# Chapter 4

### 4-5 - 12

#### Revise as follows:

**403.5 Clear width.** The clear width of an accessible route shall comply with Section 403.5.1. 403.5.2 or 403.5.3 as applicable.

403.5.1 General. The clear width of an accessible route shall be 36 inches (915 mm) minimum.

**EXCEPTION:** The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided the reduced width segments are separated by segments that are 48 inches (1220 mm) minimum in length and 36 inches (915 mm) minimum in width.

403.5.2 403.5.1 Clear Width at 180 Degree Turn. Where an accessible route makes a 180 degree turn around an object that is less than 48 inches (1220 mm) in width, clear widths shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum during the turn, and 42 inches (1065 mm) minimum leaving the turn.

**EXCEPTION:** Section <u>403.5.2</u> <u>403.5.1</u> shall not apply where the clear width during the turn is 60 inches (1525 mm) minimum.

403.5.3 403.5.2 Passing Space. An accessible route with a clear width less than 60 inches (1525 mm) shall provide passing spaces at intervals of 200 feet (61 m) maximum. Passing spaces shall be either a 60-inch (1525 mm) minimum by 60-inch (1525 mm) minimum space, or an intersection of two walking surfaces that provide a T-shaped turning space complying with Section 304.3.2, provided the base and arms of the T-shaped space extend 48 inches (1220 mm) minimum beyond the intersection.

### 4-5-12 PC1

Ron Burton, PTW Advisors LLC, representing Building Owners and Managers Association, International; David S. Collins, The Preview Group, representing American Institute of Architects (AIA); Ron Nickson, representing the National Multi-housing Council; Steve Orlowski, representing the National Association of Home Builders; Kim Paarlberg, representing International Code Council

See comment under 3-6-12 PC2

### 4-5-12 PC2

Harold Kiewel, representing self

Further revise as follows:

**403.5.1 General**. The clear width of an accessible route shall be 36 inches (915 mm) minimum.

#### **EXCEPTIONS:**

1. The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided the reduced width segments are separated by segments that are 48 inches (1220 mm) minimum in length and 36 inches (915 mm) minimum in width.

 Where the occupant load of an accessible route exceeds 50 persons, the accessible route shall be at least 72-inches wide or as required by the administrative authority for exiting, whichever is greater.

**Reason:** 72-inches is two, reduced-width passages plus three, 4-inch shoulders (4 + 32 + 4 + 32 + 4). It's probable that the median (middle shoulder) should be 8-inches wide, but I am reluctant to ask for those 4-inches.

### 4-5-12 PC3

Jean Tessmer, representing herself

Further revise Section 403.5 as follow:

**403.5 Clear width**. <u>Is a space that accommodates a wheelchair moving in one direction continuously.</u> The clear width of an accessible route shall comply with Section 403.5.1. 403.5.2 or 403.5.3 as applicable.

**Reason:** Adding the defined function of an accessible route with direction makes understanding the usability clearer. It is not static it is continuous and defines the width of that route.

### 4-5-12 PC4

Jean Tessmer, representing herself

Further revise as follow:

403.5.1 General. The clear width of an accessible route shall be 36 inches (915 mm) minimum.

**EXCEPTION:** The clear width shall be permitted to be reduced to 34 32 inches (815 mm) minimum for a length of 18 24 inches (610 mm) maximum provided the reduced width segments are separated by segments that are 60 inches (1220 mm) minimum in length and 36 inches (915 mm) minimum in width.

**Reason:** 32 inches width for a run of 24 inches is a knuckle buster, only being able to use your finger tips on the rim to maneuver the chair. Then having to negotiate that narrow 32 inches every 48 inches is not enough space to allow a full push on the rim which may cause more hand damage and greater difficulty maneuvering. Other ambulatory individuals would not be as challenge by such intruding obstacles.

### 4-5-12 PC5

Douglas Kantor, Steptoe & Johnson, LLP, representing National Association of Convenience Stores

Disapprove the change. Return the text to that found in existing standard.

**Reason:** NACS is not in favor of this proposed change. We believe the impact of this change could be significantly negative to the convenience and fuel retailing industry.

This proposed change could have a devastating impact on the small facilities of our members. This has the likely potential to impact every sales aisle in a store and therefore significantly reduce the number of sales aisles or increase the overall size of a store. Increasing the overall size of the stores has a dominoing impact on development of new facilities by requiring larger sites, additional parking, zoning concerns, and possibly making certain locations undevelopable based upon a negative impact to proforma.

This proposed change could increase the width of sales aisles by up to 7 inches which represents a 19% increase in aisle width. In a typical store this could cause the loss of an entire row of shelves. This has the potential negative impact through the loss of an average of 60 SF of sales space and \$2,800 in lost sales per month. It is estimated that this change could also cause an increase in size of a typical retail space by up to 10% with no resulting increase in sales.

Based upon this negative impact to sales NACS is not in favor of this proposal without evidence that this proposal is absolutely necessary for the accessibility of persons with disabilities. While we recognize that the research provided indicates that wheeled mobility devices are becoming larger we do not see any research or reason provided for the increase in size in wheeled mobility devices. Should we, as an industry, be required to pay this cost or increased size out of the choice for bigger devices or should the necessity of larger devices be provided prior to requiring larger spaces. NACS is also not aware of any complaints based upon the aisle space widths or turning space around aisle ends provided with existing facilities that currently comply with the current standards. See additional information at 3-6-12.

# 4-6 - 12

#### Revise as follows:

403.5 Clear Width. The clear width of an accessible route shall be 36 inches (915 mm) minimum.

**EXCEPTION:** The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided the reduced width segments are separated by segments that are 48 <u>52</u> inches (<u>1220</u> mm) minimum in length and 36 inches (915 mm) minimum in width.

**403.5.2 Passing Space.** An accessible route with a clear width less than 60 inches (1525 mm) shall provide passing spaces at intervals of 200 feet (61 m) maximum. Passing spaces shall be either a 60-inch (1525 mm) minimum by 60-inch (1525 mm) minimum space, or an intersection of two walking surfaces that provide a T-shaped turning space complying with Section 304.3.2, provided the base and arms of the T-shaped space extend 48 52 inches (1220 1320 mm) minimum beyond the intersection.

### 4-6-12 PC1

Ron Burton, PTW Advisors LLC, representing Building Owners and Managers Association, International; David S. Collins, The Preview Group, representing American Institute of Architects (AIA); Ron Nickson, representing the National Multi-housing Council; Steve Orlowski, representing the National Association of Home Builders; Kim Paarlberg, representing International Code Council

See comment under 3-6-12 PC2

## 4-6-12 PC2

Karen Gridley, representing Target Corporation

Further revise as follows:

**403.5 Clear Width.** The clear width of an accessible route shall be 36 inches (915 mm) minimum.

**EXCEPTION:** The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided the reduced width segments are separated by segments that are 48 52 inches (1220 1320 mm) minimum in length and 36 inches (915 mm) minimum in width.

Balance of 4-6-12 remains unchanged.

**Reason:** This proposed change is provided based on our previous proposal for the building block size of the clear floor space to remain at the current dimension of 48 inches in length, and not be increased to 52 inches. Several reasons are noted here to demonstrate that the increase to 52 inches will ultimately result in a reduction of access from a broader perspective.

During the July 2013 Committee Action Meeting we heard comments by committee members wondering if there is data available regarding how the size of the current turning space works in "real world" applications as compared to findings in the study completed by Dr. Steinfeld.

In response, Target can offer some data that will help add real world context to the discussion. For reference, Dr. Steinfeld's study, which lead the committee to propose a new 52" long clear floor space dimension, included 500 participants from a localized geographic area, as we understand it.

Target's data is based on feedback from people across the nation who visit our stores, totaling nearly 36 million transactions *per week*, on average. Keeping in mind that often the person making the transaction has another person with them so there are well into the multi-millions of guests at Target stores every week. Of these guests, many share comments of all sorts with Target (not just access related) through various channels. We find that of the guests who contacted us in 2012, the percentage of comments related to accessibility of the building was limited to an extremely small fraction of less than 1%. (Less than .0003% of 1%.). Of that fraction of 1%, an even smaller fraction of those comments were related to concerns about clear floor space for wheeled mobility devices. This tells us that the current sizes and dimensions in the existing Standard work, as-is, for the greater

majority of guests using wheeled mobility devices. The data presents no compelling evidence or reason to change the existing dimension.

#### Additional Information:

During the July 2013 Committee Action Meeting, members of the committee commented that the committee's only job was to look at the A117.1 Standard and implement changes to increase access through that document. In response, we urge the committee to consider that 'more and bigger is not always better, sometimes it's just more and bigger'.

Supporting this would be the observation that the committee has not done its due diligence in evoking or investigating the Wheeled Mobility Device Manufacturing Industry to see what can be accomplished to improve maneuvering through existing engineering practices in 'Like' industry trends and innovation in designs on their end, as that industry as a whole is changing too. Like the automotive industry that went from large cars, trucks and vans to smaller frame vehicles to achieve sustainable efficiencies throughout their redesign all while maintaining safety and functionality.

From an architectural perspective, designers and building owners do not have the luxury of looking at a building in isolation through only a single Standard or Regulation when we design buildings. We must consider many regulations and standards, each having an impact and interplay with other requirements that ultimately drive the size, shape and design of the spaces we provide for people. Considering this interplay, Target respectfully submits that increasing the size of the clear floor space, and other building block sizes, will actually result in decreased accessibility when applied in conjunction with forces in place from other codes and standards.

For example: Green codes and standards are increasingly challenging us to "reduce our carbon footprint", and be responsible stewards of the environment, which includes making buildings smaller in order to achieve compliance with those standards and newly developing regulations. While at the same time, the proposed increases in size of accessibility building blocks within the A117.1 standard would have us increasing our building size.

It is true that designers can adjust, tweak, push and pull designs of the physical buildings to meet these conflicting requirements. In the past we've had the luxury of being able to make buildings larger. However that luxury is increasingly limited in today's environment. The cost comes in what will subsequently be able to fit within in these buildings that are experiencing a compound squeeze (squeezed smaller in footprint on the outside, but interior spaces pushed larger from within). From a retail perspective, this will reduce capacity for merchandise offerings. What was once able to be provided on store shelves may no longer be available due to compromised available space for shelving to house merchandise, having a negative impact on guest's shopping trips.

From a product perspective, of the guest comments received in 2012, approximately 12% were related to product, as compared to the less-than 1% of comments related to building accessibility. Product availability is already of greater concern to guests than building access. Thus, increasing the building blocks of accessibility would drive product concern even higher, since the very things that persons with disabilities might travel to a store to purchase could no longer be available. Considering the effort it takes to travel to shopping destinations for many persons with disabilities, it is a disservice to them for retailers to not be able to offer the items that they currently go there for, forcing them to extend strenuous shopping trips to additional stores in search of what they are looking for, and for some, making the shopping trip as a whole inaccessible all together.

We encourage the committee to reconsider the proposals that would increase the size of the 52" long clear floor space dimension, and other building block sizes, and instead maintain the current sizes. At least until such time as more investigation of the Wheeled Mobility Device Manufacturing Industry can take place to identify what can be done to improve design of those devices via engineering and technology advancements, towards improved access.

#### 4-6-12 PC3

Harold Kiewel, representing self

#### Further revise as follows:

**403.5.2 Passing Space.** Where an accessible route with a clear width is less than 60 72 inches (1525 mm) shall wide, provide passing spaces at intervals of 200 feet (61 m) maximum. Passing spaces shall be either a 60 72-inch (1525 mm) wide minimum by 60 68-inches (1525 mm) long minimum space, or an intersection of two walking surfaces that provide a T-shaped turning space complying with Section 304.3.2, provided the base and arms of the T-shaped space extend 52 inches (1320 mm) minimum beyond the intersection.

**Reason:** A T-turn is a very awkward maneuver, and promoting its use in this situation is also anti-social. For one person to turn out into the 'T', that person must become submissive and turn his/her back to the other. The individuals should be able to pass as equals, facing each other. See additional reason statement at 1-1-12.

### 4-6-12 PC4

Kim Paarlberg, representing International Code Council

Further Revise Section 403.5.2 as follows:

**403.5.2 Passing Space.** An accessible route with a clear width less than 60 inches (1525 mm) shall provide passing spaces at intervals of 200 feet (61 m) maximum. Passing spaces shall be either a 60 67-inch (1525 1700 mm) minimum by 60 67-inch (1525 1700 mm) minimum space, or an intersection of two walking surfaces that provide a T-shaped turning space complying with Section 304.3.2, provided the base and arms of the T-shaped space extend 52 inches (1320 mm) minimum beyond the intersection.

**Reason:** This is just one example of the T-turn, circular turn, 180-degree turn, 90-degree turn and passing space not being coordinated. Please keep in mind that the building code requires a 36" minimum clear width corridor or aisle width for situations with 50 or less occupants (basically residential, small business and mercantile) and 44" minimum clear width for greater than 50 occupants. The requirements for turns could significantly impact layouts. With the current text, I am afraid that there will be situation where someone sets very specific accessible routes to keep 36" wide corridors and aisles. The option to do chamfers is very costly.

While I am in favor of improving access, the suggestions need to fit within typical building elements. Is the passing space to turn around (as implied by the T-turn) or an alcove to pull over in (as implied by the 60" space).

### 4-6-12 PC5

Robin Roberts, Chair, Technical Standards Committee, representing Accessibility Professionals Association

Disapprove this change. Return the text to that found in existing standard.

**Reason:** Many of the comments provided in the background reports expressed reservations regarding the study upon which the proposals are based. Because the proposed changes would have an enormous impact on the design and construction community, further investigation seems necessary.

### 4-7 - 12

#### Revise as follows:

**403.5 Clear Width.** The clear width of an <u>interior</u> accessible route shall be 36 inches (915 mm) minimum. The clear width of an exterior accessible route shall be 48 inches (1220 mm) minimum.

#### **Exceptions:**

- 1. The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided the reduced width segments are separated by segments that are 48 inches (1220 mm) minimum in length and 36 inches (915 mm) minimum in width.
- 2. The clear width of an exterior ramp comply with Section 405.5.

# 4-7-12 PC1

Gene Boecker, Code Consultants, Inc. representing National Association of Theatre Owners

### Further revise as follows:

**403.5 Clear Width.** The clear width of an interior accessible route shall be 36 inches (915 mm) minimum. The clear width of an exterior accessible route shall be 48 inches (1220 mm) minimum.

#### **Exceptions:**

1. The clear width of the interior accessible route shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided the reduced width segments are separated by segments that are 48 inches (1220 mm) minimum in length and 36 inches (915 mm) minimum in width.

2. The clear width of an exterior ramp comply with Section 405.5.

**Reason:** During the discussions on this item, it was mentioned that the intent was to include a requirement similar to what was noted in the Proposed Rights of Way Guidelines (PROWAG). The guidelines also do not allow reduction of the 48-inch width. If the intent is to mimic the PROWAG, then the exception needs to be specific to allow the reduction in width to only interior accessible routes.

### 4-7-12 PC2

Ron Burton, PTW Advisors LLC, representing Building Owners and Managers Association, International; David S. Collins, The Preview Group, representing American Institute of Architects (AIA); Ron Nickson, representing the National Multi-housing Council; Steve Orlowski, representing the National Association of Home Builders; Kim Paarlberg, representing International Code Council

See comment under 3-6-12 PC2

### 4-7-12 PC3

Harold Kiewel, representing self

#### Further revise as follows:

**403.5 Clear Width.** The <u>minimum</u> clear width of an interior accessible route shall be <del>36 inches (915 mm)</del> minimum 40-inches (1-meter) wide. The <u>minimum</u> clear width of an exterior accessible route shall be 48 inches (1220 mm) minimum.

### **Exceptions:**

- 1. The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided the reduced width segments are separated by segments that are 48 inches (1220 mm) minimum in length and 36 inches (915 mm) minimum in width.
- 2. The clear width of an exterior ramp comply with Section 405.5.

**Reason:** A 40-inch dimension allows a small shoulder on each side of the route (margin of error) for adults using crutches and is modular in both Imperial and metric systems of measure. See additional information at 1-1-12

### 4-7-12 PC4

Marsha K. Mazz, representing U.S. Access Board (ATBCB)

#### Further revise as follows:

**403.5 Clear Width.** The clear width of an interior accessible route shall be 36 inches (915 mm) minimum. The clear width of an exterior accessible route shall be 48 inches (1220 mm) minimum.

#### **Exceptions:**

- 1. The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided the reduced width segments are separated by segments that are 48 inches (1220 mm) minimum in length and 36 inches (915 mm) minimum in width.
- 2. The clear width of an exterior ramp shall be permitted to comply with Section 405.5.

**Reason:** Because this is an exception, it cannot convey a mandatory requirement and is rewritten to only permit, not require, compliance with the widths specified in 405.5.

### 4-7-12 PC5

Jean Tessmer, representing herself

#### Further revise as follow:

403.5.1 General. The clear width of an accessible route shall be 36 inches (915 mm) minimum.

**EXCEPTION:** The clear width shall be permitted to be reduced to 34 32 inches (815 mm) minimum for a length of 18 24 inches (610 mm) maximum provided the reduced width segments are separated by segments that are 60 inches (1220 mm) minimum in length and 36 inches (915 mm) minimum in width.

**Reason:** 32 inches width for a run of 24 inches is a knuckle buster, only being able to use your finger tips on the rim to maneuver the chair. Then having to negotiate that narrow 32 inches every 48 inches is not enough space to allow a full push on the rim which may cause more hand damage and greater difficulty maneuvering. Other ambulatory individuals would not be as challenge by such intruding obstacles.

### 4-7-12 PC6

Jean Tessmer, representing herself

#### Further revise Section 403.5 as follow:

**403.5 Clear width**. Is a space that accommodates a wheelchair moving in one direction continuously. The clear width of an accessible route shall comply with Section 403.5.1. 403.5.2 or 403.5.3 as applicable.

**Reason:** Adding the defined function of an accessible route with direction makes understanding the usability clearer. It is not static it is continuous and defines the width of that route.

## 4-7-12 PC7

Chad Beebe, - representing American Society for Healthcare Engineering (ASHE)

### Disapprove this change. Return the text to that found in existing standard.

**Reason:** In review of the 2014 Final Draft of the ICC A117.1 document, it has come to our attention that several of the proposed changes will have a significantly negative impact to the healthcare industry design/built environment of buildings designed under the 2015 IBC. Further, it is our understanding that the overwhelming majority of these changes have been derived from a single uncorroborated report which has neither been properly vetted nor adopted by any other credible agency or (similar) jurisdictional body.

As we do not feel these dramatic and substantial changes have been given proper and appropriate consideration by all interested stakeholders in this process, and since we question the authenticity of the underlying premise used to make such changes, we respectfully request they either be removed entirely from consideration in this draft, or that the entire draft adoption process be held in abeyance for a minimum of 12-months so that further collaboration can be conducted with all interested parties. If the Committee opts to delay this process for 12-months, it will be in keeping with the mission of the ICC, and best assure that all parties can be provided with the opportunity to reasonably participate in this process.

4-7-12 - The addition of a provision to require outdoor accessible routes to be increased from 36-inches wide to 48- inches wide.

These new requirements would add thousands of required square feet to a new hospital and significantly impact any renovations to an existing hospital by requiring increased patient room sizes to meet the new requirements and thus, due to the fixed square footage within the building foot print, will reduce the number of allowable beds the hospital can maintain. With hospital construction cost averaging around \$300.00 per square foot these additional increases in square footage will significantly impact the cost of construction. Thank you for your consideration of this request, and in keeping alive the goals and mandates of the entire ICC organization and membership.

# 4-7-12 PC8

Larry Eberly, representing Pennsylvania Builders Association

Disapprove this change. Return the text to that found in existing standard.

**Reason:** Adding a specific requirement for a 48" minimum exterior width is excessive and will have financial implications particularly for residential uses. Section 403.5 currently requires a 36" min. clear width for all walking surfaces part of either an interior or exterior accessible route. The minimum clear width of Section 403.5 is required for Type A, Type B and Accessible Dwelling units, and is also required by reference for circulation paths for Type C (Visitable) Units including access to one entrance from a public street or sidewalk, dwelling unit driveway, or a garage which possibly may be located at the rear of the home. Exterior sidewalks to residences particularly single family and townhomes are typically 36" in width. Increasing the width of exterior sidewalks by 33 percent to individual homes is neither necessary nor warranted and will have financial and design impacts to implement.

The Pennsylvania Builders Association opposes any change to the requirements for accessible routes and walking surfaces. All residential homes currently require a 36" minimum clear width for all circulation that is part of any interior or exterior accessible route. Type A, Type B and Accessible Dwelling units require an accessible route to and within the dwelling unit around furniture, doorways, kitchen cabinets, fixtures and all obstructions. Type C (Visitable) Units also require this clear width for both interior and exterior circulation paths including sidewalks to access one entrance from a public street, driveway, or a garage which potentially may be located at the rear of the home.

Any change, new or specific requirements for additional width or additional maneuverability at turns is excessive and will have major impact on design and spatial requirements in addition to financial implications particularly for residential uses for the site, building and units. Due to the multitude of scenarios for circulation and turns, the implementation of any change to the requirements for an accessible route will also be extremely difficult to coordinate and execute particularly for residential uses with limited available space.

Pennsylvania adopts the accessibility provisions of the newest triennial revisions to the ICC Family of Codes that have been adopted in PA, which includes the IBC, IRC, IMC, IPC and IEBC., without modification. This includes the references to ICC/ANSI A117.1. Mandatory adoption in Pennsylvania, without modification, has unforeseen consequences to the building industry, both commercial and residential communities.

### 4-7-12 PC9

Tony Ewalt, representing Sletten Construction of Nevada, Inc.; Michael Gentille, representing Philip Chun North America, Inc.; Michael McGettigan, representing Terracon Consultant; Robert W. Potter, Construction Company, representing Affordable Concepts; Eric J. Rowland, representing Rowland Design;

Disapprove this change. Return the text to that found in existing standard.

**Reason:** In review of the 2014 Final Draft of the ICC A117.1 document, it has come to my attention that several of the proposed changes (ratified by this Committee) will have a significantly negative impact to the design/built environment of buildings designed under the 2015 IBC. Further, it is my understanding that the overwhelming majority of these changes have been derived from a single uncorroborated report which has neither been properly vetted nor adopted by any other credible agency or (similar) jurisdictional body.

As I do not feel these dramatic and substantial changes have been given proper and appropriate consideration by all interested stakeholders in this process, and I question the authenticity of the underlying premise used to make such changes, I respectfully request they either be removed entirely from consideration in this draft, or that the entire draft adoption process be held in abeyance for a minimum of 12-months.

If the Committee opts to delay this process for 12-months, it will be in keeping with the mission of the ICC, and best assure that all parties can be provided with the opportunity to reasonably participate in this process.

### 4-7-12 PC10

Robin Roberts, Chair, Technical Standards Committee, representing Accessibility Professionals Association

Disapprove this change. Return the text to that found in existing standard.

**Reason:** Many of the comments provided in the background reports expressed reservations regarding the study upon which the proposals are based. Because the proposed changes would have an enormous impact on the design and construction community, further investigation seems necessary.

### 4-7-12 PC11

Minh N. Vu; representing American Hotel and Lodging Association.

Disapprove this change. Return the text to that found in existing standard.

Reason: The American Hotel and Lodging Association(1) (hereinafter, "AH&LA")opposes the proposal to increase the minimum width of an exterior accessible route from 36" to 48". (Section 403.5). The width for interior accessible

routes continues to be 36" and the ANSI Committee has provided no justification for why an exterior route should be wider. This proposal would substantially increase construction and renovation costs for lodging facilities for no apparent reason. In existing facilities, the proposed requirement would require extensive re- landscaping of grounds and in some cases could not be implemented due to space restrictions. Hotels that are not able to comply with the proposed changes in renovations due to technical infeasibility will face frivolous lawsuits by plaintiffs who typically file first and ask questions later.

To the extent that this proposal is based on the Access Board's proposal that public right of way sidewalks be 48" wide, AH&LA urges the ANSI Committee to wait until the Access Board completes its public rulemaking process. The Access Board may decide in its process that the width of exterior accessible routes should not be any different than interior accessible routes. Enacting this proposed change now could result in inconsistency between ANSI A117.1 and the Access Board's public right of way rule.

The proposed change should also be rejected because it would make the ANSI A117.1 conflict with the 2010 ADA Standards. As the ANSI Committee is well aware, for the first twenty (20) years of the Americans with Disabilities Act of 1990 (hereinafter, the "ADA"), the ANSI A117.1 Standard was not the same as the ADA Standards for Accessible Design adopted by the United States Department of Justice (hereinafter, the "DOJ"). The lack of harmonization caused a great deal of confusion among owners of public accommodations and commercial facilities who had to comply with building code and ADA requirements which differed. In September 2010, the DOJ issued the 2010 Standards which was the culmination of an effort by the ANSI Committee and the Access Board to harmonize the ANSI A117.1 Standard with the 2010 ADA Standards. The 2010 ADA Standards have only been in effect for fewer than two years.

If adopted, the proposed change to the minimum exterior sidewalk width would undo this harmonization effort by introducing an entirely different standard into future editions of the International Building Code (IBC) which will then be adopted by state governments as their building codes. Owners seeking to comply with both sets of requirements will yet again be thrown into a state of confusion even though, as discussed above, there is no need for the changes in the first place. In AH&LA's experience, compliance regimes that are confusing or difficult to understand/implement usually result in less accessibility and operate to the detriment of individuals with disabilities. AH&LA, thus, urges the ANSI Committee to reject any rule changes that would conflict with the 2010 ADA Standards, including the proposed minimum exterior accessible route width.

If the ANSI Committee is unwilling to postpone the adoption of these proposals for further study, it should, at a minimum, limit their application to facilities constructed after a jurisdiction adopts the changes. As can be seen throughout the preceding discussion, the proposed changes — once they are adopted by jurisdictions as part of their building codes—will be particularly problematic for existing facilities that will have to comply with them in future renovations. In most instances, lodging facility owners will face three alternatives: (1) comply with the new requirements by making extensive changes to their exterior routes upon renovation, (2) attempt to obtain a variance from local building officials assuming such a process is available; or (3) not renovate. All options are highly undesirable. The first two options involve substantial cost and uncertainty while the third option would actually undermine accessibility by causing owners to defer or not undertake renovations that may improve access.

1 The American Hotel & Lodging Association is a membership organization that represents the interests of every segment of the lodging industry, including REITs, brand, franchisee, management companies, independent property owners, and state associations.

### 4-8 - 12

#### Revise as follows:

403.5.1 Clear Width at 180 Degree Turn. Where an accessible route makes a 180 degree turn around an object that is less equal to or greater than 48 inches (1220 mm) in width, clear widths shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum during the turn and 42 (1065 mm) inches minimum leaving the turn 52 inches (1320 mm) in width minimum, clear widths shall be as permitted for turn complying with 405.5.1. Where an accessible route makes a 180 degree turn around an object that is less than 52 inches (1320 mm) inches, the clear widths approaching the turn, during the turn and leaving the turn, shall be one of the following sets of dimensions:

- Approaching 36 inches (915 mm) minimum, during 60 inches (1525 mm) minimum, and leaving 36 inches (915 mm) minimum.
- 2. Approaching 42 inches (1065 mm) minimum, during 48 inches (1220 mm) minimum, and leaving 42 inches (1065 mm) minimum.
- 3. Approaching 43 inches (1090 mm) minimum, during 43 inches (1090 mm) minimum, and leaving 43 inches (1090 mm) minimum.

**EXCEPTION:** Section 403.5.1 shall not apply where the clear width during the turn is 60 inches (1525 mm) minimum.

### 4-8-12 PC1

Ron Burton, PTW Advisors LLC, representing Building Owners and Managers Association, International; David S. Collins, The Preview Group, representing American Institute of Architects (AIA); Ron Nickson, representing the National Multi-housing Council; Steve Orlowski, representing the National Association of Home Builders; Kim Paarlberg, representing International Code Council

See comment under 3-6-12 PC2

### 4-8-12 PC2

Karen Gridley, representing Target Corporation

#### Further revise as follows:

403.5.1 Clear Width at 180 Degree Turn. Where an accessible route makes a 180 degree turn around an object that is equal to or greater than 52 inches (1320 mm) in width minimum, clear widths shall be as permitted for turn complying with 405.5.1.

Where an accessible route makes a 180 degree turn around an object that is less than  $\frac{48}{52}$  inches (1320 mm) inches, the clear widths approaching the turn, during the turn and leaving the turn, shall be one of the following sets of dimensions:

- 1. Approaching 36 inches (915 mm) minimum, during 60 inches (1525 mm) minimum, and leaving 36 inches (915 mm) minimum.
- 2. Approaching 42 inches (1065 mm) minimum, during 48 inches (1220 mm) minimum, and leaving 42 inches (1065 mm) minimum.
- 3. Approaching 43 inches (1090 mm) minimum, during 43 inches (1090 mm) minimum, and leaving 43 inches (1090 mm) minimum.

Where an accessible route makes a 180 degree turn around an object that is equal to or greater than 48 inches (1220 mm) in width, clear widths approaching the turn, during the turn and leaving the turn, shall be permitted to be 36 inches on interior routes and 48 inches on exterior routes in compliance with [the new] Section 403.5.1.

Reason: The changes we are proposing to this item has 3 parts:

- 1. The first is editorial in nature, but impacts the direction of the rest of this comment. Highlighted in yellow above, we believe there is a typing error in the referenced Section 405.5.1. We believe the intended reference was meant to be 403.5.1, since we could not find a section 405.5.1. The balance of our proposed changes to this item are based on the assumption that the intended referenced section is to be 403.5.1.
- 2. This proposed change is provided based on our previous proposal for the building block size of the clear floor space to remain at the current dimension of 48 inches in length, and not be increased to 52 inches.
- 3. This proposed change also arranges the language into two parts for clarity. The first part provides criteria for clear widths of the route where the object being turned around is 48 inches or less. The second part provides criteria for clear widths of the route where the object being turned around is 48 inches or greater. This separation of parts helps provide clarity on the varying options for 180 degree turns.

Several reasons are noted here to demonstrate that the increase to 52 inches will ultimately result in a reduction of access from a broader perspective.

During the July 2013 Committee Action Meeting we heard comments by committee members wondering if there is data available regarding how the size of the current turning space works in "real world" applications as compared to findings in the study completed by Dr. Steinfeld.

In response, Target can offer some data that will help add real world context to the discussion.

For reference, Dr. Steinfeld's study, which lead the committee to propose a new 52" clear floor space, included 500 participants from a localized geographic area, as we understand it.

Target's data is based on feedback from people across the nation who visit our stores, totaling nearly 36 million transactions *per week*, on average. Keeping in mind that often the person making the transaction has another person with them so there are well into the multi-millions of guests at Target stores every week. Of these guests, many share comments of all sorts with Target (not just access related) through various channels. We find that of the guests who contacted us in 2012, the percentage of comments related to accessibility of the building was limited to an extremely small fraction of less than 1%. (Less than .0003% of 1%.). Of that fraction of 1%, an even smaller fraction of those comments were related to concerns about clear floor space for wheeled mobility devices. This tells us that the current sizes and dimensions in the existing Standard work, as-is, for the greater majority of guests using wheeled mobility devices. The data presents no compelling evidence or reason to change the existing dimension.

#### Additional Information:

During the July 2013 Committee Action Meeting, members of the committee commented that the committee's only job was to look at the A117.1 Standard and implement changes to increase access through that document. In response, we urge the committee to consider that 'more and bigger is not always better, sometimes it's just more and bigger'.

Supporting this would be the observation that the committee has not done its due diligence in evoking or investigating the Wheeled Mobility Device Manufacturing Industry to see what can be accomplished to improve maneuvering through existing engineering practices in 'Like' industry trends and innovation in designs on their end, as that industry as a whole is changing too. Like the automotive industry that went from large cars, trucks and vans to smaller frame vehicles to achieve sustainable efficiencies throughout their redesign all while maintaining safety and functionality.

From an architectural perspective, designers and building owners do not have the luxury of looking at a building in isolation through only a single Standard or Regulation when we design buildings. We must consider many regulations and standards, each having an impact and interplay with other requirements that ultimately drive the size, shape and design of the spaces we provide for people. Considering this interplay, Target respectfully submits that increasing the size of the clear floor space, and other building block sizes, will actually result in decreased accessibility when applied in conjunction with forces in place from other codes and standards.

For example: Green codes and standards are increasingly challenging us to "reduce our carbon footprint", and be responsible stewards of the environment, which includes making buildings smaller in order to achieve compliance with those standards and newly developing regulations. While at the same time, the proposed increases in size of accessibility building blocks within the A117.1 standard would have us increasing our building size.

It is true that designers can adjust, tweak, push and pull designs of the physical buildings to meet these conflicting requirements. In the past we've had the luxury of being able to make buildings larger. However that luxury is increasingly limited in today's environment. The cost comes in what will subsequently be able to fit within in these buildings that are experiencing a compound squeeze (squeezed smaller in footprint on the outside, but interior spaces pushed larger from within). From a retail perspective, this will reduce capacity for merchandise offerings. What was once able to be provided on store shelves may no longer be available due to compromised available space for shelving to house merchandise, having a negative impact on guest's shopping trips.

From a product perspective, of the guest comments received in 2012, approximately 12% were related to product, as compared to the less-than 1% of comments related to building accessibility. Product availability is already of greater concern to guests than building access. Thus, increasing the building blocks of accessibility would drive product concern even higher, since the very things that persons with disabilities might travel to a store to purchase could no longer be available. Considering the effort it takes to travel to shopping destinations for many persons with disabilities, it is a disservice to them for retailers to not be able to offer the items that they currently go there for, forcing them to extend strenuous shopping trips to additional stores in search of what they are looking for, and for some, making the shopping trip as a whole inaccessible all together.

We encourage the committee to reconsider the proposals that would increase the size of the 52" long clear floor space dimension, and other building block sizes, and instead maintain the current sizes. At least until such time as more investigation of the Wheeled Mobility Device Manufacturing Industry can take place to identify what can be done to improve design of those devices via engineering and technology advancements, towards improved access.

### 4-8-12 PC3

Kim Paarlberg, representing International Code Council

#### Further revise as follows:

**403.5.1 Clear Width at 180 Degree Turn**. Where an accessible route makes a 180 degree turn around an object that is equal to or greater than 52 inches (1320 mm) in width minimum, clear widths shall be as permitted for turn complying with 405.5.1. Where an accessible route makes a 180 degree turn around an object that is less than 52 inches (1320 mm) inches, the clear widths approaching the turn, during the turn and leaving the turn, shall be one of the following sets of dimensions:

- 1. Approaching width is 36 inches (915 mm) minimum, during width is 60 67 inches (4525 1700 mm) minimum, and leaving width is 36 inches (915 mm) minimum.
- 2. Approaching width is 42 (1065 mm) inches minimum, during width is 48 inches (1220 mm) minimum, and leaving width is 42 (1065 mm) inches minimum.
- 3. Approaching width is 43 inches (1090 mm) minimum, during width is 43 inches (1090 mm) minimum, and leaving width is 43 inches (1090 mm) minimum.

### 4-8-12 PC4

Larry Eberly, representing Pennsylvania Builders Association

Disapprove this change. Return the text to that found in existing standard.

**Reason:** Due to the multitude of distinctive and specific conditions and scenarios, the implementation of this requirement is complicated, confusing and difficult to execute and coordinate due to the numerous and extensive requirements for each conditions described.

The Pennsylvania Builders Association opposes any change to the requirements for accessible routes and walking surfaces. All residential homes currently require a 36" minimum clear width for all circulation that is part of any interior or exterior accessible route. Type A, Type B and Accessible Dwelling units require an accessible route to and within the dwelling unit around furniture, doorways, kitchen cabinets, fixtures and all obstructions. Type C (Vistable) Units also require this clear width for both interior and exterior circulation paths including sidewalks to access one entrance from a public street, driveway, or a garage which potentially may be located at the rear of the home.

Any change, new or specific requirements for additional width or additional maneuverability at turns is excessive and will have major impact on design and spatial requirements in addition to financial implications particularly for residential uses for the site, building and units. Due to the multitude of scenarios for circulation and turns, the implementation of any change to the requirements for an accessible route will also be extremely difficult to coordinate and execute particularly for residential uses with limited available space.

Pennsylvania adopts the accessibility provisions of the newest triennial revisions to the ICC Family of Codes that have been adopted in PA, which includes the IBC, IRC, IMC, IPC and IEBC without modification. This includes the references to ICC/ANSI A117.1. Mandatory adoption in Pennsylvania, without modification, has unforeseen consequences to the building industry, both commercial and residential communities.

### 4-8-12 PC5

Robin Roberts, Chair, Technical Standards Committee, representing Accessibility Professionals Association

Disapprove this change. Return the text to that found in existing standard.

**Reason:** Many of the comments provided in the background reports expressed reservations regarding the study upon which the proposals are based. Because the proposed changes would have an enormous impact on the design and construction community, further investigation seems necessary.

### 4-8-12 PC6

Minh N. Vu; representing American Hotel and Lodging Association.

Disapprove this change. Return the text to that found in existing standard.

Reason: See reason statement from Minh Vu found under proposal 3-6-12.

4-9 - 12

Add text as follows:

403.5.2 Clear Width at 90 Degree Turn. Where an accessible route makes a 90 degree turn the clear widths approaching the turn and leaving the turn shall be one of the following sets of dimensions:

- 1. Both legs of the turn shall be 40 inches (1016 mm) minimum.
- 2. Where the interior corners of the turn are chamfered for 8 inches (205 mm) minimum along both walls, both legs of the turn shall be 36 inches (915 mm) minimum.

### 4-9-12 PC1

Ron Burton, PTW Advisors LLC, representing Building Owners and Managers Association, International; David S. Collins, The Preview Group, representing American Institute of Architects (AIA); Ron Nickson, representing the National Multi-housing Council; Steve Orlowski, representing the National Association of Home Builders; Kim Paarlberg, representing International Code Council

See comment under 3-6-12 PC2

### 4-9-12 PC2

Karen Gridley, representing Target Corporation

Further revise as follows:

**403.5.2 Clear Width at 90 Degree Turn.** Where an accessible route makes a 90 degree turn the clear widths approaching the turn and leaving the turn shall be one of the following sets of dimensions: permitted to be 36 inches (915 mm) on interior routes and 48 inches (1220 mm) on exterior routes in compliance with Section 403.5.1.

- 1. Both legs of the turn shall be 40 inches (1016 mm) minimum.
- 2. Where the interior corners of the turn are chamfered for 8 inches (205 mm) minimum along both walls, both legs of the turn shall be 36 inches (915 mm) minimum.

**Reason:** In a previous newly proposed section (proposal number 4-8 – 12) for 180 degree turns around an object, there is an allowance in the language of the main body of the section to maintain clear width of each portion of the turn in compliance with Section 403.5.1 at 36 inches indoors, and 48 inches outdoors, if the object is equal to or greater than a given distance. (see editorial note in comment number 4-8 – 12 referencing 403.5.1). The proposal for 90 degree turns is absent of that allowance for the same compliance with Section 403.5.1. If providing the allowance at 180 degree turns it only makes sense to also provide the allowance at 90 degree turns given that making a 90 degree turn is generally understood to be easier than making a 180 degree turn around an object. If the allowance to comply with [the new] Section 403.5.1 for general accessible route width is maintained as an option for 180 degree turns, it should also be permitted for 90 degree turns.

### 4-9-12 PC3

Harold Kiewel, representing self

Further revise as follows:

**403.5.2 Clear Width at 90 Degree Turn.** Where an accessible route makes a 90 degree turn the clear widths approaching the turn and leaving the turn shall be ene of the following sets of dimensions: 40-inches wide, except that, where the inside corner, along both walls, is champhered for 8 inches (205 mm), then the minimum width of both legs of the turn may be reduced to 36 inches (915 mm) minimum.

- 1. Both legs of the turn shall be 40 inches (1016 mm) minimum.
- 2. Where the interior corners of the turn are chamfered for 8 inches (205 mm) minimum along both walls, both legs of the turn shall be 36 inches (915 mm) minimum.

Reason. The comment simply reformats the proposal into a simple paragraph. For further information see 1-1-12.

### 4-9-12 PC4

#### Kim Paarlberg, representing International Code Council

#### Further revise as follows:

**403.5.2 Clear Width at 90 Degree Turn.** Where an accessible route makes a 90 degree turn the clear widths approaching the turn and leaving the turn shall be one of the following sets of dimensions:

- 1. Both legs of the turn shall be 40 inches (1016 mm) minimum.
- 2. Where the interior corners of the turn are chamfered for 8 inches (205 mm) minimum along Both walls, both legs of the turn shall be 36 inches (915 mm) minimum. The width of each leg of the turn shall be maintained for 52 inches (1320 mm) minimum from the inner corner.

**Reason:** This is just one example of the T-turn, circular turn, 180-degree turn, 90-degree turn and passing space not being coordinated. Please keep in mind that the building code requires a 36" minimum clear width corridor or aisle width for situations with 50 or less occupants (basically residential, small business and mercantile) and 44" minimum clear width for greater than 50 occupants. The requirements for turns could significantly impact layouts. With the current text, I am afraid that there will be situation where someone sets very specific accessible routes to keep 36" wide corridors and aisles. The option to do chamfers is very costly.

While I am in favor of improving access, the suggestions need to fit within typical building elements.

### 4-9-12 PC5

#### Larry Eberly, representing Pennsylvania Builders Association

#### Disapprove this change. Return the text to that found in existing standard.

**Reason:** Section 403.5 requires a 36 inch minimum clear width for all walking surfaces that are a part of an interior or exterior accessible route. The minimum clear width of Section 403.5 is required for Type A, Type B and Accessible Dwelling units, including within and throughout the dwelling unit. This section is also required by reference for circulation paths with Type C (Visitable) Units. Adding this new requirement for additional width and maneuverability and/or specific requirements for a 90 degrees turn is excessive and will have major impact on design, spatial requirements and potential financial implications particularly for residential uses for the site, building and units. Mandating additional width at turns not only complicates documentation but also creates unforeseen conflicts with other sections and requirements of the Standard,

The Pennsylvania Builders Association opposes any change to the requirements for accessible routes and walking surfaces. All residential homes currently require a 36" minimum clear width for all circulation that is part of any interior or exterior accessible route. Type A, Type B and Accessible Dwelling units require an accessible route to and within the dwelling unit around furniture, doorways, kitchen cabinets, fixtures and all obstructions. Type C (Vistable) Units also require this clear width for both interior and exterior circulation paths including sidewalks to access one entrance from a public street, driveway, or a garage which potentially may be located at the rear of the home.

Any change, new or specific requirements for additional width or additional maneuverability at turns is excessive and will have major impact on design and spatial requirements in addition to financial implications particularly for residential uses for the site, building and units. Due to the multitude of scenarios for circulation and turns, the implementation of any change to the requirements for an accessible route will also be extremely difficult to coordinate and execute particularly for residential uses with limited available space.

Pennsylvania adopts the accessibility provisions of the newest triennial revisions to the ICC Family of Codes that have been adopted in PA, which includes the IBC, IRC, IMC, IPC and IEBC without modification. This includes the references to ICC/ANSI A117.1. Mandatory adoption in Pennsylvania, without modification, has unforeseen consequences to the building industry, both commercial and residential communities.

### 4-9-12 PC6

Douglas Kantor, representing National Association of Convenience Stores.

#### Disapprove this change. Return the text to that found in existing standard.

**Reason:** NACS is not in favor of this proposed change. We believe that the impact of this change could be significantly negative to the convenience and fuel retailing industry

This proposed change could have a distressing impact on the typically small facilities of our members. This has the

expected potential to impact every sales aisle in a store and therefore appreciably reduce the number of sales aisles or increase the overall size of a store if the turns at the ends of sales aisles are considered 2 90 degree turns in lieu of a 180 degree turn. Increasing the overall size of the stores also has a dominoing impact on development of new stores by requiring bigger sites, more parking, potential zoning concerns, and probably making certain locations undevelopable based upon a negative impact to proforma.

This proposed change could increase the width of sales aisles by up to 8 inches which represents a 22% increase in aisle width. In a typical store this could cause the loss of an entire row of shelves. This has the potential negative impact through the loss of an average of 60 SF of sales space and \$2,800 in lost sales per month. It is estimated that this change could also cause an increase in size of a typical retail space by up to 10% with no resulting increase in sales.

Based upon this negative impact to sales NACS is not in favor of this proposal without evidence that this proposal is absolutely necessary for the accessibility of persons with disabilities. While we recognize that the research provided indicates that wheeled mobility devices are becoming larger we do not see any research or reason provided for the increase in size in wheeled mobility devices. Should we, as an industry, be required to pay this cost or increased size out of the choice for bigger devices or should the necessity of larger devices be provided prior to requiring larger spaces. NACS is also not aware of any complaints based upon the aisle space widths or turning space around aisle ends provided with existing facilities that currently comply with the current standards. See further information at 3-6-12.

### 4-9-12 PC7

Robin Roberts, Chair, Technical Standards Committee, representing Accessibility Professionals Association

Disapprove this change. Return the text to that found in existing standard.

**Reason:** Many of the comments provided in the background reports expressed reservations regarding the study upon which the proposals are based. Because the proposed changes would have an enormous impact on the design and construction community, further investigation seems necessary.

### 4-9-12 PC8

Minh N. Vu; representing American Hotel and Lodging Association.

Disapprove this change. Return the text to that found in existing standard.

Reason: See reason statement from Minh Vu found under proposal 3-6-12.

# 4-10 - 12

#### Add text as follows:

403.5.3 Clear Width at 90 Degree Turn. Where an accessible route makes a 90 degree turn, the clear width shall be 40 inches (1015 mm) minimum. The width of each leg of the turn shall be maintained for 28 inches (710 mm) minimum from the inner corner.

#### **EXCEPTIONS:**

- 1. Where one leg of the turn is 42 inches (1065 mm) minimum in width, the other shall be permitted to be 38 inches (965 mm) minimum in width.
- 2. Where one leg of the turn is 44 inches (1115 mm) minimum in width, the other shall be permitted to be 36 inches (915 mm) minimum in width.

### 4-10-12 PC1

#### Harold Kiewel, representing self

**Comment:** If the Accessible route is changed to 40-inch width as proposed above at, item 4-7 - 12, then all this qualifying language becomes superfluous. The 28-inch depth from interior vertex of the corner would be already be a given, and the 38-inch and 36-inch wide approaches to the turn would not be permitted. See further information at 1-1-12.

### 4-10-12 PC2

Ron Burton, PTW Advisors LLC, representing Building Owners and Managers Association, International; David S. Collins, The Preview Group, representing American Institute of Architects (AIA); Ron Nickson, representing the National Multi-housing Council; Steve Orlowski, representing the National Association of Home Builders; Kim Paarlberg, representing International Code Council

See comment under 3-6-12 PC2

### 4-10-12 PC3

Karen Gridley, representing Target Corporation

#### Further revise as follows:

**403.5.3 Clear Width at 90 Degree Turn.** Where an accessible route makes a 90 degree turn, the clear widths approaching the turn and leaving the turn shall be width shall be 40 inches (1015 mm) minimum. The width of each leg of the turn shall be maintained for 28 inches (710 mm) minimum from the inner corner. permitted to be 36 inches on interior routes and 48 inches on exterior routes in compliance with [the new] Section 403.5.1.

#### **EXCEPTIONS:**

- 1. Where one leg of the turn is 42 inches (1065 mm) minimum in width, the other shall be permitted to be 38 inches (965 mm) minimum in width.
- 2. Where one leg of the turn is 44 inches (1115 mm) minimum in width, the other shall be permitted to be 36 inches (915 mm) minimum in width.

**Reason:** In a previous newly proposed section (proposal number 4-8-12) for 180 degree turns around an object, there is an allowance in the language of the main body of the section to maintain clear width of each portion of the turn in compliance with Section 403.5.1 at 36 inches indoors, and 48 inches outdoors, if the object is equal to or greater than a given distance. (see editorial note in comment number 4-8-12 referencing 403.5.1). The proposal for 90 degree turns is absent of that allowance for the same compliance with Section 403.5.1. If providing the allowance at 180 degree turns it only makes sense to also provide the allowance at 90 degree turns given that making a 90 degree turn is generally understood to be easier than making a 180 degree turn around an object. If the allowance to comply with [the new] Section 403.5.1 for general accessible route width is maintained as an option for 180 degree turns, it should also be permitted for 90 degree turns.

## 4-10-12 PC4

Larry Eberly, representing Pennsylvania Builders Association

#### Disapprove this change. Return the text to that found in existing standard.

Reason: Section 403.5 requires a 36" min. clear width for all walking surfaces that are a part of an interior or exterior accessible route. The minimum clear width of Section 403.5 is required for Type A, Type B and Accessible Dwelling units, including within and throughout the dwelling unit. This section is also required by reference for circulation paths within Type C (Visitable) Units. Adding this new requirement for additional width and maneuverability and/ or specific requirements for a 90 degree turn is excessive and will have major impact on design, spatial requirements and potential financial implications particularly for residential uses for the site, building and units. Mandating additional width at turns not only complicates documentation but also creates unforeseen conflicts with other sections and requirements of the Standard.

The Pennsylvania Builders Association opposes any change to the requirements for accessible routes and walking surfaces. All residential homes currently require a 36" minimum clear width for all circulation that is part of any interior or exterior accessible route. Type A, Type B and Accessible Dwelling units require an accessible route to and within the dwelling unit around furniture, doorways, kitchen cabinets, fixtures and all obstructions. Type C (Visitable) Units also require this clear width for both interior and exterior circulation paths including sidewalks to access one entrance from a public street, driveway, or a garage which potentially may be located at the rear of the home.

Any change, new or specific requirements for additional width or additional maneuverability at turns is excessive and will have major impact on design and spatial requirements in addition to financial implications particularly for residential uses for the site, building and units. Due to the multitude of scenarios for circulation and turns, the implementation of any change to the requirements

for an accessible route will also be extremely difficult to coordinate and execute particularly for residential uses with limited available space.

Pennsylvania adopts the accessibility provisions of the newest triennial revisions to the ICC Family of Codes that have been adopted in PA, which includes the IBC, IRC, IMC, IPC and IEBC, without modification. This includes the references to ICC/ANSI A117.1. Mandatory adoption in Pennsylvania, without modification, has unforeseen consequences to the building industry, both commercial and residential communities.

### 4-10-12 PC5

Douglas Kantor, representing National Association of Convenience Stores.

Disapprove this change. Return the text to that found in existing standard.

**Reason:** NACS is not in favor of this proposed change. We believe that the impact of this change could be significantly negative to the convenience and fuel retailing industry

The proposed change could have a distressing impact on the typically small facilities of our members. This has the expected potential to impact every sales aisle in a store and therefore appreciably reduce the number of sales aisles or increase the overall size of a store if the turns at the ends of sales aisles are considered two 90 degree turns in lieu of a 189 degree turn. Increasing the overall size of the stores also has a dominoing impact on development of new stores by requiring bigger sites, more parking, potential zoning issues and probably making certain locations undevelopable based upon a negative impact to proforma.

This proposed change could increase the width of sales aisles by up to 8 inches which represents a 22% increase in aisle width. In a typical store this could cause the loss of an entire row of shelves. This has the potential negative impact through the loss of an average of 60 SF of sales space and \$2,800 in lost sales per month. It is estimated that this change could also cause in increase in size of a typical retail space by up to 10% with no resulting increase in sales.

Based upon this negative impact to sales NAGS is not in favor of this proposal without evidence that this proposal is absolutely necessary for the accessibility of persons with disabilities. While we recognize that the research provided indicates that wheeled mobility devices are becoming larger we do not see any research or reason provided for the increase in size in wheeled mobility devices. Should we, as an industry, be required to pay this cost or increased size out of the choice for bigger devices or should the necessity of larger devices be provided prior to requiring larger spaces. NAGS is also not aware of any complaints based upon the aisle space widths or turning space around aisle ends provided with existing facilities that currently comply with the current standards. For further information see 3-6-12.

### 4-10-12 PC6

Robin Roberts, Chair, Technical Standards Committee, representing Accessibility Professionals Association

Disapprove this change. Return the text to that found in existing standard.

**Reason:** Many of the comments provided in the background reports expressed reservations regarding the study upon which the proposals are based. Because the proposed changes would have an enormous impact on the design and construction community, further investigation seems necessary.

# 4-10-12 PC7

Minh N. Vu; representing American Hotel and Lodging Association.

Disapprove this change. Return the text to that found in existing standard.

Reason: See reason statement from Minh Vu found under proposal 3-6-12.

## 4-11 - 12

#### Revise as follows:

**402.2 Components.** Accessible routes shall consist of one or more of the following components: Walking surfaces with a slope not steeper than 1:20, doors and doorways, gates, ramps, curb ramps excluding the flared sides, elevators and platform lifts. All components of an accessible route shall comply with the applicable portion of this standard.

#### 404 Doors, and Doorways and Gates

404.1 General. Doors, and doorways and gates that are part of an accessible route shall comply with Section 404.

**EXCEPTION:** Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with 404.2.3, 404.2.6, 404.2.7, 404.2.8, 404.3.2 and 404.3.4 through 404.3.6.

**404.2 Manual Doors,** <u>Doorways and Manual Gates</u>. Manual doors and doorways, and manual gates, intended for user passage including ticket gates, shall comply with Section 404.2.

**EXCEPTION:** Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with Sections 404.2.6, 404.2.7, and 404.2.8.

- **404.2.3 Maneuvering Clearances.** Minimum maneuvering clearances at doors <u>and gates</u> shall comply with Section 404.2.3.and shall include the full clear opening width of the doorway <u>and the required latch side or hinge side clearance</u>. Required door maneuvering clearances shall not include knee and toe clearance.
- **404.2.3.2 Swinging Doors** <u>and Gates</u>. Swinging doors <u>and gates</u> shall have maneuvering clearances complying with Table 404.2.3.2.

# Fig. 404.2.3.2 Maneuvering Clearance at Manual Swinging Doors and Gates

**Table 404.2.4.1** Maneuvering Clearances at Manual Swinging Doors and Gates

Table 404.2.3.2—Maneuvering Clearances at Manual Swinging Doors and Gates

TYPE OF USE		MINIMUM MANEUVERING CLEARANCES	
Approach Direction	Door <u>or</u> <u>Gate</u> Side	Perpendicular to Doorway	Parallel to Doorway (beyond latch unless noted)
From front	Pull	60 inches (1525 mm)	18 inches (455 mm)

(Balance of table is not changes)

**404.2.3.4 Doorways without Doors or Gates**. Doorways without doors or gates that are less than 36 inches (915 mm) in width shall have maneuvering clearances complying with Table 404.2.3.3

# Fig. 404.2.3.4 Maneuvering Clearance at Doorways without Doors or Gates

Table 404.2.3.4—Maneuvering Clearances for Doorways without Doors or Gates

Approach Direction	MINIMUM MANEUVERING CLEARANCES Perpendicular to Doorway
From front	48 inches (1220 mm)

**404.2.3.5** Recessed Doors <u>and Gates</u>. Where any obstruction within 18 inches (455 mm) of the latch side of a doorway projects more than 8 inches (205 mm) beyond the face of the door <u>or gate</u>, measured perpendicular to the face of the door, maneuvering clearances for a forward approach shall be provided.

Fig. 404.2.3.5

Maneuvering Clearance at Recessed Doors <u>and Gates</u>

**404.2.5 Two Doors** <u>and Gates</u> in Series. Distance between two hinged or pivoted doors <u>or gates</u> in series shall be 48 inches (1220 mm) minimum plus the width of any door <u>or gate</u> swinging into the space. The space between the doors shall provide a turning space complying with Section 304

Fig. 404.2.5

Two Doors or Gates in a Series

**404.2.6 Door** <u>and Gate</u> Hardware. Handles, pulls, latches, locks, and other operable parts on accessible doors <u>and gates</u> shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching, or twisting of the wrist to operate. Operable parts of such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the floor. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

**EXCEPTION:** Locks used only for security purposes and not used for normal operation shall not be required to comply with Section 404.2.6.

- **404.2.7 Closing Speed.** Door and gate closing speed shall comply with Section 404.2.8.
- **404.2.7.1 Door Closers** <u>and Gate Closers</u>. Door closers <u>and gate closers</u> shall be adjusted so that from an open position of 90 degrees, the time required to move the door to an open position of 12 degrees shall be 5 seconds minimum.
- **404.2.7.2 Spring Hinges**. Door <u>and gate</u> spring hinges shall be adjusted so that from an open position of 70 degrees, the door <u>or gate</u> shall move to the closed position in 1.5 seconds minimum.
- **404.2.8 Door** <u>and Gate</u> Opening Force. Fire doors shall have the minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open doors <u>or gates</u> other than fire doors shall be as follows:
  - 1.Interior hinged doors and gates: 5.0 pounds (22.2 N) maximum
  - 2.Sliding or folding doors: 5.0 pounds (22.2 N) maximum

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door <u>or gate</u> in a closed position.

**404.2.9 Door** <u>and Gate</u> Surface. Door <u>and gate</u> surfaces within 10 inches (255 mm) of the floor, measured vertically, shall be a smooth surface on the push side extending the full width of the door <u>or gate</u>. Parts creating horizontal or vertical joints in such surface shall be within <sup>1</sup>/<sub>16</sub> inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.

#### **EXCEPTIONS:**

(Exceptions 1 and 2 are not changed)

- 3. Doors <u>and gates</u> that do not extend to within 10 inches (255 mm) of the floor shall not be required to comply with Section 404.2.9.
- **404.2.10 Vision Lites.** Doors, gates and sidelites adjacent to doors or gates containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one panel on either the door or an adjacent sidelite 43 inches (1090 mm) maximum above the floor.

(Exception is not changed)

**404.3 Automatic Doors** <u>and Power-Assisted Doors and Gates</u>. Automatic doors and automatic gates shall comply with Section 404.3. Full powered automatic doors shall comply with ANSI/BHMA A156.10

listed in Section 105.2.4. Power–assist and low–energy doors shall comply with ANSI/BHMA A156.19 listed in Section 105.2.3.

**EXCEPTION**: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with Sections 404.3.2, 404.3.4, and 404.3.5.

**404.3.2 Maneuvering Clearances**. Maneuvering clearances at power–assisted doors <u>and gates</u> shall comply with Section 404.2.3.

**404.3.4 Two Doors or Gates** in Series. Doors or gates in series shall comply with Section Section 404.2.5.

### 4-11-12 PC1

Ron Burton, PTW Advisors LLC, representing Building Owners and Managers Association, International; David S. Collins, The Preview Group, representing American Institute of Architects (AIA); Ron Nickson, representing the National Multi-housing Council; Steve Orlowski, representing the National Association of Home Builders; Kim Paarlberg, representing International Code Council

See comment under 3-6-12 PC2

### 4-11-12 PC2

Harold Kiewel, representing self

Further revise as follows:

**402.2 Components.** Accessible routes shall consist of one or more of the following components: Walking surfaces with a slope not steeper than 1:20, doors and doorways, gates, ramps, curb ramps excluding the flared sides, elevators and platform lifts. All components of an accessible route shall comply with the applicable portion of this standard.

<u>402.2 Accessible Route</u>. An accessible route is a continuous sequence of walks, ramps, curb-ramps, and other pedestrian circulation features that are accessible as required by this Standard and that connect or inter-connect the accessible fixtures, features, and elements of the site, structure, building, or facility it serves.

404 Doors, and Doorways and Gates

404.1 General. Doors, doorways and gates that are part of an accessible route shall comply with Section 404.

**EXCEPTION:** Doors, doorways, and gates designed to be operated only by security personnel restricted to use by security personnel shall not be required to comply with 404.2.3, 404.2.6, 404.2.7, 404.2.8, 404.3.2 and 404.3.4 through 404.3.6.

**404.2.3.4** Deorways Pedestrian passage openings without Doors or Gates. Doorways without Openings in walls and fences intended for pedestrian use, that do not have doors or gates and that are less than 36 inches (915 mm) in width shall have maneuvering clearances complying with Table 404.2.3.3

**404.2.5 Two Doors and Gates in Series.** Distance between two hinged or pivoted doors or gates door- or gate-leaf in series shall be 48 inches (1220 mm) minimum plus the width of any door or gate door- or gate-leaf swinging into the space. The space between the doors shall provide a turning space complying with Section 304.

**404.3 Automatic Doors and Power-Assisted Doors and Gates**. Automatic doors and automatic gates shall comply with Section 404.3. Full powered automatic doors shall comply with ANSI/BHMA A156.10 listed in Section 105.2.4. Power-assist and low-energy doors shall comply with ANSI/BHMA A156.19 listed in Section 105.2.3.

**Reason:** If you follow CSI's logic, the point of having Article 105 is simply to define the acronyms and abbreviated forms of references that will be in the text of the Standard. It is their subsequent use in Articles like 404.3, that actually incorporates the reference or specific provisions of it into the Standard.

### 4-14 - 12

#### Revise as follows:

TABLE 404.2.3.2—MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS

TYPE OF USE		MANEUVERING CLEARANCES AT MANUAL SWINGING	
Approach Direction	Door Side	Perpendicular to Doorway	Parallel to Doorway (beyond latch unless noted)
From front	Pull	60 inches (1525 mm)	18 inches (455 mm)
From front	Push	48 <u>52</u> inches (1220 mm)	0 inches (0 mm) <sup>3</sup>
From hinge side	Pull	60 inches (1525 mm)	36 inches (915 mm)
From hinge side	Pull	54 inches (1370 mm)	42 inches (1065 mm)
From hinge side	Push	42 inches (1065 mm) <sup>1</sup>	22 inches (560 mm) <sup>3 &amp; 4</sup>
From latch side	Pull	48 inches (1220 mm) <sup>1</sup>	24 inches (610 mm)
From latch side	Push	42 inches (1065 mm) <sup>2</sup>	24 inches (610 mm)

<sup>&</sup>lt;sup>1</sup>Add 6 inches (150 mm) if closer and latch provided.

### 4-14-12 PC1

#### Larry Eberly, representing Pennsylvania Builders Association

#### Disapprove this change. Return the text to that found in existing standard.

**Reason:** Pennsylvania Builders Association opposes this requirement which will increase the width of hallways, spaces and rooms depending on the specific design.

This proposed change relates to the anthropometric study of mobility device users by The Center for IDeA at the University at Buffalo, SUNY which questions decades of universally accepted accessibility clearances and maneuverability contained within Chapter 3: Building Blocks. This revision is based on this single study and should be researched further before such changes occur in the standard.

Pennsylvania Builders Association opposes any change to the ANSI 117.1 building blocks for numerous reasons. The requirements within Chapter 3: Building Blocks are the standard and precedent for the development of decades of accessibility required clearances, maneuverability and reach ranges both in ANSI A117.1 and federal accessibility laws and their standards (ADA /FHA/ ABA/ UFAS, etc).

Any changes will conflict with and be more stringent than these accepted laws and standards and contradictory to the efforts of the ADA/A117 Harmonization Task Group (HTG) to provide consistent language with the ADA. Residual unforeseen consequences and conflicts with these laws and within the ANSI 117.1 standard itself due to the vast references to this chapter will require extensive future coordination, revisions and clarifications and create a financial burden for residential communities.

These changes are predicated on the anthropometric study of mobility device users by The Center for IDeA at the University at Buffalo, SUNY which predominantly addresses the potential need to accommodate existing electric mobility devices. The Committee's and Wheeled Mobility Task Group's (WMTG) supporting documentation and comments contained in the

<sup>&</sup>lt;sup>2</sup>Add 6 inches (150 mm) if closer provided.

<sup>&</sup>lt;sup>3</sup>Add 12 inches (305 mm) beyond latch if closer and latch provided.

<sup>&</sup>lt;sup>4</sup>Beyond hinge side.

Backround Report raises serious questions to the study's testing methods, criteria and results and clearly acknowledges the unforeseen residual impact and consequences.

Instead of changing the Building Blocks, a more prudent approach would be to require mobility device manufacturers to comply with the decades of accepted standards, particularly taking in consideration future technology and advances in design.

Stringent changes to the requirements in the ANSI 117.1 standards make private residential communities more handicap accessible than public, institutional and commercial buildings and sites including USPS postal centers, hospitals, schools, retail, office, recreational and cultural establishments. A substantial disparity and financial burden is placed on residential communities, homeowners and builders by requiring residential buildings to comply with stricter standards. In addition, any change to these basic building blocks may also set a precedent for a re-evaluation of all other clearances and requirements not currently included in these proposed changes, particularly dwelling unit bathroom and kitchens.

Pennsylvania adopts the accessibility provisions of the newest triennial revisions to the ICC Family of Codes that have been adopted in PA, which includes the IBC, IRC, IMC, IPC and IEBC. without modification. This includes the references to ICC/ANSI A117.1. Mandatory adoption in Pennsylvania, without modification, has unforeseen consequences to the building industry, both commercial and residential communities.

### 4-14-12 PC2

Robin Roberts, Chair, Technical Standards Committee, representing Accessibility Professionals Association

Disapprove this change. Return the text to that found in existing standard.

**Reason:** Many of the comments provided in the background reports expressed reservations regarding the study upon which the proposals are based. Because the proposed changes would have an enormous impact on the design and construction community, further investigation seems necessary.

### 4-14-12 PC3

Minh N. Vu; representing American Hotel and Lodging Association.

Disapprove this change. Return the text to that found in existing standard.

Reason: See reason statement from Minh Vu found under proposal 3-6-12.

4-15 - 12

Revise as follows:

TABLE 404.2.3.2—MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS

TYPE OF USE		MANEUVERING CLEARANCES AT MANUAL	
Approach Direction	Door Side	Perpendicular to Doorway	Parallel to Doorway (beyond latch unless noted)
From front	Pull	60 inches (1525 mm)	18 inches (455 mm)
From front	Push	4 <del>8</del> <u>52</u> inches ( <del>1220</del> <u>1320</u> mm)	0 inches (0 mm) <sup>3</sup>
From hinge side	Pull	60 inches (1525 mm)	36 inches (915 mm)
From hinge side	Pull	54 inches (1370 mm)	42 inches (1065 mm)
From hinge side	Push	42 inches (1065 mm) <sup>1</sup>	22 inches (560 mm) <sup>3 &amp; 4</sup>
From latch side	Pull	48 inches (1220 mm) <sup>1</sup>	24 inches (610 mm)
From latch side	Push	42 inches (1065 mm) <sup>2</sup>	24 inches (610 mm)

<sup>&</sup>lt;sup>1</sup>Add 6 inches (150 mm) if closer and latch provided.

<sup>&</sup>lt;sup>2</sup>Add 6 inches (150 mm) if closer provided.

<sup>&</sup>lt;sup>3</sup>Add 12 inches (305 mm) beyond latch if closer and latch provided.

<sup>4</sup>Beyond hinge side.

TABLE 404.2.3.3 – MANEUVERING CLEARANCES AT SLIDING AND FOLDING DOORS

17.522 10 112.010 1117.11.120 121.11.10 02127.11 021511.0 7.11.5 1 021511.0 5001.0			
	MINIMUM MANEUVERING CLEARANCES		
Approach Direction	Perpendicular to Doorway	Parallel to Doorway (beyond stop or latch side unless noted)	
From front	48 <u>52</u> inches ( <del>1220</del> <u>1320</u> mm)	0 inches (0 mm)	
From nonlatch side	42 inches (1065 mm)	22 inches (560 mm) <sup>1</sup>	
From latch side	42 inches (1065 mm)	24 inches (610 mm)	

Beyond pocket or hinge side.

#### TABLE 404.2.3.4 - MANEUVERING CLEARANCES FOR DOORWAYS WITHOUT DOORS

Approach direction	MINIMUM MANEUVERING CLEARANCES Perpendicular to Doorway
From front	48 <u>52</u> inches ( <del>1220</del> <u>1320</u> mm)
From side	42 inches (1065 mm)

### 4-15-12 PC1

Ron Burton, PTW Advisors LLC, representing Building Owners and Managers Association, International; David S. Collins, The Preview Group, representing American Institute of Architects (AIA); Ron Nickson, representing the National Multi-housing Council; Steve Orlowski, representing the National Association of Home Builders; Kim Paarlberg, representing International Code Council

See comment under 3-6-12 PC2

### 4-14-12 PC2

Larry Eberly, representing Pennsylvania Builders Association

### Disapprove this change. Return the text to that found in existing standard.

**Reason:** Pennsylvania Builders Association opposes this requirement which will increase the width of hallways, spaces and rooms depending on the specific design.

This proposed change relates to the anthropometric study of mobility device users by The Center for IDeA at the University at Buffalo, SUNY which questions decades of universally accepted accessibility clearances and maneuverability contained within Chapter 3:Building Blocks. This revision is based on this single study and should be researched further before such changes occur in the standard.

Pennsylvania Builders Association opposes any change to the ANSI 117.1 building blocks for numerous reasons.

The requirements within Chapter 3: Building Blocks are the standard and precedent for the development of decades of accessibility required clearances, maneuverability and reach ranges both in ANSI A117.1 and federal accessibility laws and their standards (ADA/ FHA/ ABA/ UFAS, etc.).

Any changes will conflict with and be more stringent than these accepted laws and standards and contradictory to the efforts of the ADA/A117 Harmonization Task Group (HTG) to provide consistent language with the ADA. Residual unforeseen consequences and conflicts with these laws and within the ANSI 117.1 standard itself due to the vast references to this chapter will require extensive future coordination, revisions and clarifications and create a financial burden for residential communities.

These changes are predicated on the anthropometric study of mobility device users by The Center for IDeA at the University at Buffalo, SUNY which predominantly addresses the potential need to accommodate existing electric mobility devices. The Committee's and Wheeled Mobility Task Group's (WMTG) supporting documentation and comments contained in the Background Report raises serious questions to the study's testing methods, criteria and results and clearly acknowledges the unforeseen residual impact and consequences.

Instead of changing the Building Blocks, a more prudent approach would be to require mobility device manufacturers to comply with the decades of accepted standards, particularly taking in consideration future technology and advances in design.

Stringent changes to the requirements in the ANSI 117.1 standards make private residential communities more handicap accessible than public, institutional and commercial buildings and sites including USPS postal centers, hospitals, schools, retail, office, recreational and cultural establishments. A substantial disparity and financial burden is placed on residential communities, homeowners and builders by requiring residential buildings to comply with stricter standards. In addition, any change to these basic building blocks may also set a precedent for a re-evaluation of all other clearances and requirements not currently included in these proposed changes, particularly dwelling unit bathroom and kitchens.

Pennsylvania adopts the accessibility provisions of the newest triennial revisions to the ICC Family of Codes that have been adopted in PA, which includes the IBC, IRC, IMC, IPC and IEBC. without modification. This includes the references to ICC/ANSI A117.1. Mandatory adoption in Pennsylvania, without modification, has unforeseen consequences to the building industry, both commercial and residential communities.

### 4-15-12 PC3

Robin Roberts, Chair, Technical Standards Committee, representing Accessibility Professionals Association

Disapprove this change. Return the text to that found in existing standard.

**Reason:** Many of the comments provided in the background reports expressed reservations regarding the study upon which the proposals are based. Because the proposed changes would have an enormous impact on the design and construction community, further investigation seems necessary.

### 4-15-12 PC4

Minh N. Vu; representing American Hotel and Lodging Association.

Disapprove this change. Return the text to that found in existing standard.

Reason: See reason statement from Minh Vu found under proposal 3-6-12.

# 4-23 - 12

Please Note: The version of 4-23-12 included in the public review draft was not the final version of 4-23-12 as approved by the committee. The version approved by the committee is as shown in 4-23-12 PC1

#### 4-23-12 as shown in the public review draft

### Revise as follows:

**404.2.8 Door-Opening Force.** Fire doors shall have the minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open doors other than fire doors shall be as follows:

- 1. Interior hinged door: 5.0 pounds (22.2 N) maximum
- 2. Sliding or folding door: 5.0 pounds (22.2 N) maximum

These forces do not shall also apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position.

**EXCEPTION:** The 5.0 pounds force to retract latch bolts or disengage other devices that hold the door in a closed position shall not apply to panic hardware, delayed egress devices or fire-rated hardware.

# 4-23-12 PC1

Michael Tierney, representing The Builders Hardware Manufacturers Association

Please note: The following reflects the version of 4-23-12 approved by the Committee.

**404.2.6 Door Hardware.** Handles, pulls, latches, locks, and other operable parts on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching, or twisting of the wrist to operate. The operational force to retract latches or disengage devices that hold the door in a closed position shall be as follows:

- Hardware operation by a forward, pushing or pulling motion: 15 pounds (66.7 N)
  maximum
- 2. Hardware operation by a rotational motion: 28 inch-pounds (315 N⋅cm) maximum

Operable parts of such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the floor. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

**EXCEPTION:** Locks used only for security purposes and not used for normal operation are permitted in any location.

**404.2.8 Door-Opening Force.** Fire doors shall have the minimum opening force allowable <u>in scoping provisions adopted</u> by the appropriate administrative authority. <u>For other doors, the The force for pushing or pulling open doors other than fire doors</u> shall be as follows:

- 1. Interior hinged door: 5.0 pounds (22.2 N) maximum
- 2. Sliding or folding door: 5.0 pounds (22.2 N) maximum

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position.

### 4-23-12 PC2

Julie Ruth, JRuth Code Consulting, representing American Architectural Manufacturers Association

#### Further revise as follows:

**404.2.8 Door-Opening Force.** Fire doors shall have the minimum opening force allowable in scoping provisions adopted by the appropriate administrative authority. For other doors the force for pushing or pulling open doors shall be as follows:

- 1. Interior hinged door: 5.0 pounds (22.2 N) maximum
- 2. Interior Ssliding or folding door: 5.0 pounds (22.2 N) maximum
- 3. Exterior sliding door: 10.0 pounds (45 N) maximum

Opening forces for exterior sliding doors shall be determined in accordance with AAMA 513.

#### Add new reference standard as follows:

106.2.12 Standard Laboratory Test Method for Determination of Forces and Motions Required to Activate Operable Parts of CW and AW Class Operable Windows, Sliding Glass Doors and Terrace Doors in Accessible Spaces, AAMA 513 - 12 (AAMA, 1827 Walden Office Square, Suite 550, Schaumburg, IL 60173-4268)

**Reason:** This comment specifies the standard to be used to measure the opening force of accessible exterior sliding doors and it provides a more achievable maximum opening force of 10 pounds for these doors.

An informal survey of AAMA members whose product met the requirements of the International Building Code for resistance to structural load and water penetration, and the International Energy Conservation Code for air leakage, indicate that at the present time there are no commercial class, manually operated exterior sliding doors that can be opened with no more than 5 pounds force. The survey results did indicate, however, that some residential class horizontal sliding windows of up to 6 feet in height can be opened manually with no more than 10 lbs force. This information indicates that although achieving a manually operated, exterior sliding door that can be opened with no more than 10 pounds force would be a challenge, it may be achievable.

This comment separates the requirement for interior sliding doors from that for exterior sliding doors. Exterior sliding doors are subjected to concerns that do not apply to interior products. These include the code required resistance to wind, water penetration, air leakage and forced entry that is mentioned above. For interior products that are not subject to these concerns a 5 pound opening force may be reasonable.

The comment also adds reference to AAMA 513 for measuring the opening force of these doors. AAMA 513 was developed specifically to clarify the methodology that is to be used to measure the force required to open, close, lock and unlock, latch and unlatch commercial grade (Class CW and AW) operable windows, exterior sliding glass doors and exterior side hinged doors. Section 404.2.8 only addresses the force to open accessible doors. Therefore, the reference to AAMA 513 in this section only pertains to its use to determine opening force.

### 4-27-12

#### Revise as follows:

**404.2.9 Door Surface.** Door surfaces within 10 inches (255 mm) of the floor, measured vertically, shall be a smooth surface on the push side extending the full width of the door. <u>Door hardware, or any other obstruction or protrusion shall not be mounted in nor extend into the area within 10 inches (255 mm) of the floor. Parts creating horizontal or vertical joints in such the smooth surface shall be within 1/16 inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.</u>

#### **EXCEPTIONS:**

- 1. Sliding doors shall not be required to comply with Section 404.2.9.
- 2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at no less than 60 degrees from the horizontal shall not be required to comply with the 10-inch (255 mm) bottom rail height requirement.

Doors that do not extend to within 10 inches (255 mm) of the floor shall not be required to comply with Section 404.2.9.

### 4-27-12 PC1

Harold Kiewel, representing self

#### Further revise as follows:

**404.2.9 Door Surface.** Door surfaces within 10 inches (255 mm) of the floor, measured vertically, shall be a smooth surface on the push side extending the full width of the door. Door hardware, or any other obstruction or protrusion shall not be mounted in nor extend into the area within 10 inches (255 mm) of the floor. Parts creating horizontal or vertical joints in the such smooth surface surfaces shall be flush within 1/16 inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.

#### **EXCEPTIONS:**

- 1. Sliding doors shall not be required to comply with Section 404.2.9.
- 2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at no less than 60 degrees from the horizontal shall not be required to comply with the 10-inch (255 mm) bottom rail height requirement.

Doors that do not extend to within 10 inches (255 mm) of the floor shall not be required to comply with Section 404.2.9.

Reason: See the general comments of Mr. Kiewel at 1-1-12.

### 4-29 - 12

#### Add text as follows:

**404.2.9 Door Surface**. Door surfaces within 10 inches (255 mm) of the floor, measured vertically, shall be a smooth surface on the push side extending the full width of the door. Parts creating horizontal or vertical joints in such surface shall be within  $^{1}/_{16}$  inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.

#### **EXCEPTIONS:**

(Exceptions 1 through 3 are not changed)

4. Existing doors and gates without smooth surfaces within 10 inches (255 mm) of the finish floor or ground shall not be required to provide smooth surfaces complying with 404.2.9 provided that if added kick plates are installed, cavities created by such kick plates are capped,

### 4-29-12 PC1

Michael Tierney, representing The Builders Hardware Manufacturers Association

Disapprove this change. Return the text to that found in existing standard.

Reason: The new Exception 4 does not adequately convey the intent to allow added plates that create a smooth surface over exit device bottom rods.

# 4-30-12

#### Revise as follows:

**404.3 Automatic Doors** and Power-Assisted Doors and Gates. Automatic doors and automatic gates shall comply with Section 404.3. Full powered automatic doors shall comply with ANSI/BHMA A156.10 listed in Section 105.2.4. Power-assist and low-energy doors shall comply with ANSI/BHMA A156.19 listed in Section 105.2.3.

**EXCEPTION**: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with Sections 404.3.2. 404.3.4. and 404.3.5.

**404.3.2 Maneuvering Clearances**. Maneuvering clearances at power–assisted doors shall comply with Section 404.2.3. <u>Clearances at swinging automatic doors and gates without standby power and serving</u> an *accessible means of egress* shall comply with Section 404.2.3.

**EXCEPTION:** Where automatic doors and gates remain open in the power-off condition, compliance with Section 404.2.3 shall not be required.

**404.3.5 Controls** Switches. Manually operated controls switches shall comply with Section 309. The clear floor space adjacent to the control switch shall be located beyond the arc of the door swing.

# 4-30-12 PC1

Kim Paarlberg, representing International Code Council

#### Further revise as follows:

**404.3 Automatic Doors and Power-Assisted Doors and Gates**. Automatic doors and automatic gates shall comply with Section 404.3. Full powered automatic doors shall comply with ANSI/BHMA A156.10 listed in Section 105.2.4. Power-assist and low-energy doors shall comply with ANSI/BHMA A156.19 listed in Section 105.2.3.

**EXCEPTION**: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with Sections 404.3.2, 404.3.4, and 404.3.5.

**404.3.2 Maneuvering Clearances**. Maneuvering clearances at power–assisted doors shall comply with Section 404.2.3. Clearances at swinging automatic doors and gates without standby power and serving an accessible means of egress shall comply with Section 404.2.3.

**EXCEPTION:** Where automatic doors and gates remain open in the power-off condition, compliance with Section 404.2.3 shall not be required.

**404.3.5 Controls**. Manually operated controls shall comply with Section 309. The clear floor space adjacent to the control shall be located beyond the arc of the door swing.

**Reason**: Multiple changes for the automatic door provisions were approved. This text and exception is a duplication of the requirements approved in 4-31-12. This deletion will coordinate changes 4-11, 4-30, 4-31 and 4-34.

### 4-31-12

#### Revise as follows:

**404.3 Automatic Doors.** Automatic doors and automatic gates shall comply with Section 404.3. Full powered automatic doors shall comply with ANSI/BHMA A156.10 listed in Section 105.2.4. Power-assist <u>doors</u> and low-energy <u>automatic</u> doors shall comply with ANSI/BHMA A1 56.19 listed in Section 105.2.3.

**EXCEPTION:** Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with Sections 404.3.2, 404.3.4, and 404.3.5.

**404.3.2 Maneuvering Clearances.** Maneuvering clearances at power-assisted doors shall comply with Section 404.2.3. <u>Maneuvering clearances shall be provided on the egress side of low-energy automatic</u> doors and full power automatic doors that serve as part of the accessible means of egress.

#### **EXCEPTIONS:**

- 1. Low-energy automatic doors and full power automatic doors that have standby power or battery back-up shall not be required to comply with this section.
- 2. Low-energy automatic doors and full power automatic doors that remain open in the power-off condition shall not be required to comply with this section.
- 3. Full power automatic sliding doors that include a break-away feature shall not be required to comply with this section.

**404.3.4 Two Doors in Series.** Doors in series shall comply with Section 404.2.5.

**EXCEPTION:** Where both doors are power assist doors, low energy automatic doors or full power automatic doors, two doors in a series shall not be required to provide a turning space between the doors.

**404.3.5 Controls Switches.** Manually operated controls switches shall comply with Section 309. The clear floor space adjacent to the control switch shall be located beyond the arc of the door swing.

404.3.6 Break Out Opening. Where full power automatic sliding doors and gates are equipped with a break out feature, the clear break out opening shall be 32 inches (815 mm) minimum when operated in emergency mode.

# 4-31-12 PC1

Kim Paarlberg, representing International Code Council

#### Further revise as follows:

**404.3 Automatic Doors** <u>and Power-Assisted Doors and Gates</u>. Automatic doors and automatic gates shall comply with Section 404.3. Full powered automatic doors <u>and gates</u> shall comply with ANSI/BHMA A156.10 listed in Section 105.2.4. Power-assist doors <u>and gates</u> and low-energy automatic doors <u>and gates</u> shall comply with ANSI/BHMA A156.19 listed in Section.105.2.7.

**EXCEPTION**: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with Sections 404.3.2, 404.3.4, and 404.3.5.

**404.3.2 Maneuvering Clearances**. Maneuvering clearances at power–assisted doors <u>and gates</u> shall comply with Section 404.2.3. Maneuvering clearances <u>complying with Section 404.2.3</u> shall be provided on the egress side of low-energy automatic doors <u>and gates</u> and full power automatic doors <u>and gates</u> that serve as part of the accessible means of egress.

#### **EXCEPTIONS:**

- 1. Low-energy automatic doors <u>and gates</u> and full power automatic doors <u>and gates</u> that have standby power or battery back-up shall not be required to comply with this section.
- 2. Low-energy automatic doors <u>and gates</u> and full power automatic doors <u>and gates</u> that remain open in the power-off condition shall not be required to comply with this section.
- 3. Full power automatic sliding doors <u>and gates</u> that include a break-away feature shall not be required to comply with this section.
- **404.3.4 Two Doors** or Gates in Series. Doors or gates in series shall comply with Section 404.2.5.

**EXCEPTION:** Where both doors <u>or gates in series</u> are power assist doors, low energy automatic doors or full power automatic doors, <u>the</u> two doors <u>and gates</u> in a series shall not be required to provide a turning space between the doors.

- **404.3.5 Controls.** Manually operated controls shall comply with Section 309. The clear floor space adjacent to the control switch shall be located beyond the arc of the door swing.
- **404.3.6 Break Out Opening.** Where full power automatic sliding doors and gates are equipped with a break out feature, the clear break out opening shall be 32 inches (815 mm) minimum when operated in emergency mode.

**Reason:** Multiple changes for the automatic door provisions were approved. This proposal would coordinate those provisions. This is the combined changes 4-11, 4-30, 4-31 & 4-34 with revisions.

**404.3** Automatic Doors and Power-Assisted Doors and Gates. Automatic doors and automatic gates shall comply with Section 404.3. Full powered automatic doors shall comply with ANSI/BHMA A156.10 listed in Section 105.2.4. Power-assist doors and low-energy automatic doors shall comply with ANSI/BHMA A156.19 listed in Section.105.2.7. (4-11-12) (4-30-12)

**404.3.2 Maneuvering Clearances.** Maneuvering clearances at power—assisted doors and gates shall comply with Section 404.2.3. Clearances at swinging automatic doors and gates without standby power and serving an accessible means of egress shall comply with Section 404.2.3. Maneuvering clearances complying with Section 404.2.3 shall be provided on the egress side of low-energy automatic doors and gates and full power automatic doors and gates that serve as part of the accessible means of egress. **(4-30-12)(4-31-12)** 

#### **EXCEPTIONS:**

- 1. Where automatic doors and gates remain open in the power-off condition, compliance with Section 404.2.3 shall not be required. (4-30-12)
- 2.Low-energy automatic doors <u>and gates</u> and full power automatic doors <u>and gates</u> that have standby power or battery back-up shall not be required to comply with this section.
- 3.Low-energy automatic doors <u>and gates</u> and full power automatic doors <u>and gates</u> that remain open in the power-off condition shall not be required to comply with this section.
- 4. Full power automatic sliding doors <u>and gates</u> that include a break-away feature shall not be required to comply with this section. **(4-31-12)**
- 404.3.4 Two Doors or Gates in Series. Doors or gates in series shall comply with Section 404.2.5. (4-11-12)

#### **EXCEPTIONS:**

- 1. Where both doors <u>or gates in series</u> are power assist doors, low energy automatic doors or full power automatic doors, <u>the</u> two doors <u>and gates</u> in a series shall not be required to provide a turning space between the doors. (4-31-12)
- 2. Full power automatic doors in a series are not required to provide a turning space complying with Section 304. (4-34-12)

### 4-31-12 PC2

Curt Wiehle, Minnesota Construction Codes and Licensing, representing self

#### Further revise as follows:

**404.3.4 Two Doors in Series.** Doors in series shall comply with Section 404.2.5.

**EXCEPTION:** Where both doors are power assist doors, low energy automatic doors or full power automatic doors, two doors in a series shall not be required to provide a turning space <u>complying with</u> Section 304 between the doors.

Balance of 4-31 remains unchanged.

**Reason:** Change 4-34 also added an exception to this section. The two exceptions are essentially redundant. The exception approved in 4-24 does add a key reference to Section 304 the location of the turning space requirement. In this comment I suggest adding that text to this exception and in my companion comment to 4-34, deleting the duplicative exception Bottom line – both exceptions are not needed.

404.3.4 Two Doors or Gates in Series. Doors or gates in series shall comply with Section 404.2.5.

#### **EXCEPTIONS:**

- 4. Where both doors are power assist doors, low energy automatic doors or full power automatic doors, two doors in a series shall not be required to provide a turning space complying with Section 304 between the doors.
- 2. Full power automatic doors in a series are not required to provide a turning space complying with Section 304.

### 4-34-12

Revise as follows:

**404.3.4 Two Doors in Series.** Doors in series shall comply with Section 404.2.5.

**EXCEPTION:** Full power automatic doors in a series are not required to provide a turning space complying with Section 304.

**404.3.5 Control Switches.** Manually operated control switches shall comply with Section 309. The clear floor space adjacent to the control switch shall be located beyond the arc of the door swings.

**404.3.6 Door Hardware.** Handles, pulls, latches, locks, and other operable parts shall comply with Section 404.2.6,

### 4-34-12 PC1

Kim Paarlberg, representing International Code Council

Further revise as follows:

**404.3.4 Two Doors in Series.** Doors in series shall comply with Section 404.2.5.

**EXCEPTION:** Full power automatic doors in a series are not required to provide a turning space complying with Section 304.

**404.3.5 Control Switches.** Manually operated control switches shall comply with Section 309. The clear floor space adjacent to the control switch shall be located beyond the arc of the door swings.

**404.3.6 Door Hardware.** Handles, pulls, latches, locks, and other operable parts shall comply with Section 404.2.6.

Reason: The exception is already covered in 4-31-12. This change will coordinate 4-11, 4-30, 4-31 and 4-34.

## 4-34-12 PC2

Curt Wiehle, Minnesota Construction Codes and Licensing, representing self

Further revise as follows:

**404.3.4 Two Doors in Series.** Doors in series shall comply with Section 404.2.5.

**EXCEPTION:** Full power automatic doors in a series are not required to provide a turning space complying with Section 304.

Balance of 4-34 remains unchanged.

**Reason:** Change 4-31 also added an exception to this section. This exception is essentially redundant with the exception as proposed in 4-31. This exception does add a key reference to Section 304 the location of the turning space requirement. My companion comment to 4-31 would move the text – 'complying with Section 304 into that exception. Bottom line – both exceptions are not needed.

404.3.4 Two Doors or Gates in Series. Doors or gates in series shall comply with Section 404.2.5.

**EXCEPTIONS:** 

- 4. Where both doors are power assist doors, low energy automatic doors or full power automatic doors, two doors in a series shall not be required to provide a turning space complying with Section 304 between the doors.
- 2. Full power automatic doors in a series are not required to provide a turning space complying with Section 304.

# 4 - 38 - 12

#### Revise as follows:

**405.5 Clear Width.** The clear width of a ramp run shall be 36 inches (915 mm) minimum. Handrails and handrail supports that are provided on the ramp run shall not project into the required clear width of the ramp run.

**EXCEPTION:** Within employee work areas, the required clear width of ramps that are a part of common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

**405.8 Handrails.** Ramp runs with a rise greater than 6 inches (150 mm) shall have handrails complying with Section 505.

**EXCEPTION:** Within employee work areas, handrails shall not be required where ramps that are part of common use circulation paths, and which are used for the movement of equipment, are designed to permit the installation of handrails complying with Section 505. Ramps not subject to the exception to Section 405.5 shall be designed to maintain a 36 inch (915 mm) minimum clear width when handrails are installed.

### Add following new definitions.

#### 106.5 Defined terms

<u>circulation path.</u> An exterior or interior way of passage provided for pedestrian travel, including but not limited to, walks, hallways, courtyards, elevators, platform lifts, ramps, stairways, and landings.

**common use.** Interior or exterior circulation paths, rooms, spaces, or elements that are not for public use and are made available for the shared use of two or more people.

<u>employee work area.</u> All or any portion of a space used only by employees and used only for work. Corridors, toilet rooms, kitchenettes and break rooms are not employee work areas.

## 4-38-12 PC1

Harold Kiewel, representing self

#### Further revise as follows:

**405.5 Clear Width.** The clear width of a ramp run shall be 36 inches (915 mm) minimum. Handrails and handrail supports that are provided on the ramp run shall not project into the required clear width of the ramp run.

**EXCEPTION:** Within employee work areas, the required clear width of ramps that are a part of common use circulation paths shall be permitted to be decreased to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum by work area equipment provided that the decrease is essential to the function of the work being performed.

**Reason:** If ramp width is not controlled by 403.5, then you must repeat the constraints of the Exception to 403.5, here. If ramp widths are not controlled by 403.5, why not? See also information at 1-1-12.

### 4-38-12 PC2

#### David Hall, representing self

#### Further revise as follows:

**common use.** Interior or exterior circulation paths, rooms, spaces, or elements that are <del>not for public use</del> and are made available for the shared use of two or more people.

Balance of 4-38 remains unchanged.

**Reason:** I suggest taking the words "not for public use and are' out of the common use definition. This is going to be very confusing to a lot of people.

Common use would be for anyone at any time. Example #3 above indicates kitchenettes are not employee work areas and they are usually not open to the public, but the public could be invited in on special occasions. There have been occasions in my own office where I have invited a client into the breakroom/kitchenette to get coffee or some other beverage as well as giving them access to the microwave.

Another example is when our Bottled Water Service delivers the bottled water. He is not an employee of my company and he is not 'the public' either. So I guess he could be considered a 'vendor' and now you can add that definition to the code. This just seems to be an issue that will come back to haunt you very soon.

### 4-40 - 12

#### Revise as follows:

**405.7.4 Change in Direction**. Ramps that change direction <u>between runs</u> at <del>ramp</del> landings <del>shall be sized to provide a turning space complying with Section 304.3</del> <u>shall have a clear landing 60 inches (1525 mm)</u> minimum by 60 inches (1525 mm) minimum.

### 4-40-12 PC1

Harold Kiewel, representing self

#### Further revise as follows:

**405.7.4 Change in Direction**. Ramps that change direction between runs at landings shall have a <u>clear level</u> landing 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum.

#### Add new definition to Section 104

**level:** Horizontal in all directions; except where a slope is required to shed water, then level may include a slope of 1/4-inch-per-foot (1:50).

Reason: See information at 1-1-12.

### 4-42-12

Revise as follows:

#### 406 Curb Ramps

**406.1 General.** Curb ramps on accessible routes shall comply with Sections 406, 405.2, 405.3, and 405.10.

**406.2 Counter Slope.** Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20. The adjacent surfaces at transitions at curb ramps to walks, gutters and streets shall be at the same level.

406.3 Sides of Curb Ramps. Where provided, curb ramp flares shall comply with Section 406.3.

406.3.1 Slope. Flares shall not be steeper than 1:10.

406.4 Width. Curb ramps shall be 36 inches (915 mm) minimum in width, exclusive of flared sides.

406.5 Floor Surface. Floor surfaces of curb ramps shall comply with Section 302.

**406.7 Landings.** Landings shall be provided at the tops of curb ramps. The clear length of the landing shall be 36 inches (915 mm) minimum. The clear width of the landing shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing.

**EXCEPTION:** In alterations, where there is no landing at the top of curb ramps, curb ramp flares shall be provided and shall not be steeper than 1:12.

406.10 Diagonal Curb Ramps. Diagonal or corner-type curb ramps with returned curbs or other well—defined edges shall have the edges parallel to the direction of pedestrian flow. The bottoms of diagonal curb ramps shall have 48 inches (1220 mm) minimum clear space outside active traffic lanes of the roadway. Diagonal curb ramps provided at marked crossings shall provide the 48 inches (1220 mm) minimum clear space within the markings. Diagonal curb ramps with flared sides shall have a segment of curb 24 inches (610 mm) minimum in length on each side of the curb ramp and within the marked crossing.

**406.11 Islands.** Raised islands in crossings shall be a cut-through level with the street or have curb ramps at both sides. Each curb ramp shall have a level area 48 inches (1220 mm) minimum in length and 36 inches (915 mm) minimum in width at the top of the curb ramp in the part of the island intersected by the crossings. Each 48-inch (1220 mm) by 36-inch (915 mm) area shall be oriented so the 48-inch (1220 mm) length is in the direction of the running slope of the curb ramp it serves. The 48-inch (1220 mm) by 36-inch (915 mm) areas and the accessible route shall be permitted to overlap.

### **406 Curb Ramps and Blended Transitions**

406.1 General. Curb ramps and blended transitions on accessible route shall comply with Section 406

**406.2 Perpendicular Curb Ramps.** Perpendicular curb ramps shall comply with Sections 406.2 and 406.5.

406.2.1 Turning Space. A turning space 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the top of the curb ramp and shall be permitted to overlap other turning spaces and clear spaces. Where the turning space is constrained at the back-of-sidewalk, the turning space shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum. The 60 inches (1525 mm) dimension shall be provided in the direction of the ramp run.

- 406.2.2 Running Slope. The running slope of the curb ramp shall cut through or shall be built up to the curb at right angles or shall meet the gutter grade break at right angles where the curb is curved. The running slope of the curb ramp shall be 1:20 minimum and 1:12 maximum but shall not require the ramp length to exceed 15 feet (4570 mm). The running slope of the turning space shall be 1:48 maximum.
- **406.3 Parallel Curb Ramps.** Parallel curb ramps shall comply with Sections 406.3 and 406.5.
- 406.3.1 Turning Space. A turning space 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the bottom of the curb ramp and shall be permitted to overlap other turning spaces and clear spaces. Where the turning space is constrained on 2 or more sides, the turning space shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm). The 60 inches (1525 mm) dimension shall be provided in the direction of the pedestrian street crossing.
- 406.3.2 Running Slope. The running slope of the curb ramp shall be in-line with the direction of sidewalk travel. The running slope of the curb ramp shall be 1:20 minimum and 1:12 maximum but shall not require the ramp length to exceed 15 feet (4570 mm). minimum. The running slope of the turning space shall be maximum.
- **406.4 Blended Transitions.** Blended transitions shall comply with Sections 406.4 and 406.5.
- **406.4.1 Running Slope.** The running slope of blended transitions shall be 1:20 maximum.
- **406.5 Common Requirements.** Curb ramps and blended transitions shall comply with Section 406.5.
- 406.5.1 Width. The clear width of curb ramp runs (excluding any flared sides), blended transitions, and turning spaces shall be 48 inches (1220 mm) minimum.
- 406.5.2 Grade Breaks. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
- 406.5.3 Cross Slope. The cross slope of curb ramps, blended transitions, and turning spaces shall be 1:48 maximum. At pedestrian street crossings without yield or stop control and at midblock pedestrian street crossings, the cross slope shall be permitted to equal the street or highway grade.
- <u>406.5.4 Counter Slope</u>. The counter slope of the gutter or street at the foot of curb ramp runs, blended transitions, and turning spaces shall be 1:20 maximum.
- 406.5.5 Clear Space. Beyond the bottom grade break, a clear space 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided within the width of the pedestrian street crossing and wholly outside the parallel vehicle travel lane.
- <u>406.5.6</u> <u>406.3.2</u> **Marking.** If curbs adjacent to the ramp flares are painted, the painted surface shall extend along the flared portion of the curb.
- <u>406.5.7</u> <u>406.6</u> **Location.** Curb ramps and the flared sides of curb ramps shall be located so they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.
- <u>406.5.9</u> 406.8 Obstructions. Curb ramps shall be located or protected to prevent their obstruction by parked vehicles.
- 406.5.10 406.9 Handrails. Handrails shall not be required on curb ramps.

Add the following definitions:

blended transition. A raised pedestrian street crossing, depressed corner, or similar connection between the pedestrian access route at the level of the sidewalk and the level of the pedestrian street crossing that has a grade of 1:20 or less.

<u>curb line.</u> A line at the face of the curb that marks the transition between curb and the gutter, street or highway.

**curb ramp.** A short ramp cutting through a curb or built up to it. <u>Curb ramps can be perpendicular or parallel</u>, or a combination of parallel and perpendicular ramps.

grade break. The line where two surface planes with different grades meet.

### 4-42-12 PC1

Kim Paarlberg, representing International Code Council

Further revise as follows:

**406.2.1 Turning Space.** A turning space 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the top of the curb ramp and shall be permitted to overlap other turning spaces and clear spaces. Where the turning space is constrained at the back-of-sidewalk, the turning space shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum. The 60 inches (1525 mm) dimension shall be provided in the direction of the <u>curb</u> ramp run.

**406.2.2 Running Slope.** The running slope of the curb ramp shall cut through or shall be built up to the curb at right angles or shall meet the gutter grade break at right angles where the curb is curved. The running slope of the curb ramp shall be 1:20 minimum and 1:12 maximum. but shall not require The curb ramp run length shall not be required to exceed 15 feet (4570 mm). The running slope of the turning space shall be 1:48 maximum.

**406.3.2 Running Slope.** The running slope of the curb ramp shall be in-line with the direction of sidewalk travel. The running slope of the curb ramp shall be 1:20 minimum and 1:12 maximum. but shall not require The curb ramp run length shall not be required to exceed 15 feet (4570 mm) minimum. The running slope of the turning space shall be 1:48 maximum.

**406.5.2 Grade Breaks.** Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the <u>curb</u> ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.

Balance of 4-42 remains unchanged.

Reason: The editorial committee identified some terminology issues. This is intended as a clarification only.

### 4-42-12 PC2

Larry Perry, representing self

Further revise as follows:

**curb ramp.** A short ramp cutting through a curb or built up to it. Curb ramps can be perpendicular or parallel, or a combination of parallel and perpendicular ramps.

Balance of 4-42 remains unchanged.

**Reason:** Delete the added language. It intended to explain all the configurations possible, it is commentary and therefore not needed. If intended to prohibit configurations that are not perpendicular, parallel, or a combination thereof, it is introducing a requirement into a definition, which is not appropriate.

## 4-42-12 PC3

Hope Reed, representing New Mexico Governor's Commission of Disability; Robin Roberts, representing Accessibility Professionals Association.

Revise by adding new text as follows:

<u>406.2.3 Flared Sides.</u> Where a pedestrian circulation path crosses the curb ramp, flared sides shall be sloped 10 percent maximum, measured parallel to the curb line.

Balance of 4-42 remains unchanged

#### Reason:

REED: Proposal 4-42-12 appears to have missed the requirement for flared sides, add PROWAG text shown below:

**R304.2.3 Flared Sides.** Where a pedestrian circulation path crosses the curb ramp, flared sides shall be sloped 10 percent maximum, measured parallel to the curb line.

**ROBERTS:** In following with the Access Board's Proposed Public Rights of Way standards, R304.2.3 provides the user the maximum slope of the flare and how it is measured for the locations referenced in the document. Additionally, the 2010 Standards at 406.3 also states that curb ramp flares cannot be more than 10% slope. Adding this section to the A117.1 be consistent with harmonizing the regulations.

# 4-42-12 PC4

Curt Wiehle, Minnesota Construction Codes and Licensing, representing self

#### Further revise as follows:

- **406.2.1 Turning Space** Landing. A turning space landing 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the top of the curb ramp and shall be permitted to overlap ether turning spaces pedestrian routes and clear spaces. Where the turning space landing is constrained at the back-of-sidewalk, the turning space landing shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum. The 60 inches (1525 mm) dimension shall be provided in the direction of the ramp run. The slope of the landing shall be 1:48 maximum in all directions.
- **406.2.2 Running Slope.** The running slope of the curb ramp shall cut through or shall be built up to the curb at right angles or shall meet the gutter grade break at right angles where the curb is curved. The running slope of the curb ramp shall be 1:20 minimum and 1:12 maximum but shall not require the ramp length to exceed 15 feet (4570 mm). The running slope of the turning space shall be 1:48 maximum.
- **406.3.1 Turning Space** Landing. A turning space landing 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the bottom of the curb ramp and shall be permitted to overlap other turning spaces pedestrian routes and clear spaces. Where the turning space landing is constrained on 2 or more sides, the turning space landing shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum. The 60 inches (1525 mm) dimension shall be provided in the direction of the pedestrian street crossing. The slope of the landing shall be 1:48 maximum in all directions.
- **406.3.2 Running Slope.** The running slope of the curb ramp shall be in-line with the direction of sidewalk travel. The running slope of the curb ramp shall be 1:20 minimum and 1:12 maximum but shall not require the ramp length to exceed 15 feet (4570 mm). minimum. The running slope of the turning space shall be 1:48 maximum.

**406.5.1 Width.** The clear width of curb ramp runs (excluding any flared sides), and blended transitions, and turning spaces shall be 48 inches (1220 mm) minimum.

**406.5.2 Grade Breaks.** Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces landings. Surface slopes that meet at grade breaks shall be flush.

**406.5.3 Cross Slope.** The cross slope of curb ramps, <u>and</u> blended transitions, <u>and turning spaces</u> shall be 1:48 maximum. At pedestrian street crossings without yield or stop control and at midblock pedestrian street crossings, the cross slope shall be permitted to equal the street or highway grade.

**406.5.4 Counter Slope.** The counter slope of the gutter or street at the foot of curb ramp runs, blended transitions, and turning spaces <u>landings</u> shall be 1:20 maximum.

Balance of 4-42 remains unchanged

**Reason:** The area at top and bottom of curb ramps should not be confused with a turning space. Maintain current curb ramp language which refers to this area as a landing.

Relocate the slope of the landing [turning space] requirement to the landing [turning space] sections.

Delete the reference to a maximum length of 15 feet as this implies that curbs can be 15 inches high.

The minimum size of the landing [turning space] has been addressed and does not need to be restated at Section 406.5.1.

The slope of the landing [turning space] has been addressed and does not need to be restated at Section 406.5.3.

## 4-42-12 PC5

Chad Beebe, representing American Society for Healthcare Engineering (ASHE)

Disapprove this change. Return the text to that found in existing standard.

**Reason:** In review of the 2014 Final Draft of the ICC A117.1 document, it has come to our attention that several of the proposed changes will have a significantly negative impact to the healthcare industry design/built environment of buildings designed under the 2015 IBC. Further, it is our understanding that the overwhelming majority of these changes have been derived from a single uncorroborated report which has neither been properly vetted nor adopted by any other credible agency or (similar) jurisdictional body.

As we do not feel these dramatic and substantial changes have been given proper and appropriate consideration by all interested stakeholders in this process, and since we question the authenticity of the underlying premise used to make such changes, we respectfully request they either be removed entirely from consideration in this draft, or that the entire draft adoption process be held in abeyance for a minimum of 12-months so that further collaboration can be conducted with all interested parties. If the Committee opts to delay this process for 12-months, it will be in keeping with the mission of the ICC, and best assure that all parties can be provided with the opportunity to reasonably participate in this process.

4-42-12 / 4-44-12 - The addition of large landings at both top and bottom of all curb ramps.

These new requirements would add thousands of required square feet to a new hospital and significantly impact any renovations to an existing hospital by requiring increased patient room sizes to meet the new requirements and thus, due to the fixed square footage within the building foot print, will reduce the number of allowable beds the hospital can maintain. With hospital construction cost averaging around \$300.00 per square foot these additional increases in square footage will significantly impact the cost of construction. Thank you for your consideration of this request, and in keeping alive the goals and mandates of the entire ICC organization and membership.

# 4-42-12 PC6

Tony Ewalt, representing Sletten Construction of Nevada, Inc.; Michael Gentille, representing Philip Chun North America, Inc.; Michael McGettigan, representing Terracon Consultant; Robert W. Potter, Construction Company, representing Affordable Concepts; Eric J. Rowland, representing Rowland Design;

Disapprove this change. Return the text to that found in existing standard.

**Reason:** In review of the 2014 Final Draft of the ICC A117.1 document, it has come to my attention that several of the proposed changes (ratified by this Committee) will have a significantly negative impact to the design/built environment of buildings designed under the 2015 IBC. Further, it is my understanding that the overwhelming majority of these changes have been derived from a single uncorroborated report which has neither been properly vetted nor adopted by any other credible agency or (similar) jurisdictional body.

As I do not feel these dramatic and substantial changes have been given proper and appropriate consideration by all interested stakeholders in this process, and I question the authenticity of the underlying premise used to make such changes, I respectfully request they either be removed entirely from consideration in this draft, or that the entire draft adoption process be held in abevance for a minimum of 12-months.

If the Committee opts to delay this process for 12-months, it will be in keeping with the mission of the ICC, and best assure that all parties can be provided with the opportunity to reasonably participate in this process.

# 4-42-12 PC7

Jeffrey T. O'Neill, representing self

Disapprove this change. Return the text to that found in existing standard.

Reason: See reason statement from Jeffrey O'Neill found under proposal 3-6-12.

# 4-42-12 PC8

Minh N. Vu; representing American Hotel and Lodging Association.

### Disapprove this change. Return the text to that found in existing standard.

Comment: The American Hotel & Lodging Association (hereinafter, the "AH&LA") opposes the proposal to increase the minimum width of curb ramps from 36" to 48" (section 406.5.1), and require a 48" turning radius at the top and bottom of curb ramps (Sections 406.2.1, 406.3.1) to increase the length of landings at the top of curb ramps from 36" to 48". The ANSI Committee has provided no justification for why this change is necessary. This proposal would substantially increase construction and renovation costs for the exterior accessible routes of lodging facilities for no apparent reason. In existing facilities, the proposed requirement would also require extensive re-landscaping of grounds and in some cases could not be implemented due to space restrictions.

To the extent that this proposal is based on the Access Board's proposal for public rights of way, AH&LA urges the ANSI Committee to wait until the Access Board completes its public rulemaking process. That process is still pending and enacting this proposed change now could result in inconsistency between ANSI A117.1 and the Access Board's public right of way rule

The ANSI Committee should also reject this proposal because it would undermine the Committee's past efforts to harmonize the A117.1 Standard with the 2010 ADA Standards. As the ANSI Committee is well aware, for the first twenty (20) years of the Americans with Disabilities Act of 1990 (hereinafter, the "ADA"), the ANSI All7.1 Standard was not the same as the ADA Standards for Accessible Design adopted by the United States Department of Justice (hereinafter, the "DOJ"). The lack of harmonization caused a great deal of confusion among owners of public accommodations and commercial facilities who had to comply with building code and ADA requirements which differed. In September 2010, the DOJ issued the 2010 Standards which was the culmination of an effort by the ANSI Committee and the Access Board to harmonize the ANSI A117.1 Standard with the ADA 2010 Standards. The ADA 2010 Standards just took effect on March 15, 2012.

If the ANSI Committee is unwilling to postpone the adoption of these proposals for further study, it should, at a minimum, limit their application to facilities constructed after a jurisdiction adopts the changes. As can be seen throughout the preceding discussion, the proposed changes -- once they are adopted by jurisdictions as part of their building codes -- will be particularly problematic for existing facilities that will have to comply with them in future renovations. In most instances, lodging facility owners will face three alternatives: (1) comply with the new requirements by making extensive changes to their exterior routes upon renovation; (2) attempt to obtain a variance from local building officials assuming such a process is available; or (3) not renovate. All options are highly undesirable. The first two options involve substantial cost and uncertainty while the third option would actually undermine accessibility by causing owners to defer or not make renovations that may improve access.

1. The American Hotel & Lodging Association is a membership organization that represents the interests of every segment of the lodging industry, including REITs, brand, franchisee, management companies, independent property owners, and state associations.

# 4-44-12

### Revise as follows:

**406.12 Detectable Warnings at Raised Marked Crossings.** Marked crossings that are raised to the same level as the adjoining sidewalk shall be preceded by a detectable warning 24 inches (610 mm) in depth complying with Section 705. The detectable warning shall extend the full width of the marked crossing.

**406.12 Where detectable warnings are required.** Detectable warning surfaces complying with Section 705 shall be provided at the following locations on pedestrian access routes and at transit stops:

- 1. Curb ramps and blended transitions at pedestrian street crossings:
- 2. Pedestrian refuge islands;
- 3. Pedestrian at-grade rail crossings not located within a street or highway;
- **4.** Boarding platforms at transit stops for buses and rail vehicles where the edges of the boarding platform are not protected by screens or guards; and
- 5. Boarding and alighting areas at sidewalk or street level transit stops for rail vehicles where the side of the boarding and alighting areas facing the rail vehicles is not protected by screens or quards.

Exception: Detectable warning surfaces are not required at pedestrian refuge islands that are cutthrough at street level and are less than 6 feet (1830 mm) in length in the direction of pedestrian travel.

- **406.13 Detectable Warnings at Curb Ramps.** Where detectable warnings are provided on curb ramps, they shall comply with Sections 406.13 and 705.
- **406.13.1 Area Covered.** Detectable warnings shall be 24 inches (610 mm) minimum in depth in the direction of travel. The detectable warning shall extend the full width of the curb ramp or flush surface.
- **406.13.2 Location.** The detectable warning shall be located so the edge nearest the curb line is 6 inches (150 mm) minimum and 8 inches (205 mm) maximum from the curb line.
- **406.14 Detectable Warnings at Islands or Cut-through Medians.** Where detectable warnings are provided on curb ramps or at raised marked crossings leading to islands or cut-through medians, the island or cut-through median shall be provided with detectable warnings complying with Section 705, that are 24 inches (610 mm) in depth, and extend the full width of the pedestrian route or cut-through. Where such island or cut-through median is less than 48 inches (1220 mm) in depth, the entire width and depth of the pedestrian route or cut-through shall have detectable warnings.
- **705.6 Size.** Detectable warning surfaces shall extend 24 inches (610 mm) minimum in the direction of pedestrian travel. At curb ramps and blended transitions, detectable warning surfaces shall extend the full width of the curb ramp run excluding any flared sides or blended transition. At pedestrian at-grade rail crossings not located within a street or highway, detectable warnings shall extend the full width of the crossing. At boarding platforms for buses and rail vehicles, detectable warning surfaces shall extend the full length of the public use areas of the platform. At boarding and alighting areas at sidewalk or street level transit stops for rail vehicles, detectable warning surfaces shall extend the full length of the transit stop.
- **705.7 Placement.** The placement of detectable warning surfaces shall comply with Section 705.7.
- <u>705.7.1 Perpendicular Curb Ramps.</u> On perpendicular curb ramps, detectable warning surfaces shall be placed as follows:
  - 1. Where the ends of the bottom grade break are in front of the back of curb, detectable warning surfaces shall be placed at the back of curb.
  - 2. Where the ends of the bottom grade break are behind the back of curb and the distance from either end of the bottom grade brake to the back of curb is 60 inches (1525 mm) or less,

- <u>detectable warning surfaces shall be placed on the ramp run within one dome spacing of the bottom grade break.</u>
- 3. Where the ends of the bottom grade break are behind the back of curb and the distance from either end of the bottom grade brake to the back of curb is more than 60 inches (1525 mm), detectable warning surfaces shall be placed on the lower landing at the back of curb.
- **705.7.2 Parallel Curb Ramps**. On parallel curb ramps, detectable warning surfaces shall be placed on the turning space at the flush transition between the street and sidewalk.
- 705.7.3 Blended Transitions. On blended transitions, detectable warning surfaces shall be placed at the back of curb. Where raised pedestrian street crossings, depressed corners, or other level pedestrian street crossings are provided, detectable warning surfaces shall be placed at the flush transition between the street and the sidewalk.
- 705.7.4 Pedestrian Refuge Islands. At cut-through pedestrian refuge islands, detectable warning surfaces shall be placed at the edges of the pedestrian island and shall be separated by a 24 inches (610 mm) minimum length of surface without detectable warnings.
- 705.7.5 Pedestrian At-Grade Rail Crossings. At pedestrian at-grade rail crossings not located within a street or highway, detectable warning surfaces shall be placed on each side of the rail crossing. The edge of the detectable warning surface nearest the rail crossing shall be 72 inches (1830) minimum and 15 feet (4570 mm) maximum from the centerline of the nearest rail. Where pedestrian gates are provided, detectable warning surfaces shall be placed on the side of the gates opposite the rail.
- **705.7.6 Boarding Platforms.** At boarding platforms for buses and rail vehicles, detectable warning surfaces shall be placed at the boarding edge of the platform.
- 705.7.7 Boarding and Alighting Areas. At boarding and alighting areas at sidewalk or street level transit stops for rail vehicles, detectable warning surfaces shall be placed at the side of the boarding and alighting area facing the rail vehicles.
- **805.10 Track Crossings.** Where a circulation path crosses tracks, it shall comply with Section 402 and shall have a detectable warning 24 inches (610 mm) in depth complying with Section 705 extending the full width of the circulation path. The detectable warning surface shall be located so that the edge nearest the rail crossing is 6 foot (1830 mm) minimum and 15 foot (4570 mm) maximum from the centerline of the nearest rail.

**EXCEPTION:** Openings for wheel flanges shall be permitted to be  $2^{1}/_{2}$  inches (64 mm) maximum.

# 4-44-12 PC1

Harold Kiewel, representing self

**Comment:** The question for the Exception to Article 406.12 is when is a mid-street "island" not a safe "refuge?" For me, if the island is not a real destination of its own, then it shouldn't be considered a place of refuge. If the island is part of a walkable park, has a news-stand, or some kind of public use then perhaps it could be marked as pedestrian safe zone. If the primary purpose of the island is vehicular traffic control it should be treated as part of the street. See further information at 1-1-12.

# 4-44-12 PC2

Karen Gridley, representing Target Corporation

Further revise as follows:

**406.12 Where detectable warnings are required.** Detectable warning surfaces complying with Section 705 shall be provided at the following locations on pedestrian access routes and at transit stops:

- Curb ramps and blended transitions at pedestrian street crossings;
- Pedestrian refuge islands;
- 3. Pedestrian at-grade rail crossings not located within a street or highway;
- **4.** Boarding platforms at transit stops for buses and rail vehicles where the edges of the boarding platform are not protected by screens or guards; and
- 5. Boarding and alighting areas at sidewalk or street level transit stops for rail vehicles where the side of the boarding and alighting areas facing the rail vehicles is not protected by screens or quards.

**Exception:** Detectable warning surfaces are not required at pedestrian refuge islands that are cutthrough at street level and are less than 6 feet (1830 mm) in length in the direction of pedestrian travel.

Balance of 4-44-12 remains unchanged.

**Reason:** The proposed language of 406.12 is scoping language and should not be included in the technical criteria of the A117.1 Standard. Per Chapter 2 of A117.1 it is made clear that "This standard provides technical criteria..." and, "The administrative authority shall provide scoping provisions to specify the extent to which these technical criteria apply."

Also, the Access Board has gone to great lengths to relocate the requirement for detectable warnings out of the 2010 ADA Standards and into rulemaking on the public-right-of way, clarifying that detectable warnings are not required at buildings or facilities covered by Title II and Title III, and that detectable warnings are only intended to be provided within the public right-of-way at specific pedestrian access route locations.

If this proposed scoping language is included in the new A117.1 Standard it will again effectively require detectable warnings at buildings or facilities covered by Title II and Title III, which is in conflict with the action taken on relocating the scoping requirement into public right-of-way rulemaking, and bring A117.1 out of harmonization with the new 2010 ADA Standards.

# 4-44-12 PC3

Karen Gridley, representing Target Corporation

### Further revise as follows:

**406.12 Where detectable warnings are required.** Detectable warning surfaces complying with Section 705 shall be provided at the following locations on pedestrian access routes within the public right-of-way and at transit stops:

- 1. Curb ramps and blended transitions at pedestrian street crossings;
- Pedestrian refuge islands;
- 3. Pedestrian at-grade rail crossings not located within a street or highway;
- **4.** Boarding platforms at transit stops for buses and rail vehicles where the edges of the boarding platform are not protected by screens or guards; and
- 5. Boarding and alighting areas at sidewalk or street level transit stops for rail vehicles where the side of the boarding and alighting areas facing the rail vehicles is not protected by screens or guards.

**Exception:** Detectable warning surfaces are not required at pedestrian refuge islands that are cutthrough at street level and are less than 6 feet (1830 mm) in length in the direction of pedestrian travel

Balance of 4-44-12 remains unchanged.

**Reason:** Per our other public comment on the same item, Target does not support the addition of this section of proposed scoping language. However, if the Committee approves the inclusion of this new scoping language for detectable warnings, additional clarifying language should be added indicating the requirement is only for detectable warnings located within the Public Right-of-Way in order to maintain consistency and harmonization with the action taken by the Access Board for other Federal rulemaking, providing much needed clarity for enforcement officials.

The proposed language of 406.12 is scoping language and should not be included in the technical criteria of the A117.1 Standard. Per Chapter 2 of A117.1 it is made clear that "This standard provides technical criteria..." and, "The administrative authority shall provide scoping provisions to specify the extent to which these technical criteria apply."

The Access Board has gone to great lengths to relocate the requirement for detectable warnings out of the 2010 ADA Standards and into rulemaking on the public-right-of way, clarifying that detectable warnings are not required at buildings or facilities covered by Title II and Title III, and that detectable warnings are only intended to be provided within the public right-of-way at specific pedestrian access route locations.

If this proposed scoping language is included in the new A117.1 Standard, it will again effectively require detectable warnings at buildings or facilities covered by Title II and Title III, which is in conflict with the action taken on relocating the scoping requirement into public right-of-way rulemaking, and brings A117.1 out of harmonization with the new 2010 ADA Standards.

# 4-44-12 PC4

Jean Tessmer, representing self.

### Further revise as follows:

**705.6 Size**. Detectable warning surfaces shall extend  $\underline{0}$  24 inches (610 mm) minimum in the direction of pedestrian travel. At curb ramps and blended transitions, detectable warning surfaces shall extend the full width of the curb ramp run excluding any flared sides or blended transition. At pedestrian at-grade rail crossings not located within a street or highway, detectable warnings shall extend the full width of the crossing. At boarding platforms for buses and rail vehicles, detectable warning surfaces shall extend the full length of the public use areas of the platform. At boarding and alighting areas at sidewalk or street level transit stops for rail vehicles, detectable warning surfaces shall extend the full length of the transit stop.

**Reason:** Detectable warnings are hazardous to the elderly and ambulatory persons. They have caused trips and falls and serious permanent debilitating injury. Children are prone to falling face first on hard surfaces while running what if they fell face first on a dome. DOT my comments on DW's I believe there are also photos. There needs to be a non-hazardous alternative to the domes. The doctor said it was like the person was hit on the head with a hammer when they fell on the domes.

# 4-44-12 PC5

Curt Wiehle, Minnesota Construction Codes and Licensing, representing self

### Further revise as follows:

**406.11** <u>Detectable Warnings.</u> Where detectable warnings are provided they shall comply with Section 705 as applicable. Where detectable warnings are required. Detectable warning surfaces complying with Section 705 shall be provided at the following locations on pedestrian access routes and at transit stops:

- 1. Curb ramps and blended transitions at pedestrian street crossings;
- 2. Pedestrian refuge islands:
- 3. Pedestrian at-grade rail crossings not located within a street or highway;
- 4. Boarding platforms at transit stops for buses and rail vehicles where the edges of the boarding platform are not protected by screens or guards; and
- **5.** Boarding and alighting areas at sidewalk or street level transit stops for rail vehicles where the side of the boarding and alighting areas facing the rail vehicles is not protected by screens or quards.

**Exception:** Detectable warning surfaces are not required at pedestrian refuge islands that are cut-through at street level and are less than 6 feet (1830 mm) in length in the direction of pedestrian travel.

 $\textbf{Reason:} \ \ \textbf{This is scoping and is not appropriate for the standard}.$ 

## 4-44-12 PC6

## Chad Beebe, - representing American Society for Healthcare Engineering (ASHE)

## Disapprove this change. Return the text to that found in existing standard.

**Reason:** In review of the 2014 Final Draft of the ICC A117.1 document, it has come to our attention that several of the proposed changes will have a significantly negative impact to the healthcare industry design/built environment of buildings designed under the 2015 IBC. Further, it is our understanding that the overwhelming majority of these changes have been derived from a single uncorroborated report which has neither been properly vetted nor adopted by any other credible agency or (similar) jurisdictional body.

As we do not feel these dramatic and substantial changes have been given proper and appropriate consideration by all interested stakeholders in this process, and since we question the authenticity of the underlying premise used to make such changes, we respectfully request they either be removed entirely from consideration in this draft, or that the entire draft adoption process be held in abeyance for a minimum of 12-months so that further collaboration can be conducted with all interested parties. If the Committee opts to delay this process for 12-months, it will be in keeping with the mission of the ICC, and best assure that all parties can be provided with the opportunity to reasonably participate in this process.

4-42-12 / 4-44-12 - The addition of large landings at both top and bottom of all curb ramps.

These new requirements would add thousands of required square feet to a new hospital and significantly impact any renovations to an existing hospital by requiring increased patient room sizes to meet the new requirements and thus, due to the fixed square footage within the building foot print, will reduce the number of allowable beds the hospital can maintain. With hospital construction cost averaging around \$300.00 per square foot these additional increases in square footage will significantly impact the cost of construction. Thank you for your consideration of this request, and in keeping alive the goals and mandates of the entire ICC organization and membership.

# 4-44-12 PC7

Tony Ewalt, representing Sletten Construction of Nevada, Inc.; Michael Gentille, representing Philip Chun North America, Inc.; Michael McGettigan, representing Terracon Consultant; Robert W. Potter, Construction Company, representing Affordable Concepts; Eric J. Rowland, representing Rowland Design;

### Disapprove this change. Return the text to that found in existing standard.

**Reason:** In review of the 2014 Final Draft of the ICC A117.1 document, it has come to my attention that several of the proposed changes (ratified by this Committee) will have a significantly negative impact to the design/built environment of buildings designed under the 2015 IBC. Further, it is my understanding that the overwhelming majority of these changes have been derived from a single uncorroborated report which has neither been properly vetted nor adopted by any other credible agency or (similar) jurisdictional body.

As I do not feel these dramatic and substantial changes have been given proper and appropriate consideration by all interested stakeholders in this process, and I question the authenticity of the underlying premise used to make such changes, I respectfully request they either be removed entirely from consideration in this draft, or that the entire draft adoption process be held in abeyance for a minimum of 12-months.

If the Committee opts to delay this process for 12-months, it will be in keeping with the mission of the ICC, and best assure that all parties can be provided with the opportunity to reasonably participate in this process.

## 4-44-12 PC8

Jeffrey T. O'Neill, representing self

Disapprove this change. Return the text to that found in existing standard.

Reason: See reason statement from Jeffrey O'Neill found under proposal 3-6-12.

# 4-49-12

### Revise as follows:

**407.4.6.1 Location.** Controls shall be located within one of the reach ranges specified in Section 308.

### **EXCEPTIONS:**

- 1. Where the elevator panel complies with Section 407.4.8.
- In existing elevators, where a parallel approach is provided to the controls, car control
  buttons with floor designations shall be permitted to be located 54 inches (1370 mm)
  maximum above the floor. Where the panel is changed, it shall comply with Section
  407.4.6.1 308.

# 4-49-12 PC1

Harold Kiewel, representing self

Further revise as follows:

**407.4.6.1** Elevator Control Location. Controls shall be located centered on one edge of the clear floor space that served them and within one of the appropriate reach ranges range limits specified in Section 308.

### **EXCEPTIONS:**

- 1. Where the elevator panel complies with Section 407.4.8.
- 2. In existing elevators, where a parallel approach is provided to the controls, car control buttons with floor designations shall be permitted to be located 54 inches (1370 mm) maximum above the floor. Where the panel is changed, it shall comply with Section 308.

Reason: See general information from Mr. Kiewel at 1-1-12.

# 4-49-12 PC2

Kim Paarlberg, representing International Code Council

Further revise as follows:

**407.4.6.1 Location.** Controls shall be located within one of the reach ranges specified in Section 308.

#### **EXCEPTIONS:**

- 1. Where the elevator panel complies with Section 407.4.8.
- 2. In existing elevators, where a parallel approach is provided to the controls, car control buttons with floor designations shall be permitted to be located 54 inches (1370 mm) maximum above the floor. Where the panel is changed, it shall comply with Section 308 for the operable parts on the panel, the high reach shall be 48 inches (1220 mm) maximum and the low forward reach shall be 15 inches (380 mm) minimum above the floor. (4-49-12)

**407.4.10.1 407.4.10.2 Height.** The highest operable part of a two-way communication system shall comply with Section 308 be located to have the high reach of 48 inches (1220 mm) maximum and the low forward reach shall be 15 inches (380 mm) minimum above the floor.

**408.4.6 Elevator Car Controls.** Elevator car controls shall comply with Section 407.4.6. Control panels shall be centered on a side wall.

**Reason:** Existing elevators may not be able to get all control panels within the new forward reach. In addition, the emergency phone may not be within the new forward reach range. I want input from the industry. LULA's get the same requirements by reference to the elevator provisions.

# 4-50-12

### Revise as follows:

**407.4.6.2.2 Arrangement.** Buttons shall be arranged with numbers in ascending order. Floors shall be designated . . . -4, -3, -2, -1, 0, 1, 2, 3, 4, etcetera, with floors below the main entry floor designated with minus numbers. Numbers shall be permitted to be omitted, provided the remaining numbers are in sequence. Where a telephone keypad arrangement is used, the number key ("#") shall be utilized to enter the minus symbol ("-"). When two or more columns of buttons are provided they shall read from left to right.

**407.4.7.1.2 Designation.** Floors shall be designated . . . -4, -3, -2, -1, 0, 1, 2, 3, 4, etcetera, with floors below the main entry floor designated with minus numbers. Numbers shall be permitted to be omitted, provided the remaining numbers are in sequence. Where a telephone keypad arrangement is used, the number key ("#") shall be utilized to enter the minus symbol ("-"). Ancillary letters shall be permitted to be used in conjunction with the numbers provided the letters are located to the right of the numbers and not more than two letters are used for each floor designation.

## 4-50-12 PC1

Harold Kiewel, representing self

### Further revise as follows:

**407.4.6.2.2 Arrangement.** Buttons shall be arranged with numbers in ascending order. When two or more columns of buttons are provided they shall read from left to right.

**407.4.7.1.2** <u>Floor</u> **Designation.** Floors shall be designated . . . -4, -3, -2, -1, 0, 1, 2, 3, 4, etcetera, with floors below the main entry floor designated with minus numbers. Numbers shall be permitted to be omitted, provided the remaining numbers are in sequence. Where a telephone keypad arrangement is used, the number key ("#") shall be utilized to enter the minus symbol ("-"). Ancillary letters shall be permitted to be used in conjunction with the numbers provided the letters are located to the right of the numbers and not more than two letters are used for each floor designation.

**Reason:** This is very sophisticated and highly restrictive system that although technically correct is not at all consistent with common knowledge – one of the fundamentals of Universal Design. Most Americans expect that they walk into a building on the first floor, and go up to the second or down to the basement.

They will resist thinking of the ground level as Floor Zero; this only makes sense on a number line where 0 is only a point on a line and has no dimension. Where this theoretical 0 point or 0 level has, in common perception, a whole floor of building with an area, and probably a 3-dimensional volume as its descriptor – the point on a line definition falls apart. Hospitality facilities will have lobbies, lounges, conference centers in these prominent locations and refuse to designate them as the zero level. Not to mention all the negative connotations of "minus" numbers for subterranean levels. Who, besides the authors of this Standard, will know that the pound-key (#) means minus (-)?

See additional information from Mr. Kiewel at 1-1-12.

# 4-54-12

**407.4.10 Emergency communications.** <u>Visual and audible</u> emergency two-way communication systems between the elevator car and a point outside the hoistway shall comply with Section 407.4.10 and ASME A17.1/CSA B44 listed in Section 105.2.5 and provide a two-way visual communication device.

<u>407.4.10.1</u> Visual Display Device shall be provided for two-way visual communication to be activated by the elevator occupant. Visual communication devices shall consist of a key pad and monitor to enable text based or sign-language communication provided through a certified Visual relay Service.

# 4-54-12 PC1

Kim Paarlberg, representing International Code Council

Disapprove this change. Return the text to that found in existing standard.

**Reason:** Due to the requirements for access to the call buttons, the two way communication system in elevators is typically in a box down near the floor. Some two way communication are to remote sites. I do not see how this location would work with a key pad or a sign language system.

# 4-54-12 PC2

Harold Kiewel, representing self

Disapprove this change. Return the text to that found in existing standard.

**Comment:** OMG! Has this technology been proofed, staffed up, made vandal resistant, and cheap enough that a hotelier in Wall, SD, with an annualized occupancy rate of 60-precent of his 50 rooms, can make this commitment to the American public?

# 4-54-12 PC3

Minh N. Vu; representing American Hotel and Lodging Association.

Disapprove this change. Return the text to that found in existing standard.

**Reason:** The American Hotel and Lodging Association(hereinafter, "AH&LA") opposes the proposed new requirement for a visual display device that allows for text-based or sign language communication through relay services in every elevator car. (Sections 407.4.10 and 407.4.10.1). To meet this requirement lodging facility owners would have to install a TTY device that is connected to a phone line that can be used to call a relay service and a videophone that is connected to a phone line which can be used to call a relay service that is staffed with operators who know sign language. This proposal must be rejected for at least three reasons.

First, it is unclear whether this technology even exists for elevators, or whether there is enough room in the elevator panel for this equipment. Second, the cost of providing and maintaining these visual display devices would be high because they would be prone to vandalism and misuse. Third, and most importantly, a requirement for this device would conflict with the ASME A17.1/CSA B44-13 Safety Code for Elevators and Escalators. A17.1/B44 requires the emergency communication system in elevator cars to call authorized personnel who can take appropriate action with respect to the elevator emergency and communicate the proper building location and elevator number to such personnel. (See Sec. A17.1/B44 227.1.13). Having a visual display device which allows a deaf person to call a relay operator is not consistent with these requirements and, more importantly, would not help deaf passengers. If a deaf passenger were to call a relay operator, the passenger would have no idea what elevator he was in and the relay operator would not know who to call to get help.

For all the above reasons, the ANSI Committee should reject this proposal.

# 4-56-12

### Revise as follows:

**408.4.1 Inside Dimensions.** Elevator cars shall provide a clear floor width of 42 inches (1065 mm) minimum. The clear floor area shall not be less than 15.75 square feet (1.46 m²). The elevator car shall provide a clear floor space complying with Section 305.3.

## **EXCEPTIONS**:

- 1. For installations in existing buildings, elevator cars that provide a clear floor area of 15 square feet (1.4 m²) minimum, and provide a clear inside dimension of 36 inches (915 mm) minimum in width and 54 inches (1370 mm) minimum in depth, shall be permitted. This exception shall not apply to cars with doors on adjacent sides.
- 2. For installations in existing buildings, cars that provide a clear width 51 inches (1295 mm) minimum shall be permitted to provide a clear depth 51 inches (1295 mm) minimum provided that car doors provide a clear opening 36 inches (915 mm) wide minimum.

## 4-56-12 PC1

## Harold Kiewel, representing self

**Comment:** The problem with small elevators that do not provide full turning space is reaching the control panel. In pass-through designs the controls should be either on the near side-wall or on both door return panels. In front-access only designs the control panel should be centered on the strike-jamb side wall. Elevators with doors in two adjoining walls should be required to have turning space.

Also, two-stop, automatic, passenger-elevators should know where you're going; when you enter the car, the controller should register a call for the other landing automatically. For general comments from Mr. Kiewel see 1-1-12.

# 4-56-12 PC2

Ron Burton, PTW Advisors LLC, representing Building Owners and Managers Association, International; David S. Collins, The Preview Group, representing American Institute of Architects (AIA); Ron Nickson, representing the National Multi-housing Council; Steve Orlowski, representing the National Association of Home Builders; Kim Paarlberg, representing International Code Council

See comment under 3-6-12 PC2