

Visitability is an affordable, sustainable and inclusive design approach for integrating basic accessibility features into all newly built homes and housing.

Visitability is based on the conviction that inclusion of basic architectural access features in all new homes is a civil and human right and improves livability for all. This project is a collaboration between the IDeA Center and Concrete Change.

Founded by Eleanor Smith of Atlanta, GA, Concrete Change has been a leader in advocating for and otherwise promoting visitability for many years

Quick Guide to Low Costs of Visitability

Cost Information for Visitability

Eleanor Smith, Concrete Change 2012

Cost for new houses of incorporating a zero-step entrance; all passage doors (including bathrooms) with 32 inches or more clear passage space; and at least a half bath on the main floor. (The following costs assume the house plan already provides at least a half bath on the main floor, as is nearly always the case with contemporary plans.)

- One zero-step entrance on a concrete slab \$0
- Five doors @ \$2 more per door than narrower doors \$10
- One zero-step entrance over a basement \$250

TOTAL: \$10 (slab) to \$260 (basement or crawl space)

Why are the costs so low?

- Figures refer to NEW construction, where the builder has the opportunity to plan, site and grade for cost-effectiveness.
- Zero-step entrances should be omitted on sites that present unusual difficulties, so “worst case scenario” cost estimates are not relevant to typical costs.
- The entrance may be located at the front, side, back or from an attached garage – whatever location is most advantageous.
- Cost-effective methods have evolved in the field through direct construction experience.

Why have some building professionals estimated much higher costs? They may be unaware of best methods to incorporate basic access. Or, they may have a vested interest in claiming high costs. Estimated high costs of zero-step entrances over basements; the alleged need for extra grading for a

zero-step entrance; the alleged cost or difficulty of modifying plans to accept slightly wider doors; the alleged higher cost of 2'10" doors over narrower doors – these and all other assertions of added cost have been definitively demonstrated through built experience to be inaccurate.

How are the low costs verified? By the stated experience of builders, developers and building officials who have produced thousands of houses with basic access. For example:

- 3,700 Houses over basements: Dan Buonamici, Building Commissioner, [Bolingbrook, IL City Ordinance](#) (cf. 1999 to present) and Mayor Roger Claar
- 21,000+ Houses on concrete slabs: [Pima County Official's Statement](#) from Yves Khawam, Chief Building Official, [Pima County, AZ Ordinance](#) (cf. 2002-present)

(For numerous other cost estimates, see the interviews with builders and building officials in Appendix A of *Increasing Home Access: Designing for Visitability*, AARP Public Policy Paper, 2008.)

What are unintended financial costs of continuing to build houses with basic barriers?

- Costs of Moving
- Costs of Renovations (retrofits)
- Medical costs due to injuries resulting from barriers
- Increased Institutionalization of when home barriers are a factor in moving to a nursing home.

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Every new
home visitable.

Visitability Costs Affirmed

Zero-Step Entrances

Since all lots have to be graded for development, the key to keeping costs down is to position the house on the lot and grade the lot with the zero-step entrance in mind. When this is done, \$100 is a reasonable average additional cost for the zero-step entrance on a concrete slab, and \$300-600 over a crawl space or basement. It should be remembered that visitability does not demand a front entrance if a side or back entrance is the most feasible.

Why such a low cost? Because:

- Figures refer to NEW construction, where the builder has the opportunity to plan, site and grade for cost-effectiveness.
- Zero-step entrances should be omitted on the 1% to 2% sites that present unusual difficulties, so “worst case scenario” cost estimates are not relevant to typical costs.
- The entrance may be located at the front, side, back or from an attached garage — whatever location is most advantageous.
- Cost-effective methods have evolved in the field through direct construction experience.

When the cost of a zero-step entrance is averaged over the 98%+ of lots where such an entrance is practical, the \$100-\$600 average cost stated above is generously high.

On the 41% of all single-family homes in the U.S. which are built on a concrete slab(1), the zero-step entrance typically does not add any cost. In fact, the cost for zero steps on slab construction may be lower than the cost of steps, since compacted earth can reduce the amount of concrete needed.

On the homes not built on a slab — those which have a basement or crawl space — there are several low-cost options. Over 2/3 of new homes have attached garages or carports(2). Often the zero-step entrance can easily be constructed from the garage by planning the house floor and garage floor on the same level (or nearly so) rather than having the typical one or two steps up into the house. In those cases, either no ramp or a very short concrete ramp is all that is needed.

On homes with basements or crawl spaces, low-cost front, back or side entrances that do not require entering through the garage are often easy and inexpensive. Berming can allow a sidewalk or short bridge leading directly to the porch. For example, the “notched foundation” method used for thousands of homes with basements in Bolingbrook IL can be employed for a lower floor, at a cost estimated at

approximately \$ 500.

Another option is a short ramp made of attractive materials with a deck-like appearance. In calculating cost, the cost of the omitted steps should be deducted from the cost of a ramp.

The very high cost estimates for zero-step entrances which some builders put forth are often based on lack of information about the best construction methods, or include averaging in worst-case scenarios which in fact should not be constructed at all.

For visual examples of homes with zero-step entrances, visit our [Photo Gallery](#).

Interior Passage Doors

Interior passage doors should be 3'0" or 2'10" wide, including bathrooms (passage doors are those that lead from one room to another, as opposed to closets.) Wide closet doors are good too, but way down the list from passage doors in terms of necessity. If a 3'0" or 2'10" door absolutely will not fit in a tight plan, 2'8" is much better than lesser widths. A 3'0" door provides about 34 inches of clear passage space, depending on the thickness of the door which is hung; 2'10" doors provide about 32 inches of clear passage space; 2'8" provide about 30 inches. More door width is needed than the simple width of a wheelchair, because doors cannot always be approached straight on . . . just as a car needs a lane wider than the car itself to be able to turn a corner.

\$20 per home is a generous average estimate for wide enough doors (10 doors at \$2). In most cases, a wider opening is simply cut into the wall and an architect does not need to be called in to change the plans. The builder can adjust the existing plans with too-narrow doors by manually drawing a minor adjustment to the doorways on the plans or using CAD software to modify the plan. Adding square footage is not necessary to create adequately wide doors.

In a few cases, such as an unusually small bathroom, three or four inches may need to be shaved from an adjoining room, but again adding square footage is not the economical solution. (A pocket door is another option in a small space.)

How wide should the passage doors be?

Less than 2'8"

*(32")leaves less than
30" clear passage
space* Seriously insufficient

2'8" (32") leaves 30"
clear passage space Somewhat usable for many but not ideal

2'10" (34") leaves
32" clear passage
space Excellent – this width is becoming increasingly available at low cost as customer demand increases. (2'10" is the interior door width required by the Fair Housing Amendment in new apartment buildings. While not yet available in retail home improvement stores such as Lowe's or Home Depot, 2'10" doors are readily available from the wholesale door suppliers where professional builders buy their

doors.)

3'0" (36") leaves 34"
clear passage space

Excellent, where space allows.

A 2006 survey of six wholesale door companies in six states conducted by the IDEA Center at the State University of New York, Buffalo, and by Concrete Change found the added cost of a 2'10" door over a 2'8" to be less than \$2.00 per door.

(1) National Association of Home Builders, based on nationwide statistics for 1994

(2) National Association of Home Builders, based on nationwide statistics for 1996.

Summary

On new construction: \$200 zero-step entrance plus \$50 interior doors; total about \$250 (about 1/3 the cost of one bay window).

These costs can be compared to the costs of retrofitting:

- Conservatively, an average of \$3,300 to add a safe zero-step entrance to an existing home (a ramp built to code or fill dirt plus raised sidewalk to meet porch, and often the need to raise the porch floor to eliminate the step from porch to interior.)
- Conservatively, an average of \$700 to widen each interior doorway.

Further cost information is available in our free PowerPoint presentation "Entryways: Creating Low-Cost Attractive Zero-Step Entrances," which can be downloaded from our [online store](#). This presentation contains more than 130 slides addressing myths/facts, principles, methods and costs, and illustrates with more than 50 photographs and drawings.

Also relevant – the unintended social and financial costs of continuing to construct steps at all entrances and narrow interior doors in homes:

- The residents can't comfortably entertain friends and relatives who have mobility limitation.
- A non-disabled person who experiences a temporary disability such as broken bones or recuperation from surgery often must find a different place to live while recuperating.
- A resident may need to move permanently to a nursing home, while a lack of barriers would have allowed the person to stay at home for added months or years.
- Non-disabled residents strain their bodies carrying bicycles, baby carriages, heavy furniture, etc., up steps and through narrow doors and passages.
- Resale or renting the home cuts out potential customers who have mobility limitation or who want a home that welcomes disabled visitors.

For more data, see [The Costs of No Change](#).

For a summary of major construction myths and facts about Visitability, see [Responses to Opposition](#).