

ADAPTING THE HOME

for independent living for
the elderly and handicapped

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ADAPTING THE HOME

for independent living for the elderly and handicapped

Sue Young*

A feeling of independence is important to everyone, including the elderly and handicapped. The majority of elderly persons in Texas own their homes and wish to live independently as long as health permits. The self worth of the handicapped person is strengthened when he can do for himself. Much can be done, with little effort or cost, to increase safety, convenience and comfort in the home.

Lighting

Many elderly persons require about twice the level of illumination as do younger people with good vision. While more lighting is needed, the elderly are especially sensitive to glare. Glare can be minimized by using frosted or shaded bulbs. Adapting to dark and light takes up to three times as long for the elderly. This transition can be aided by night lights in bedrooms, bathrooms and hallways. Incandescent lighting is recommended as the flicker of fluorescent lighting is troublesome. Avoid exposed bulbs as the after image hinders vision.

Wall fixtures and ceiling lights that pull down make bulb changing easier for wheelchair users and removes the temptation for an older adult to stand on a chair to change a ceiling light bulb. Three-way switches, beginning at the front door, eliminate groping in the dark.

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Luminous switches are also helpful. Light switches can be lowered for wheelchair users. Outlets placed 28 or 30 inches off the floor reduce bending and stooping. Bed-side lamps, well-lighted work areas and ample light at outside doors, walks, steps and porches are a must.

Color

Painting a room is an inexpensive way of adding light and a feeling of warmth. Light colors reflect the light. In addition, a room painted light yellow, orange or warm white gives an illusion of warmth. It is a good idea to contrast the color of furniture with walls and floors. For example, color may be used to define footstools to reduce the chance of tripping over them. Contrast in color can distinguish stairs from corridors and treads from risers on stairs.

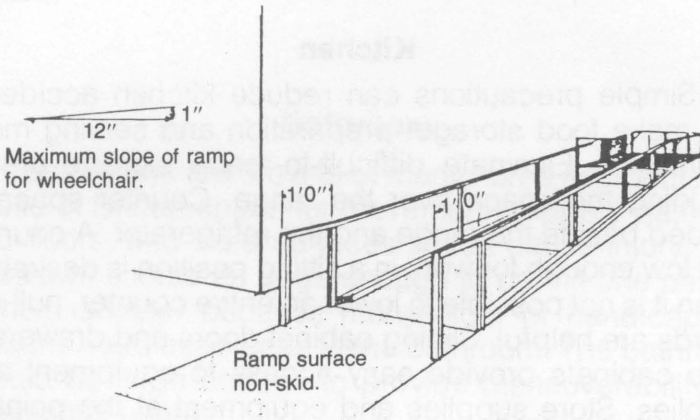
Floors

Floors should be as smooth and level as possible. Changes in elevation between rooms are difficult for wheelchair users to negotiate and may contribute to falls by elderly. Weatherstrip the bottom of doors to eliminate floor thresholds which hinder wheelchair movement.

Wall-to-wall carpet (preferably short pile) provides warmth and comfort while reducing noise which is bothersome to many elderly persons. However, carpet may be a problem for people in wheelchairs. It is best to avoid carpeting on stairs because it increases the size of the step and may contribute to loss of balance. Avoid indoor-outdoor carpet on stairs and ramps because it can be quite slick.

Select floor coverings that will not absorb grease and become slippery. Floors not only should be non-skid but should look non-skid; a slippery look is psychologically dangerous. Unwaxed vinyl is an ideal floor covering for wheelchair users.

Avoid throw rugs as they are wheelchair obstacles and are easy for the elderly to trip over. Handrails, desirable along hallways, should be designed so clothing does not catch. Wheelchair users need gradual pitch on ramps — 1 inch per foot is maximum.



A gently sloping ramp, 1 inch or less in height for each 12 inches of horizontal length, allows best access for wheelchair users.

Doors and Doorways

Avoid doors that swing shut with enough force to push an unsteady person off balance. Pocket doors are easier to operate than hinged ones. Lever type door knobs are easiest to grasp. Locks with a safety release on all interior doors are desirable so that doors may open from either side in an emergency. Doorways and halls should be wide enough to accommodate the operation of a wheelchair. A 36-inch wide hall allows a wheelchair to move forward and to back up, but not to make a complete reverse-direction turn. For an easy, continuous-movement turn, 46-inches is needed. Peepholes placed at eye level in exterior doors increase security.

Windows

Windows should open and close easily. Sills 30 to 32 inches high reduce bending and stretching to open windows and minimize chances of falls against glass. Window sills of this height are low enough for a person to see out from a sitting or prone position. They also provide an easy escape from fire.

Kitchen

Simple precautions can reduce kitchen accidents and make food storage, preparation and serving more convenient. Eliminate difficult-to-reach storage areas, including the space over the range. Counter space is needed beside the range and the refrigerator. A counter built low enough for work in a sitting position is desirable. When it is not possible to lower an entire counter, pull-out boards are helpful. Sliding cabinet doors and drawers in base cabinets provide easy access to equipment and supplies. Store supplies and equipment at the point of first use. Simplify life by getting rid of gadgets that are not used or needed.

A dining table in the kitchen is convenient. It should be placed by a window if possible because eating alone without something pleasant to look at discourages the appetite. Movement around the table should be easy. The kitchen table can also serve as work space where one may be seated.

Appliances

Electric ranges are safer than gas because elements that glow are less likely to be left on by mistake. Burner controls at the front of the range prevent reaching over a hot burner to make adjustments.

Place the washer and the dryer in the bathroom, kitchen or a rarely used closet to reduce trips into a cold garage during the winter.

Heating and Cooling

The effect of extreme heat and cold is greater on older people than on younger. A temperature of 75 to 80 degrees is comfortable for most elderly people. Draftless uniform distribution of heat is desirable. Warm floors are important but radiant panels should be avoided as they aggravate foot trouble. Generally, air conditioning is not needed or desired by the elderly, except in extreme climates.

Bathroom

Bathrooms are the site of many home accidents because of limited space for movement, slippery bathtubs and floors, and hard surfaces which cause injury. The bathroom should be large enough to permit one person to help another because many older or handicapped persons need assistance in the bathroom. The bathroom should be large enough to provide maneuverability for wheelchair users.

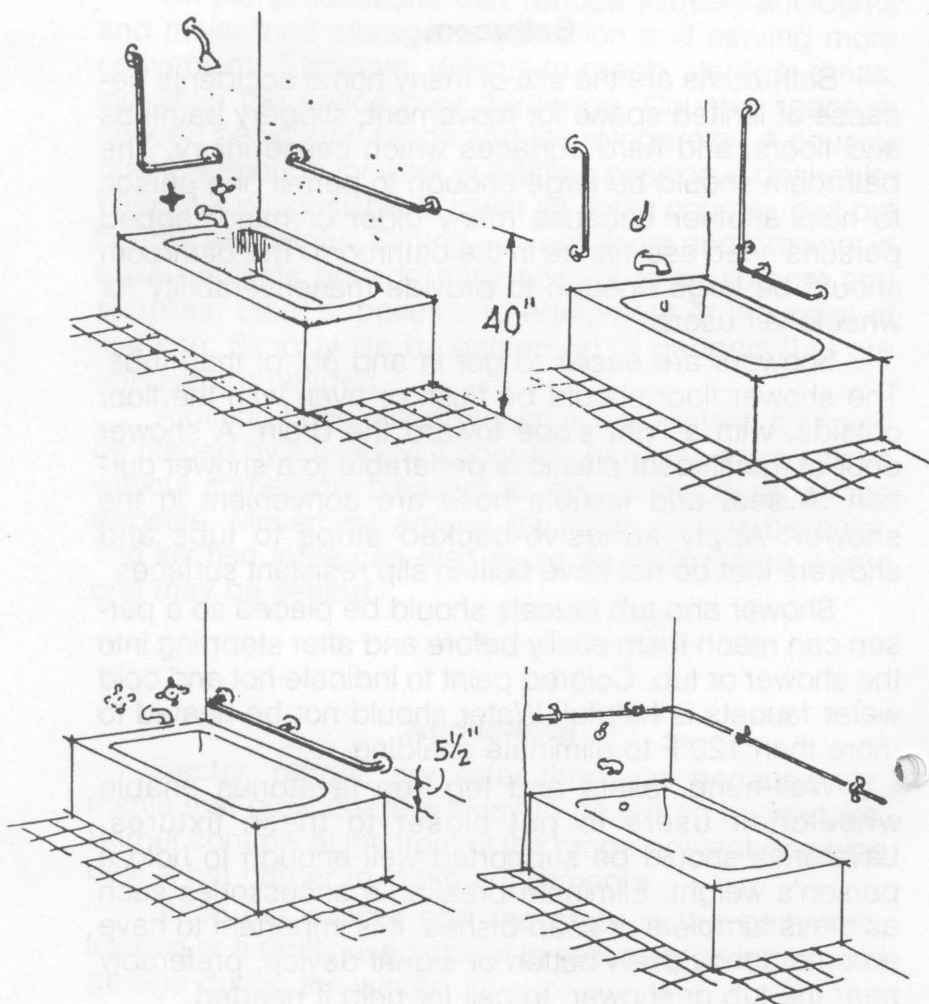
Showers are easier to get in and out of than tubs. The shower floor should be flush or even with the floor outside, with a light slope toward the drain. A shower door of translucent plastic is preferable to a shower curtain. A seat and flexible hose are convenient in the shower. Apply adhesive-backed strips to tubs and showers that do not have built-in slip resistant surfaces.

Shower and tub faucets should be placed so a person can reach them easily before and after stepping into the shower or tub. Colored paint to indicate hot and cold water faucets is helpful. Water should not be heated to more than 120°F to eliminate scalding.

Wall-hung toilets and leg-free lavatories enable wheelchair users to get closer to these fixtures. Lavatories should be supported well enough to hold a person's weight. Eliminate breakable accessories such as glass tumblers or soap dishes. It is important to have an emergency push button or signal device, preferably near the tub or shower, to call for help if needed.

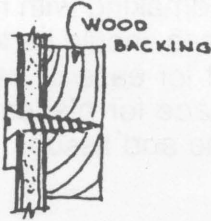
Low-rimmed bathtubs with grip handles and a pole mounted on the wall beside the tub are ideal. Grab bars must be secure, preferably attached to wall studs. A bar at the edge and one over the tub provide security from falls. Sturdy towel bars can be attached to serve as grab bars.

Grab Bars — Suggested Locations at the Tub



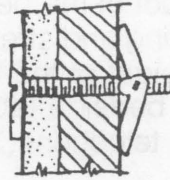
Fastening Devices for Grab and Towel Bars

Plaster on Lath



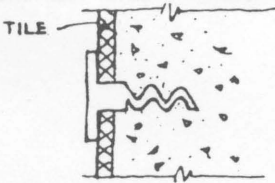
Wood screw in wood backing

Dry Wall on Wood Studs



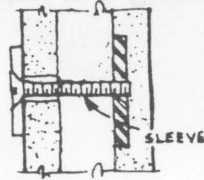
Spring wing toggle bolt

Structural Block



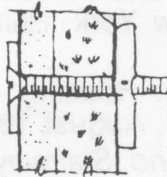
Integral anchor

Plaster Partition on Metal Studs



Through wall plate
(install before plaster)

Plaster on Block



Tumbler toggle bolt

Bedroom

Unobstructed passage from the bedroom to the bath is important. Bedrooms should be large enough to permit elderly or handicapped persons to move about with ease. Approximately 22 inches of space at the sides and foot of the bed allows for bedmaking with minimum reaching and stretching. Mattresses should be level with the height of the wheelchair seat for ease of transfer. A large bedside table provides space for placement of a lamp, telephone, books, medicine and tissues.

Adaptation — Neither Expensive Nor Difficult

Most of the recommended safety features can be installed with relative ease and little expense. Yet these changes can contribute greatly to the independence, well-being and happiness of the elderly and handicapped.

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