

Florida Housing's Approach to Universal Design and Visitability

Concepts and Features

The intent of the universal design concept is to make more housing usable by more people at little or no extra cost.

What is a universal design feature?

It is any component of a house that can be used by everyone regardless of their level of ability or disability. Universal features are generally standard building products or features that have been placed differently, selected carefully, or omitted. For example, standard electrical receptacles can be placed higher than usual above the floor, standard but wider doors can be selected, and steps at entrances can be eliminated to make housing more universally usable.

How is universal design approach different from “accessible housing?”

While accessible or adaptable design requirements are specified by codes or standards for only some buildings and are aimed at benefiting only some people (those with mobility limitations), the universal design concept targets all people of all ages, sizes, and abilities and is applied to all buildings.

In addition to accessibility requirements, Florida Housing requires the following construction features:

- Primary entrance door shall have a threshold with no more than a ½-inch rise;
- All door handles on primary entrance door and interior doors must have lever handles;
- Lever handles on all bathroom faucets and kitchen sink faucets;
- Mid-point on light switches and thermostats shall not be more than 48 inches above finished floor level; and

- Cabinet drawer handles and cabinet door handles in bathroom and kitchen shall be lever or D-pull type that operate easily using a single closed fist.

The following information outlines some basic concepts of Universal Design that can be incorporated into housing.

Universal Design Features in Housing – Structural

Entrances

- Stepless entrances, more than one is preferred. If only one, the stepless entrance should not be through a garage or from a patio or raised deck.
- Front door should have windows at a height that a person in a wheelchair can see outside before opening the door.
- Full-length sidelights, windows in doors, and/or windows nearby that allow people using wheelchairs to see who is at the door before opening it.
- Avoid ramps; if ramps are used, integrate into the design.
- Driveway and garage elevated to floor level, so that any climbing is done by the automobile. The slope of the route must be low enough to make traveling from parking to the door easier.
- One-half inch maximum rise at entrance thresholds.
- Minimum 5x5 level clear space inside and outside entry door that will allow for maneuvering while opening and closing door.
- Light outside entry door and motion-detector controlled lights.

Interior Features:

- 32" minimum clear door opening for all doorways. (36" wide doors.)
- Flush thresholds at all doorways.
- Clear floor space of 18" minimum beside door to provide space to move out of the way of the door's swing when pulling it open.
- Turning space in all rooms of 5' in diameter.

- At least 48" minimum width in hallways to maneuver.
- An open plan interior design that minimizes hallways and doorways and maximizes sight lines.
- Light switches 44-48" high, and thermostats 48" maximum height.
- Electrical outlets at beds and desks, four-plex boxes each side for computer and electronic equipment as well as personal use equipment.
- Electrical outlets at 18" minimum height.
- Electrical panel with top no more than 43" above floor located with a minimum 30"x48" clear floor space in front.
- Both audible and visual smoke detectors.

Windows:

- Windows for viewing 36" maximum sill height.

Sliding Doors:

- Exterior sliding doors: drop frame and threshold into subfloor to reduce height of track, or raise the finished floor to top of track.

Bathrooms:

- At least one bathroom must have one of the following three accessible bathing fixtures:
 1. Curbless shower that is a minimum of 60" x 36" or;
 2. Shower stalls that are between 32" x 60" and have a 30" x 48" clear floor space flush with the control wall, or;
 3. Tub with integral seat, waterproof floor, and a floor drain.
- Adequate maneuvering space in the bathroom: 60" diameter turning space in the room and 30"x40" clear floor spaces at each fixture. Spaces may overlap.
- Clear space (3') in front and to one side of toilet.

- Toilet centered 18" from any side wall, cabinet, or tub.
- Blocking in walls around toilet, tub, and shower for future placement and relocation of grab bars.
- Vanity/sink counter height 32" minimum.
- Knee space under sink 29" high. May be open knee space or achieved by means of removable vanity or fold-back or self-storing doors. Pipe protection panels must be provided to prevent contact with hot or sharp surfaces.
- Wall-hung sinks are acceptable with appropriate pipe protection. However, pedestal sinks are not acceptable.

Fixture Controls in Bathrooms

- Offset controls in tub/shower with adjacent clear floor space. This allows for access outside the tub/shower that reduces reaching and bending.
- Single-lever water controls at all faucets and fixtures.
- Anti-scald valves at tubs and showers.

Kitchens

- Clear knee space (minimum 29" high) under sink, counters, and cook tops. May be open knee space or achieved by means of removable base cabinets or fold-back or self-storing doors.
- Stretches of continuous countertops particularly between refrigerator, sink, and stove top.
- Accessible switches for disposal and range/cook top exhaust fan and light.

Laundry Area

- Clear floor space 36" wide across full width in front of washer and dryer and extending at least 18" beyond right and left sides.

Garages and Carports

- Extra length and width around cars

Decks

- Build deck at same level as house floor. Use decking materials that allow for adequate drainage.

Sources:

Center for Universal Design, North Carolina State University, Raleigh, NC; Center for Inclusive Design and Environmental Access (IDEA Center), University at Buffalo, State University of New York