

Chapter 5
Items 5-1-12 through 5-24-12
August 21, 2014.

This is one of eight documents containing the preliminary actions of the A117.1 Committee regarding public comments received on the First Public Review Draft (October 2013) of proposed changes to the A117.1 Standard, 2009 edition. Each item was discussed at the meeting of Committee during the weeks of January 21st and July 14th of 2014, in Washington D.C. The Committee took action on each public comment and such action is specified herein. The actions listed here are subject reconfirmation by the Committee via the Committee's ballot process.

Please note: This document does not contain proposals for which no comments were received. Those proposals, and the Committee decision on each one, can be viewed in the Committee Action Report (CAR) under the title: First Draft Standard Development at this following location: <http://www.iccsafe.org/cs/standards/A117/Pages/default.aspx>

Chapter 5

5-1– 12

(This represents the language approved by the committee for the First Public Review Draft)

Revise as follows:

502.1 General. Accessible car and van parking spaces in parking lots shall comply with ~~Section 502~~ Sections 502.2 through 502.8. Accessible car and van parking spaces provided as part of on-street parking shall comply with Sections 502.9 through 502.10.

502.9 Parallel Parking Spaces. On-street parallel parking spaces shall comply with Section 502.9.1. On-street perpendicular or angled parking shall comply with Section 502.9.2.

502.9.1 Wide Sidewalks. Where the width of the adjacent sidewalk or available right-of-way exceeds 14 feet (4270 mm), an access aisle 60 inches (1525 mm) wide minimum shall be provided at street level the full length of the parking space and shall connect to a pedestrian access route. The access aisle shall comply with Section 502.4 and shall not encroach on the vehicular travel lane.

502.9.1.1 Alterations. In alterations where the street or sidewalk adjacent to the parking spaces is not altered, an access aisle shall not be required provided the parking spaces are located at the end of the block face.

502.9.1.2 Narrow Sidewalks. An access aisle is not required where the width of the adjacent sidewalk or the available right-of-way is less than or equal to 14 feet (4270 mm). Where an access aisle is not provided, the parking spaces shall be located at the end of the block face.

502.9.2 Perpendicular or Angled Parking Spaces. Where perpendicular or angled parking is provided, an access aisle 96 inches (2440 mm) wide minimum shall be provided at street level the full length of the parking space and shall connect to a pedestrian access route. The access aisle shall comply with Section

502.4 and shall be marked so as to discourage parking in the access aisle. Two parking spaces are permitted to share a common access aisle.

502.10 Parking Meters and Parking Pay Stations. Parking meters and parking pay stations that serve accessible parking spaces shall comply with Section 309.

502.10.1 Location. At accessible parallel parking spaces, parking meters shall be located at the head or foot of the parking space.

502.10.2 Displays and Information. Displays and information shall be visible from a point located 40 inches (1015 mm) maximum above the center of the clear space in front of the parking meter or parking pay station.

5-1-12 PC1

Harold Kiewel, representing self

Further revise as follows:

502.1 General. Accessible car and van parking spaces in parking lots and structures shall comply with Sections 502.2 through 502.8. Accessible car and van parking spaces provided as part of on-street parking shall comply with Sections 502.9 through 502.10.

502.9.1.1 Alterations Exceptions. In alterations where the street or sidewalk adjacent to the parking spaces is not altered, an access aisle shall not be required provided the parking spaces are located at the end of the block face.

~~502.9.1.2~~ **502.9.2 Narrow Sidewalks.** An access aisle is not required where the width of the adjacent sidewalk or the available right-of-way is less than or equal to 14 feet (4270 mm). Where an access aisle is not provided, the parking spaces shall be located at the end of the block face.

~~502.9.2~~ **502.9.3 Perpendicular or Angled Parking Spaces.** Where perpendicular or angled parking is provided, an access aisle 96 inches (2440 mm) wide minimum shall be provided at street level the full length of the parking space and shall connect to a pedestrian access route. The access aisle shall comply with Section 502.4 and shall be marked so as to discourage parking in the access aisle. ~~Two parking spaces are permitted to share a common access aisle.~~

Comments and Reason: Curb-side, parallel parking spaces are not accessible, unless they meet the very rare and special conditions outlined in Article 502.9.1 "Wide Sidewalks." 502.9.1 Did you mean 67-inches? An access-aisle can only be shared when the driver can choose between driving into the parking space either forwards or backwards (in order place the side of the vehicle used by the disabled person against the access-aisle).

This choice is rarely available except in parking lots with 2-way drive aisles and perpendicular parking. Angled parking always excludes this choice.

502.10.1 Location. The language here needs to clarify the difference between rules for a pay-station which serves multiple spaces, a two-headed meter which serves a pair of adjoining spaces and a meter which serves a specific space.

Also see Mr. Kiewel's general comments at 1-1-12.

Committee action on 5-1-12 PC1

Disapprove Public Comment 5-1-12 PC1.

Reason: The public comment would strike the allowance for 2 parking spaces to share a common access aisle. The Committee felt this was an important provision to retain. Insufficient justification was provided to delete the allowance.

5-1-12 PC2

Kim Paarlberg, representing ICC

Further revise as follows:

502.9.1 Wide Sidewalks. Where the width of the adjacent sidewalk or available right-of-way exceeds 14 feet (4270 mm), an access aisle ~~60-67~~ inches (~~1525~~ 1700 mm) wide minimum shall be provided at street level the full length of the parking space and shall connect to a pedestrian access route. The access aisle shall comply with Section 502.4 and shall not encroach on the vehicular travel lane.

(portions of proposal not shown remain unchanged)

Reason: If parking lots need a 67 inch access aisle, it seems like the street parking access aisle should be the same.

Committee action on 5-1-12 PC2

Disapprove Public Comment 5-1-12 PC2.

Reason: The Committee concluded that since a T-turn can be accomplished in a 60 inch space, requiring 67 inches for these spaces is unnecessary.

5-1-12 PC3

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

Add new text as follows:

502.9.3. Curb Ramps or Blended Transitions. Curb ramps or blended transitions complying with Section 406 shall connect the access aisle to the pedestrian access route. Curb ramps shall not be located within the access aisle.

Reason: In following with the Access Board's Proposed Public Rights of Way standards, R309.4 provides the user the requirement that a curb ramp or blended transition must be provided at the access aisle. This section should be included with the remainder of 502.

Committee action on 5-1-12 PC3

Disapprove Public Comment 5-1-12 PC3.

Reason: The Committee felt that the text contained in the public comment did not add anything to the standard. It is, to a certain extent redundant with other provisions.

5-8 – 12

(This represents the language approved by the committee for the First Public Review Draft)

Revise as follows:

503.3.3 Length. Access aisles shall be extend the full length of the vehicle pull-up spaces they serve. 20 feet (6100 mm) minimum in length.

5-8-12 PC1

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

Further revise as follows:

503.3.3 Length. Access aisles shall ~~be extend~~ 18 feet (5485 mm) minimum in length but not less than the full length of the vehicle pull-up spaces they serve.

Reason: The prior text indicated a length not less than 20 feet. The proposal removed that and simply requires the length to be not less than the length of the parking space. Nothing in the standard or scoping documents requires the passenger loading to be parallel to the curb. The minimum standard parking space length is 18 feet for 90 degree (head-in/head-out) loading. If no minimum is provided the length could be based on the assumed compact car size spaces which could be only 15 feet in length. Since vehicles used for accessibility needs tend to be larger vehicles, some minimum should be included so that a reasonable length is provided in an area where the pull-up space position is not known. It is necessary to make sure that the vehicle space is adequate for its intended use. If the space is greater than 18 feet or 20 feet, the additional text will address that condition. Otherwise, the passenger loading zone could be relegated to compact sizes and inadequate for the needs of the users.

A search of records from various states indicate that the following is fairly standard for lengths of vehicle parking spaces.

DIMENSIONS FOR STANDARD PARKING SPACES AND AISLES

Parking Angle	Space Width	Space Length	Aisle Width		Width at Curb
			(1-way)	(2-way)	
90°	9'	18'0"	24'0"	24'0"	9'0"
60°	9'	21'0"	18'0"	20'0"	10'5"
45°	9'	19'10"	15'0"	20'0"	12'9"
30°	9'	16'10"	12'0"	20'0"	18'0"
Parallel	8'	24'0"	12'0"	24'0"	n/a

DIMENSIONS FOR COMPACT PARKING SPACES AND AISLES

Parking Angle	Space Width	Space Length	Aisle Width		Width at Curb
			(1-way)	(2-way)	
90°	8'	15'0"	24'0"	24'0"	8'0"
60°	8'	16'8"	18'0"	20'0"	9'3"
45°	8'	16'6"	15'0"	20'0"	11'4"
30°	8'	14'0"	12'0"	20'0"	16'0"
Parallel	7'	21'0"	12'0"	24'0"	n/a

Committee action on 5-8-12 PC1

Disapprove Public Comment 5-8-12 PC1.

Reason: Adding this text here would insert a conflict with Section 503.2.

5-13– 12

(This represents the language approved by the committee for the First Public Review Draft)

Revise as follows:

504.5.1 Visual contrast. The leading 2 inches (51 mm) of the landing and tread shall have visual contrast of dark on-light or light-on-dark from the remainder of the tread.

5-13-12 PC1

Allan B. Fraser, representing self

Delete and substitute as follows:

~~**504.5.1 Visual contrast.** The leading 2 inches (51 mm) of the landing and tread shall have visual contrast of dark on-light or light-on-dark from the remainder of the tread.~~

504.5.1 Visual contrast.

505.5.1.1 Every tread and landing shall have two surface colors for visual contrast, dark on-light or light-on dark.

505.5.1.2 The contrasting color of the leading edge of the tread or landing shall:

- a. Extend the full width of the tread or landing.
- b. Start at a line 2 inches (51 mm) back from the furthest point of the nosing and,
- c. Extend on the tread or landing toward the nosing, perpendicular to the path of travel, continuing to cover the profile of the nosing and down the riser until the color has extended 3 inches (75 mm) from the start line.

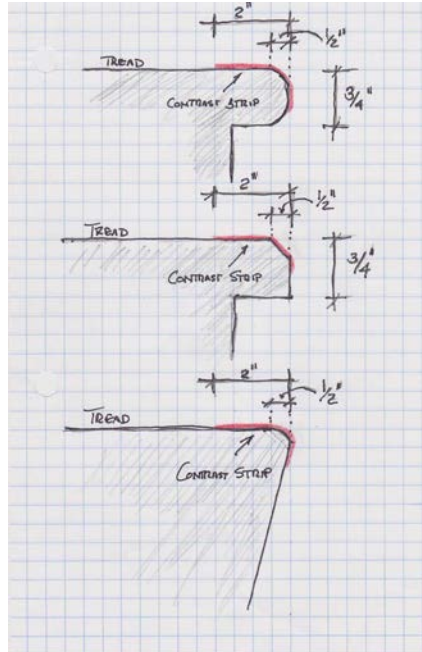


FIGURE 504.1

Reason: The concept in Proposal 5-13-13 has great merit, but the committee was unable to agree on adequate language to describe the contrasting edge stripe so that it is clear as to what is required. The proposed language and figure do that.

Committee action on 5-13-12 PC1

Approve with modifications – 5-13-12 PC1

Modification:

504.5.1 Visual contrast. ~~The leading 2 inches (51 mm) of the landing and tread shall have visual contrast of dark on light or light on dark from the remainder of the tread.~~

504.5.6 Visual contrast. Visual contrast shall comply with either Sections 504.5.6.1 and 504.5.6.2, or Section 504.5.6.3

504.5.6.1 The leading 1 to 2 inches (51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color having visual contrast of dark-on-light or light-on-dark from the remainder of the tread.

504.5.6.2 The contrasting marking shall be durable, and shall extend from one side of each tread to the other side of each tread.

504.5.6.3 Durable distinctive warning markings required by the adopted building code or ANSI safety standard.

Reason: As with nosings, applying the visual contrast concept to the stairways had resulting in considerable discussion. The committee, upon reconsideration, approved 5-13-12 based on a modification of PC1. It is a companion piece to the modification approved under 5-11-12. Both provide

clear standard, clearly organized which will improved compliance. It is hoped that this revision contained in the Second Public Review Draft will attract comments to improve the standard.

5-16 – 12

(This represents the language approved by the committee for the First Public Review Draft)

Revise as follows:

504.9 ~~Stair Level Identification~~ Tactile signage within the stairway enclosure. Stair level identification signs in raised characters and braille complying with Sections 703.3 and 703.4 shall be located at each floor level landing in all enclosed stairways adjacent to the door leading from the stairwell into the corridor to identify the floor level. The exit door discharging to the outside or to the level of exit discharge shall have a sign with raised characters and braille stating "EXIT."

504.10 Tactile signage at exits. A sign stating EXIT in raised characters and Braille and complying with Sections 703.3 and 703.4 shall be provided adjacent to each door to an area of refuge, an exterior area for assisted rescue, an exit stairway, an exit ramp, an exit passageway and the exit discharge.

5-16-12 PC1

Christopher G. Bell, representing American Council of the Blind

Comment: ACB is concerned that 504.9 & 504.10 only require signage which is tactile, and in braille. There is no cross-reference whether such signage is required to satisfy the BSF LRV standard provided for in Chapter 7. There are many different ways that 504.9 & 504.10 could be amended to make clear that the reference signage must also provide sufficient contrast. Revisions could also be made to proposal number 7-1– 12

To rectify this issue. ACB is not providing a proposed revision to solve these issues because there are so many possible ways by which this issue could be addressed. However, ACB strongly believes that the signage referenced in 504.9 & 504.10 must have the requisite contrasting colors for the text.

Committee action on 5-16-12 PC1

Approve with additional modifications - Public Comment 5-16-12 PC1.

Modification:

504.10 Tactile signage at exits. A sign stating EXIT in raised characters and Braille and complying with Sections 703.3 and 703.4 shall be provided adjacent to each door to ~~an area of refuge~~, an exterior area for assisted rescue, an exit stairway, an exit ramp, an exit passageway and the exit discharge.

Reason: Elevator lobbies are sometimes the location of an area of refuge. An elevator lobby is not an exit and requiring a sign at such locations stating the such is an exit would be incorrect.

5-22- 12

(This represents the language approved by the committee for the First Public Review Draft)

Revise as follows:

506.1 General. Where operable Accessible windows are provided in an accessible room or space, at least one shall be accessible and have operable parts complying with Section 309. Where operable windows required to provide natural ventilation or operable windows are required to provide an emergency escape and rescue openings that window shall be the accessible operable window.

EXCEPTIONS:

1. Operable windows that are operated only by employees are not required to comply with this section.
2. Operable windows in Type A units that comply with Section 1003.13.
3. Operable skylights are not required to comply with this section.

506.2 Opening force. The opening force for opening operable windows shall be as follows:

1. 8.5 pounds (37.7 N) maximum for casement or horizontal sliding windows
2. 25 pounds (111 N) maximum for double hung windows

1002.9 Operable Parts. Lighting controls, electrical panelboards, electrical switches and receptacle outlets, environmental controls, appliance controls, ~~operating hardware for operable windows~~, plumbing fixture controls, and user controls for security or intercom systems shall comply with Section 309.

EXCEPTIONS:

(Exceptions are not changed)

1002.13 Windows. Operable windows shall comply with Section ~~1002.13~~ 506.1.

EXCEPTIONS:

1. Windows in kitchens are not required to comply with this section.
2. Windows in bathrooms are not required to comply with this section.

~~1002.13.1 Natural ventilation.~~ ~~Operable windows required to provide natural ventilation shall comply with Sections 309.2 and 309.3.~~

~~1002.13.2 Emergency escape.~~ ~~Operable windows required to provide an emergency escape and rescue opening shall comply with Section 309.2.~~

1003.9 Operable Parts. Lighting controls, electrical panelboards, electrical switches and receptacle outlets, environmental controls, appliance controls, ~~operating hardware for operable windows~~, plumbing fixture controls, and user controls for security or intercom systems shall comply with Section 309.

EXCEPTIONS:

(Exceptions are not changed)

1003.13 Windows. Operable windows shall comply with Section 1003.13.

1003.13.1 Natural ventilation. Operable windows required to provide natural ventilation shall comply with Sections 309.2 and 309.3.

1003.13.2 Emergency escape. Operable windows required to provide an emergency escape and rescue opening shall comply with Section 309.2.

5-22-12 PC1

Harold Kiewel, representing self

Further revise as follows:

1002.9 Operable Parts. Lighting controls, electrical panelboards, electrical switches and ~~receptacle~~ power- and communication- outlets, environmental controls, appliance controls, plumbing fixture controls, operating hardware for accessible windows, plumbing fixtures controls and user controls for security or intercom systems shall comply with Section 309.

1003.9 Operable Parts. Lighting controls, electrical panelboards, electrical switches and ~~receptacle~~ power- and communication- outlets, environmental controls, appliance controls, operating hardware for accessible windows, plumbing fixture controls, and user controls for security or intercom systems shall comply with Section 309.

(Balance of 5-22-12 remains unchanged)

Reason: 506.1 Exception 1 – windows operated by employees. There is some confusion here. If this is a residential dwelling unit, who constitutes an employee? But, if this just pertains to operable, accessible windows, what about windows in places of employment? The redundancy of these two articles points to a major flaw in the underlying construction of the Standard. The Construction Specifications Institute teaches that one of the goals of our technical writing is to say everything once in the right place. Also see Mr. Kiewel's general comments at 1-1-12.

Committee action on 5-22-12 PC1

Disapprove Public Comment 5-22-12 PC1.

Reason: The public comment was addressing some issues outside the original scope of the proposed change. The balance of the suggested revisions are better addressed in other public comments.

5-22-12 PC2

Hope Reed, representing New Mexico Governor's Commission on Disability (NMGCD)

Further revise as follows:

506.1 General. Where operable windows are provided in an accessible room or space, at least one shall be accessible and have operable parts complying with Section 309. Where operable windows required to:

1. Provide natural ventilation.

2. To provide an emergency escape and rescue ~~openings~~ opening or operable windows are required that window shall be the accessible operable window.

EXCEPTIONS:

1. Operable windows that are operated only by employees are not required to comply with this section.
2. Operable windows in Type A units that comply with Section ~~4003.13~~ 1103.13.
3. Operable skylights are not required to comply with this section.

506.2 Opening force. The opening force for opening operable windows shall be as follows:

1. 5.0 pounds (22.2 N) 8.5 pounds (37.7 N) maximum for casement or horizontal sliding windows
2. ~~25 pounds (111 N) maximum for double hung windows~~

(Balance of 5-22-12 remains unchanged)

Reason: Correct citation number from ~~4003.13~~ to 1103.13

ANSI's general approach to measurements is to provide a range. There are windows on the market that can be operable with 5 pounds of force. To be consistent with ANSI, GCD recommends providing a range for casement and sliding window opening force. This will encourage designers to find windows with the lowest opening force.

Delete the exception to allow 25 opening force for double hung widows. This is not an accessible standard. This is not usable by people with disabilities. This is the industry standard, it does not provide good access, and does not belong in ANSI.

Double hung windows can be operably at less than 5 lbs. opening force with an attached operating mechanism. ANSI should lead designers to find the most accessible window on the market. ANSI should not provide a double hung window opening force just as it does not providing an exterior door opening weight. Remain silent if there is no good solution.

Committee action on 5-22-12 PC2

Approve PC 5-22-12 PC2 with modifications

This proposal complete replaces the original public comment PC2

506.2 Opening force. The opening force for opening operable windows shall be as follows:

1. 8.5 pounds (37.7 N) maximum for casement or horizontal sliding windows
2. ~~25 pounds (111 N) maximum for double hung windows.~~

Reason: Twenty-five pound of force should not be considered accessible.

5-22-12 PC3

Hope Reed, representing New Mexico Governor's Commission on Disability (NMGCD)

Further revise as follows:

506.2 Opening force. The opening force for opening operable windows shall be as follows:

1. 5.0 pounds (22.2 N) to 8.5 pounds (37.7 N) maximum for casement or horizontal sliding windows
2. 5.0 pounds (22.2 N) to 25 pounds (111 N) maximum for double hung windows

(Balance of 5-22-12 remains unchanged)

Reason: ANSI's general approach to measurements is to provide a range. There are windows on the market that can be operable with 5 pounds of force. To be consistent with ANSI, GCD recommends providing a range for window opening force. This will encourage designers to find windows with the lowest opening force.

Double hung windows can be operable at less than 5 lbs. opening force with an attached operating mechanism. Provide range to encourage designers to find a lower operating force by using an attachment.

Committee action on 5-22-12 PC3

Disapprove Public Comment 5-22-12 PC3.

Reason: The proposal adds a lower limit to range. The result is if someone created a device that would open at 4 pounds, it wouldn't comply with the standard.

5-22-12 PC4

Julie Ruth, representing American Architectural Manufacturers Association

Further revise as follows:

506.1 General. Where operable windows are provided in an accessible room or space, at least one shall be accessible and have operable parts complying with Section 309. Where operable windows required to provide natural ventilation or operable windows are required to provide an emergency escape and rescue openings that window shall be the accessible operable window.

EXCEPTIONS:

1. Operable windows that are operated only by employees are not required to comply with this section.
2. Operable windows in Type A units that comply with Section 1003.13.
3. Operable skylights are not required to comply with this section.

506.2 Opening Operating force. The operating force for windows includes forces for opening, closing, locking or latching, and unlocking or unlatching, and shall be determined in accordance with AAMA 513. Operable parts shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required for locking or latching and unlocking or unlatching shall be 5 pounds (22.2 N) maximum. The opening operating force for opening and closing operable windows shall be as follows:

1. 8.5 pounds (37.7 N) maximum for casement or horizontal sliding windows
2. 25 pounds (111 N) maximum for double hung windows

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 (AAMA, 1827 Walden Office Square, Suite 550, Schaumburg, IL 60173-4268)

(Balance of 5-22-12 remains unchanged)

Reason: This comment specifies the standard to be used to measure the operating force of accessible, operable windows. 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. Applicable provisions of Section 309 regarding the operability of the accessible components have also been brought forward to clarify that these provisions apply to window operation as well.

Committee action on 5-22-12 PC4

Approve PC 5-22-12 PC4 with modifications:

506.2 Operating force. The operating force for windows includes forces for opening, closing, locking or latching, and unlocking or unlatching, ~~and shall be determined in accordance with AAMA 513.~~ Operable parts shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required for locking or latching and unlocking or unlatching shall be 5 pounds (22.2 N) maximum. The operating force for opening and closing operable windows shall be as follows:

1. 8.5 pounds (37.7 N) maximum for casement or horizontal sliding windows
2. 25 pounds (111 N) maximum for double hung windows

~~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 (AAMA, 1827 Walden Office Square, Suite 550, Schaumburg, IL 60173-4268)~~

Reason: The AAMA standard was not completed at the time of committee review. Therefore reference to it was removed. The balance of the public comment provided improved language for the standard.

5-22-12 PC5

Julie Ruth, representing American Architectural Manufacturers Association

Further revise as follows:

506.1 General. Where operable windows are provided in an accessible room or space, at least one shall be accessible and have operable parts complying with Section 309. Where operable windows required to provide natural ventilation or operable windows are required to provide an emergency escape and rescue openings that window shall be the accessible operable window.

EXCEPTIONS:

1. Operable windows that are operated only by employees are not required to comply with this section.
2. Operable windows in Type A units that comply with Section 1003.13.
3. Operable skylights are not required to comply with this section.

506.2 Opening force. The opening force for opening operable windows shall be as follows:

1. ~~8.5~~ 5 pounds (~~37.7~~ 22.2 N) maximum for casement ~~or horizontal sliding or rotary operated projected~~ windows
2. 5 pounds (22.2 N) maximum for crank or motor operated vertical or horizontal sliding windows
- ~~2~~ 3 . 25 pounds (111 N) maximum for other vertical sliding and double hung windows
4. 12 pounds (52.5 N) maximum for non-rotary operated projected windows
5. 10 pounds (45 N) maximum for other horizontal sliding windows

((Balance of 5-22-12 remains unchanged))

Reason: The purpose of this comment is twofold:

1. Establish challenging but achievable maximum operating forces for all types of operable windows.
2. Provide the building designer or architect the option of specifying operable windows that meet the 5 pound force requirement of Section 309 of ANSI A117 if they desire to do so, with the understanding that such a choice will severely limit the types of operating windows that can be used to serve accessible spaces.

An informal survey of window manufacturers whose products meet the structural, water penetration resistance and forced entry requirements of the 2012 International Building Code indicates that the maximum force required to operate these windows varies widely, depending upon the size and operator type of the window. 41 product lines were included in the survey. The survey findings indicated:

1. Only 1 Class AW window could meet the 5 pound operating force limit. That window was a 3 foot high by 5 foot wide, rotary operated awning window. Note Class AW and CW windows are considered to be commercial grade windows. These are the class of windows typically used in hospitals and other large, commercial buildings.

The force required to operate other awning windows included in the survey ranged from 6 pounds for a Class CW window of the same size which was also rotary operated, to 12 pounds for a Class AW window of the same size that was not rotary operated.

2. Only 1 Class LC window could meet the 5 pound operating force limit. That window was a 3 foot wide by 6 foot high casement window. Note Class LC windows are intended for "light" commercial applications. They are typically used for smaller commercial buildings such as one or two story office buildings or hotels whose opening sizes are more similar to those in residential construction than those in commercial construction.

The force to operate other casement windows included in the survey ranged from 6 pounds for a 3 foot high by 5 foot wide Class AW casement to 14 pounds for a 6 foot wide by 5 foot high Class AW casement.

3. There was also 1 Class R window that could meet the 5 pound operating force limit. That window was a 6 foot wide by 6 foot high horizontal sliding window. Class R windows are intended for residential or light commercial construction. The requirements of the IBC and IRC in terms of resistance to structural load, air leakage and water resistance, are not as stringent for Class R and LC windows as they are for Class CW and AW windows.

The force to operate other horizontal sliding windows included in the survey ranged from 10 pounds for a 6 foot high by 6 foot wide Class R horizontal sliding windows to 28 pounds for a 6 foot wide by 5 foot high Class LC horizontal sliding window. Only 1 Class C horizontal sliding window was included in the survey. It was 6 foot wide by 6 foot high, and had an operating force of 15 pounds.

4. The lowest operating force for any hung or vertically sliding window was 20 pounds. That window was a 4 foot by 5 foot Class R window.

The force to operate other Class R or LC hung or vertically sliding windows included in the survey ranged from 21 pounds to 60 pounds.

5. The lowest operating force for any Class AW or CW hung or vertically sliding window was 33 pounds. That window was a 5 foot wide by 8 foot high (both sashes) Class AW double hung window.

The force to operate other Class AW or CW windows included in the survey ranged from 35 to 58 pounds.

Based upon these survey results AAMA is recommending:

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1. The 5 pound maximum operating force be maintained for casement, rotary operated projected or crank or motor operated vertical or horizontal sliding windows.
2. A maximum operating force of 12.5 pounds be established for non-rotary operated projected windows.
3. A maximum operating force of 25 pounds be maintained for all other vertical sliding windows.
4. A maximum operating force of 10 pounds be established for horizontal sliding windows.

Establishing a 5 pound maximum operating force for some types of windows will allow a building designer or architect to specify only windows that meet the 5 pound operating force limit specified elsewhere in ANSI A117 for operable components, if they choose to do so. Permitting higher operating forces for other types of windows would expand the window choices a designer has. It is hoped that the combination of these two approaches will reduce the likelihood that the building designer or architect will choose to simply not specify any operable windows in accessible spaces. It should be noted that the maximum operating forces proposed in this comment are achievable, but they would be a challenge to the window manufacturer and they are definitely NOT standard practice.

Committee action on 5-22-12 PC5

Disapprove Public Comment 5-22-12 PC5.

Reason: The text of this public comment implies that these are 'accessible' opening forces. They are the forces the industry says they can now achieve. The Committee felt that the current limitations of the industry should drive the standard.

5-23- 12

(This represents the language approved by the committee for the First Public Review Draft)

Add new text as follows:

507 Accessible Routes through Parking. Where accessible routes pass through parking facilities, the routes shall be physically separated from vehicular traffic.

EXCEPTIONS:

1. Crossings at drive aisles shall not be required to comply with Section 507.
2. Parking spaces complying with Section 502 and passenger loading zones complying with Section 503 shall not be required to comply with Section 507.

5-23-12 PC1

Karen Gridley, representing Target Corporation

Further revise as follows:

507 Accessible Routes through Parking. Where accessible routes pass through parking facilities, the routes shall be physically separated from vehicular traffic.

EXCEPTIONS:

1. Crossings at drive aisles shall not be required to comply with Section 507.
2. Parking spaces and access aisles complying with Section 502 and passenger loading zones complying with Section 503 shall not be required to comply with Section 507.
3. Where an accessible route is provided at the head of accessible parking stalls and access aisles complying with Section 502, the head-of-stall accessible route shall not be required to comply with Section 507.

Reason: In parking facilities providing a “head-of-car” accessible route at the head of accessible parking stalls and access aisles, these routes are already considered to be a safe path of travel by not compelling users to go behind parked cars or in drive aisles. The stalls and access aisles themselves create a separation from the drive aisles. Adding this additional exception will provide clarity for enforcing officials who might otherwise require other barriers or tripping hazards where connection is intended to be made with, and intersect the head-of-stall route. Without the clarifying exception, inconsistent interpretation and random requirements will be problematic.

Some examples of problematic applications at head-of-stall accessible routes include:

Where a raised sidewalk is used as the separation from traffic and the sidewalk also leads past the head of accessible parking stalls, as this proposed Section 507 is currently written, in order to access the sidewalk one would need to recess the sidewalk at access aisles, and ramp up and down at each accessible stall creating a cumbersome, undulating route of travel for both mobility device users and ambulatory persons alike at the head-of-stall accessible route from accessible parking area, which in itself could be hazardous to traverse.

In lieu of ramping up and down at the head-of-stall route, where routes that are flush with access aisles, enforcement officials could require installation of raised curbs along the sides of the route, creating trough-like conditions with openings at access aisles to join the path. **However**, raised curbs and wheel stops have proven to be dangerous tripping hazards for ambulatory persons when located within the accessible parking area and adjacent to the head-of-stall accessible route. Raised curbs and wheel stops become especially problematic when there is no vehicle utilizing an accessible stall to block someone from tripping over the obstruction. Rather than wheel stops, raised curbs or raised sidewalks to prevent cars from pulling too far forward over the head-of-stall accessible route, existing vertical protection bollards and post mounted signage already serve as a separation element between the accessible route and vehicles. Without the additional proposed clarifying exception enforcement official could easily require some sort of other random separation that could cause hazardous path of travel conditions or hinder access to the accessible route.

Committee action on 5-23-12 PC1

Approve with additional modifications - Public Comment 5-23-12 PC1.

Modification:

507 Accessible Routes through Parking. Where accessible routes pass through parking facilities, the routes shall be physically separated from vehicular traffic.

EXCEPTIONS:

1. Accessible routes crossings at drive aisles shall not be required to comply with Section 507.
2. Accessible routes only from parking spaces and access aisles complying with Section 502 and passenger loading zones complying with Section 503 to accessible entrances shall not be required to comply with Section 507.
3. ~~Where an accessible route is provided at the head of accessible parking stalls and access aisles complying with Section 502, the head-of-stall accessible route shall not be required to comply with Section 507.~~

Reason: The Committee continues its support of providing protected accessible routes through parking. By approving this public comment, which clarifies the application of the exceptions, the topic will be presented in the Second Public Review Draft and available for public comment.

5-23-12 PC2

Kim Paarlberg, representing ICC

Disapprove this change.

Reason: While I have respect for the issue for the visually impaired the proponent is attempting to address, the language is too broad to be uniformly enforced. 'Physically separated' could be interpreted as anything from walls to bollards to raised sidewalks. If this route goes past the accessible parking spaces, even with the exception, there is nothing to say that a person on the access aisle be able get onto this route. Since accessible routes are required from all public arrival points, this could be a very extensive requirement. This needs a lot more work.

Committee action on 5-23-12 PC2 and PC3

These two public comments requested disapproval of the 5-23-12 change. The committee took one action which addressed both comments.

Disapprove Public Comments 5-23-12 PC 2 and PC3.

Reason: The committee maintained its support for the concept of a protected pathway through parking facilities. After taking action to disapprove requests to delete the proposal, PC 1 was approved as modified.

5-23-12 PC3

Minh N. Vu, representing American Hotel & Lodging Association

Disapprove this change.

Reason: The American Hotel & Lodging Association (hereinafter, the AH&LA) opposes the proposed new requirements that 'where accessible routes pass through parking facilities, they shall be physically separated from vehicular traffic.'(Section 507). AH&LA is unable to full comment on this proposal because the requirements are unclear. Specifically, what constitutes 'physical separation?' If the separation must be accomplished with either a raised sidewalk, landscaping, barriers or railings, new parking facilities would have to be much larger to accommodate this new path because, currently, in most jurisdictions, the path can overlap the vehicular route. Applying this proposed rule to existing parking facilities would require the complete reconfiguration of parking lots to crate a physically separated route and reduce the space available for parking spaces. The AH&LA urges the ANSI Committee not to adopt this proposal until it is clarified and issued for further public comment.

The ANSI Committee should also reject the 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, the first 20 years of the Americans with Disabilities Act of 1990 (hereinafter the 'ADA'), the A117.1 Standard was not the same as the ADA Standards for Accessible Design adopted by the United State 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 the 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 Standards. If adopted, the proposed change to curb ramp requirements will undo this harmonization effort by introducing entirely different standards into future editions of the International Building Code 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 the 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) Defer renovating for as long as possible. 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 renovations that may improve access.

Committee Action Report on Public Comments Received on First Public Review Draft
January 21-24, 2014 and July 14-16, 2014

See Committee action on 5-23-12 PC2

5-24- 12

(This represents the language approved by the committee for the First Public Review Draft)

Revise as follows:

309.1 General. Operable parts required to be accessible shall comply with Section 309.

Exception: Equipment used only for emergencies by emergency responders or emergency personnel shall not be required to comply with Section 309.

5-24-12 PC1

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

Further revise as follows:

309.1 General. Operable parts required to be accessible shall comply with Section 309.

Exception: Equipment Firefighting devices, such as hose connections, valve controls, gauges, and annunciator panels shall not be required to comply with Section 309 provided that they are used only for emergencies by emergency responders or emergency personnel shall not be required to comply with Section 309 acting in their official capacity.

Reason: The terms “emergency responder” and “emergency personnel” are somewhat ambiguous. Anyone who responds to an emergency can be considered an emergency responder. This proposal clarifies that the exception applies only where responders would act in an official capacity to distinguish between professional responders and ordinary building occupants. We found the list in the original proposal.

Committee action on 5-24-12 PC1

Approved Public Comment 5-24-12 PC1.

Reason: The revisions included in the public comment clarified that the application of the exception will be for equipment which is part of the building versus portable or non-permanent equipment.