

# Home Access- Alternatives to Ramps

If stairs are a barrier to getting in a home, installation of a ramp is one option for easier access. Unfortunately, the layout of the home, a small site, or even a steep site can make ramp installation unfeasible.

When this occurs, consider the following alternative options.

## Re-Build Stairs to Create a Lower Stair Height

Most homes have risers that are about 7 to 8 inches high. While this meets code, 8 inches can be too high for some people to easily use. If the stairs are difficult, but the user does not require a ramp, one option is to re-build the stairs to create a lower stair height and deeper stair tread. Rebuilding the stairway so each riser is only 4 to 6 inches high makes it user friendly for more people.

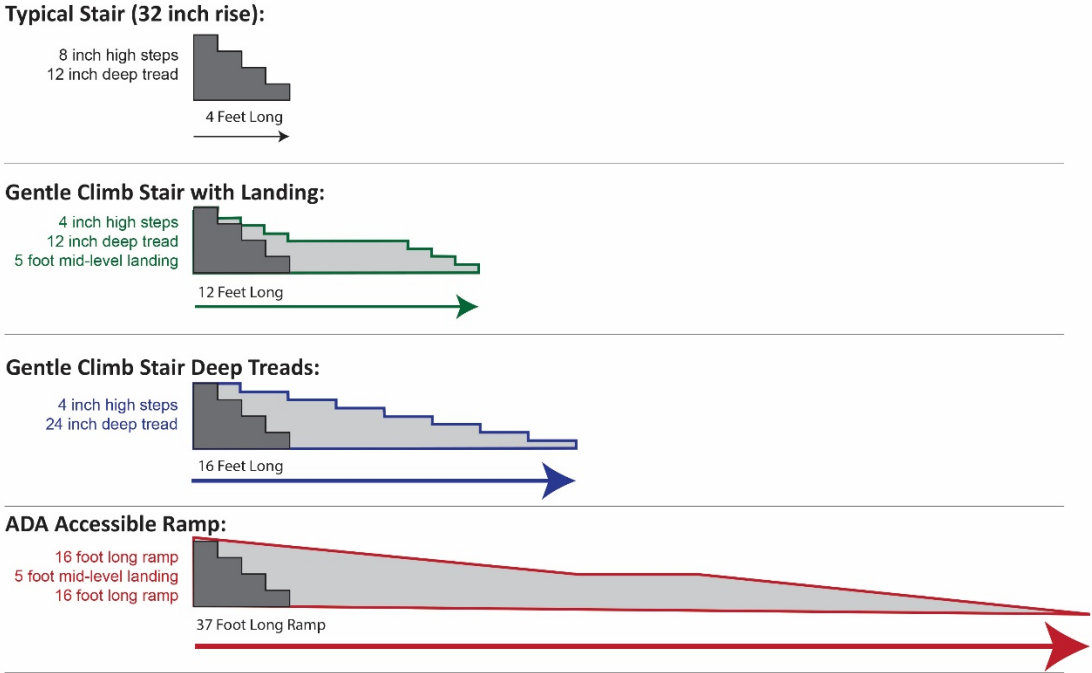
Most stair tread depths are between 10 to 12 inches. Creating a deeper stair depth or providing an intermediate landing for a resting place helps make the stair easier to climb.

This type of stair modification will require more area than the standard stairway, but much less than an accessible ramp.

### Important considerations:

- Per code, step heights (risers) should not be less than 4 inches high. Less than 4 inches and they are more of a tripping hazard.
- All steps in a stairway must be the same height.
- A handrail on both sides of the stairs is strongly recommended.
- Make sure there is good lighting and a non-slip surface on the stairs.

The following diagrams provide a size comparison between the footprint of four regular stairs (a 4 foot projection), lower rise stairs (12-16 feet), and an ADA accessible ramp (37 feet).



## Platform Lifts

A platform lift provides a vertically rising and descending landing that transports a person from one level to another. Platform lifts work for people either with or without a wheelchair. They are often used to get up onto a deck or porch. There are many types and styles. Some are open, and some are fully enclosed by metal siding or windows or a combination of the two.



**Exterior platform lift installed to the left of stairs**

A platform lift requires much less area than a ramp would. For example, based on this image, assume each of the six steps are 8 inches high for a total rise of 48 inches. The maximum recommended slope of an ADA ramp is 1:12. To meet ADA, forty-eight inches of rise would require 48 **feet** of ramp. Given the small size of this site, a platform lift is a better option than a ramp.

### Important Considerations:

- Be sure your lift can be maintained and repaired reliably in your community.
- Work with a local or regional dealer to determine the company and model that works best for a specific location.
- Make sure you have a battery back-up so the lift can be exited, in case of a power outage.
- For heavier loads, such as with power wheelchairs or larger riders, consider investing in a commercial grade platform lift.
- To protect from the weather, installation of a roof covering the stairs and platform is recommended.

## Stair Chair Lift

Stair chair lifts are chairs that ride along a rail on one side of a stairwell. The rider sits in the chair with their feet supported and secured in the seat with a seat belt and armrests.

Stair chair lifts can be installed on interior or exterior stairs. There are two primary types: straight or curved. Curved stair chair lifts generally cost more. For costs savings, two straight rails can be used along multiple stair runs. However, this is only practical when the user is able to safely and independently transfer from one seat to the second at the stair landing.

### Important Considerations:

- Wheelchair users will need to assess transfer ability and sitting balance when considering use of a stair chair lift. (Note that a wheelchair will then be required on each level to transfer back into.)
- Work with a local or regional dealer to find one that works best for your particular situation and environment. (Temperature may be a limiting factor for use with some stair chair lift brands.)
- Ensure that the model selected has valid warranty and service options for your location.
- Battery backup is required in order for the chair to return to the floor level in case of a power outage.
- The folding seat must not obstruct the path of travel along the stairs or at the landings.
- A minimum stairwell width of 36 inches is recommended for most stair chair lifts.
- When installed on an exterior stairway, consider also installing an overhead cover to protect the user and lift from the elements.
- Weight limits may be associated with different stair chair lift brands.

*Note: In the case of "common use" stairs (stairs used by more than one tenant), check with the local Building or Fire Department to see if a stair chair lift is allowed on the stairway. Often a lift is not allowed on common use stairs because a power failure might stop the chair in a position that blocks the required fire exit width.*

There are a number of companies that sell stair chair lifts. The following three example images are from a stair chair lift company called Bruno.



**Interior/Straight Rail**

**Exterior/Straight Rail**

**Interior/Curved Rail**

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