Aging in Style
The New Standards
Part 1 .2 CEU

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Aging in Style The New Standards Part 1 Handouts

The Elderly are living longer, healthier lives and this trend will likely continue.
In the 21st century, older people will out-number children for the first time in history. When the baby boomer generation who are currently ages 46-64 turn 75, the elderly segment of the population over 75 is projected to triple in size.
Additionally, 1 in 5 Americans have some kind of disability and 1 in 10 have a severe disability. This is exacerbated by our aging population, the obesity in this country and our growing number of injured/disabled war veterans and is expected to accelerate even faster in the coming decades. So more Americans will need accessible design.
Barrier Free Design was first addressed in a series of guidelines entitled the Architectural Barriers Act (ABA) of 1968. This marks one of the first efforts to ensure access to the "built environment" and requires "access for all persons disabled or not" to facilities designed, built, altered, or leased with Federal funds. These guidelines serve as the basis for the standards used to enforce the law, the Uniform Federal Accessibility Standards (UFAS). But these requirements only applied to Federal buildings, so the disabled kept on lobbying.
In 1990, the **Architectural Barriers Act** was supplemented to provide physical accessibility on a state and local level as well as a Federal level, with the passing of The **Americans with Disabilities Act (ADA) of 1990.** The American Disabilities Act pertains to state and local government services, public accommodations, commercial facilities, and transportation and was passed to extend on a state and local level to persons with disabilities the same kinds of nondiscrimination protections afforded to persons based on race, color, religion, sex and national origin. After 1990, states and cities were also able to organize their own accessibility codes. But these codes still didn't address all disabilities and all issues so the disabled kept on lobbying.
Finally on September 15th 2010 the Department of Justice published revised, enforceable accessibility regulations for the Americans with Disabilities Act for state and local government facilities (Title II) and public accommodations and commercial facilities (Title III) called The 2010 ADA Standards for Accessible Design or just "Standards". These "Standards" set new minimum requirements for newly designed and constructed or altered State and local government facilities, public accommodations and commercial facilities, who's start dates for construction are on or after March 15 2012 to be readily accessible to and usable by individuals with disabilities and is to be used in conjunction with "The Fair Housing Act" which applies to all covered multifamily dwellings consisting of four or more dwelling units in multistory buildings that share common walls and that have one or more elevators.
This webinar will discuss 11 areas covered in those 2010 ADA Standards: Wheelchair Access Space, Accessible Routes, Ramps, Landings, Stairs, Handrails, Doors, Faucets, Light Switches, Thermostats and Electric Plugs, Floors and Public Area Furnishings

WHEELCHAIR ACCESS SPACE

Wheelchair access space required is 30” by 48” as defined by Standard 305.3
A circular turning space of 60”minimum by 60” minimum is required or if that is not possible, a T-shaped space which is 60” minimum by 36” minimum is acceptable as defined by Standard 304.3.1

ACCESSIBLE ROUTES

An accessible route is a continuous unobstructed path connecting all accessible elements and spaces of a building or facility.
All walkways, halls, corridors, aisles, skywalks, tunnels, and other spaces that are part of an accessible route shall comply with those specifications
At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones, public streets and sidewalks and public transportation stops to the accessible building or facility entrance they serve.
At least one accessible route shall connect accessible buildings and accessible spaces on the same site, connect each story in Multi-story buildings, connect accessible building entrances with all accessible spaces within the building which are otherwise connected by a circulation path and be provided to all dining areas.
All halls, walkways, corridors, passageways and aisles are accessible routes as well as walking surfaces and need to be a minimum of 36” wide - as per Standard 403.5.1
Ideally, all accessible routes should have a clear width of 60” throughout the route In order for 2 wheelchairs to have enough space to pass each other but if this is not possible, and the accessible route has a clear width less than 60” wide, it should at least have a clear with of 60” at some point in the route at intervals of 200 ft maximum to provide passing spaces at those points.
Passing spaces shall be either a space that is 60” minimum by 60” minimum
The maximum running slope of an accessible walking surface shall not be steeper than 1:20 rise to run as per Standard 403.3
Walks, halls, corridors, passageways, aisles, or other circulation spaces shall have 80 minimum clear head room
A protruding object that has a leading edge that is taller than 27” off the finished floor or ground but not more than 80” above the finished floor or ground
can only protrude 4” maximum horizontally into the circulation path

RAMPS

The clear width of a ramp run, and where handrails are provided, the clear width between the handrails, shall be 36” minimum as per Standard 405.
Any part of an accessible route with a slope greater than 1:20 shall be considered a ramp and shall comply with ramp specifications
The least possible slope shall be used for any ramp
Ramp runs in new construction shall have a running slope not steeper than 1:12 as per

Standard 405.2 The maximum rise for any run shall be 30” maximum 405.6
Any interior or exterior ramps to be constructed on existing sites or in existing buildings or facilities where a space limitation prohibits the use of a 1:12 slope may have slopes and rises as follows as per Standard 405.2:
A slope between 1:10 and 1:12 is allowed for a maximum rise of 6”
A slope between 1:8 and 1:10 is allowed for a maximum rise of 3”
A slope steeper than 1:8 is not allowed
Ramps shall have level landings at bottom and top of each ramp run

LANDINGS
All landings needs to be level
Landings should be: 60” wide by 60” long if a circular turning space will be required if there will be turning to either the right or the left from that landing as per 304.3.1. since wheelchairs need a circular 60” by 60” turning space or 36” wide by 60” long if a T - Shaped Turning Space is sufficient because there will be no turning required to either the right or the left from that landing as defined by Standard 304.3.2

STAIRS
Shall have a non-slip surface, shall be a minimum of 44” in width, better 48” width, shall be uniform in dimension and shall be well lit

HANDRAILS
Handrails shall: be located 30” to 34” above stair nosing be round or oval in section with rounded edges, measure 1-1/2” – 2” in diameter, be free of sharp or abrasive elements and be continuous at landings

DOORS
All interior and exterior doors need to have a minimum clear width opening of 32” with the door open 90 degrees measured between the face of the door and the opposite stop, necessitating a 34” door and have a clear opening height of 80” minimum as per Standard 404.2.3
And should require no more pull that 5 lbs of pressure so a weaker person or a child can open it as defined by Standards 309.4 and 404.2.9.
Doorway thresholds shall be flush with the door wherever possible
If a raised threshold is necessary, it may be no higher than ½” and must be beveled with a slope no greater than 1:2
All door hardware should be easy to use and require little or no strength or flexibility. Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist as defined by Standards 309.4 and 404.2.7

FAUCETS

Faucets shall not require tight grasping, pinching or twisting of the wrist as per Standard 309.4 Faucets and cabinet hardware that can be operated with a closed fist or a loose grip accommodates the greatest range of users. Hardware that requires simultaneous hand and finger movements require greater dexterity and coordination, is not recommended. Hardware D shaped Loop handles should be used on all drawers and cabinet doors as defined by Standards 404.2.7.

LIGHT SWITCHES, THERMOSTATS AND OUTLETS

Light switches should be the rocker type so that they can be operated with a finger, a fist or an elbow both light switches and thermostats should be a maximum of 48" off finished floor.

Outlets need to be higher than 15" and better 18" -24" high off the finished floor to be easily accessible in terms of low forward reach

PUBLIC AREA FURNISHINGS

There are no real dimension requirements for public area seating so I'm stating my dimension recommendations for commercial seating

Seat width for pool lifts in recreation facilities shall be 16" wide minimum and toilet height for ambulatory accessible water closets is 17" – 19 off the finished floor

so why not make chair seat width for public area furnishings 16" wide minimum so large people can sit in them and 17"-19" off the finished floor so people can get out of them once they have sat down

Chairs and sofas should also have low arms for ease of mobility into and out of those items

Specify firm padding and cushions and a seat depth that is less deep than a standard residential sofa seat depth so elderly and disabled people can get out of that seat once they got into it

The seating upholstery color should contrast with the flooring color so that individuals with visual disabilities are better able to distinguish the seat edge from floor

All tables shall have rounded edges and at least 5% of all dining surfaces and work surfaces shall have tops that are be between 28" minimum and 34" maximum off the finished floor, an unobstructed clear floor space that is 30" wide by 48" deep and the required knee and toe clearance under that dining surface as part of the clear floor space so that a person in a wheelchair can roll in and frontally access that dining surface

FLOORING

Floor surfaces along accessible routes and in accessible rooms and spaces including floors, walks, ramps, stairs, and curb ramps, shall be stable, firm and slip-resistant complying with ADA requirements which is a minimum coefficient of friction of 0.6 when wet are so someone doesn't fall and get injured

Carpet or carpet tile should be level loop, textured loop, level cut pile, or level cut/uncut pile texture, it should be ½" maximum thickness height to provide less friction and require less force and less roll resistance for a wheelchair to roll over and it should be securely attached and have a firm cushion, pad, or backing, or no cushion or pad

CONCLUSION

Our population is aging and more people are disabled than ever before. Therefore, the government revised the ADA Standards for newly designed and constructed or altered State and local government facilities, public accommodations and commercial facilities, who's start dates for construction are on or after March 15 2012 to include more disability issues. Now that you have taken this CEU, you know the most current 2010 ADA Standards and can incorporate them into your design projects.

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Biography

Beverly Vosko is a Allied Member ASID who is an RID, registered and licensed (#6333) in the state of Texas, CAPS, L.E.E.D. Green Associate, CGP, TAID "Full Service", Interior Designer and Remodeler, President and CEO of Beverly Vosko Interiors. For over 25 years, she has been remodeling and designing custom Residential and Commercial environments across the United States and Europe, be they Traditional, Transitional, Contemporary or Eclectic, that match her clients' every need. She graduated Phi Beta Kappa, Magna Cum Laude from the University of Pennsylvania, spent a year at Harvard University studying Art History, received her MBA in Marketing from Stern Graduate Business School and her design training from Sotheby's and the world renown Inchbald School of Design. She has taught Antiques and Interior Design at both Rice University and the University of Houston, teaches Interior Designers Continuing Education CEU's and webinars nationally about Antiques, ADA /Universal Design, Sustainable Design, Lighting and Day-lighting and Oriental Rugs with her own company – InteriorDesign-ED. Additionally, Beverly Conducts monthly Interior Design and Antique tours in and around Houston and to various locals in the U.S. and Europe.