

Aging in Style
Bathrooms - Residential
Universal Design
1 hour CEU

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Beverly Vosko's
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Aging in Style Kitchens and Bathrooms –
Residential Universal Design
4 hour webinar Handouts ... Welcome to our webinar!

Elders are living longer, more active, happier, healthier lives

In the 21st Century, older people will outnumber children for 1st time in history and when baby boomers become 75, number of people 75 years old and older will triple in size.

According to the AARP, 84% of older homeowners wish to “Age in Place” regardless of their age, income or ability level. We now also have more multigenerational families living together. In order for them all to remain in their homes safely, independently & comfortably, many homeowners will need to modify their homes.

Design for the elderly and disabled was first addressed in a series of guidelines entitled the Architectural Barriers Act (ABA) of 1968, which marked the first efforts to ensure the disabled access to the built environment and served as the basis for the Standards used to enforce the law, under the Uniform Federal Accessibility Standards (UFAS).

But since UFAS only used Federal Funds, it only applied to Federal Buildings.

And most people hardly visit Federal buildings so this legislation wasn't enough.

In 1991, these UFAS Standards were supplemented to provide the disabled physical accessibility on a state and local as well as Federal level with the Department's 1991 title III Americans With Disabilities Act (ADA) Standards For Accessible Design published July 26, 1991 but this legislation still wasn't enough.

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, the “2010 Standards”. These “Standards” set 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.

But since ADA does not apply to residential projects –only to public buildings- it is important for Residential Interior Designers to have a thorough knowledge and understanding of Universal Design guidelines so they can impart this information to their residential clients & help them create kitchens that will work for those clients now yet also work for them as they age.

The concept of Universal Design was created by Architect Ronald L. Mace and launched at the North Carolina State University in the 1980's.

Universal design is the design of products and environments to be used by all people to the greatest extent possible, without the need for later adaptation or specialized design.

It was conceived to create comfortable, functional environments for all people regardless of their age, size, stature or ability, serving people young and old, with excellent or limited abilities, in ideal or difficult circumstances from ages 4 to 104.

Universal Design is design that is versatile enough to function for everyone from 4 to 104 – for everyone in the family from children to grandparents.

Universal Design is based upon 7 principles:

1. Equitable Use- the design must appeal to all users
2. Flexible and Versatile- so that they accommodate a wide range of individual preferences/abilities-
3. Simple and intuitive to use
4. Perceptible- communicating necessary information
5. With a Tolerance of Error- designed to minimize hazards /accidents

6. Able to be used with minimum physical effort
7. Size and Space Appropriate

An important point is that Universal Design believes that function does NOT have to sacrifice beauty!

This webinar will discuss how to incorporate Universal Ideas into both Bathrooms –so you will be able to help your client's create bathrooms that look fabulous now yet that they will be able to live in as they age.

Bathrooms

It is essential that everyone in a home regardless of their age or ability has access to a bathroom so there needs to be at least one Universally Designed bathroom on the ground floor of every home And it is recognized that as we get older, we lose mobility and strength. And we have found that using the bathroom requires a tremendous amount of physical exertion from entering and exiting the tub and shower to using the toilet

So remodeling and creating an accessible bathroom with sound design and appropriate products is essential

Bathrooms have become much more than rooms where people wash and use the facilities

Today they are places to relax and wind down; People want bathrooms that are comfortable, convenient, safe and facilitate relaxation for everyone be they children, adults or grandparents, be they short or tall ...seated or standing

Nowhere does universal Design yield more beautiful results that in the bathroom. That is because ample circulation, space, smart organization and convenience are signatures of good overall bathroom design as well as good Universal Design. And because so many dazzling products are available today that satisfy both Universal Design needs and stylish tastes

Bathrooms Need Space for Maneuverability as well

1. Make all the bathroom aisles a minimum of 36" wide - better 42" best 48" wide so that a person in a wheelchair will be able to frontally roll in and access all the appliances and cabinets
2. Create a 60" by 60" (5') turning radius somewhere in the bathroom so that a person in a wheelchair will be able to rotate that wheelchair a full 360 degrees to turn around
3. All Bathroom door openings need to be 32" wide so a wheelchair can enter the bathroom, since not only the wheelchair but also the person in a wheelchair's elbows and knuckles need to pass through the door unscathed and in order to achieve this bathroom doors need to be 34" or better 36" wide. Make sure that the bathroom door swings outwards
4. Bathroom countertops should be rounded or metered and there should be a lower 30"-34" Maximum Countertop somewhere in the bathroom

Bathroom fixtures

1. Sinks
 - a. Universal Design suggests that we allow a clear floor space of at least 30" by 48" parallel or perpendicular in front of the sink
 - b. Make sure that the minimum clearance from the centerline of a sink to all side wall is 15".
 - c. Make sure that the minimum clearance between 2 sinks is 30" so that dual vanities have enough space for 2 people to put all their things near each of their sinks and use those 2 sinks effectively
 - d. Many Pedestal sinks have become shallow and are 7" deep or less

- e. Attach the toe kick to the bathroom sink cabinet doors
 - f. Or do not have any cabinets below the sink at all
 - g. You must remember to give your client the storage space for the items that would normally have been placed in that bathroom sink cabinet, somewhere else in the bathroom
 - h. Use single levered faucets
1. Toilets
 - a. Place a minimum of 48" square clear floor space in front of the toilet
 - b. This space can overlap with the clear floor space for the sink or other fixtures
 - c. Place a minimum of 18" clearance from the centerline of a toilet to any obstruction ie a wall or other bathroom fixture
 - d. Comfort Height Toilets seats should be raised to 16 ½" - 17 ½ " in height off the finished floor
 - e. Install toilet grab bars or at least reinforce the wall so you can install toilet grab bars later
 2. Universal Design Guidelines say that Showers need to be easier to get in and out of than conventional showers
 - a. They should be a minimum of 36" by 60" wide which is large enough for a person in a wheelchair to easily use it
 - b. Be 'Curb less" and Roll In or have a maximum 1/2" beveled curb
 - c. Have a wide outward swinging door with an opening of at least 32" in width or no door at all (shower doors should be 34" or better 36" wide to insure the 32" opening
 - d. . Have a hand held shower that can be adjusted to varying heights
 - e. Have Anti-scald shower controls
 - f. -Have an integral seat about 17" – 19" off the finished floor situated where controls can be reached from that seat
 - g. Grab bars or at least reinforced walls so grab bars can be added later
 - h. Have a non slip floor
- 4 Bathtubs
 - a. New Trendy Bathtubs are large and usually measure 30" by 60" which is the minimum a. dimensions required under Universal Design Guidelines
 - b. Have a clear floor space at least 60" by 30" wide in front of the tub for a parallel approach , or 60" by 48" for a perpendicular approach, so a person can get in and out of the tub easily
 - c. Tub height should be seat height - between 18" and 20" from finished floor level, which is appropriate for transfer and which also happens to be standard bathtub height
 - d. Make the tub surround under-mounted and either with a permanent seat at the head end of the bathtub large enough for a person to be able to sit on, hoist themselves into the tub and be able to reach the faucets, or install a removable in-tub seat on top of the top if there is no permanent seat
 - e. Have some sort of grab bar or hand rail be it hidden or not, within easy reach of the tub so a person can easily get in and out of the tub
 - f. Have a flat bottomed tub with integral slip resistance surface
 - g. Anti scald bathtub controls
 5. Install tilted mirrors or mount mirrors and medicine cabinets with bottoms directly above the sink rear backsplash height to allow easy use and access for a seated person

6. Multiple height and/or adjustable shelves should be used in closets

Other important information for both Kitchens and Bathrooms

1. Use "D" shaped Cabinet Hardware in both kitchen and bathroom as these are easier to use and require little or no strength or flexibility. Avoid knobs as they can be slippery and hard to grasp for greasy hands as well as hands riddled with arthritis and rheumatism
2. Light Switches should be the large rocker type
 - a. preferably illuminated and
 - b. should be ideally positioned 42" from finished floor to center of switch
 - c. all electrical receptacles in the kitchen and bathroom, and lights and switches near water should have GFCI's (ground-fault circuit interrupters) installed so no one gets electrocuted
 - d. Use dimmers
 - e. Electrical Wall outlets need to be 12" -16" high off the floor
3. Make sure that the floor in both the kitchen and the bathroom are slip resistant with a coefficient of friction of at least 0.6 when wet so a person doesn't fall and get injured, especially if the floor does get wet
4. Make sure that the kitchen and bathroom door openings are 32" wide by installing 34" or better 36" wide doors so they are sufficiently wide to allow passage for everyone, including people in wheelchairs or walkers to enter the kitchen or bathroom. In the kitchen if there are exterior sliding doors, they should have the frame and track dropped into the subfloor so a wheel chair can pass through easily and so a person will not trip on the track walking into the room and forgetting it is there

Conclusion

I do hope that this webinar has convinced you that many of these Universal Design ideas are brilliant and if we incorporate these Universal Design ideas into our clients kitchen remodeling projects, we can create beautiful kitchens that will function for them and their families from age 4-104 now and also function for them all as they age. So we can help them "Age in Style".

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Biography

Beverly Vosko, Allied Member ASID, RID, UDCP (Universal Design Certified Professional), CAPS, L.E.E.D Green Associate, CGP (is a full service, Registered Interior Designer in Texas #6333. She is President and founder of both Beverly Vosko Interiors and InteriorDesign-ED; both DBA's for C. V. Design Inc. For over 25 years, she has been designing homes across the United States and Europe, specializing in creating custom residential and commercial environments, be they traditional, transitional, contemporary or eclectic, that match her design clients' every need, through her design firm, Beverly Vosko Interiors. For nearly 20 years, she has taught Interior Design: first at Rice University, then at the University of Houston, and for the last 10 years nationally, with her Continuing Education company, InteriorDesign-ED. Specifically, she has taught Interior Design, Aging in Place, Green/Sustainable Design, Lighting and Antiques. She graduated Phi Beta Kappa, Magna Cum Laude from the University of Pennsylvania, studied Art History at Harvard University, received her MBA in Marketing from NYU Stern Graduate Business School, and completed Design and Antiques training from Sotheby's, the world-renowned Inhbald School of Design and Houston Community College. Please view her websites, www.vosko.com and www.InteriorDesign-ED.com