

# CREATING ACCESSIBLE HOMES



There should be good, even lighting throughout

the house. Light fixtures, lamps, and window treat-

ments should be selected and placed to avoid glare

Smoke detectors should be located on each floor

side of the sink rather than the back are easier for

seated persons to reach.

on smooth surfaces.

The following features will make a home accessible to all who live there or who come to visit, no matter what their age or ability is. All persons do not need all features.

This checklist is designed to aid persons who are building or remodeling a home to think about accessibility features. Incorporating these features into your house design may mean that modifications will not be necessary should a household member become ill or disabled.

room areas should be no higher than 30 inches so

that a person seated or lying in bed can see out-

doors. Windows should be easy to open.

### of the house, especially near the bedrooms. Thermostats with readable numbers, large print, and good contrast should be located so a seated person can adjust them (no higher than 48 inches from the floor) General Features throughout the House Activity areas for eating, sleeping, and bathing Flooring materials should be hard, even surfaces or tightly woven, low pile carpeting over a thin pad. should be on one floor that is reached without using stairs. Additions to the house should not require going up or down a step. **Entrances** Doorways to most rooms should be at least 32 inches wide (have a 32-inch clear passage), At least one entrance to the home should be usable preferably 36 inches wide. without going up or down steps. For some residents, a ramp may be needed with a pitch of no A lever-style door handle is easier to use than a greater than 1 to 12 (for every 1 foot in rise, round knob. 12 feet in length) and preferably 1 to 20. Hallways at least 36 inches wide (preferably Entryways should be protected from rain, snow, 48 inches wide) allow access to bedrooms and and ice. An attached garage with automatic door bathrooms by persons using mobility devices. opener is ideal. The entrance between the garage Light switches should be located within easy reach and the house should not require going up steps. at the entrance of each room and should be reach-Thresholds should be level or beveled and no able from a seated position (36 to 42 inches from more than ½ inch higher than the floor. the floor). The doorway should have a clear, unobstructed Electrical outlets should be located at a height opening at least 32 inches in width and preferably reachable from a seated position (15 or more 36 inches wide. inches from the floor) and in enough locations to eliminate the need for extension cords. The door should have a secure lock that can be reached by a seated person. At least one telephone should be located where it will be accessible to a person who is unable to stand. Telephone jacks in the kitchen, living area, Kitchen and bedroom allow residents to install telephones in accessible locations that meet their health needs. Features that make sinks more accessible include single lever controls and a sprayer with a flexible Sills of windows in the living, dining, and bedhose. Also, controls and faucets mounted on the

 Cabinet doors and drawers should be easy to open. D-shaped handles or magnetic closures are easier to use.  Storage that includes pullout shelves, baskets, and lazy susans makes items more accessible.		Color contrasts at the front and back edges of counter tops serve as visual cues to persons with impaired vision. Light-colored counter tops reflect available light and are desirable for persons with limited vision.
Wall-hung cabinets should be at the appropriate height for the user. If they are too high, much of the space will not be usable by persons who are small, seated, or have limited reach. Consider having them installed 15 inches above the counter top rather than 18 inches.		Adequate task lighting is needed in the kitchen. Fluorescent lighting installed underneath wallhung cupboards provides light for working at the counter top.  A fire extinguisher should be located in an easy-to-reach place in the kitchen.
Cooktops should be at the appropriate height for the user. Drop-in ranges or cooktops can be installed at the desired height. For short or seated users, the most convenient height may be 30 to 32 inches.  Wall-mounted ovens can be installed at any height	Bath:	A bathroom should be located near a bedroom.  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.  Bathrooms with clear floor space, at least 5 feet by 5 feet, can be easier for persons in wheelchairs to use.  Grab bars should be considered a safety feature to prevent falls. Reinforcements in the walls around the tub, toilet, and shower allow grab bars to be installed. Grab bars should be able to support 250 pounds. Towel bars are not usually safe to be used as grab bars.  Handles on faucets should have levers rather than knobs for easier use.  A shower or tub should have a seat, either built-in
 to meet the user's needs, and wall ovens with side- opening doors are ideal. Self-cleaning ovens aid persons with limited strength.  Microwave ovens with side-opening doors are safe and easy for most people to use.		
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 1½ inches or greater in diameter are easier to turn. Controls should have readable settings and directions with large print and good contrast.		
 Counter space should be located near all ovens for placing hot dishes.		
 Side-by-side refrigerator/freezers have accessible space in both the refrigerator and freezer sections for persons with limited reach. Self-defrosting units are easier for persons with limited strength to maintain.		or set-in, the tub/shower.  Hose-type detachable, hand-held shower heads are convenient for either a standing or seated person to use.
 Kitchens may have some low work surfaces for pre- paring a meal while seated. For example, a pullout work surface, such as a cutting board, located 24 to		Bathroom sinks and vanities that are open underneath allow seated persons to use them easily.  The mirror and medicine cabinet can be hung low
 30 inches above the floor can serve this purpose.  Floors and walls under the sink and cooktop should be finished in the event that any base cabinets need to be removed at a later time to lower the work		enough to be used from a seated position.  Bathtub water controls and faucets are sometimes easier to reach if they are located off center, near the entry side of the tub.
 surfaces or create knee space for seated users.  Below a sink or cooktop, base cabinets with no shelves or a center stile can be used by a seated person when the cabinet doors are open.		Nonslip surfaces and flooring in the bathroom helps prevent falls.  Turning the water heater down to 120 degrees prevents burns.

# **Bedroom**

- A telephone and light switch should be within easy reach of the bed.
- Some closet rods should be adjustable or positioned low enough to be reached from a sitting position (no higher than 48 inches from the floor).
- \_\_\_\_ There should be an uninterrupted path from the bed to the bathroom, free from throw rugs, cords, and other obstacles. A night light in this area is a safety feature.

# Laundry

- Laundry areas located on the main floor help to avoid trips to the basement.
  - 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 of the appliance.
- 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

- All stairs should have sturdy handrails the entire length of both sides. If the rails extend beyond both top and bottom of the stairs, they provide more security to the user.
- Light switches should be located at both the top and bottom of the stairs, and the stairway should be adequately lit.
- 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 here are called universal design or lifetime design features. Universal design accommodates varying needs throughout a person's life. These features are safe and easy for all residents to operate and maintain.

Prepared by Marilyn Bode, Extension Housing Specialist, Department of Apparel, Textiles, and Interior Design, Kansas State University. 4 THENEAR ENVIRONMENT

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

Publications from Kansas State University are available on the World Wide Web at: http://www.oznet.ksu.edu

Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. In each case, credit Marilyn Bode, "Creating Accessible Homes," Kansas State University, June 1996.

## Kansas State University Agricultural Experiment Station and Cooperative Extension Service

MF-2213 June 1996

It is the policy of Kansas State University Agricultural Experiment Station and Cooperative Extension Service that all persons shall have equal opportunity and access to its educational programs, services, activities, and materials without regard to race, color, religion, national origin, sex, age or disability. Kansas State University is an equal opportunity organization. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Marc A. Johnson, Director.

File code: Health (Human)–2 NP 10-99