5-1 - 12

502.1, 502.9 (New), 502.10 (New)

Proponent: Kim Paarlberg, International Code Council

Revise as follows:

502.1 General. Accessible car and van parking spaces <u>in parking lots</u> shall comply with Sections 502.2 <u>through 502.8</u>. 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 of angled parking shall comply with 502.9.2.

502.9.1 Wide Sidewalks. Where the width of the adjacent sidewalk or available right-of-way exceeds 14 feet (4267 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.

<u>502.9.1.1 Alterations.</u> 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 (4267 mm). When 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.

<u>502.10.2 Displays and Information</u>. Displays and information shall be visible from a point located 40 inches (1016 mm) maximum above the center of the clear space in front of the parking meter or parking pay station.

Reason: The quantity of change proposals submitted by International Code Council is reflective of three elements of our work: 1. ICC is the Secretariat for the Standard and some changes reflect inconsistencies or improvements suggested by staff; 2. ICC develops and publishes a Commentary on the standard and writing the commentary illuminates issues of the text and figures; and 3. ICC provides an interpretation service for the standard which results in the observation of provisions the users find most confusing.

The provisions from the Access Boards' proposed Public Right-of-way requirements address street parking (R309). The current requirements in A117.1 really only works on a practical basis for parking lots.

Committee Action:	AS	AM	D	
				502.9 (NEW)-PAARLBERG.doc

5-2 - 12 502.3

Proponent: Gene Boecker, Code Consultants, Inc.

Revise as follows:

502.3 Vehicle Space Marking. Car and van parking spaces shall be marked to define the width. Where parking spaces are marked with lines, the width measurements of parking spaces and adjacent access aisles shall be made from the centerline of the markings.

EXCEPTIONS:

- 1. Where parking spaces or access aisles are not adjacent to another parking space or access aisle, measurements shall be permitted to include the full width of the line defining the parking space or access aisle.
- 2. Marked spaces are not required in valet or mechanical parking facilities provided all of the following conditions are met:
 - 2.1 Accessible van spaces are provided as follows:
 - 2.1.1. Not less than one space, or;
 - 2.1.2. Not less than two spaces where a facility has a total parking capacity of 200 or more.
 - 2.2. A passenger loading zone complying with Section 503 is provided;
 - 2.3. At least one accessible parking space is made available unless all required accessible parking spaces are occupied;
 - 2.4. Each van accessible space shall be permanently marked and provided with signage containing the International Symbol of Accessibility complying with Section 703.6.3.1 and accompanied by a sign stating "Vehicles parked in this space are subject to relocation if necessary to accommodate a vehicle that cannot be parked in another accessible parking space." Such signs shall not be obstructed by a vehicle parked in the space; and
 - 2.5 A plan is provided to the Authority Having Jurisdiction indicating the following:
 - 2.5.1. An attendant shall park and retrieve all vehicles not equipped with special controls in which either the driver or passenger is a person with a disability;
 - 2.5.2 An attendant shall direct drivers of vehicles equipped with special controls to the accessible parking spaces, accompanying the driver to and from the space along the driver route and the accessible route from the parking space.

Reason: The Standard is not clear regarding how parking facilities are to be addressed where they are served by an attendant (valet) or by mechanical parking. In both of those instances, the operator of the vehicle does not actually park the vehicle but leaves it for an attendant to park. In these types of facilities, parking spaces are usually not marked so identifying specific accessible parking spaces is not easily found. As the standard is written now, all accessible spaces must be marked so it is in conflict with the use of these valet and mechanical parking facilities. Shall all accessible spaces be marked? If so where must these be? Why mark the spaces if an attendant parks the vehicle? Why mark access aisles if the aisles disappear as soon as the next vehicle is parked by the attendant?

This language is modeled from the exception in the New York City Building Code. It places some degree of responsibility on the method used for attendant parking. In order to be able to use this exception, <u>all</u> of the conditions must be met. The following describes each of the provisions:

- 2.1 Accessible van spaces must be provided in addition to regular accessible spaces.
- 2.1.1 and 2.1.2 At least one accessible van parking space must be provided and permanently marked. Where the facility has 200 or more parking spaces possible, two accessible van spaces must be provided. This is based on the scoping provisions in Section 1106.1 of the International Building Code (IBC) and Section 208.2 of the 2010 ADA Standards for Accessible Design (2010 Standards) as adopted by the US Department of Justice for one in six accessible spaces to be a van accessible space. Where the

number of total parking spaces is not more than 200, only six accessible spaces are required, resulting in a single van accessible space. This makes the responsibility for van spaces consistent with other types of parking. (See 2.4 for additional discussion.)

- 2.2 The passenger loading zone is already required by the scoping provisions of Section 1106.7.3 and 1106.7.3 of the IBC as well as Sections 209.4 and 209.5 of the 2010 Standards. This provision acts as a pointer and reminder that this condition is required regardless of what other equivalencies may be provided.
- 2.3 Because this is an exception to required marked parking spaces, the ability to create an accessible parking space in valet parking is based on how the attendant parks the vehicle. The space is the size of the vehicle. The key is making sure that the access aisle is available for the persons seeking to use them. This is usually accommodated by parking the vehicle such that one or the other side has sufficient space next to a vehicular aisle or pedestrian path. The last part of this item is simply stating that at some time it may not be possible to provide the access aisle any longer due to the manner in which valet parking is accommodated. In mechanical parking facilities, the criteria are more along the lines of access to/from the vehicle parking position. The word "required" parking spaces is intentionally used to bring attention to the fact that there is a specific minimum number of accessible spaces required elsewhere which must be addressed.
- 2.4 The van accessible spaces required in 2.1 must be marked and provided with signage. Because van spaces require additional height these spaces should be identified and made available. The remainder of the parking facility may or may not have adequate height. This provision requires that at least these two spaces have adequate height and the proper access aisles. Should the facility have sufficient height, more than two van accessible spaces could be provided if the vehicles can be moved (subject to 2.4 and 2.5 above).
- 2.5 In order to be able to not have marked parking spaces, an operations plan must be submitted to the Authority Having Jurisdiction. The official receives the plan and files it with the project.
- 2.5.1 and 2.5.2 These two criteria address the method for getting the vehicle to the accessible parking space. If the vehicle does not have special controls, then it can be driven and parked by the attendant. If the vehicle has special controls, then the attendant assists the driver in parking the vehicle at what is an accessible space (albeit not marked) and directing the driver along the vehicular path to the parking space and then along the pedestrian path to available accessible routes into and through the parking facility.

This may allow for more accessible spaces to be provided and more accessible van spaces to be provided than what would be available with permanently marked parking lots. The minimum required number of accessible spaces must be provided. However, attendant parking gives the attendant the control over location and parking which means that in a valet arrangement almost all parking spaces could be accessible spaces.

The current text is not clear regarding what must be done to mark parking spaces in valet and mechanical parking facilities. This proposal seeks to maintain the requirement that accessible spaces be provided while removing the obligation to mark spaces in facilities where parking is either flexible in configuration (valet) or fixed in regard to position but flexible regarding usage (mechanical).

Committee Action:	AS	AM	D	
				TEMPI ATE doc

5-3 - 12 502.4.2

Proponent: Gail Himes, City of Tacoma, Washington

Revise as follows:

502.4.2 Width. Access aisles serving car and van parking spaces shall be 60 inches (1525 mm) minimum in width. <u>Building elements shall not reduce the width.</u>

Reason: It is common for designers to locate obstructions in the access aisle. This will emphasize that this is not permissible. Reducing the width can impede or deny access to people with disabilitites.

Committee Action: AS AM D 502.4.2-HIMES.doc

5-4 - 12 502.4.4

Proponent: Gail Himes, City of Tacoma, Washington

Revise as follows:

502.4.4 Marking. Access aisles shall be marked so as to discourage parking in them. Where access aisles are marked with lines, the width measurements of access aisles and adjacent parking spaces shall be made from the centerline of the markings. The markings shall be diagonal stripes with a maximum angle of 20 degrees from the outer lines designating the aisles. For a 5 foot wide access aisle the stripes shall be 12 inches wide with 24 inches on center, and for an 8 foot wide access aisle the stripes shall be 24 inches wide with 48 inches on center.

EXCEPTION: Where access aisles or parking spaces are not adjacent to another access aisle or parking space, measurements shall be permitted to include the full width of the line defining the access aisle or parking space.

Reason: Markings that are perpendicular to the outside lines of the access aisle may be misinterpreted as a crossing. A diagonal stripe helps differentiate access aisles from the street crossings and improve safety.

Committee Action:	AS	AM	D	
				502 4 4-HIMES doc

5-5 -	· 12
502 5	

Proponent: Gail Himes, City of Tacoma, Washington

Revise as follows:

502.5 Floor Surfaces. Parking spaces and access aisles shall comply with Section 302 and have surface slopes not steeper than 1:48. Access aisles shall be at the same level as the parking spaces they serve. Ramps shall not be located in the access aisle.

Reason: Ramps in the access aisle may impede the deployment of a ramp or lift, or create an uneven surface when entering or exiting a vehicle.

Committee Action:	AS	AM	D	
				502.5-HIMES.doc

5-6 - 12 502.7

Proponent: Gail Himes, City of Tacoma, Washington

Revise as follows:

502.7 Identification. Where accessible parking spaces are required to be identified by signs, the signs shall include the International Symbol of Accessibility complying with Section 703.6.3.1. Signs identifying van parking spaces shall contain the designation "van accessible." <u>Such signs shall be located at the head and centered on each parking space.</u> Such signs shall be 60 inches (1525 mm) minimum above the floor of the parking space, measured to the bottom of the sign.

Reason: Accessible parking signs that are off to one side of the parking stall or shared by two stalls make it confusing for drivers and parking enforcement staff. In Washington State, the ground symbol for the parking space is optional. Centering the parking sign on the stall would reduce confusion and violations.

Committee Action:	AS	AM	D	
				502.7-HIMES.doc

5-7 - 12 502.9 (NEW)

Proponent: Robert D. Feibleman, HAND Construction, representing self

Add new text as follows:

502.9 Carport Structures. Carport structural supports posts are permitted to reduce the required width of parking spaces and access aisles provided the post complies with the following:

- 1. The post is centered on a line delineating two parking spaces or between a parking space and access aisle.
- 2. The post is 7 inches maximum in width and 16 inches maximum in length as measured along the delineating line;
- 3. The post is located 72 inches maximum from the head of the parking space.



Reason: Carport supports are not addressed and are currently not allowed in the parking space nor access aisle. The resulting narrowed point will create a maneuvering issue. The location of the post in the front third of the space allows for the structural design and for most car/van doors to open without hitting them.

Committee Action:	AS	AM	D	
				502.9 (NEW)-FEIBLEMAN.dog

5-8 - 12 503.3.3

Proponent: Ed Roether, representing the ADA/A117 Harmonization Task Group and Francine Wai, Executive Director, Disability & Communication Access Board

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.

Reason: (**Roether**) The ADA/A117 Harmonization Task Group (HTG) was created as a task group of the A117.1 Committee to compare the 2010 ADA with the 2009 A117.1 Standard. The HTG has recommend a series of changes through a set of change proposals. The HTG is recommending changes, for the most part, address where the ADA was viewed as more stringent than the A117. Where the A117 contained provisions not addressed in the ADA, these were not considered a conflict needing action to amend the A117. In addition there are a number of places where the ADA and A117.1 are different as a result of specific actions, by the A117.1 Committee during the development of the 2009 edition, to remain or create a difference where, in the judgment of the committee the ADA was deficient. A117.1 could result in access aisles being too short in some cases.

(Wai): There may be states and counties in which the length of an accessible parking stall is required to be greater than 20 feet. By only requiring the access aisle to be a minimum of 20 feet in length, the access aisle may be situated along side an accessible stall in such a way to conflict with the use of the aisle by a vehicle lift if the length of the access aisle is not the same length as the accessible stall. Where the access aisle is 20 feet, but the accessible stall is greater than 20 feet, the access aisle would not be in compliance with the 2010 ADA Standards. The 2010 ADA Standards require the length of the access aisle to be the same length as the accessible stall.

Also, local jurisdictions may allow the length of the accessible stall to be less than 20 feet. This design of the accessible stall and access aisle would be unusual in that the access aisle would then be longer than the stall, which can affect parking lot and garage layouts.

The 2010 ADA Standards state:

503.3.2 Length. Access aisles shall extend the full length of the vehicle pull-up spaces they serve.

Committee Action:	AS	AM	D	
				503.3.3-ROETHER.doc

5-9 **–** 12 504

Proponent: Gail Himes, City of Tacoma, Washington

Delete without substitution as follows:

504 Stairways

504.1 General. Accessible stairs shall comply with Section 504.

504.2 Treads and Risers. All steps on a flight of stairs shall have uniform riser height and uniform tread depth. Risers shall be 4 inches (100 mm) minimum and 7 inches (180 mm) maximum in height. Treads shall be 11 inches (280 mm) minimum in depth.

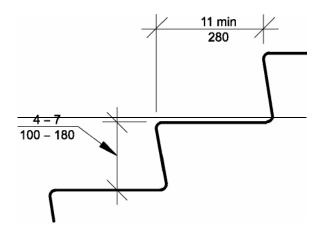


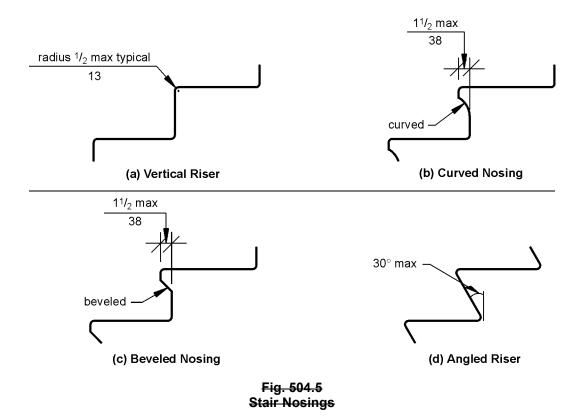
Fig. 504.2
Treads and Risers for Accessible Stairways

504.3 Open Risers. Open risers shall not be permitted.

504.4 Tread Surface. Stair treads shall comply with Section 302 and shall have a slope not steeper than 1:48.

504.5 Nosings. The radius of curvature at the leading edge of the tread shall be ¹/2 inch (13 mm) maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical. The permitted projection of the nosing shall be 1 inches (38 mm) maximum over the tread or floor below.

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



504.6 Handrails. Stairs shall have handrails complying with Section 505.

504.7 Wet Conditions. Stair treads and landings subject to wet conditions shall be designed to prevent the accumulation of water.

504.8 Lighting. Lighting for interior stairways shall comply with Section 504.8.

504.8.1 Illumination Level. Lighting facilities shall be capable of providing 10 foot-candles (108 lux) of illuminance measured at the center of tread surfaces and on landing surfaces within 24 inches (610 mm) of step nosings.

504.8.2 Lighting Controls. If provided, occupancy-sensing automatic controls shall activate the stairway lighting so the illuminance level required by Section 504.8.1 is provided on the entrance landing, each stair flight adjacent to the entrance landing, and on the landings above and below the entrance landing prior to any step being used.

504.9 Stair Level Identification. 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."

Reason: These requirements are in International Building Code Section 1009. Stairs are not considered an accessible route of travel under the 2009 International Building Code, Chapter 11 or ICC/ANSI A117.1, Chapter 4.

Committee Action:	AS	AM	D	
				504-HIMES.doc

5-10 - 12

504.1, 504.2, 504.3, 504.4, 504.5, 504.5.1, 504.6, 504.6.1 (New), 504.6.2 (New), 504.6.3, 504.7, 504.8 (New), 504.9 (New), 504.10, 504.11

Proponent: Kim Paarlberg, International Code Council

Revise as follows:

504.1 General. Accessible stairs shall comply with Section 504.

EXCEPTION: Stepped aisles providing access to tiered seating are not required to comply with this section.

504.2 Treads and Risers. All steps on a flight of stairs shall have uniform riser height and uniform tread depth. Risers shall be 4 inches (100 mm) minimum and 7 inches (180 mm) maximum in height. Treads shall be 11 inches (280 mm) minimum in depth. The riser height shall be measured vertically between the *nosings* of adjacent treads. Rectangular tread depths shall be 11 inches (279 mm) minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's *nosing*. Winder treads shall have a minimum tread depth of 11 inches (279 mm) between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline and a minimum tread depth of 10 inches (254 mm) within the clear width of the *stair*.

504.3 Dimensional uniformity. Stair treads and risers shall be of uniform size and shape. The tolerance between the largest and smallest riser height or between the largest and smallest tread depth shall not exceed 3/8 inch (9.5 mm) in any flight of stairs. The greatest winder tread depth at the walkline within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

EXCEPTIONS:

- 1. Consistently shaped *winders*, complying with Section 504.2, differing from rectangular treads in the same *stairway flight*.
- 2. Risers complying with Section 504.3.1.

504.3.1 Sloping public way. Where the bottom or top riser adjoins a sloping *public way*, walkway or driveway having an established grade and serving as a landing, the bottom or top riser is permitted to be reduced along the slope to less than 4 inches (102 mm) in height, with the variation in height of the bottom or top riser not to exceed one unit vertical in 12 units horizontal (8-percent slope) of *stairway* width. The *nosings* or leading edges of treads at such nonuniform height risers shall have a distinctive marking stripe, different from any other *nosing* marking provided on the *stair flight*. The distinctive marking stripe shall be visible in descent of the *stair* and shall have a slip-resistant surface. Marking stripes shall have a width of at least 1 inch (25 mm) but not more than 2 inches (51 mm).

504.4 504.3 Open Solid Risers. Open risers shall not be permitted. Risers shall be solid.

EXCEPTIONS:

- 1. Solid risers are not required for *stairways* provided that the opening between treads does not permit the passage of a sphere with a diameter of 4 inches (102 mm).
- Solid risers are not required for occupancies in Group I-3 or in Group F, H and S occupancies
 other than areas accessible to the public. There are no restrictions on the size of the opening
 in the riser.
- 3. Solid risers are not required for *spiral stairways*.

504.5 504.4 Tread Stairway walking Surface. Stair treads shall comply with Section 302 and shall have a slope not steeper than 1:48. The walking surface of treads and landings of a stairway shall not be

sloped steeper than one unit vertical in 48 units horizontal (2-percent slope) in any direction. Stairway treads and landings shall have a solid surface. Finish floor surfaces shall be securely attached.

EXCEPTIONS:

- Openings in stair walking surfaces shall be a size that does not permit the passage of 1/2inch-diameter (12.7 mm) sphere. Elongated openings shall be placed so that the long dimension is perpendicular to the direction of travel.
- In Group F, H and S occupancies, other than areas of parking structures accessible to the public, openings in treads and landings shall not be prohibited provided a sphere with a diameter of 11/8 inches (29 mm) cannot pass through the opening.
- **504.6 504.5 Nosings.** The radius of curvature at the leading edge of the tread shall be 4t_2 9/16inch (43 14.3 mm) maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. Beveling of nosings shall not exceed 9/16 inch (14.3 mm). Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical.
- <u>**504.6.1 Nosing projection size.**</u> The permitted projection of the nosing shall be 4^4l_2 <u>1-1/4</u> inches (38 <u>32</u> mm) maximum over the tread or floor below.
- **504.6.2 Nosing projection uniformity.** All *nosing* projections of the leading edges shall be of uniform size, including the projections of the *nosings* leading edge of the floor at the top of a *flight*.
- **504.5.1 504.6.3 Visual contrast.** The leading 2 inches (51 mm) of the tread shall have visual contrast of dark on-light or light-on-dark from the remainder of the tread.
- 504.7 Stairway landings. There shall be a floor or landing at the top and bottom of each stairway. The width of landings shall not be less than the width of stairways they serve. Every landing shall have a minimum width measured perpendicular to the direction of travel equal to the width of the stairway. Where the stairway has a straight run the depth need not exceed 48 inches (1219 mm). Doors opening onto a landing shall not reduce the landing to less than one-half the required width. When fully open, the door shall not project more than 7 inches (178 mm) into a landing. When wheelchair spaces are required on the stairway landing as an area of refuge, the wheelchair space shall not be located in the required width of the landing and doors shall not swing over the wheelchair spaces.
- **504.8 Curved stairways.** Curved *stairways* with *winder* treads shall have treads and risers in accordance with Section 504.2 and the smallest radius shall not be less than twice the required width of the *stairway*.
 - **EXCEPTION:** The radius restriction shall not apply to curved *stairways* for occupancies in Group R-3 and within individual *dwelling units*.
- **504.9 Spiral stairways.** Spiral stairways are permitted to be used as a component in the *means of egress* only within *dwelling units* or from a space not more than 250 square feet (23 m2) in area and serving not more than five occupants, or from *technical production areas*.

A spiral stairway shall have a 71/2-inch (191 mm) minimum clear tread depth at a point 12 inches (305 mm) from the narrow edge. The risers shall be sufficient to provide a headroom of 78 inches (1981 mm) minimum, but riser height shall not be more than 91/2 inches (241 mm). The minimum stairway clear width at and below the handrail shall be 26 inches (660 mm).

- **504.6 504.10 Handrails.** Stairs shall have handrails complying with Section 505.
- **504.7 504.11 Wet Conditions.** Stair treads and landings subject to wet conditions shall be designed to prevent the accumulation of water.

Reason: The quantity of change proposals submitted by International Code Council is reflective of three elements of our work: 1. ICC is the Secretariat for the Standard and some changes reflect inconsistencies or improvements suggested by staff; 2. ICC develops and publishes a Commentary on the standard and writing the commentary illuminates issues of the text and figures; and 3. ICC provides an interpretation service for the standard which results in the observation of provisions the users find most confusing.

If the A117 is going to address stairways, they should address straight, curved and spiral stairways. They should also include safety issues they do not currently address like uniformity, landings, walk lines, etc. The text of this proposal is based on the 2012 International Building Code.

Committee Action:	AS	AM	D	
				504-PAARLBERG.doc

5-11- 12 504.5

Proponent: David W. Cooper, Stairway Manufacturing and Design Consulting, representing Stairway Manufacturers Association

Revise as follows:

504.5 Nosings. The radius of curvature or bevel at the nosing shall not exceed ½ inch (12.7 mm) maximum from at the leading edge of the tread shall be ½ inch (13 mm) maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical. The permitted projection of the nosing shall be 1 ½ inches (38 mm) maximum over the tread or floor below.

Reason: This proposal provides needed correlation with changes in the building code recognizing that the radius of the curvature is a non factor but rather the limitation of the distance from the leading edge.

Committee Action:	AS	AM	D	
				504.5-COOPER.doc

5-12 - 12 504.5.1

Proponent: Kim Paarlberg, International Code Council

Revise as follows:

504.5.1 Visual contrast. At the nosing of a stairway landing and at the nosing of the bottom tread, the leading 2 inches (51 mm) of the <u>landing or</u> tread shall have visual contrast of dark on-light or light-on-dark from the remainder of the tread.

Reason: The quantity of change proposals submitted by International Code Council is reflective of three elements of our work: 1. ICC is the Secretariat for the Standard and some changes reflect inconsistencies or improvements suggested by staff; 2. ICC develops and publishes a Commentary on the standard and writing the commentary illuminates issues of the text and figures; and 3. ICC provides an interpretation service for the standard which results in the observation of provisions the users find most confusing.

Cadence is established within two or three steps, so you do not look down at your feet. The location where the change is from level to steps and from steps to level is where the visual cues are relevant.



Committee Action: AS AM D

504.5.1 (revised)-PAARLBERG.doc

5-13 – 12 504.5.1

Proponent: Kim Paarlberg, International Code Council

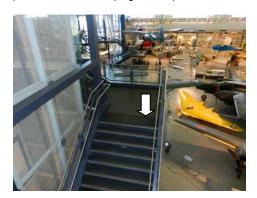
Revise as follows:

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

EXCEPTION: Where a stair has detectable warnings complying with Section 705 at the leading edge of each landing, visual contrast is not needed provided the detectable warnings extend the full width of the stairway and extend 24 inches minimum from the nosing.

Reason: The quantity of change proposals submitted by International Code Council is reflective of three elements of our work: 1. ICC is the Secretariat for the Standard and some changes reflect inconsistencies or improvements suggested by staff; 2. ICC develops and publishes a Commentary on the standard and writing the commentary illuminates issues of the text and figures; and 3. ICC provides an interpretation service for the standard which results in the observation of provisions the users find most confusing.

Cadence is established within two or three steps, so you do not look down at your feet. The application shown is in the Air and Space Museum in Washington D.C. This may be a good option for high traffic stairways where the contrasting stripe might be worn off, or if the stairway is patterned so that there contrasting color is in question, or in stairways where there is a requirement for photoluminescent striping also required.





Committee Action:

AS

AM D

504.5.1 #2(New)-PAARLBERG.doc

5-14 - 12 504.8.1

Proponent: Kim Paarlberg, International Code Council

Revise as follows:

504.8.1 Illumination Level. Lighting facilities shall be capable of providing 40-1 foot-candles (408 10.8 lux) of illuminance measured at the center of tread surfaces and on landing surfaces within 24 inches (610 mm) of step nosings.

Reason: The quantity of change proposals submitted by International Code Council is reflective of three elements of our work: 1. ICC is the Secretariat for the Standard and some changes reflect inconsistencies or improvements suggested by staff; 2. ICC develops and publishes a Commentary on the standard and writing the commentary illuminates issues of the text and figures; and 3. ICC provides an interpretation service for the standard which results in the observation of provisions the users find most confusing.

The building code requires 1 footcandle for means of egress lighting. The standard to charge photoluminescent stripes requires 1 footcandle. OSHA asks for 5 footcandles for exit ways and 3 footcandles for access ways. What is the justification for 10 footcandles in ICC A117.1.

Committee Action:	AS	AM	D	
				504.8 #1-PAARLBERG.doc

5-15 - 12 504.8.2

Proponent: Kim Paarlberg, International Code Council

Revise as follows:

504.8.2 Lighting Controls. If provided, occupancy sensing automatic controls shall activate the stairway lighting so the illuminance level required by Section 504.8.1 is provided on the entrance landing, each stair flight adjacent to the entrance landing, and on the landings above and below the entrance landing prior to any step being used.

504.8.2 Automatic lighting controls. Automatic lighting controls shall be permitted to activate the required illumination for the means of egress provided they meet all of the following conditions:

- 1. The controls shall be configured to provide the required illumination within each room or space while occupied.
- 2. Where provided, occupant sensors shall activate the required illumination for a minimum duration of 15 minutes.
- 3. Where the automatic lighting controls fail, the controls shall fail in the on or operating state.
- 4. Occupant sensors shall not turn extinguish lighting to charge luminous egress path markings
- 5. All designated emergency lighting luminaries in the means of egress path shall operate in the event of a loss of power.
- 6. The automatic lighting controls shall be tested as a component of the emergency lighting equipment in accordance with Section 604.5 of the International Fire Code.

Reason: The quantity of change proposals submitted by International Code Council is reflective of three elements of our work: 1. ICC is the Secretariat for the Standard and some changes reflect inconsistencies or improvements suggested by staff; 2. ICC develops and publishes a Commentary on the standard and writing the commentary illuminates issues of the text and figures; and 3. ICC provides an interpretation service for the standard which results in the observation of provisions the users find most confusing.

If there are automatic controls in stairways, they should be addressed in a totally safe manor or removed from the A117.1 standard as outside the scope.

Committee Action:	AS	AM	D	
				504.8 #2-PAARLBERG.doc

5-16 - 12 504.9, 504.10 (New)

Proponent: Kim Paarlberg, International Code Council

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*.

Reason: The quantity of change proposals submitted by International Code Council is reflective of three elements of our work: 1. ICC is the Secretariat for the Standard and some changes reflect inconsistencies or improvements suggested by staff; 2. ICC develops and publishes a Commentary on the standard and writing the commentary illuminates issues of the text and figures; and 3. ICC provides an interpretation service for the standard which results in the observation of provisions the users find most confusing.

Tactile signage is required by the building code both inside and outside of the exit doors. The current provisions in 504 only address the signage within the stair tower.

1011.4 Raised character and Braille exit signs. A sign stating EXIT in raised characters and Braille and complying with ICC A117.1 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.

1022.9 Stairway identification signs. ... In addition to the *stairway* identification sign, a floor-level sign in raised characters and Braille complying with ICC A117.1 shall be located at each floor-level landing adjacent to the door leading from the *interior exit stairway* and *ramp* into the *corridor* to identify the floor level.

Committee Action:	AS	AM	D	
				504.9-PAALBERG.doc

5-17	_	12
505.3		

Proponent: David W. Cooper, Stair Manufacturing and Design Consulting, representing Stairway Manufacturers Association

Revise as follows:

505.3 Open Risers. Open risers shall not be permitted.

EXCEPTION:

1. Openings that do not allow the passage of a 4 inches (102 mm) diameter sphere shall be permitted in the lower 4 inches (102 mm) of the riser height.

Reason: This proposal provides needed correlation with the building code sphere rule limitation and improved specification to require the opening in the lower portion of the riser allowing for compliance with the ADA recommended nosing profiles.

Committee Action:	AS	AM	D	
				505.3-COOPER.doc

5-18 - 12 505.4

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

Revise as follows:

505.4 Height. Top of gripping surfaces of handrails shall be 34 inches (865 mm) minimum and 38 inches (965 mm) maximum vertically above stair nosings, ramp surfaces and walking surfaces. Handrails shall be at a consistent height above stair nosings, ramp surfaces and walking surfaces.

EXCEPTION: Where a second handrail is provided primarily for children's use, the top gripping surface shall be 28 inches (710 mm) maximum vertically above stair nosings, ramp surfaces and walking surfaces. A 9 inch (230 mm) minimum vertical clearance shall be provided between upper and lower handrails.

Reason: Add this Exception for Children's handrails because they are an important safety feature for adults and children. Add this exception for children's handrail height as shown in 2010 ADA Advisory 505.4.

See companion change in Section 102 Anthropometric Provisions.

Committee Action:	AS	AM	D	
				505.4-REED.doc

5-19 - 12 505.6. 505.7.2

Proponent: David W. Cooper, Stairway Manufacturing and Design Consulting, representing Stairway Manufacturers Association

Revise as follows:

505.6 Gripping Surface. Gripping surfaces shall be continuous, without interruption by newel posts, other construction elements, or obstructions.

Exceptions:

1. Handrail brackets or balusters attached to the bottom surface of the handrail shall not be considered obstructions, provided they comply with one of the following criteria options:

Option 1

- 1.1 The perimeter dimension of the handrail cross section is 4 inches (102 mm) minimum and 6 1/4 inches (159 mm) maximum,
- 1.2 Not more than 20 percent of the handrail length is obstructed,
- Horizontal projections beyond the sides of the handrail occur 1 1/2 inches (38 mm) minimum below the bottom of the handrail, and provided that for each 1/2 inch (13 mm) of additional handrail perimeter dimension above 4 inches (100 mm), the vertical clearance dimension of 1 1/2 inch (38 mm) can be reduced by 1/8 inch (3.2 mm), and
- 1.4 Edges shall be are rounded.

Option 2

- 2.1 The handrail has a noncircular cross section,
- 2.2. The perimeter dimension of the handrail cross section shall be greater than 6-1/4 inches (159 mm).
- 2.3. Horizontal projections beyond the sides of the handrail occur 2 1/4 inches (63 mm) minimum below the tallest portion of the handrail and
- 2.4 Edges are rounded.
- 2. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, the bottoms of handrails gripping surfaces shall be permitted to be obstructed along their entire length where they are integral to crash rails or bumper guards.

505.7.2 Noncircular Cross Sections. Handrails with a noncircular cross section shall have a perimeter dimension of 4 inches (400102 mm) minimum. Handrails with a perimeter greater than and 6½ inches (460159 mm) shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of ¾ inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch (8 mm) within ½ inch (22mm) below the widest portion of the profile. This required depth shall continue for at least ¾ inch (10 mm) to a level that is not less than 1¾ inches (45mm) below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1¼ inches (32 mm) to a maximum of 2¾ inches (70 mm). maximum, and Handrails with a perimeter less than 6¼ inches (102 mm) shall have a cross-section dimension of 1 inch (25.4 mm) minimum and 2¼ inches (57 mm) maximum.

Reason: This proposal provides needed handrail rail shape options for the majority of users both with and without disabilities that do not use the bottom surface of the handrail, by providing handrail shape options with recesses that provide surfaces and sizes that offer preferred visual and tactile recognition, guidance, ready stabilization, greater resistance to shear forces that cause slipping.

Handrail profiles with the grip surface designed in the upper portion are not prone to interrupted loss of grip caused by "hand hopping"

obstacles such as supporting elements. A constant stabilizing grip can be maintained during the full traverse of the stair or ramp. Such a grip is essential to prosthetic users.

This proposal also adds a needed minimum cross section dimension of 1 inch for non-circular cross sections to correlate with recent changes in the building code.

<u>Dusenberry DO</u>, <u>Simpson H</u>, <u>Dellorusso SJ</u>, 2009 Jul. Effect of handrail shape on graspability. <u>Applied Ergonomics</u>. ;40(4):657-

69. Epub 2008 Oct 26.

Gray DB, 2009 Jan. <u>Uses and Preferences of Handrails: People with Mobility and Visual Impairments and Limitations</u>

Committee Action: AS AM D 505.6-COOPER.doc **5-20 - 12** 505.7, 505.7.2, 505.7.3 (New)

Proponent: Kim Paarlberg, International Code Council

Revise as follows:

505.7 Cross Section. Handrails shall have a cross section complying with Section 505.7.1, or 505.7.2 or 505.7.3 or shall provide equivalent graspability.

505.7.2 Noncircular Cross Sections Option 1. Handrails with a noncircular cross section shall have a perimeter dimension of 4 inches (100 mm) minimum and $6^{1}/_{4}$ inches (160 mm) maximum, and a cross-section dimension of $2^{1}/_{4}$ inches (57 mm) maximum and minimum cross-sectional dimension of 1 inch (25 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).

505.7.3 Noncircular cross sections Option 2. Handrails with a perimeter greater than 61/4 inches (160 mm) shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the profile. This required depth shall continue for at least 3/8 inch (10 mm) to a level that is not less than 13/4 inches (45 mm) below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 11/4 inches (32 mm) to a maximum of 23/4 inches (70 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).

Reason: The quantity of change proposals submitted by International Code Council is reflective of three elements of our work: 1. ICC is the Secretariat for the Standard and some changes reflect inconsistencies or improvements suggested by staff; 2. ICC develops and publishes a Commentary on the standard and writing the commentary illuminates issues of the text and figures; and 3. ICC provides an interpretation service for the standard which results in the observation of provisions the users find most confusing.

In looking at handrail provisions between the IBC and ICC A117.1, the following information is missing from cross section. Non-circular cross section Option 2 would provide additional information on what constitutes equivalent graspability.

Committee Action:	AS	AM	D		
				505.7-PAARLBERG.doo	

5-21 - 12506.1

Proponent: Hank Falstad, Access Technologies Services, Inc., representing self

Revise as follows:

506.1 General. Accessible windows shall have operable parts complying with Sections 308 and 309.

Reason: 1. Need that clear floor space to get to the operable parts.
2. Need to be sure the operable parts are in the reach range.

D Committee Action: AS AM

506.1-FALSTAD.doc

5-22 - 12

506.1, 506.2 (New), 1002.9, 1002.13, 1003.9, 1003.13,

Proponent: Ed Roether, representing ADA/A117 Harmonization Task Group

Revise as follows:

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

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.

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:

- 1. Receptacle outlets serving a dedicated use.
- 2. Where two or more receptacle outlets are provided in a kitchen above a length of counter top that is uninterrupted by a sink or appliance, one receptacle outlet shall not be required to comply with 309.
- 3. Floor receptacle outlets.
- 4. HVAC diffusers.
- 5. Controls mounted on ceiling fans.
- 6. Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to be accessible.
- 7. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
- 8. Electrical panelboards shall not be required to comply with Section 309.4.

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:

- 1. Receptacle outlets serving a dedicated use.
- 2. Where two or more receptacle outlets are provided in a kitchen above a length of counter top that is uninterrupted by a sink or appliance, one receptacle outlet shall not be required to comply with Section 309.
- 3. Floor receptacle outlets.
- 4. HVAC diffusers.
- 5. Controls mounted on ceiling fans.
- 6. Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to be accessible.
- 7. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
- 8. Electrical panelboards shall not be required to comply with Section 309.4.

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.

Reason: The ADA/A117 Harmonization Task Group (HTG) was created as a task group of the A117.1 Committee to compare the 2010 ADA with the 2009 A117.1 Standard. The HTG has recommend a series of changes through a set of change proposals. The HTG is recommending changes, for the most part, address where the ADA was viewed as more stringent than the A117. Where the A117 contained provisions not addressed in the ADA, these were not considered a conflict needing action to amend the A117. In addition there are a number of places where the ADA and A117.1 are different as a result of specific actions, by the A117.1 Committee during the development of the 2009 edition, to remain or create a difference where, in the judgment of the committee the ADA was deficient.

Section: ADA 229 Windows

ADA 229.1 General. Where glazed openings are provided in *accessible* rooms or *spaces* for operation by occupants, at least one opening shall comply with 309. Each glazed opening required by an *administrative authority* to be operable shall comply with 309.

EXCEPTION:

- 1. Glazed openings in residential dwelling units required to comply with 809 shall not be required to comply with 229.
- 2. Glazed openings in guest rooms required to provide communication features and in guest rooms required to comply with 206.5.3 shall not be required to comply with 229.

506.1 - In ICC A117.1 terminology – The exceptions are basically for Type A dwelling units and non-accessible hotel rooms. 'Operation by occupants' is basically an employee only exception. The only operable windows 'required by the administrative authority' is for ventilation or emergency escape.

506.2 – This is not coordination, but there is the question if the operable parts includes not only opening the locks and latches, but lifting the sash. The pounds force is from the window standards as a start. This could be changed to any force the committee wants. Remember last cycle that they window industry said that there was no double hung on the market that could meet the force requirements. An option would be to say that an add on could get the 5 lbs. force.

1002.9 & 1003.9 – If 1002.13 and 1003.13 is going to address windows, then window hardware should not also be in the operable parts section. This is currently how we address doors and door hardware, so that would be consistent.

1002.13 – Accessible units are required to comply with the accessible window provisions. Question – I understand that hotel rooms and dorm rooms would be operated by residents, but is the same considered for hospitals and nursing homes? Or would their windows be operated by employees? The exceptions for kitchens and bathrooms is because the window in the kitchen is typically over the sink and the window in the bathroom may be elevated for privacy or have a fixture in the immediate area. I could not find a similar exception in ADA, but this seemed logical and was in ICC A117.1 last cycle.

1003.13 – Windows in Type A units are exempted under ADA. For a total match, this would be deleted. It is shown here to see if the committee wants to match, or would prefer to exceed as currently written.

Committee Action: AS AM D

506.1-ROETHER.doc

5-23 - 12

507 (New), 507.1 (New), 507.2 (New)

Proponent: Melanie J. Hughes, VA Department for the Blind and Vision Impaired, representing Association for the Education and Rehabilitation of the Blind and Visually Impaired (AER)

507. Accessible Routes Adjacent to Vehicular Drives

507.1. **Separation** Accessible routes located adjacent and parallel to vehicular drives shall be separated from the vehicular drive by one or more of the following:

- 1. A vertical change in level of 4 inches, minimum.
- 2. Barriers or railings.
- 3. Landscape area.

<u>507.2 Barriers.</u> Where parking spaces are immediately adjacent to the accessible walkway, wheelstops shall be required. Barriers used to separate an accessible route from the vehicular drive shall comply with current MUTCD requirements.

Reason: Lack of protected accessible routes to shopping centers, malls and other public spaces separated from the roadway by large parking lots present a barrier to those who are dependent upon public transportation and pedestrian modes of travel. The need to walk through parking lots to get from public transportation stops, public streets, or sidewalks, makes it difficult and unsafe for persons who have visual impairments or mobility impairments and persons of short stature, including children, to access many facilities.

Committee Action:	AS	AM	D	
				507 (New)-HUGHES doc

5-2	4–	12
507	(NE	W)

Proponent: Robert D. Feibleman, HAND Construction, representing self

Add new text as follows:

507 Fire Safety Devices

507.1 General. Fire fighting devices such as fire extinguishers, hose connections, valve controls, gauges, and annunciator panels are not required to comply with this standard.

Reason: Basic fire alarm and suppression devices are not covered by this standard. However, fire extinguishers and the like are typically located in exit corridors and mistakenly treated as a device that should comply with reach ranges. Locating them low conflicts with placement of handrails. Fire officials prefer occupants leave the building or seek shelter until rescue they do not encourage occupants to fight fires.

Committee Action:	AS	AM	D	
				507 (NEW)-FEIBLEMAN.doo