

CONSTRUCTION GUIDELINES

for

VISITABLE HOMES

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The following construction guidelines make homes generally "Visitable," not fully "accessible". At the same time, many people with mobility limitations can also occupy these houses with little or no modification. Because the guidelines are for private, single-family dwellings, or for renovations of houses and apartments which are rarely mandated by existing law, no special "access" codes or additional regulations apply other than general codes that regulate widths of entry doors, slopes of sidewalks, etc., for regular residential construction. (The exception is when a ramp per se is built--with a 90-degree drop-off at its edges, as opposed to graded earth, which provides the shoulders of a sloping sidewalk. When a ramp is built, it must follow the same code specifications as required for public buildings. These specs are available from local building departments.) Overall, the house is not being touted as officially "handicapped accessible," because this might lead to extra regulation that may impede the goal of applying these principles to as many homes as possible, including those where the none of the proposed buyers currently have a disability.

The most essential features for basic access are the zero-step entrance and bathrooms. In new construction, minor modifications in the home plans can often change an inaccessible house into a Visitable one. In renovations, the problems are usually more complex, but sometimes creativity can prevail over obstacles.

I. NEW HOUSES

(The Federal Fair Housing Amendment in the United States already requires basic access in all ground-floor units of most new multifamily apartment or condo buildings--whether publicly or privately owned--and in ALL units if the new building has an elevator.)

A. ZERO-STEP ENTRANCE

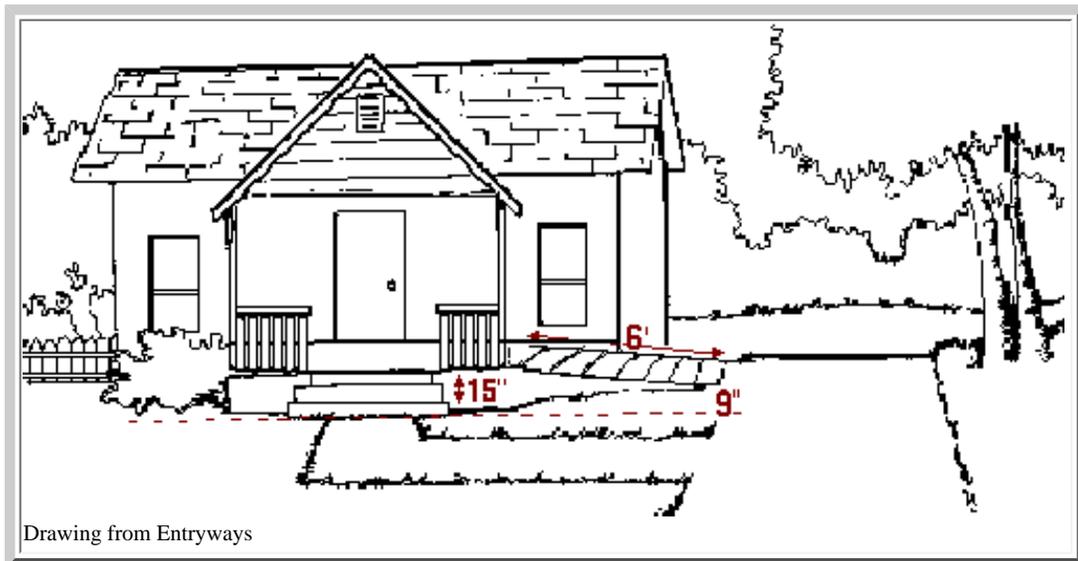
The house needs to have at least one zero-step entrance on an accessible route. The entrance may be a ramp, or simply a sloping sidewalk, or a garage floor level with the house. Ideally this entrance will be the same entrance family and guests usually use. However, the topography of the lot may dictate that the entrance be at the back or side of the house rather than the front--or, through the garage. "Accessible route" means a firm surface at least three feet wide over which a person with mobility limitations can travel, such as a sidewalk.

The entrance must be truly ZERO-STEP. Even one small step poses a barrier. The slope must not be too steep; the ratio of length to height should be at least a foot long for every inch in height (1:12), and less steep than that when possible. The exception to the 1:12 rule is that the ramp or walkway can be proportionately shorter if the total rise is less than six inches (because the danger of a mobility aid rolling or tipping out of control is much less on a short rise). The following table gives information for low rises:

Rise	Length of Slope
3/4 inch	no slope needed
1 inch	3 inch

2 inch	6 inch
3 inch	1 foot
4 inch	1 1/2 feet
5 inch	2 feet
	6 inches or more - 1 foot length for each inch rise

The height of the ground at the bottom of a ramp (as opposed to height of the ground at the top of a ramp) is very relevant in determining the proper minimum length of the slope. Few lots are completely flat. When the rise of the ground is deliberately used and graded to advantage, many feet can be shaved from the needed length. For instance, a starting point that is a mere 4 inches higher allows a slope that is 4 feet shorter. To determine the length of slope needed, a board can be held out parallel from the porch floor; the board then leveled; and the vertical distance from the board to the ground then measured, at various possible end-points for the slope.



Many feet can be shaved from the required length of an incline if it starts on ground that is nearly the same elevation as the entrance. Here, the driveway is sloped to provide some rise on a flat lot.

If a driveway must remain steeper than 1:12 because the lot is sloped considerably, the 1:12 zero-step entrance should nevertheless be constructed from the driveway to the house. Then the visitor or occupant with a disability can unload from their vehicle at the top of the driveway and proceed into the house.

The slope (unless it is extremely gradual, such as 1:20) must end in a level platform such as a porch or garage floor, so that a mobility-limited person does not roll or fall backward when trying to open or close the door. Also, the slope should (1) be level side-to-side; (2) be flat from top to bottom, not "humped"; and (3) end smoothly at the bottom, with less than a half-inch drop off. These features are necessary for basic safety.

For detailed information on zero-step entrances, purchase the 2006 Power Point "Entryways: Creating Attractive, Inexpensive Zero-Step Entrances."

All interior passage doors to provide a minimum of 32 inches of clear passage space when the door is open at 90 degrees. A 2'10" door provides this space, and these doors are increasingly available because that is the width required by the Fair Housing Amendment in new multi-family dwellings. 3'0" doors are excellent where space permits. Pocket doors may also provide the needed width. Special attention needs to be paid to the bathroom door because this is the one typically smaller than other doors on house plans, whether the house costs \$90,000 or \$900,000.

It is not essential (although it is helpful) to have a large turning radius inside a residential bathroom; in a small bathroom, the wheelchair user can roll in forward and roll out backward. But it is essential to have at least a 32" clear path to the commode. The bathroom door can be hinged to swing out rather than in to provide more room and give a person using a wheelchair or walker enough room to shut the door.

For more information on door widths and bathrooms, purchase the 2006 Power Point "Introduction to Visitability"

II. RENOVATING HOUSES OR APARTMENTS

A. ZERO-STEP ENTRANCE

All of the above is relevant, and what at first looks impossible might in fact be feasible. Often the best solution is to run a ramp parallel to a structure rather than straight out at a right angle. When evaluating for the best lay of the land, ask: Can an existing porch rail be cut out? Can existing bushes and flowers be removed and then replanted along the new ramp? Can an existing window be made into a door, or a new exterior door cut?

B. BATHROOMS

If the door lacks only approximately 1 1/2 inches of being wide enough, swing-away hinges (about \$22 per pair) may provide the added space.



Concrete Change

An international effort to make *all* homes Visitable!

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