

Universal Design Products

Creating a User Friendly Home

Family and Consumer Sciences, Universal Design, The Ohio State University, fcs.osu.edu/resources/universal-design

The following features will make your home more accessible to all who live there or who come to visit. All persons do not need all features. This checklist is designed to assist those who are building or remodeling a home to think about universally designed features.

General Features Throughout the Home

- ___ 1. Activity areas for eating, sleeping, and bathing should be on one floor that can be reached without using stairs. Additions to the house should not require going up or down a step.
- ___ 2. Doorways to most rooms should be at least 32 inches wide (have a 32 inch clear passage, preferably 36 inches wide).
- ___ 3. A lever style door handle is easier to use than a round knob.
- ___ 4. Hallways at least 36 inches wide (preferably 48 inches wide) allow access to bedrooms and bathrooms by persons using mobility devices.
- ___ 5. Light switches should be located within easy reach at the entrance of each room and should be reachable from a seated position (36 to 42 inches from the floor).
- ___ 6. Electrical outlets should be located at a height reachable from a seated position (15 or more inches from the floor) and in enough locations to eliminate the need for extension cords.
- ___ 7. At least one telephone should be located where it would be accessible to a person who is unable to stand. Telephone jacks in the kitchen, living area, and bedroom allow residents to install phones in accessible locations that meet their health needs.
- ___ 8. Sills of windows in living, dining, and bedroom areas should be no higher than 30 inches so that a person seated or lying in bed can see outdoors. Windows should be easy to open.
- ___ 9. There should be good even lighting throughout the house. Light fixtures, lamps, and window treatment should be selected and placed to avoid glare on smooth surfaces.
- ___ 10. Smoke detectors should be located on each floor of the house, especially near the bedrooms.
- ___ 11. Thermostats should be located such that a seated person can adjust them (no higher than 48 inches from the floor) with readable numbers, large print, and good contrast.
- ___ 12. Flooring material should be hard even surfaces or tightly woven, low pile carpeting over a thin pad.



Entrances

- ___ 13. At least one entrance of the home should be usable without going up or down steps. For some residents, a ramp may be needed with a pitch of no greater than 1 to12 (for every 1' in rise, 12' in length) and preferably 1 to 20.
- ___ 14. Entry ways should be protected from rain, snow, and ice. An attached garage with automatic door opener is ideal. The entrance between garage and house should not require going up steps.
- ___ 15. Thresholds should be level or beveled and no more than ½ inch higher than the floor.
- ___ 16. The doorway should have a clear, unobstructed opening at least 32 inches in width and preferably 36 inches wide.
- ___ 17. The door should have a secure lock that can be reached by a seated person.



Kitchen

- ___ 18. Features that make sinks more accessible include single lever controls and a sprayer with a flexible hose. Also, controls and faucets mounted on the side of the sink rather than the back are easiest to reach by seated persons.
- ___ 19. Cabinet doors and drawers should be easy to open. D-shaped handles are easy to use even if fingers are stiff or sore.
- ___ 20. Storage that includes pull out shelves, baskets and lazy susans make items more accessible.
- ___ 21. Wall-hung cabinets should be at the appropriate height for the user. If they are too high, much of the space will not be useable by persons, who are small, seated or have limited strength.
- ___ 22. Cooktops should be the appropriate height for the user. Drop-in ranges or cooktops can be installed at different heights.
- ___ 23. Wall-mounted ovens can be installed at any height to meet the user's needs; and wall ovens with side-opening doors are ideal.
- ___ 24. Microwave ovens with side opening doors are safe and easy for most people to use.
- ___ 25. Control knobs on the range and oven should be front-mounted or side-mounted to eliminate the need to reach over hot burners. Appliance dials 1-1/2 inches or greater in diameter are easiest to turn. Controls should have readable settings and directions with large print and good contrast.
- ___ 26. Counter space should be located near all ovens for placing hot dishes.

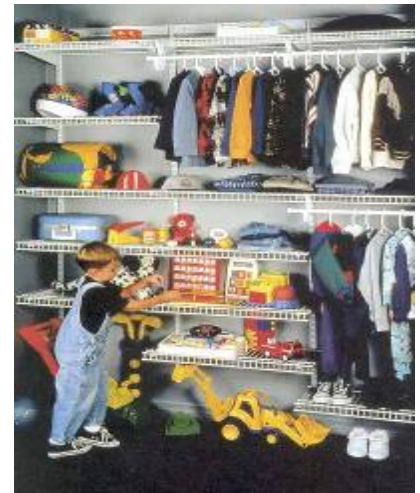


- ___ 27. Side by side refrigerator/freezers have more accessible space.
- ___ 28. Kitchens may have some low work surfaces for preparing a meal while seated. For example, a pull-out work surface such as a cutting board located 24-29 inches above the floor could serve this purpose.
- ___ 29. Below a sink or cooktop, base cabinets with removable shelves and no center stile can be used by a seated person if the cabinet doors are open.
- ___ 30. Floors and walls under the sink and cooktop should be finished in the event that any cabinets need to be removed at a later time.
- ___ 31. Color contrasts at the front and back edges of counter tops serve as visual cues to persons with impaired vision.
- ___ 32. A fire extinguisher should be located in an easy-to-reach place in the kitchen.



Bathroom

- ___ 33. A bathroom should be located near a bedroom.
- ___ 34. Bathroom doors should be at least 32 inches wide and open out so that if a person falls in the bathroom, they do not block the door.
- ___ 35. Bathrooms with clear floor space at least 5 feet by 5 feet can be used most easily by person in wheelchairs.
- ___ 36. Reinforced walls around the tub, toilet, and shower allow grab bars to be installed if they become necessary. Grab bars should be able to support 250 pounds. Towel bars are not usually safe to be used as grab bars.
- ___ 37. Handles on faucets should have levers, rather than knobs, for easier turning.
- ___ 38. Hose-type detachable, handheld showerheads are convenient for a standing or seated person.
- ___ 39. Bathroom sinks and vanities that are open underneath allow seated person to use them more easily.
- ___ 40. A shower or tub should have a seat, either built-in or set in on the tub/shower.
- ___ 41. The mirror and medicine cabinet can be hung low enough to be used from a seated position. Bathtub water controls and faucets are often easier to reach if they are located off-center, near the entry side of the tub.



Bedroom

- ___ 42. A telephone and light switch should be within easy reach of the bed.
- ___ 43. Some closet rods that are adjustable or positioned low enough to be reached from a sitting position (no higher than 48 inches from the floor).

Laundry

- ___ 44. Laundry areas located on the main floor help to avoid trips to the basement.
- ___ 45. Front loading washers and dryers may be easier for a seated person to use, although top loading models are easier for a person who is standing. Front loading appliances can be mounted on risers for easier use by a standing person. Front or side controls on the washer and dryer are more accessible to a seated person than controls mounted at the back.
- ___ 46. A table or counter located near the washer and dryer at a height usable by a seated person (28 to 30 inches) is useful for sorting or folding clothes.

Stairs

- ___ 47. All stairs should have sturdy handrails the entire length of both sides. If extended beyond both top and bottom of the stairs, they provide more security to the user.
- ___ 48. Light switches should be located at both the top and bottom of stairs, and the stairway should be adequately lit.
- ___ 49. Steps should have rounded nosings (edges) with sloping risers. Step height (risers) should be no greater than 7 inches high (preferably 6 inches) and steps should be at least 10 inches deep to fit most shoe sizes.



The features listed above are called Universal Design Features. Universal design accommodates varying needs throughout a person's life. These features are safe and easy for all users to operate and maintain, and adaptable for a variety of users.

Source: Marilyn Bode, Housing Specialist, Kansas State University Cooperative Extension Service, 1996.

For more information, visit:
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