

Welcoming Home

A home with a no-step entrance is easier for everyone to use. Exterior steps become a nuisance or a safety hazard when carrying groceries, moving furniture, pushing a baby stroller, or hobbling on crutches – especially during Iowa’s icy winters. Also, an entrance with steps are not “visitable”¹ by friends or neighbors who use wheelchairs.

This publication will help you identify ways to make the entrance of your home say “welcome.” You will learn practical ideas for making your entrance more usable and appealing, whether building, remodeling, or making minor improvements.

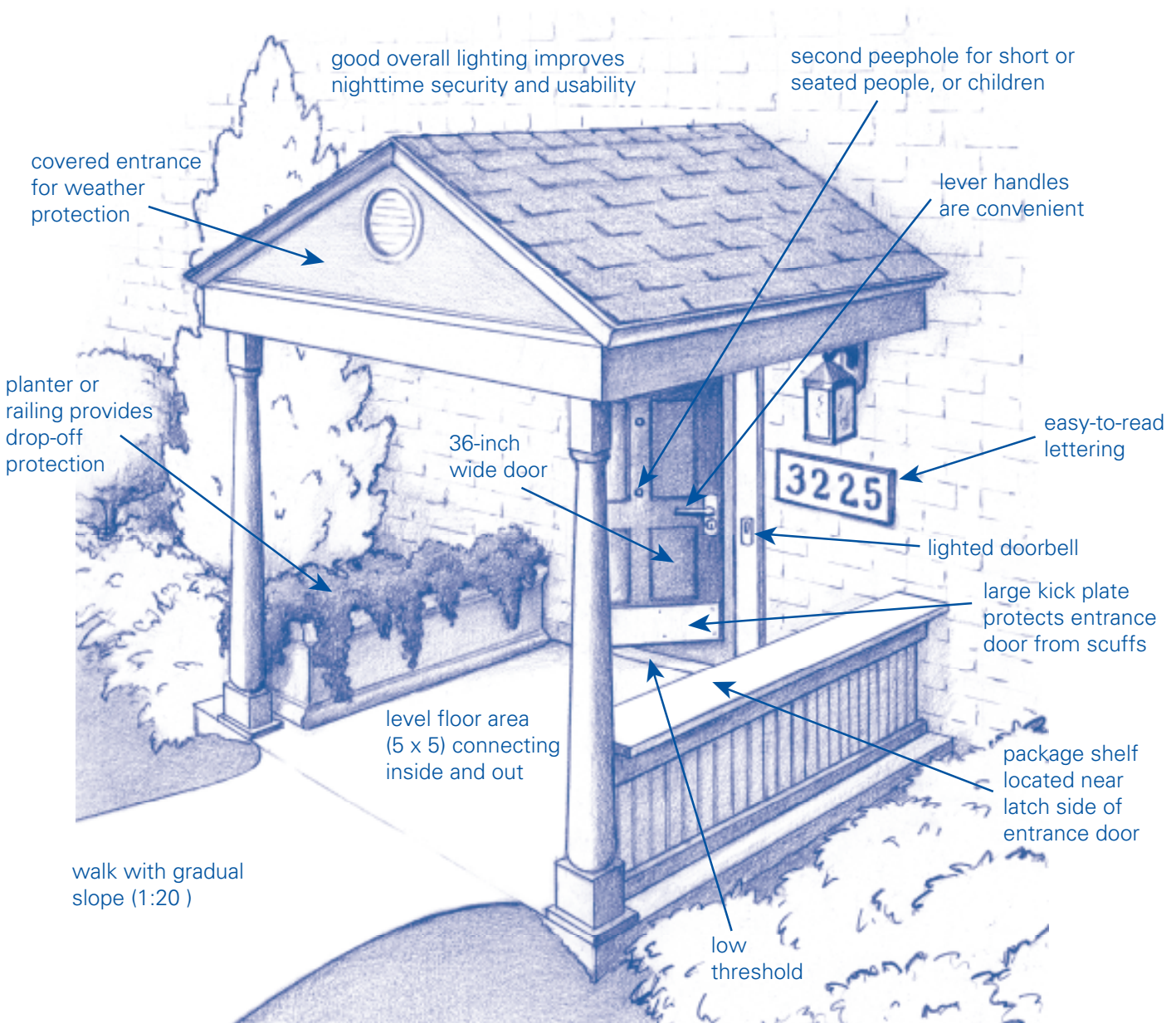


Figure 1. No-step entrance

Essential features for a welcoming home include a no-step entrance (level floor space connecting inside and out), maneuvering space both inside and outside the entrance door, a low threshold, and a wide door (see Figure 1).

Recommended features that can make the entrance more welcoming include weather protection, lever handle on door, package shelf, edge protection for drop-off area of porch, viewing aids, lighting for doorbell and lockset, kick plate for door, easy-to-read lettering for house numbers and signs, and communication devices.

Essential Features

No-step Entrance: This does not mean a ramp. Use a gradual slope (1:20) to connect the walk to the entrance porch or stoop. Earth fill can be used to replace steps and make a smooth connection between walk and porch.

Construct the porch floor so that it is level with the interior floor of the home. When repairing or replacing the porch landing, the level change can be minimized by raising the exterior level to within ½-inch or less of the interior floor level.

Be sure to slope surfaces away from the home and use other waterproofing techniques to avoid moisture problems around the door. Consult with a local builder for finishing details.

Maneuvering Space: Plan for a 5 x 5 foot space both inside and outside the entrance door. This size will allow adequate maneuvering space for people who use a cane, walker, or wheelchair to easily get through the door. Be sure two feet of open floor space is available on the latch side of the door to allow space for a wheelchair user to reach the door handle.

Low Threshold: Make the threshold as flat as possible. Up to a ½-inch threshold can be used if the edge is beveled at 45 degrees. In new construction, the door sill can be set onto the subfloor so the finished flooring is nearly flush with the top of the sill.

Wide Door: Use a door that is at least 36 inches wide to provide a minimum clear opening of 32 inches. This makes it easier to move furniture in and out of the home and also allows a wheelchair user to maneuver through the doorway without scraping elbows and knuckles.

Recommended Features

Weather Protection: Provide a covered entrance to protect from rain and snow. A roof, canopy, or awning can be used for shelter when unlocking the door or greeting guests.

Lever Handle: Replace round door knobs with lever handles. They are much easier to operate, especially when hands are full of packages. Lever handles are available in a wide range of prices and can be used for all entrance doors, including storm and screen doors.

Package Shelf: Install a shelf, bench, or table near the entrance door to provide a place to put packages and other items while unlocking and opening the door. Make the shelf about 10 to 12 inches wide and at railing or table height.

Edge Protection: Use railings, benches, or planters to keep people from falling off edge of porch or step.

Viewing Aids: Use nearby windows, windows in door, sidelights, and/or two peepholes, so that all people, including children and seated users, can see who is at the door. The lower peephole should be located about 42 to 48 inches from the floor.

Lighting: Add extra lighting at the entrance to make it easier to see who is at the door and to help find the doorbell and operate the lock. Use a lighted doorbell, and focus concentrated light on the lock set.

Kick Plate: Install a durable panel on the push side of the door to protect from damage caused by kicking or wheelchair bumpers. Mount the 12- to 16-inch high panel, full width, near the bottom of the door.

Lettering: Use large, high contrast letters in a simple typeface for house numbers or other signs. Place numbers about 60 inches above the floor on the latch side of the door. Easily-read signs will assist not only guests, but also emergency-service personnel.

Communication Devices: Install doorbells that have a distinct chime for each entrance of the home. An intercom system, especially one with a video display, provides a safe way to screen visitors.

Remodeling Options

Even with an older home, it is usually possible to create a no-step entrance without using a ramp or porch lift (see Figures 2 and 3). At first glance, you might not notice that this home has a welcoming entrance. The front of the home (Figure 2) maintains its stately traditional entrance, but from the side (Figure 3) the no-step design ties into a gently-sloping sidewalk that is an integral part of the surrounding landscape.



Figure 2. Front view of home entrance showing typical steps leading to front door



Figure 3. Side view of home entrance showing a no-step design integrated with surrounding landscape

Another option for remodeling a porch is to replace steps with an earth berm and connecting “bridge” (see Figure 4).

Still another remodeling solution is to let vehicles do the climbing. It may be possible to slope the driveway or the entire garage floor to eliminate a step into the house. However, this solution may not adequately address needs for protection from leaking or spilled fuel and carbon monoxide in exhaust fumes.

Special Needs

When changes must be made quickly to accommodate special needs, consider the following possible solutions.

Mobility Limitations:

- ▲ temporary ramp. Slopes steeper than 1:20 to 1:12 require ramps with handrails and edge protection for safety.
- ▲ platform lift
- ▲ wood platform to raise entrance landing to within ½-inch or less of interior floor level
- ▲ awning for weather protection
- ▲ abrasive strips on slippery stair treads
- ▲ power door opener. Use push button switch or remote control to open and close door. This is especially useful where maneuvering space for a wheelchair is inadequate.
- ▲ electronic latch and lock. Use on doors equipped with power opener to make door operation easier for person with hand or mobility limitations.

Hearing Limitations:

- ▲ wireless doorbell that comes in two parts: doorbell button (transmitter) and receiver. Some receivers can be carried in a pocket from room to room; others can be plugged into any electrical outlet and have both a loud chime and a flashing bright light.
- ▲ knocker light on entrance door that will flash when activated by knocking vibrations.

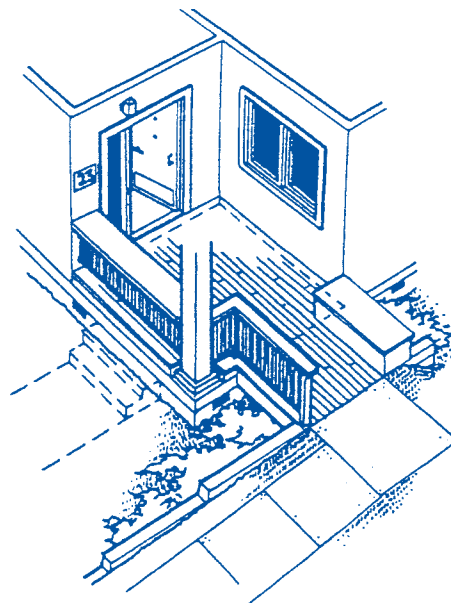


Figure 4. Earth berm and bridge

Vision Limitations:

- ▲ intercom systems can be hardwired or installed with a portable telephone link.

The welcoming home entrance incorporates features that are convenient, attractive, and marketable for all families. The basic features adapt to changing needs as family members age, yet they are “invisible” and have universal appeal for people of all ages and abilities. For more information about universal design and home accessibility, see the ISU Extension Housing Web site:

<http://www.extension.iastate.edu/housing>

¹Concrete Change, Atlanta, Georgia, leads an international campaign to make “every new home visitable” (instead of building separate, isolated “special” homes for people with disabilities).

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