

Wheelchair Lift vs. Wood Ramp

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I have been asked many times, which is better - a lift or a ramp? The answer is not that easy. Both have some advantages and some disadvantages. In order to really decide which is right for you, you need to answer some questions.

- How much rise is there to overcome?
- What is the terrain like that leads from the end of the lift or ramp to the area where you will enter the vehicle?
- Who will maintain the lift or ramp?
- What about esthetics – how does the lift or ramp affect the look (and therefore the value) of your home?
- What do you prefer?
- Obviously cost matters, but is it the deciding factor?

When I talk about rise, I mean the difference in elevation between the upper landing (often times the door threshold) and the ground. This is not always easy to calculate because often times the ground is not flat. This means the overall rise needs to be calculated from where the ramp or lift ends.

If you do not take into account the point where the lift or ramp ends, you can end up with a dangerous situation.

If you are considering a ramp and the distance from the upper landing or door threshold to the ground is 12" (and the ground is flat), then the ramp needs to be 12 feet (1 foot of ramp for every inch of rise). If the ground slopes away by 12 inches, making your actual rise 24", then your ramp needs to be 24 feet. Keep in mind that for every 30 feet of ramp, you need to have a turning or resting platform, which makes your ramp even longer. If the ground pitches away from the upper landing or door threshold, often times you cannot catch up to the pitch of the ground if you continue to go the direction of the ground pitch. You can see this can get rather complicated! When the ground is pitching away from the upper landing, this may be the time to consider a lift.

You must also take into consideration the terrain between the parking area and the end of the lift or ramp. I have seen great ramps that just dump out onto the lawn and go nowhere. I have also seen ramps and lifts installed in areas that a mountain goat would have a hard time getting to.

When should you consider a vertical wheelchair lift over a ramp?

There are benefits and issues with each decision you make. There is not one single answer to the problem. My basic rule of thumb is if the rise is greater than 48", then you should consider a lift. There are, however, many variables so use that as a guideline rather than a rule.



Some things you should consider when thinking about a ramp:

- How long will the ramp have to be in order to meet the 1": 12" ratio as required
- Do you have the physical room to accommodate a ramp
- Who is going to shovel, sand and maintain the ramp
- What is the ramp going to look like? This is a part of your home – there needs to be some sort of aesthetic consideration to the project.

Keep in mind when calculating the overall length of the ramp, you need to figure the flat resting and turning platforms into the equation. Also, when determining the overall rise, you need to determine where the ramp will end, not just at the step going in the door. Plywood should never be used on the surface; it is too slippery when wet and worse with frost on it. The surface should be made of boards with spaces so water can drain through the spaces. However, keep in mind that any wood surface, when it's wet or has frost on it – is slippery! One of the plus sides to a ramp is that, depending on its length, it can be less expensive than a lift. Also, a ramp also never stops working unexpectedly.



Things you should consider before purchasing a vertical wheelchair lift.

- Where the lift needs to be installed, will water, ice or snow be an issue?
- What is the cost difference versus a ramp?
- What will you do if the lift fails to operate?
- Is the rise over 14 feet? (Remember the 48" rule!)

Vertical wheelchair lifts can only travel up to 14 feet. The lift must sit on a concrete slab. There must be an automatic locking upper gate. If the lift is not installed in a shaft-way, the lift must have an electrically operated safety pan. Does the installation meet the latest A18.1 code for residential applications? The states of NH, ME, VT do not inspect residential lifts. However, the equipment and the installation must still meet national safety code (A18.1b). In the event someone is hurt on the lift, the first question that will be asked is "Does it meet code". The property owner is responsible for making sure the equipment and the installation meet code. The code is there to protect you, not to arbitrarily add to the cost.

Okay, what about maintenance? Maintenance is critical for any piece of equipment. Regular maintenance helps to ensure that the lift is ready to operate when you need it. For a vertical wheelchair lifts the industry standard for regular service & safety checks is every 6 months. Because of this, an annual service contract is recommended. At All-Ways Accessible, we offer a flat rate that provides for two Preventative Maintenance & Safety Checks Annually (PMSC) plus you get a discount on any parts and labor of non-scheduled service calls (it is a good deal!).

Wood ramps need to be sealed, stained or painted within 3-6 months of construction. Even if your ramp is built from pressure treated lumber, you still have to apply some type of sealant. Even the synthetic deck products are beginning to require a sealant be applied to prevent mold. And sealing isn't done just once – it needs to be done annually for the life of the ramp. In addition, wood ramps should also be inspected annually for loose nails and screws.