

around the HOUSE

SAH and UD: Entries and Building Costs

The Veterans Housing and Opportunity and Benefits Act of 2006 was amended and expanded in 2008 as part of Public Law 702 and titled “The Economic and Housing Recovery Act of 2008.”

The Specially Adapted Housing grant has been expanded to \$63,780 from \$50,000 and can be used for up to 50% of the cost of a new home or remodel in order to make it accessible. It is available to veterans with disabilities, can be used up to three times, and there is no time limit on its access.

You can use the grant for the additional \$13,780 if you used the \$50,000 previously, as long as you have not already accessed it three times. It can be used for construction and/or architect design fees.

Universal Design (UD) in housing is designed for all people of all ages and abilities. Its design parameters are very



The welcome mat is out for wheelchair users when an entry threshold is ½ inch high or less.

similar to Specially Adapted Housing (SAH), although SAH will be more specific to each veteran. Let’s look at some of the features and the costs associated with making SAH and UD usable for everyone.



It is important to note that many UD and SAH features are amenities that will increase the value of *every* home. Eighty percent of the 75 million baby boomers want to live the rest of their lives in their own homes. These features will increase the long-term resale value of most homes.

Ramps & Lifts

An existing home requiring an SAH remodel may need a ramp up to a level entry landing. If the building has an existing basement or crawl space, the main floor will probably be 1’-6” to 2’-0” above the finish grade. For a wheelchair ramp up to 8% slope, the recommended width is 3’-6” with a handrail on both sides. This width allows the simultaneous use of both handrails. The maximum rise is 8%, which is a one foot rise for every 12 feet in length. This is the maximum allowed rise but is too steep for many users. A 1:20 slope or even less is recom-

Amenities that increase the value of *every* home include an accessible main entry.



mended. A 4" curb at each side of the ramp is required as a guardrail for the wheelchair wheels. This will also prevent the user from scraping his or her knuckles on the parallel wall. For a new ramp with a 1:20 or less slope, a 4'-0" width is required by SAH guidelines.

A concrete ramp with exposed aggregate with a nonslip surface is ideal. I have designed these with attractive raised flower boxes in front that conceal the ramp behind. This is an easy option for a home with a short ramp requirement. Every ramp must have a minimum 5'-0" x 5'-0" top landing. It should have a 1/8-inch cross slope for drainage and always be covered.

One would not think handrail specifications are important, but they are. A handrail should have a diameter of 1 1/2" for the most satisfactory grip. They should be mounted, if against a wall, to provide a 1 1/2" clearance from the adjacent wall. A larger clearance can allow

the arm to become wedged between the wall and the handrail. Handrails should continue a minimum of 1'-0" beyond both ends of any stair or ramp. This is especially important for a wheelchair user, who must be able to pull the chair ahead until he or she is on level ground. Handrails at ramps should be mounted at a height between 2'-6" and 2'-8".

The cost of a preservative treated wood ramp that rises 2'-0", is 4'-0"



Houses need at least two level exits or ramps. The second exit should not pass through an area that is a potential fire hazard.



wide and 24'-0" long (8%), and has an open spindle railing on both sides may cost \$25 per square foot or more in the Midwest. That comes to 121 ft² including the minimum 5'x5' landing area for a total of \$3,025.

In addition, there is the cost of the covered entry. That must be well lit on the underside. This can vary widely depending on type of construction, soffit, column details, etc. A wood ramp must also include nonslip adhesive tape or nonslip paint that will add additional cost. A ramp platform must be provided every 30' of ramp and at every 90° turn for longer ramps.

At least two level exits or ramps from the house are required. The second exit should not pass through an area that is a

Entry conditions are generally unique to the home's floor level, local setbacks, and building site.



potential fire hazard such as a kitchen, garage, or utility room containing heating equipment. In some tight scenarios a ramp may not be possible.

A vertical platform lift should be installed in this case, and it should have a battery or generator backup system. The backup system is required for SAH. A Trus-T-Lift™ is a porch lift that can start at \$4,100 for a 28"-52" version and may lift as high as 144" for an additional \$3,750. Of course, prices will vary per height of lift required, and there are several add-on options. Like everything else, dozens of available products are on the market.

The above scenario is for a home with a floor higher than 6" or so above grade. A slab-on-grade home ramp is

relatively easy to provide with a gradual slope up to the entry doors. However, depending on the topography of a given lot, fill may be required to provide drainage away from the house. This fill would be an additional expense. The entry conditions will almost always be unique to your home floor level, local setbacks, and building site.

Doors & Floors

The main entry door must be 3'-0", and it must be fitted with a lever handle. A sidelight is a good idea for visual access from the inside. If this is not possible, a lower level "peep hole" is an option for wheelchair users. The floor level of the porch or deck should be the same as the

main living floor. The threshold may not be more than ½". You would be amazed how difficult it can be to "jump over" a threshold higher than that.

In following articles we will stroll through a home and look at SAH and UD. We will discuss features and related costs. We will also discuss many types of "green" energy-efficient homes and other topics of interest.

To learn more about SAH grants, visit www.military.com/benefits/veteran-benefits/specially-adapted-housing-faqs. For information about UD and "green" homes, visit my website, www.UniversalDesignOnline.com.

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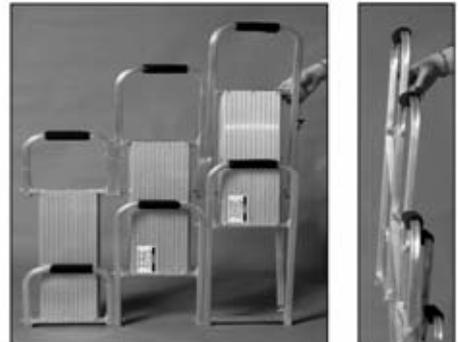
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