

Homeowner's Guide

Universal Design Features for Every Remodeling Project



McClurg

Forward



I've been in the residential remodeling business for more than 35 years and have worked with many homeowners at different stages of life. Construction and design professionals realize that people go through changes. We work with homeowners to create attractive environments for all people to function in regardless of age, size or abilities.

For **young homeowners**, those changes may be expanding space for a growing family by adding a family room, converting a basement to a playroom or remodeling a kitchen to accommodate more users and gatherings.

After the kids leave, **empty nesters** look to projects they have been putting off, such as remodeling a master bedroom suite, or converting that basement playroom into a den or hobby room. **When a parent moves in**, a home may need to be retrofitted to accommodate all of the occupants. At **retirement**, additional changes may be needed especially if health issues become a factor.

We have prepared this homeowner's guide on "**Universal Design Features for Every Remodeling Project**" to address questions we often hear from customers. In the guide you will learn about how "Universal Design" can make your home more accessible, comfortable and safer for all residents. The guide shows you specific products that can be used in baths, kitchens and throughout the house. You will find tips to improve the function of each room and the entry areas of your home and discover [how a Certified Aging-in-Place Specialist can help](#) you in the design process.

For more ideas, we invite you to visit the [Universal Design photo gallery](#) on our website and peruse our [Universal Design blog articles](#).

We hope you find the guide helpful. We welcome your questions and comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott F. McClurg". The signature is stylized with a large loop at the end.

Scott F. McClurg
President & Co-Owner

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I. What is Universal Design?

Think of a Universal Design home as a “[home for a lifetime](#).”

The U.S. Baby Boomer generation is 77 million strong (28 percent of the population) and is now between the ages of 50 and 68. As this cohort ages, making changes in their home environments using Universal Design concepts will be essential to maintaining their quality of life.

There are features and products that make a home comfortable and functional for its residents at every age and at any level of ability over the course of a lifetime. These features have become known in the industry as “Universal Design.”

Here’s how the [National Association of Home Builders](#) (NAHB) defines this term:

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



Universal Design begins at the entry to a home. This home was expressly designed with a level threshold entry to address the needs of the owners.

II. Features for Every Room

We incorporate many universal design concepts into our remodeling projects because they make homes more “user friendly” and add value. Some of these features are so subtle that you wouldn’t even know they were there until they were pointed out to you. Here are some “Universal Design” features to consider as you plan your home remodeling projects:

1. Throughout the Home

- No-step or level entryways
- Doorways 32-to-36 inches wide
- Hallways 36-to-42 inches wide
- More and open floor space
- Level thresholds
- Lever handles on doors
- Rocker light switches
- Electrical outlets placed 25 inches above the floor
- Slip-resistant flooring
- Casement windows
- Good lighting
- Adjustable closet rods and shelves



A level threshold connects rooms and eliminates a tripping hazard.

II. Features for Every Room

2. Special Accommodations for Wheelchair Users

- An elevator to enable access to all levels of a home
- A cooktop set into a counter with open knee space
- Light switches located 36 inches from the floor



Home elevator.

II. Features for Every Room

3. Other Spaces

- A front loading washer and dryer
- One floor living where a kitchen, bedrooms, bathroom and living spaces are all accessible on one barrier-free level



Open concept kitchen with Universal Design features: Level thresholds, 36-inch entryways, wide kitchen work aisle, rollout storage on the island, multiple height counters and an undercounter microwave oven.

III. Features for Kitchens

Small details count when you are planning to remodel a kitchen. We are seeing a growing interest in [“Universal Design”](#) features that make a kitchen safe and functional [for people of all ages and stages of life](#). Even if you are not planning to live in your home for a long period of time, these features make sense by creating a kitchen that is comfortable for your use and will appeal to a wide range of buyers at resale. “Universal Design” is simple and intuitive.

It's important to know that with the right planning and design of your kitchen (or bath) remodel, it will not cost any more to make it accommodating for all ages and life changes.

Here is a list of things to consider in your [kitchen design](#) plans:

1. Lighting

As we age, lighting becomes more important especially for people age 60 and older. Enhance general lighting in a kitchen with ambient and accent lighting. Install bright non-glare task lighting over work areas including the sink, stove and counters. Lighting inside of storage cabinets and pantries makes it easier to see the items stored there and to read labels.



Task lighting over stove and counter areas.

III. Features for Kitchens

2. Appliances

When choosing appliances, consider ease of operation:

- Stoves and cooktops with front controls are user-friendly.
- Microwave ovens can be installed under a counter for easy access or at a height convenient for a cook. This height is safer for both children and older adults. Hot dishes can be removed easily and the risk of spills is lessened.
- Consider dishwasher drawers that can be raised from the floor for easy loading.
- Refrigerators with a freezer drawer and side-by-side doors are more accessible. The lower height of the freezer makes it easier to view items and organize them for storage.
- Ovens with side opening doors are accommodating for wheelchair users.



A kitchen with an open floor plan, front control range, an easy access refrigerator with a bottom freezer drawer and an undercounter wine storage unit.

III. Features for Kitchens

3. Cabinets

Open shelving can be used for easy-to-reach storage. Cabinets with full extension drawers, full-extension pullout shelves, carousels and adjustable height shelving will keep you off your knees and from losing your balance when you reach in the back for contents. Glass door cabinets help you to view the contents and keep items organized.



A base cabinet equipped with accessible pullout shelves.

III. Features for Kitchens

4. Hardware

Use over-size hardware on cabinets. D-shaped or cup-style pulls are stylish and easier to open than cabinets with round pulls. Consider self-closing drawer glides and soft close door hinges on cabinets. Use a lever handle faucet for the sink that can be pushed on or off by a hand.



Classic cup drawer pulls and round brushed satin nickel knobs from Top Knobs complement the cabinetry and counters in [this remodeled kitchen](#).

III. Features for Kitchens

5. Counters

Multi-height counters create a surface for household members to work either standing or sitting. Smooth rounded edges help to prevent injuries. Multi-height counters are great if you have small children in your home and create architectural interest in a kitchen.



A kitchen island with multi-height counters and wide work aisles.

III. Features for Kitchens

6. Flooring

Level thresholds between the kitchen and adjacent rooms make a home safer and reduce the probability of tripping and falling. Select slip resistant or cushioned flooring. Take the time to consider the traffic patterns and the way you move around in a kitchen to alleviate barriers. Good planning and design should address creating level thresholds between a kitchen and adjoining areas.

7. Open Spaces

Maneuvering space is important in any kitchen. For people who use a wheel chair or ambulatory support, a clear space in the room with a 5-foot (60 inches) radius for turning is recommended. Door openings into the room should be at least 36 inches wide. Many door manufacturers now offer "easy access thresholds" for exterior entry doors, sliding glass doors and patio doors.



This kitchen features plenty of open space, wide work aisles and level flooring between rooms.

III. Features for Kitchens

8. Windows

If your kitchen remodel requires adding new windows, consider **crank out windows** and, if possible, place the controls at waist level for ease of operating.

9. Doorways

If your plans include “demolishing” a kitchen, reframe doorways to **allow at least 36 inches for clearance and easy access.**

10. Shelves

Install **storage with pullout shelves, carousels and adjustable height shelving** to keep you off your knees and from stretching on your toes and losing your balance when you reach in the back of upper cabinets for stored goods and dishware.

11. Pot Filler

Adding a stovetop **“pot filler” water fixture** to your cooking area will enable you to fill heavy pots with water so that you no longer will have to lift and carry them from the sink to the stove.

12. Garbage Disposal

Place your **garbage disposal switch** in a location where it is easily accessible.

13. Trash

Install **built-in storage space and a pull-out bin** for recyclables and trash.

14. Safety Faucets

Add **anti-scald faucets with lever handles** to your sinks.

15. Outlets

Add **extra electrical outlets** for small appliances, including under the counter for easy access.

III. Features for Kitchens

16. New Innovations

Some relatively [new products](#) to look into if someone in your home has impaired mobility are adjustable sinks, counters and cabinets that can be raised and lowered as well as stove tops with front access controls.



Gas stovetop with front access controls. On the right side of the cabinet panel below the stovetop are controls for the vent downdraft. The recessed cabinetry provides easy wheelchair access and is an interesting architectural feature.

IV. Features for Bathrooms

If you're planning to update or remodel a bathroom consider these **twelve "Universal Design" tips** to improve access and safety:

1. Install a **no-threshold walk-in shower or low-threshold water dam shower** with minimum dimensions of 5-by-3 feet. Use slip-resistant flooring in the shower and within the [bathroom](#).
2. Add a **built-in shower seat**.
3. Place **grab bars** in the shower, tub and near the toilet.



This walk-in shower features a low-threshold entry. Grab bars help to prevent the user from slipping and also assist the user to move more easily without help from others. The fold-up shower seat provides easy access.

IV. Features for Bathrooms

4. Install **several showerheads**, including a hand-held adjustable height showerhead with easy to operate controls.
5. **Widen the doorway to 36 inches** in the bathroom entrance.
6. If possible, **allow for maneuvering space**. Ideally, allocate space to accommodate a 60-inch turning radius.
7. Replace twist handle faucets with **lever handle, anti-scald faucets**.
8. Consider installing a **pedestal sink or wall mount sink**. Not only are they attractive, but also the sink is accessible to those in your home who may use a walker, wheelchair or crutches.



This simple bathroom has many universal design elements including grab bars, a wall mount sink, a chair-height toilet, a single handle faucet and products that are easy to clean such as the one piece sink.

IV. Features for Bathrooms

9. If you are installing a vanity, **mount the sink bowl close to the edge of the counter** for easier use and select cabinetry with **easy-glide drawers that close automatically**. Use a **cabinet with a “toe kick”** to help users maintain their balance when using the sink.
10. **Toilets should be centered** 18 inches from any sidewall, tub or cabinet and the seat should be 18-to-19 inches off the floor for older persons, lower for children. Consider taller **“comfort height” toilets** for adults.
11. Replace round knobs on bathroom doors with **lever handles**.
12. Install lighting to provide good illumination for vision when using the shower, tub, sink and toilet. Also, add a **night light** for safety.



Lever handle bathroom sink faucet in brushed nickel finish.

V. Features for Master Bedroom Suites

You can make a **master bedroom suite** more accommodating, comfortable and safe by considering these Universal Design elements in your plans:

- A **level threshold in the doorway between the bedroom and bath** to prevent tripping.
- A **night light in the bedroom near the bathroom entryway**.
- Install **additional electrical outlets** to accommodate technology or future medical equipment.
- **Fit closets with multi-level clothing rods or multi-level pullout drawers and shelving**. Don't use bi-fold doors on closets because they can be difficult to open and close.
- **Base cabinets with toe-kicks in the bathroom**.
- A **grab bar** in the shower.
- **Ample lighting**.
- **Slip-resistant tile flooring**.



This upscale master bathroom includes a shower with a wide barrier-free entry, a shower seat, slip-resistant tile flooring and an adjustable and fully removable handheld showerhead.

VI. Features for Entryways and Exits

If you've had a child with a broken leg, parents who are experiencing problems with walking or if you have had an injury or surgery which has impeded your mobility, you know that entering or exiting buildings can be a problem. There is nothing more frustrating than being unable to enter or exit your home easily.

Here are some tips for making entryways secure and easy to access:

- **Exterior doors should be 36 inches wide** to allow for 32 inches of clearance.
- Install no step, **no trip thresholds** near doors.
- Install **lever style door handles**.



A wide main entryway with level walkway and threshold and a lever handle on the door.

VI. Features for Entryways and Exits

- **Add lights to pathways and entryways** to your home.
- **Check walkways frequently** to be sure they're in good condition. Repair holes, cracks, loose pavers and unlevel areas of sidewalks and paths.
- Install **flood lights with motion sensors** and **lights with photoelectric eyes** that automatically turn on at dusk and off at dawn.
- Install **handrails** on both sides of steps.
- There should be at least one **no-step entry** into a home.
- Consider **non-slip flooring** in the foyer.
- Install a **peep hole** at an appropriate height for residents for security.
- If needed, install **ramps** to doorways. The slope of a ramp should be no greater than a 1-inch rise for each foot of length and there should be handrails. A 5-foot landing should be built at the entrances and a ramp should have 2-inch curbs for safety. Ramps can be built to look attractive and to complement the architecture of a home.



This home's exterior features level walkways, no threshold entryways and lighted pathways.

VII. How a CAPS Contractor Can Help

A Certified Aging-in-Place Specialist (CAPS) is an expert who provides design-build solutions that incorporate Universal Design concepts.

What is a Certified Aging-in-Place Specialist?

The National Association of Home Builders (NAHB) recognizes the growing consumer interest in Universal Design that is spurred by three trends:

1. The demand for well-conceived, functional and safe homes.
2. The need to create accessible barrier-free environments for those with physical disabilities.
3. An aging population of “Baby Boomers” who want to live comfortably in their home.

To address the changing needs of homeowners as they age, the [NAHB](#) and the American Association of Retired Persons (AARP) have collaborated to train contractors in modifying homes to meet the needs of senior adults and individuals with disabilities. These contractors earn the [Certified Aging-in-Place Specialist \(CAPS\) designation](#).

The CAPS training program was developed by the Remodelers Council of NAHB, the NAHB Research Center and the NAHB Senior Housing Council in consultation with AARP.

Graduates of the CAPS program are trained in:

- Communication techniques.
- Identifying home modifications or changes that will help people live independently in their homes.
- Finding solutions to common obstacles that make houses unsafe or uncomfortable.
- Technical/construction aspects of designing environments for a lifetime.
- Ethics.

Once certified, CAPS contractors must maintain their credentials through continuing education and subscribe to a Code of Ethics. Builders and remodelers, as well as designers, architects and health care consultants, participate in a 12-hour continuing education program which offers courses on design-build solutions for accessibility and issues associated with modifying homes for older adults and people with disabilities

VII. How a CAPS Contractor Can Help

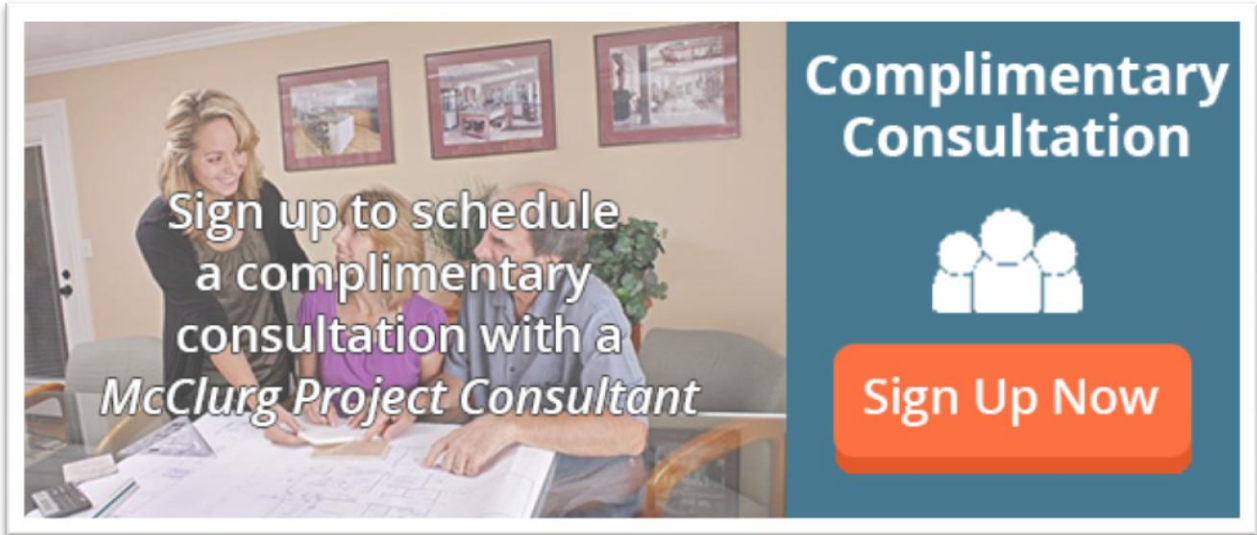
How Can a CAPS Contractor Help?

A CAPS contractor will typically address the physical barriers and potential obstacles in a home by:

- Creating access to enable an individual to safely and securely [enter and exit their home](#).
- Creating spaces that are usable by people in all stages of life, which also helps improve the home's value.
- Improving the function of the [kitchen](#) for easy meal preparation and dining.
- Modifying [bathrooms](#) for safety and access.
- Enabling a person to maneuver in their home safely, securely and independently.
- Designing accommodations while preserving the aesthetics of a home.

One final note, not only are organizations such as AARP and NAHB addressing the need for “Universal Design,” but consumers are beginning to show more interest in [home features that promote comfort, ease of access and safety](#). Adding these amenities can also add value to your home.

NOTE: ...AARP maintains a list of certified contractors and remodelers and will help consumers locate CAPS contractors in their area. [Scott McClurg is a CAPS-certified professional](#) and is available to answer your questions about “Universal Design” and “Aging-in-Place”.

An advertisement banner featuring a photograph of three people (two women and one man) gathered around a table, looking at architectural blueprints. The background is a light-colored wall with three framed pictures. To the right of the photo is a dark blue vertical panel with white text and icons. The text reads "Complimentary Consultation" at the top, followed by an icon of three stylized human figures. Below that is an orange button with the text "Sign Up Now".

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