Accessibility Options for Elevated Residences

UNO-CHART

University of New Orleans

Follow this and additional works at: http://scholarworks.uno.edu/chart_pubs

Recommended Citation
http://scholarworks.uno.edu/chart_pubs/13

This General Information is brought to you for free and open access by the Center for Hazards Assessment, Response and Technology (CHART) at ScholarWorks@UNO. It has been accepted for inclusion in CHART Publications by an authorized administrator of ScholarWorks@UNO. For more information, please contact scholarworks@uno.edu.
Accessibility options for elevated residences

Whether a disability makes stairs unaccommodating or if you are concerned about aging with stairs, options exist to allow all people to access homes elevated to a safe height. Four are described below.

**Ramps**

A ramp is the accessibility option most people are familiar with. Typically wood or concrete, a ramp forms a sloping walkway to take one from the ground to the desired height. Although it is often considered a more economic option, the cost of wood and concrete makes ramps increasingly more costly, but still less expensive than other options. More funding possibilities may exist for ramp installation as well. However, a ramp might not be suitable for all homes. High elevations will require significant ground space so that the ramp can be navigated successfully. Ramps may be better suited for small to medium rises or on homes on large lots. With no moving parts, a ramp is entirely flood-proof unless damaged by debris and is easily restored and maintained. Ramps should be a minimum of 36 inches wide for wheelchairs, and are required to have a handrail to prevent people from falling and injuring themselves.

**Platform Lifts**

A platform lift is an open-air lift that operates when constant pressure is applied to a button. They can rise up to 8 feet without full enclosure required and take up about as much space as a walk-in closet. A platform lift is less expensive than an elevator, but more expensive than a ramp or stair lift. It is wheelchair accessible, and may be a good fit for a home elevated less than 8 feet but with limited or awkward room for a ramp. A platform lift has less range than an elevator, moves slower and requires the user to press a button to move. Platform lifts use a standard electrical outlet, and therefore require no further inspections or permits. However, with the motor located outdoors on the ground, it will suffer damage during a flood.

**Stair Lifts**

A stair lift allows a resident to sit in a chair and ride up an aluminum rail attached to the staircase. Stair lifts are less expensive than platform lifts and elevators and can be installed outdoors on any straight staircase at least 24 inches wide or inside on any stairs 24 inches wide. They can climb 35 feet in length allowing access to any elevated home. The stair lift is not wheelchair accessible, but can be negotiated easily by a wheelchair user with assistance and is a good fit for people with slight mobility problems or discomfort. With two options for power — electrical and battery — the latter can be used when electricity is out. The chair can be sent to the top with a remote, allowing storage at a safe height during high water. The rail system should not take on damage during a flood unless water persists for several days.

**Residential Elevators**

A residential elevator is a smaller version of a commercial elevator — a fully enclosed, fully automated lift. They may be constructed a number of different ways, but are most typically hydraulic in design. Although a somewhat expensive option, if installed while building or rebuilding, they are only marginally more expensive than other options. Able to rise up to 25 feet (or higher with a city variance), an elevator takes up a space about the size of a walk-in closet. Because of electrical needs, an elevator requires an additional city permit. Money should be budgeted for an annual inspection of safety features. However, for elevations above 8 feet and with limited ground space for a ramp, an elevator may be the best alternative. They may be preferable to a lift if a resident has limited hand control. Elevators are not completely floodproof, with a small pit needed at their bases. However, options exist at installation to improve their flood durability.

**Funding assistance** for these alternatives is available through a number of agencies with varying applicant requirements. It is significantly easier to find funding assistance for residents who are disabled. Ramps are the easiest to fund, and can be installed by a handy homeowner or educated volunteer group. A loan program is also available to disabled Louisianans through the Louisiana Assistive Technology Access Network. For more information about funding programs visit [http://www.chart.uno.edu/projects/default.aspx](http://www.chart.uno.edu/projects/default.aspx)