

Wood Ramp vs. Wheelchair Lift
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I have been asked many times, what is better a ramp or a lift? 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 terrain like that leads from the end of the lift or ramp and 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 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 and the ground. This is not always easy to calculate, because many times the ground is not flat. This means the overall rise needs to be calculated where the ramp or lift ends. If you do not take into account the point where the lift or ramp ends you can have some major problems. If you are designing a ramp and the height at the edge of the porch is 12”, but you need to go out 12 feet, and the ground has dropped 12 inches, then you have doubled the pitch of the ramp. Many times you cannot catch up to the pitch of the ground if you continue to go the direction of the ground pitch. 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 we should consider a lift. However, there are many variables so use that as a guideline rather than a rule. Some things you should consider when thinking about a ramp are: How long



will the ramp have to be to meet the 1”: 12” ratio as required, do you have the physical room for the ramp, who is going to shovel, sand and maintain the ramp, what is the ramp going to look like. Keep in mind when considering the overall length you need to figure the flat resting and turning platforms into the total length. 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. The plus side of a ramp is that many times it is less expensive than a lift. A ramp also never stops working unexpectedly.

Things you should consider before purchasing a vertical wheelchair lift. Is the lift in a spot that the water, ice or snow will not cause the lift to be a problem? What is the cost difference verses a ramp? What will you do if the lift fails to operate? Is the rise over 12', because vertical wheelchair lifts can only travel up to 12'. 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 A18.1b code for residential applications; the state of NH does not inspect residential lifts. However, the national code still applies to the installation. In the event someone is hurt on the lift, just hope your lift meets the code guidelines. The code is there to help you, not to arbitrarily add to the cost.



Okay, what about maintenance? Maintenance is critical for any piece of equipment. For a vertical wheelchair lift I would consider a service contract. In a service contract your lift is serviced every six months and usually a discount is given for 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 put something on it. If you just seal it, like with Thompson's water seal, you should do this annually. Wood ramps should also be inspected annually for loose nails and screws.