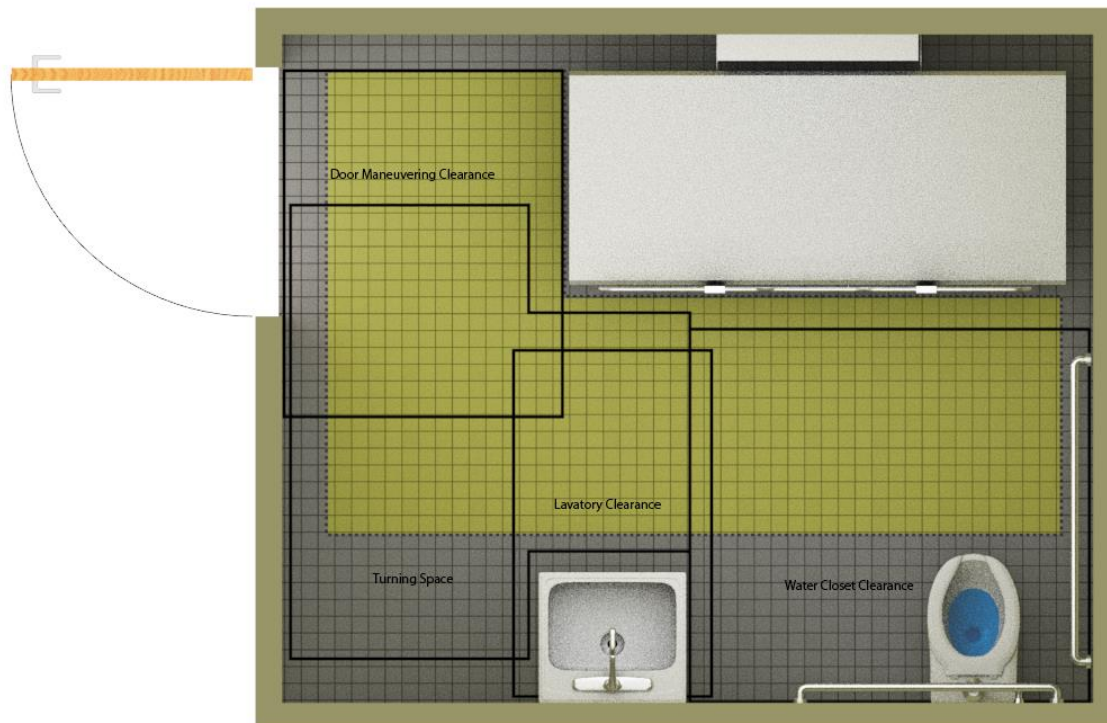
A side rail is needed on open side of changing surface to prevent person being cared for from rolling off. The 5” minimum height from the top of the side rail to the changing surface is considered a practical height for the caregiver to lean over.

The following are reasons for the portions of the proposal dealing with the room where the adult changing table/surface is located:

613.4 Installation location.

There currently is no existing technical design criteria for this feature. A need for adult changing facilities has been brought forth in proposed bills in multiple states with differing sets of design criteria. The proposed bills’ criteria were reviewed when developing these recommendations to provide a consistent set of technical criteria that meets the minimum needs of care providers for a private changing facility to change the adults with disabilities whom they care for, while at the same time maintaining required clearances at other fixtures in the room.

Consideration was given to the size of the changing surface being recommended by the Table sub-group to ensure that when in the open position, the changing surface does not obstruct the required clearances for toilets, sinks, doors and maneuvering when an adult changing surface is provided. It is necessary to ensure that the adult changing surface does not create a barrier for other persons with disabilities who may come to use the toilet room if the changing surface is folding and left in the open position. In addition to maintaining required clear floor spaces at other fixtures in the room, it was determined that the changing surface could not overlap the room’s turning space because some tables have a base underneath that does not allow for open knee and toe clearance that could otherwise be utilized as part of a turning space.



Staff note: The new standards will be provided for the ICC A117.1 committee members to review. The standards are copyrighted, so this will only be available for the committee and in a read only format.

06-90 – 2021 Replacement proposal

603.2.2, 613(New), 902.1

Proponent: Laurel Wright, representing the Adult Changing Facilities work group

Replace and revise as follows:

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

EXCEPTIONS:

1. Doors to a toilet or bathing room for a single occupant, accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space, provided the swing of the door can be reversed to comply with Section 603.2.2.
2. Where the room is intended for individual use, family or assisted-use, and a clear floor space is provided within the room outside the arc of ~~the~~ a door swing, ~~the~~ such a door shall not be required to comply with 603.2.2.

SECTION 902

DINING SURFACES AND WORK SURFACES

902.1 General. Accessible dining surfaces and work surfaces shall comply with Section 902.

Exceptions:

1. Dining surfaces and work surfaces primarily for children’s use shall be permitted to comply with Section 902.5.
2. Adult changing surfaces shall not be required to comply this section.

SECTION 613

ADULT CHANGING STATIONS

613.1 General. Adult changing stations shall comply with Section 613.2 through 613.4.

613.2 Installation location. Where provided, adult changing stations shall be installed in accordance with the locations specified in Section 613.2.1, 613.2.2 or 613.2.3.

613.2.1. Single user or family or assisted use toilet or bathing room. Where adult changing stations are provided in a toilet room with only one water closet and one lavatory, or in a family or assisted-use toilet or bathing room, the room shall provide all of the following components:

6. A dispenser for soap complying with Section 308.
7. A hand towel dispenser or hand dryer complying with Table 603.6.
8. A coat hook located in close proximity to the changing surface.
9. A waste receptacle.
10. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.
11. Signage indicating the weight capacity and instructions for operation of the changing station within the room.

613.2.2 Multi-user toilet or bathing room. Where adult changing stations are provided in a multi-user toilet or bathing room, the adult changing station shall be located in a compartment that includes all of the following components:

1. Privacy provided by walls, curtains or partitions enclosing the compartment.
2. A turning space complying with Section 304.

3. A lavatory complying with Section 606.
4. A dispenser for soap complying with Section 308.
5. A hand towel dispenser or hand dryer complying with Table 603.6.
6. A coat hook in close proximity to the changing surface.
7. A waste receptacle.
8. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.
9. Signage indicating the weight capacity and instructions for operation of the changing station within the compartment.

613.2.3 Room or space other than a toilet room or bathing room. Where adult changing stations are provided in a room or space other than a toilet or bathing room and including, but not limited to, nurses’ work areas, therapist work areas, or special education classrooms, the adult changing station shall be located in a compartment or room that includes all of the following components:

7. Privacy provided by walls, curtains or partitions.
8. A turning space complying with Section 304.
9. A lavatory complying with Section 606 or an alcohol-based hand sanitizer dispenser.
10. Where a lavatory is provided in the compartment or room, provide a dispenser for soap.
11. Where a lavatory is provided in the compartment or room, provide a hand towel dispenser or hand dryer complying with Table 603.6.
12. A waste receptacle.
13. Signage indicating the weight capacity and instructions for operation of the changing station within the room.

613.3 Room clearances. An adult changing station and its supporting structure shall not obstruct required clear floor spaces and clearances at accessible elements, maneuvering clearances at doors, or the wheelchair turning spaces.

613.4 Changing surface. A changing surface shall be provided and shall comply with Section 613.4.

613.4.1 Safety and performance. Adult changing stations shall comply with the following safety and performance requirements:

1. Protect the user from falling from the changing surface along the open long sides, by means such as retractable safety rails.
2. Provide a belt to secure the user on the changing surface.
3. Protect the user and caregiver from entrapment during operation.
4. Support a weight of not less than 400 lbs. (182 kg) applied to the changing surface
5. Provide a method to prevent tipping such as secured to the floor or wall, or other means.
6. Provide a changing surface that is durable, cleanable, non-absorbent, and resistant to corrosion.
7. Electrical components complying with NFPA 70.
8. Operable controls for height adjustment and, where provided, on and off complying with Section 309.4.

613.4.2 Size. The changing surface shall be 70 inches (1778mm) minimum in length and 30 inches (762mm) minimum in width.

613.4.3 Height adjustability. The changing surface height shall be adjustable at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.

Exception: Where the adult changing station is not required by the administrative authority, a fixed height changing surface shall be permitted and shall be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.

613.4.4 Clearances. Clearances complying with Sections 613.4.4.1 and 613.4.4.2 shall be provided adjacent to the changing surface, measured when the surface are in the operational position.

613.4.4.1 Side clearance. A 36-inch (914mm) deep minimum side clearance shall be provided along the open long side of the changing surface.

Exception: In the raised position, the side rail shall be permitted to overlap the side clearance.

613.4.4.2 End clearance. A 36-inch (914mm) wide minimum end clearance shall be provided along the depth of one end of the changing surface. The width of the end clearance shall extend the depth of the changing surface and the side clearance.

Exceptions:

- 1.** A 24-inch (610 mm) wide minimum end clearance shall be permitted where a clear floor space complying with Section 305.3 is provided within the room beyond the clearances for the changing surface.
- 2.** Where installed in locations specified in Section 613.2.3, end clearances complying with Section 613.4.4.2 is not required.

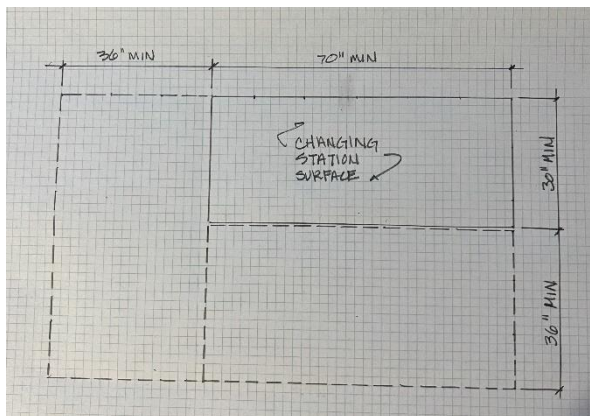


Figure 613.4.4
Changing surface and clearances

613.4.5 Side rail. Where side rails are provided at the changing surface they shall comply with Sections 613.4.5.1 and 613.4.5.2.

613.4.5.1 Size and location. Side rails shall be a minimum of 2/3 of the length of the changing surface and shall be centered +/- 3 inch (75 mm) along the long open sides of the changing surface.

613.4.5.2 Rail positioning. Side rails shall be capable of being raised and lowered. The side rail shall be fixed in place when in the raised position. The top of the side rail shall extend 5 inches (127mm) minimum above the top of the changing surface.

REASON: The purpose of this standard proposal is to develop criteria for adult changing tables and the rooms in which they are installed. This is intended to coordinate with scoping provisions provided to the I-codes in proposals E141-21(AMPC1), E142-21(AMPC 1 and 2), P37-21(AMPC1) and M20-21(AS). This proposal is a result of the meetings held by the Adult Changing Facilities work group set up by the ICC A117.1 committee. The work group met from August 2020 to December of 2021 to develop this criteria. They have met several times in 2022 to improve the proposal based on comments from the full A117.1 committee.

Participation included work group members and interested parties with a wide range of interests, and included representatives of manufacturers of adult changing tables and parents of adult persons with disabilities that need to use adult changing tables. The work group reviewed eighteen proposed state laws, two already adopted, and four guidelines in European, Australian and North American countries for adult changing tables. While there is interest in many states to provide such facilities, investigations by this work group showed either no technical guidance or very inconsistent information and application. The end result currently is limiting access to children with disabilities who have grown up with accessibility in schools and public places since the ADA went into effect, as well as disenabling a significant number of adults with disabilities who have experienced a different type of life-changing event, accidents, injuries or wars.

The following is an impact statement on the benefits of having these facilities in buildings and facilities.

- Limiting access to those who need adult changing stations decreases the community size dramatically. Nationally, the Centers for Disease Control and Prevention (CDC) reports 61 Million adults (26% of the US population) have some form of disability, with 24.1% affected in the areas of mobility, independent living, and self care. Further, each of those folks need assistance, and likely travel with additional family members. Once this population is taken out of the community, businesses are also losing a large potential of support and income. Providing our citizens more opportunities to participate in the community and patronize local establishments strengthens communities, allowing all family members to engage or travel together as one family nucleus. Currently many families have to make the choice to participate in activities outside of the home with only a portion of their family.
- Individually, families from many states are pushing for the adult changing facilities. A national campaign, Changing Spaces, has been activated, with chapters in at least 10 states, advocating for height adjustable changing tables to be required in public places. At least 12 states have proponents actively proposing and working toward legislation, while as many as 18 states have draft language in play. California has already enacted legislation requiring adult changing stations. Maryland has legislation that goes into effect next year. Accepting this proposal will show wide-spread acceptance of the need along with a consistent set of standards across the country for users to rely on.
- We are all part of an aging population and the elderly still want to be able to attend family gatherings and travel in a car to be with relatives. These adult changing facilities would be valued not only by families with adult disabled children but also be aging adult family members.
- Without appropriate changing facilities, families cannot travel more than 30-40 miles from home. Additionally, trips that involve more than a few hours of time are also a risk. As a result, vacations, trips to zoos, aquariums, museums, concerts, and similar events are eliminated.
- The addition of adult changing tables will present a tremendous change in the quality of life for so many people who were unable to get out and participate in many activities before due to the lack of adequate facilities.

The following are reasons for the portions of the proposal dealing with the adult changing table/surface:

The work group compared the recommended changing surface technical requirements with changing tables on the market and verified that the requirements recommended are available from multiple sources. The following are specific to the sections for the changing surface.

603.2.2 Door swing (to family or assisted-use toilet room) – (see also 613.3) Similar to a single occupant bathroom, it is assumed that persons using this room will enter the room and lock the door. Therefore, the door can swing over clear floor spaces provided that the a wheelchair space is located past the swing of the door.

902.1 General (Work surface) – (see also 613.2) Some tables are wall mounted and could provide knee and toe clearances, however to achieve desired weight capacity and stability, there are many options with a center post or an x-brace system that need to be permitted. Therefore, adult changing surfaces, while a work surface for a care provider, is not also required to be an accessible work surface due to the potential lack of knee and toe clearances.

613 Adult changing stations and 613.1 General – This is a new section for the technical criteria for adult change stations. The IBC and the Appendix will include locations where these should be required for public access so that parents can change their adult children. For use and safety, these provisions will also apply where adult changing facilities are provided voluntarily.

There currently is no existing technical design criteria for adult changing facilities. A need for adult changing facilities has been brought forth in proposed bills in multiple states with differing sets of design criteria. The proposed bills' criteria were reviewed when developing these recommendations to provide a consistent set of technical criteria that meets the minimum needs of care providers for a private changing facility to change the adults with disabilities whom they care for, while at the same time maintaining required clearances at other fixtures in the room.

613.1.2 Installation location – Where adult changing facilities are required, they will be provided in a separate toilet room (613.2.1). Where provided, but not required, they can be in a separate toilet room (613.2.1, in a bathroom in a separate stall (613.2.2) or in a private area (613.2.3). The work group felt that that there should be additional allowances for locations where the persons with disabilities are cared for in areas such as special education classrooms or in school nurses' offices where the primary care giver is not family members. The intent is to allow the adult changing tables in the locations that best serves the situation where these are provided voluntarily.

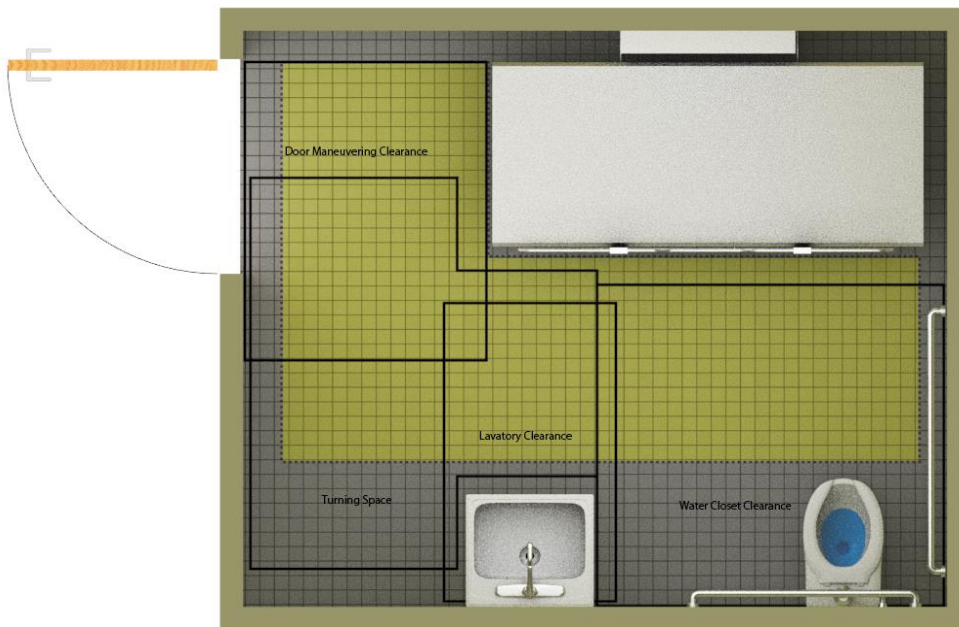
613.2.1. Single user or family or assisted use toilet or bathing room. – In a private bathroom, to allow for sanitation of the table, the user and the care giver, along with the fixtures (lavatory, water closet), the room will include soap, towels and a garbage can. There will be a coat hook in the room. Signage outside to identify the room and instructions for the table operation inside the room are required.

613.2.2 Multi-user toilet or bathing room. Where a table is provided in a multi-stall bathroom, the table will be in a private area. Within that area will be a lavatory with soap and a hand dryer, or hand towel dispenser. A garbage can is required. Signage to identify the room outside and instructions for the table operation are required.

613.2.3 Room or space other than a toilet room or bathing room. These are primarily for, but not limited to, nurses' work areas, therapist work areas, or special education classrooms. Privacy is required. Within that

area if the room has a lavatory, also provide soap and a hand dryer, or hand towel dispenser. There is the option for a hand sanitizer. A garbage can is required. Instructions for the table operation are required.

613.3 Room clearances. Consideration was given to the size of the changing surface being recommended by the Table sub-group to ensure that when in the open position, the changing surface does not obstruct the required clearances for toilets, sinks, doors and maneuvering when an adult changing surface is provided. It is necessary to ensure that the adult changing surface does not create a barrier for other persons with disabilities who may come to use the toilet room if the changing surface is folding and left in the open position. (A folding table is permitted, but the intent is that when the table is down, it will not be necessary to lift the table to access the other fixtures.) In addition to maintaining required clear floor spaces at other fixtures in the room, it was determined that the changing surface could not overlap the room's turning space because some tables have a base underneath that does not allow for open knee and toe clearance that could otherwise be utilized as part of a turning space.



613.2 Safety and performance. The committee has applied to work with IAPMO to develop a standard specific to adult changing. This list is the performance criteria to use for safety until this standard is finished.

Item 1 and 2 - Both a safety belt and a side rail will be required. The side rail prevents the user from rolling off the changing surface. The belt secures the user in place and, from the commentary received from Jennifer and other parents, is a necessary secondary item that prevents the user from rolling around on the surface. Not all users may require it, but from the comments received so far, having a belt to secure the user allows the caretaker to be more free in his/her movements/administrations during the changing process. Side rails are required by six states (FL, IA, IL, MI, MN, WI) and a safety belt is required in five states (FL, IA, IL, MI, MN) of the eleven states listing changing station requirements. A safety belt is included on four adult, adjustable height changing station models of the twelve products from six manufacturers the Adult Changing Station Task Force surveyed.

Item 3, 4 and 5– Consideration of possible entrapment, capacity and no tipping are important safety issues.

“Not less than 350 lbs.” was originally selected as changing surface capacity because it covers 99% of the general population. Six states (FL, IL, MN, NH, OK and WI) of ten listing load capacity, state 350 lbs. One state (CA) of ten listing load capacity, states 300 lbs. Four states (IA, MI, ND and OH) of ten listing load capacity, state 440 lbs.

One private sector website offers a body weight percentile calculator, based on the CDC’s 2015-2016 NHANES survey. The site specifies that the 99th percentile for adult males as being 341.1 lbs.

It is suggested that the weight capacity of the adult-size, adjustable height changing station should be “not less than 400 lbs. (182 kg)”. Commentary from parents of adult children who use adjustable height changing stations to change their children indicated that additional weight beyond the users’ weight is placed on the changing station surface. First, the care giver will apply pressure to the changing surface during the changing process. Second, the care giver may add equipment to the changing surface that is needed during the changing process. Third, the care giver may lie on the changing surface to calm down their agitated child while another caregiver performs the changing process. The weight capacities of twelve adult-size, adjustable height changing station models, from six manufacturers, on the market surveyed by the Adult Changing Station Task Force shows the following:

- Under 400 lbs., 2
- 400 lbs., 1
- 440 lbs., 8
- 500 lbs., 1

Item 6 – This is common language for surfaces that need to be cleanable for sanitation reasons. The surface shall be non-porous surface for easy, thorough cleaning. Surface shall be durable to provide multiple years of service under normal conditions of use.

Item 7 – NFPA 70 is the National Electrical Code and will reduce the chance of accidental shock.

Item 8 – the controls to operate the height of the table are for the caregiver and should be places where it is best to serve their needs for a smooth operation of the changing surface. This may not be on the side or over the table.

613.4.2 Size. ICC A117.1 has requirements for benches to change clothes with a depth of 24” (Section 903.3). The 30” minimum width is thought to be most appropriate for a person laying down. The 70” length is based on the average height of an adult male.

613.4.3 Height adjustability. The 17” lowest height is consistent with the ADA 17” to 19” water closet seat height requirement. The average height of a wheelchair seat is 19” above the floor. Lateral transfer to 17” changing surface height is practical. Adjustable height range is consistent with eight states’ (FL, NH, OK, WI, CA, MN, IA, MI) published height requirements.

“Adjustable at variable heights” will allow for reasonable transitions.

Reasons for 38” Maximum Height Adjustability - The maximum height of twelve adult-size, adjustable height changing station models, from six manufacturers, on the market surveyed by the Adult Changing Station Task Force shows 9 of the 12 meet this height requirement.

The maximum height of states’ requirements surveyed shows the following:

38” (1) CA

34" (7) FL, IA, MI, NH, OH, OK, WI
28" (1) MN
No height listed (5) GA, IL, PA, TX, VI

The 38" maximum adjustable height suggested is consistent with a majority of the adult-size, adjustable height changing station models on the market offering a higher maximum height than is stated in majority of U.S. States' requirements.

The exception allows a fixed height surface where tables are provided voluntarily. Fixed height changing surface is: (1) better than no changing surface; (2) a solution for vandalism of adjustable height adult changing surface; (3) a significant reduction in cost that should encourage additional tables where needed (such as in every special education classroom in a school). The 19" to 23" is based on new information for the Access Board about the range of wheelchair seat heights.

613.4.4 Clearances. Folding tables are not prohibited, so the clearance are required when the table is in its operational position.

613.4.4.1 Side clearance. A 36" deep minimum side clearance along the length of one long open side allows for an accessible route with space to park a wheelchair to support transfer to/from changing surface. The exception allows for side rails to be inbound or outbound of the of the changing surface. When the side rails are down, they should not obstruct the transfer to the table.

613.4.4.2 End clearance. A 36" deep minimum clearance on at least one end of the changing surface allows space for caregiver to move around the table to manipulate clothing and change the user. It also allows for the wheelchair to be located at that end while a care giver is changing someone.

Exception 1 would allow for a 24" clearance at the end (based on information from Assisted Toileting and Bathing work group and study from the Rothchild's Foundation) if there is another location in the room to move the wheelchair. (The California Code requires 36" deep minimum clearance on both ends of the changing surface.)

Exception 2 allows for tables in nurses' work areas, therapist work areas, or special education classrooms to be located in an alcove where necessary.

613.4.5 Side rail,

613.4.5.1 Size and location. Relate side rail length to changing surface length without referring to a specific inch dimension.

613.3.6.2 Side rail positioning. A side rail is needed on open side of changing surface to prevent person being cared for from rolling off. The 5" minimum height from the top of the side rail to the changing surface is considered a practical height for the caregiver to lean over.

Committee Action: As Modified 26-0-0

REPORT OF HEARING:

Modification (if any): Motion to delete 613.4.1 passed 26-3-0

Further revise as follows:

~~**613.4.1 Safety and performance.** Adult changing stations shall comply with the following safety and performance requirements:~~

- ~~1. Protect the user from falling from the changing surface along the open long sides, by means such as retractable~~

~~safety rails.~~

- ~~2. Provide a belt to secure the user on the changing surface.~~
- ~~3. Protect the user and caregiver from entrapment during operation.~~
- ~~4. Support a weight of not less than 400 lbs. (182 kg) applied to the changing surface~~
- ~~5. Provide a method to prevent tipping such as secured to the floor or wall, or other means.~~
- ~~6. Provide a changing surface that is durable, cleanable, non-absorbent, and resistant to corrosion.~~
- ~~7. Electrical components complying with NFPA 70.~~
- ~~8. Operable controls for height adjustment and, where provided, on and off complying with Section 309.4.~~

613.4.3 Height adjustability. The changing surface height shall be adjustable at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.

Exception: Where the ~~changing surface~~ adult changing station is not required by the administrative authority, a fixed height changing surface shall be permitted and shall be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.

Committee Reason: The first modification deleted Section 613.4.1 due to concerns that some of the item were not in enforceable language (e.g. # 3 and 5). Item 1 is addressed in Section 614.4.5. Item 8 needed some editorial cleanup on the language.

The modification to Section 613.4.3 was because the adult changing station is required by the codes, not the surface itself. This is editorial.

The replacement proposal developed by the Adult Changing Station Committee was approved because it brought requirements in for the changing table that would provide appropriate guidance for these facilities. The committee worked to address concerns raised by the A117.1 committee during the original presentation to the committee at the March 10 presentation. Laurel Wright's presentation explained the development and resources used by the task group to develop criteria.

106-WRIGHT.doc

06-90 – 2021 Public Comment 1

613.4.3 (New)

Proponent: Jennifer Skulski, Skulski Consulting LLC

Support the committee action with the following related comment.

613.4.3 Height adjustability. The changing surface height shall be adjustable at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.

Exception: Where the adult changing station is not required by the administrative authority, a fixed height changing surface shall be permitted and shall be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.

REASON: Over the last three years, we have conducted accessibility assessments in public parks where every mechanically adjustable changing table was rendered inoperable within 12 months of installation. Either through excessive force, heavy use, or malicious intent, the mechanically adjustable changing tables have not been able to withstand the unsupervised public park restroom setting. Thank you for allowing for the exception

of a fixed height changing surface. This will be especially helpful in public park settings like playgrounds and splash pads that experience a high volume of hard use and vandalism.

Committee Action for Public Comment 1:

REPORT OF HEARING:

Modification (if any):

Committee Reason:

06-90 Skulski.doc

06-90 – 2021 Public Comment 2

102.1

Proponent: Laurel Wright, representing the Adult Changing Station Task Group

Revise as follows:

Further modify as follows:

613.3.4 Capacity. Allowable stresses for materials, fastening mounting devices, and support structure shall support a downward force of not less than 400 lbs. (182 kg) applied to any point on the changing surface.

REASON: A 350 lbs. capacity was in the original proposal, but was removed in the replacement proposal. The reason statement for the replacement indicates why 400 lbs. would be more appropriate. IAPMO is developing a safety standard for adult changing tables, that may address this, but until this standard is ready, we feel that this requirement should be reinstated.

Committee Action for Public Comment 2:

REPORT OF HEARING:

Modification (if any):

Committee Reason:

06-90 Wright.doc

06-90 – 2021 Public Comment 3

613

Proponent: Marsha Mazz, representing Terminology Work Group

Further revise as follows:

SECTION 616 ADULT CHANGING STATIONS

616.2.1. Single user or family or assisted use toilet or bathing room. Where adult changing stations are provided in a toilet room with only one water closet and one lavatory, or in a family or assisted-use toilet or bathing room, the room shall provide all of the following components:

1. A dispenser for soap ~~complying with Section 308~~ located within the applicable reach range.
2. A hand towel dispenser or hand dryer complying with Table 603.6.
3. A coat hook located in close proximity to the changing surface.
4. A waste receptacle.
5. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.
6. Signage indicating the weight capacity and instructions for operation of the changing station within the room.

616.2.2 Multi-user toilet or bathing room. Where adult changing stations are provided in a multi-user toilet or bathing room, the adult changing station shall be located in a compartment that includes all of the following components:

1. Privacy provided by walls, curtains or partitions enclosing the compartment.
2. A turning space ~~complying with Section 304.~~
3. A lavatory complying with Section 606.
4. A dispenser for soap ~~complying with Section 308~~ located within the applicable reach range.
5. A hand towel dispenser or hand dryer complying with Table 603.6.
6. A coat hook in close proximity to the changing surface.
7. A waste receptacle.
8. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.
9. Signage indicating the weight capacity and instructions for operation of the changing station within the compartment.

616.2.3 Room or space other than a toilet room or bathing room. Where adult changing stations are provided in a room or space other than a toilet or bathing room and including, but not limited to, nurses’ work areas, therapist work areas, or special education classrooms, the adult changing station shall be located in a compartment or room that includes all of the following components:

1. Privacy provided by walls, curtains or partitions.
2. A turning space ~~complying with Section 304.~~
3. A lavatory complying with Section 606 or an alcohol-based hand sanitizer dispenser.
4. A dispenser for soap ~~complying with Section 308~~ located within the application reach range.
5. Where a lavatory is provided in the compartment or room, provide a hand towel dispenser or hand dryer complying with Table 603.6.
6. A waste receptacle.
7. Signage indicating the weight capacity and instructions for operation of the changing station within the room.

616.3 Room ~~clearances configurations.~~ An adult changing station and its supporting structure shall not obstruct required clear floor spaces and maneuvering clearances at ~~accessible elements~~ fixtures, maneuvering clearances at the adult changing stations, maneuvering clearances at doors, or the ~~wheelchair~~ turning spaces.

616.4.3 Maneuvering Clearances. Maneuvering Clearances at the adult changing surface and complying with Sections 616.4.4.1 and 616.4.4.2 shall be provided. ~~adjacent to the changing surface, and~~ Such

maneuvering clearances shall be measured when where the adult changing surface are is in the operational position.

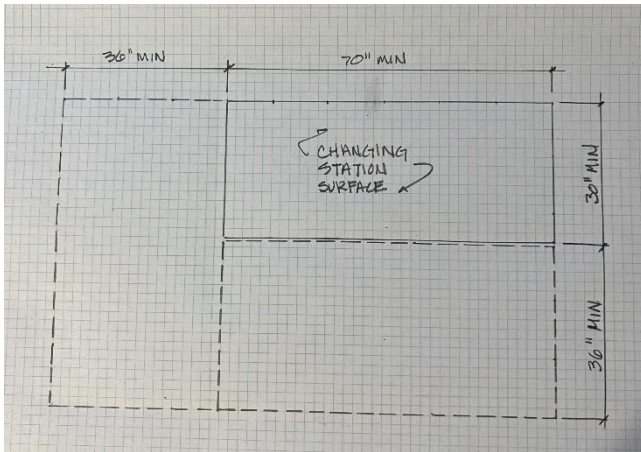
616.4.3.1 Side maneuvering clearance. A 36-inch (914mm) deep minimum side maneuvering clearance at the adult changing surface shall be provided along the open long side of the adult changing surface.

Exception: In the raised position, the side rail shall be permitted to overlap the side clearance.

616.4.3.2 End maneuvering clearance. A 36-inch (914mm) wide minimum end maneuvering clearance at the adult changing surface shall be provided along the depth of one end of the changing surface. The width of the end maneuvering clearance shall extend the depth of the changing surface and the side maneuvering clearance.

Exceptions:

3. A 24-inch (610 mm) wide minimum end maneuvering clearance shall be permitted where a clear floor space complying with Section 305.3 is provided within the room beyond the maneuvering clearances for the changing surface.
4. Where installed in locations specified in Section 616.2.3, end maneuvering clearances complying with Section 616.4.3.2 is not required.



6-90-2021 AM

Figure 616.4.4

Size and maneuvering clearances at the adult Changing surface ~~and clearances~~

REASON: This is part of a proposal from the Terminology task group to define the building blocks so that a reference is not required. This public comment is included here because it was part of new text. Please see the complete proposal for additional information.

Committee Action for Public Comment 3:

REPORT OF HEARING:

Modification (if any):

Committee Reason:

Committee Action for First Ballot:

REPORT OF HEARING:

Modification (if any):

Committee Reason:

Report for 06-90-2021		
Committee decision: AM	Committee Vote at Meeting: 26-0-0	Committee Vote on Ballot:39-0-2
REPORT OF HEARING: Modification (if any): Further revise as follows:		
<p>613.4.1 Safety and performance. Adult changing stations shall comply with the following safety and performance requirements:</p> <ol style="list-style-type: none">1. Protect the user from falling from the changing surface along the open long sides, by means such as retractable safety rails.2. Provide a belt to secure the user on the changing surface.3. Protect the user and caregiver from entrapment during operation.4. Support a weight of not less than 400 lbs. (182 kg) applied to the changing surface5. Provide a method to prevent tipping such as secured to the floor or wall, or other means.6. Provide a changing surface that is durable, cleanable, non-absorbent, and resistant to corrosion.7. Electrical components complying with NFPA 70.8. Operable controls for height adjustment and, where provided, on and off complying with Section 309.4. <p>613.4.3 Height adjustability. The changing surface height shall be adjustable at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface. Exception: Where the changing surface adult changing station is not required by the administrative authority, a fixed height changing surface shall be permitted and shall be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.</p>		
<p>Committee Reason: The first modification deleted Section 613.4.1 due to concerns that some of the item were not in enforceable language (e.g. # 3 and 5). Item 1 is addressed in Section 614.4.5. Item 8 needed some editorial cleanup on the language. The modification to Section 613.4.3 was because the adult changing station is required by the codes, not the surface itself. This is editorial. The replacement proposal developed by the Adult Changing Station Committee was approved because it brought requirements in for the changing table that would provide appropriate guidance for these facilities. The committee worked to address concerns raised by the A117.1 committee during the original presentation to the committee at the March 10 presentation. Laurel Wright's presentation explained the development and resources used by the task group to develop criteria.</p>		
BALLOT 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:		
BALLOT 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:		