

Building a Home for All Ages

by Renee Thompson



The housing market consists of people of all ages and all physical abilities. The majority of homes today are not accessible to all people. By incorporating Universal Design (UD) into the construction of new homes and remodeled homes the housing market becomes open to everyone of any physical ability. After reading this article you will understand that UD has many benefits. Besides offering safety and convenience, it is more cost effective to add UD features in the planning stages than to go back and add such features after construction.

What exactly is UD? According to The Center of Universal Design at North Carolina State University, UD is defined as 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. Further, the intent of the universal concept is to simplify life for everyone by making more housing usable by more people at little or no extra cost. Assistive Technology (AT) goes hand in hand with UD. AT can be defined as a device that enhances an individual's ability to function or more simply, a device that makes life easier. It can be something as simple as a garage door opener or as complex as an automated computer system.

Now with a basic understanding of UD and AT you can see how the concepts can apply to everybody. UD in housing is about making living easier and safer for everyone in a household, regardless of age or physical ability. UD benefits everyone. A builder that can offer UD to young families, middle aged families and older adults will certainly have an edge up in the housing market.

The Basics & Benefits of Universal Design

Entrances

It is best to make all entrances zero step entrances, with doors 36" in width, with a one-half inch maximum rise at entrance thresholds. Many falls occur on steps. By eliminating steps you eliminate the risk of falling on them. Other benefits include rolling cumbersome furniture and appliances in and out with ease. No more bumping heavy loads up and down steps and less banging up of trim. A mother can roll in a baby stroller and an elderly relative can be pushed in a wheelchair with ease. A built in shelf with knee space at the entryway is a great feature to add for setting groceries on. Motion detector type lighting, keyless entry and intercom systems are some examples of assistive technology features that can be added as well.

Doorways, Hallways, Flooring & Electrical

A 36" wide door with a lever handle, flush thresholds and 42" minimum width hallways allow for easy access from room to room for anyone. If space is an issue try a pocket door. Furniture can be moved with ease through a wider doorway. A lever handle is much easier to operate than a knob, especially for someone who has their arms full. A lever type handle can be easily opened with the touch of an elbow or fist. Tile, hardwood, or low nap carpets are great flooring choices. These types of flooring are easier to maintain and allow easier maneuverability for a wheelchair or a



wheeled walker than high pile carpet would allow. With an open spacious floor plan the flow of traffic is much smoother and more convenient for everyone in a household. Lever switches placed at a lower height can be easily operated by people of all ages and abilities. Electrical outlets placed higher are easy to access without as much bending. AT devices such as remote fireplaces, ceiling fans and window blinds can be added conveniences.

Kitchens

Allow as much free floor space as possible. In most cases a 5' x 5' space allows two people to work together to prepare a meal. It also is adequate space for maneuverability in a wheelchair. A 5' x 5' turning space should be incorporated into all rooms. Cabinets with pull out shelving are a great source of convenience. By incorporating removable base cabinets, under the sink, with a 29" minimum clear knee space, one would be able to access the sink in a wheelchair, if need be. Be sure to use pipe protection to avoid burns. By using a platform to raise the height of a dishwasher, you decrease the amount of bending for a standing person and increase overall accessibility for a seated person. Appliances are becoming more and more user friendly. For example, the side by side refrigerator, refrigerators with the pull out tilt freezer on the bottom, front loading washers and dryers, stoves with the controls on the front, side swing oven doors. This type of universal design allows people to use the equipment with ease from a sitting or standing position. A young toddler can help with laundry or access the refrigerator just as easily as a teenager or a parent could. Varying height countertops not only add aesthetic appeal, but allow for all family members to participate in meal prep, including children.

Bathrooms

Lever handles for all sink and shower fixtures are more user friendly than knobs are. A knob is difficult to operate with wet or slippery hands or if you have limited movement in your hands. A lever can be easily operated with an open or closed fist. An adjustable height hand held shower makes bathing a child or pet an easy task. Grab bars in and around the tub and toilet area increase safety and ease of transferring safely. Grab bars can be attractive and double as towel racks. If grab bars are not needed now, by installing backing behind the tub walls, they can be easily added, if needed in the future.

A roll in shower stall is ideal. This type of shower stall can be accessed easily without having to step over an edge. A wheelchair could be rolled into this type of shower stall. A large step in shower is okay too. A pedestal sink allows for easy access in a wheelchair or using a walker. A taller toilet makes for a nearly effortless transfer from sit to stand.

Bedrooms

Closets with shelving at varying adjustable heights are a wonderful convenience. Good lighting and open space to maneuver are added benefits.

When building or remodeling it's more cost effective to add universal design features during the planning stages than to go back and add them at a later date. Many features can be built or added at little or no extra cost. For example, I found that lever door handles cost the same as the typical door knobs. Lever fixture faucets can be the same cost as knob fixtures. 36" interior doors cost approximately \$2 more than the typical 32" door. A no step entry with a sloping approach can be easier to do than steps because there is no setting up for curbs or steps involved.

By having an understanding of UD, builders can gain a competitive edge by offering valuable information to customers about UD and its benefits to people of all ages and abilities. UD features allow anyone to live in a home comfortably for as long as they desire. One is no longer forced to move out of their home due to a temporary or permanent injury or just from the normal aches and pains of aging. UD is priceless and benefits everyone. ♦

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