

UNIVERSAL DESIGN CHECKLIST

Accessible Pathways & Entrances:

- Provide a clear obstacle free at least 36" wide walkway to front doorway from the vehicle parking area, and sidewalk.
- Provide at least one no-step entrance to the home which may be accomplished with careful grading of the walkway run.
- Walkway grading should not exceed a pitch or angle producing 1 foot of rise for every 20 feet in length.
- Install secure handrails on steps and porches where needed.
- Covered overhang at entranceway for inclement weather protection.
- Optional package shelf at front entranceway for parcels, groceries, etc.
- High-visibility address numbers, illuminated if possible.
- Front door should be 36" wide and a maximum ½" high threshold with beveled edges.
- Lever-set easy to grasp front door handle with dual-function release deadbolt preferred.
- Provide a 5'x 5' level clear space both outside and inside of main entry doorway.
- Full-length sidelights(s) at entry, or window in door to see visitors, or double peepholes one at normal height and the second at 42" height.
- Install a front doorbell able to be heard throughout house.

Interior Features Throughout:

- In multi-story homes consider locating a bedroom & bathroom on the ground floor , and also stacking two closets for a future elevator install.
- All doors to rooms and closets to be 34" to 36" minimum width.
- All floor thresholds should not exceed ½" height and have beveled top edges.
- Provide easy-to-grasp lever style door handles throughout @ 36"ht.c.c
- Use lightweight interior doors with about five-pounds of force to open.
- Provide 18" minimum space beside in-swing latch side of doorway.
- All hallways to be at least 42" to 48" minimum clear width. (minimum 48" clear width for VA Specially Adapted Housing)
- Use commercial grade, non-slip, easy to maintain flooring surfaces and low pile or loop carpeting over thin dense commercial type padding throughout the home. (No VOC materials).
- Avoid small throw rugs. Large area rugs should have anti-slip backing.
- Window sills in living, dining, and bedroom areas should be 30" height maximum from finished floor.
- Install non-glare skylights to provide daylighting wherever possible.
- Thermostats should have large print easily readable numbers and controls, and mounted at 53" height from finished floor to center of thermostat (48" height optional for wheelchair user).

- ___ Provide adjustable height poles and shelves in all closets.
- ___ Avoid floor elevation changes in rooms throughout house.
- ___ Select furniture that has rounded corners, and properly scaled for each room to allow easy movement. Select furniture of the correct firmness, and easy to get in and out of.
- ___ Employ the use of color contrast between door jambs & adjacent walls. Use light colors, or off whites on all walls. Avoid dark colors.
- ___ Install automatic-on, automatic-off night lights in bathrooms and pathway leading from bedrooms to bathrooms.
- ___ Select high energy-efficient appliances and products throughout the home.
- ___ Choose all products and finishes that minimize maintenance and upkeep. Select materials that do not produce VOC, volatile organic gases.

Lighting and Electrical Throughout the Home:

- ___ Provide good lighting to illuminate exterior paths to entrances and especially at all entrances.
- ___ All areas and rooms to have high quality Energy Star rated fluorescent general illumination and task lighting. Light fixtures to have electronic ballasts, and linear or compact fluorescent lamps in 3500k to 4100k color range.
- ___ All electrical wall outlets to be grounded type and mounted at 12" to 16" height from finished floor to center of outlet.
- ___ All light switches to be large rocker-type, preferably illuminated type. Locate at the entrance of each room, within easy reach, and mounted at 42" height from finished floor to center of switch.
- ___ Install energy-saving "automatic vacancy sensor" wall switches in bathrooms and closets with a manual-on or motion sensor automatic on, and automatic time-delay off feature when the room or closet becomes vacant. This also applies to exhaust fan switches in bathrooms and laundry.
- ___ Provide telephone jacks in all rooms mounted at 12" to 16" height from finished floor to center of outlet. Consider a wall mounted phone in bathroom, laundry, and kitchen for convenience and safety.
- ___ All light fixtures and window treatments should provide glare-free lighting.
- ___ Install automatic-on night lights in bathrooms and pathway leading from bedrooms to bathrooms.
- ___ Consider installing glare free skylights & light tubes to bring in natural daylight.

Kitchen:

- ___ Provide a 5' diameter clear open space in kitchen.
- ___ An L or U-shaped counter with the sink, cook-top, and oven works best and allows moving heavy or hot items safely. Countertop should be 34" to 36" height from finished floor.
- ___ Vary kitchen counter heights when applicable, for easy use by both tall and short people.
- ___ Use easy to maintain countertops such as laminate, granite, quartz, or other durable materials. Try to avoid very dark colors, and ceramic tile as the tile grout collects mold and is difficult to maintain.

- ___ Radius or bevel all counter corners for safety and consider contrasting border edge color to improve visibility for anyone with sight impairment.
- ___ Provide at least 18" to 24" of clear countertop surface at both sides of cook-top and sink, and at least 24" of clear countertop surface at one side of refrigerator and built-in oven.
- ___ Cabinets should have VOC free box construction. Avoid materials containing Formaldehyde. All lower cabinets to have full extension drawers instead of doors and fixed shelves, except under sink and cooktop which should be finished and fully accessible.
- ___ Sink & cook-top lower cabinets to have a clear open space underneath approximately 30"wide x 27"high x 19" deep.
- ___ Cabinet doors and drawers should be easy to open and have easy-to-grasp handles or knobs.
- ___ Use 170 degree hinges on cook-top and sink cabinet doors to allow maximum barrier-free access.
- ___ Heat insulate all exposed waste and hot water lines.
- ___ Mount upper cabinets at 15" height from counter top instead of standard 18" height.
- ___ Consider the option of using glass door upper cabinets for good content visibility.
- ___ Dishwasher unit to be elevated at least 6" to 9" height from finished floor.
- ___ Wall-mounted oven should be installed at height so that center of control panel is about 48" from finished floor, and center shelf is about level with adjacent countertop. Select self-cleaning and convection features. Oven should have easy to read and operate controls.
- ___ Provide heat resistant surface counter-top adjacent to oven for easy and safe transfer of hot dishes from oven.
- ___ Consider using a free-standing microwave unit set on counter-top for ease of use. Over-range units are too high and potentially dangerous.
- ___ Cook-top to have easy-to-reach, see, and grasp front located controls.
- ___ Floors, walls, and cabinet sides under sink and cook-top to have finished surfaces.
- ___ Sink should be minimum 18 gauge stainless steel with 6" deep basins and drains offset to rear..
- ___ Faucet to be single-lever, or ergonomic dual handle, high arc type with pull-out spray head.
- ___ Install whole-house anti-scald valve at outlet line side of main hot water heater, set at 120 degrees maximum.
(100 degrees for people with spinal cord injuries)
- ___ Install exhaust fans with correct airflow capacity, very quiet operation features, and Energy Star rating.
- ___ Mount kitchen exhaust fan control switch at front of counter or where accessible for easy reach when seated.
- ___ Provide electronic ballast fluorescent lighting under upper cabinets.
- ___ Provide fluorescent recessed or surface ambient lighting fixtures with electronic ballasts and lamps in 3500k (preferred) to 4100k range in kitchen for good even general illumination.
- ___ Select easy-to-maintain, water and slip resistant floor surface materials in light color which is preferred for kitchen, laundry, and bathrooms.
- ___ Mount a grease fire fighting type fire extinguisher in an easy-to-reach location in kitchen. Have unit periodically serviced.

Bathrooms:

- ___ Bathroom entry door should be 34" to 36" width.
- ___ Provide a 5' diameter clear space in bathrooms, or a T-shaped 3'x 5' with 2'x5'-T space.
- ___ Resilient floor surface material is recommended such as contract or commercial grade, no-wax, slip-resistant sheet vinyl in light color. Try to avoid using ceramic tile for floor, counters, and shower walls.
- ___ Provide in-wall plywood or blocking reinforcement to allow later installation of grab-bars with 250# load support capacity around all tub, toilet, and shower walls.
- ___ Install heavy duty towel bars securely mounted in case of need to grasp during a fall.(250# minimum load support)
- ___ Bathroom sink cabinets to have 30" wide x 27"high x 19" deep clear open space underneath to allow a seated person to easily use.
- ___ Insulate exposed hot water and waste lines under sink, or hide behind easily removable panel.
- ___ Single lever or ergonomic dual lever sink faucet with anti-scald valve in hot side set at 120 degrees maximum. (If not already installed in main hot water heater outlet line) (set at 100 degrees for people with spinal cord injuries)
- ___ Mount mirrors and medicine cabinet with bottoms directly above sink rear backsplash height to allow easy use when seated.
- ___ Bathtub to have non-slip bottom, and a 24" minimum full length seated drying space alongside when possible.
- ___ Offset mount bathtub lever type controls near to the entry side of the tub, when possible to facilitate use.
- ___ Install an anti-scald valve set at 120 degrees maximum for hot water line in tub. (If not already installed in main hot water heater outlet line)
(set at 100 degrees for people with spinal cord injuries)
- ___ Provide a curb-less shower unit with minimum 36" wide by 60" long non-slip base, and sufficient room for an optional 48" x 60" unit.
- ___ Offset mount single lever type shower control mounted near entry to shower. Mount control valve at 38" to 40" height measured from center of control knob or handle to finished floor.
- ___ Shower spray unit to have a 6' long flexible hose and detachable hand held shower with water shut-off button or lever on head. Mount on a secure heavy duty vertical slider bar unit, able to support a 250lb load.
- ___ All shower walls to have "in-wall" plywood or blocking reinforcement to allow later installation of grab-bars (minimum 250lb load support capacity).
- ___ Avoid using ceramic tile in bathrooms to prevent grout mold buildup, especially shower, and tub surround. Select materials that facilitate ease of cleaning and maintenance.
- ___ Install exhaust fan with correct airflow capacity, and quiet 1.0 or less sones noise level operation, controlled by a separate vacancy sensing switch with an automatic motion sensing on, or "manual-on and automatic timed-delay off feature".
- ___ Lighting: Linear or compact fluorescent fixtures using 2-lamp, 48" long surface mounted wrap around acrylic diffuser light fixture, with electronic ballast and T8, 3500k to 4100k lamps, or decorative wall mounted compact fluorescent light fixture using a minimum of (4) - 13 watt compact fluorescent lamps, or

(2) 26 watt compact fluorescent lamps. Mount directly above vanity mirror. Recessed "can" type light fixture above shower and/or tub light fixtures to be moisture resistant type with compact fluorescent lamp.

___ Toilet to be elongated 16-1/2" to 17-1/2" height to top of seat, "comfort height" type unit.

Bedrooms:

- ___ All closets should have height adjustable poles and shelving
- ___ Provide good fluorescent lighting in all closets . Mount switch directly adjacent to and outside the closet doorway for ease of use
- ___ Closet doorway to be at least 36" clear opening width minimum.
- ___ Provide high quality fluorescent ceiling mounted general illumination light fixtures in each bedroom in addition to table-top and wall mounted task lighting. Consider Energy Star fan/light combo units.
- ___ Provide 36 "clear space on two sides of the bed and 60" clear on the closet side.
- ___ Provide a telephone jack near the bed in the master bedroom.
- ___ Bed mattress height should not exceed 22" from finished floor to mattress top for easy entry and exit.

Laundry & Utility Room:

- ___ Select a washer and dryer with front-load and front mounted, easy-to-use and read controls. Platform mount the washer and dryer approx. 9" from finished floor.