How to Adapt an Entrance for a Wheelchair

If you use a wheelchair, you may need to change the entrance of your home for easier access. You may need to have sidewalks, ramps, platforms and lifts installed. Check with your city about the building codes, rules and regulations that may affect installation. **Building permits may be required.**

**Sidewalk leading to a ramp**

Sidewalks are recommended to be at least **36 inches wide** to accommodate the average width of a wheelchair of 27 to 29 inches.

- **Use solid materials for the sidewalk,** such as cement, brick or wood. They provide a smooth surface for the wheelchair to travel over and make snow removal easier in the winter.
- **Make the sidewalk slightly higher than ground level** so that water will drain.

**Ramps**

Plan for a ramp to be 3 to 4 feet wide. **The length of the ramp depends on the total height of your entry steps** (ground to threshold rise). The standard ratio for ramps is 1:12. This means each inch above the ground (rise), you will need 12 inches or 1 foot of ramp length.

- **Ramps longer than 30 feet will need a landing for safety.** Mark the beginning and ending of each ramp section with contrasting paint or tape for safety.
- **Use solid materials for the ramp,** such as wood, cement or metal.

- **Use a non-slip surface on the top of the ramp,** such as a “brushed” surface on cement. A commercial non-slip floor covering or safety treads may be preferred for other surfaces. Paint mixed with sand is another option to provide a non-slip texture.
- **Add lighting to make the ramp safe for night time use.**
- **Avoid building over stairs,** to allow guests stairway entry.
- **Improve curb appeal by adding shrubs and landscaping near the ramp.**
Landings and platforms

An entry platform, level with the threshold, is required at the door. This platform needs to be a minimum of 5 feet wide by 5 feet long.

The landing at the bottom of the ramp should be at least as wide as the ramp and at least 5 feet long. If a turn is required at this landing, the minimal size is 5 feet wide by 5 feet long.

Level platforms are needed to break up ramps that are longer than 30 feet. If a 90 degree turn is needed, the platform must be 5 feet wide by 5 feet long. If a 180 degree turn is needed, the platform must be 5 feet wide by 8 feet long.

Handrails

Handrails are required if a ramp has a 6 inch rise or greater, or if the ramp is longer than 6 feet (72 inches).

Handrails need to:

- Be 2 inches in diameter (wood) or at least 1 ½ inches in diameter (metal).
- Extend 3 inches out from the ramp support posts and walls.
- Be mounted 30 to 34 inches above the ramp surface.
• Extend 1 foot (12 inches) past the end of the ramp and end at a post / wall or be rounded off.
• Have ramp guardrail installed 36 inches above the ramp surface.
• Have a wheel guide installed, at least 2 inches high, along both sides of the ramp floor. This will prevent the front wheels of the wheelchair from slipping off the ramp edge.

**Electric porch lifts**

Porch lifts can be more expensive than ramp construction. If there is not enough room for a ramp or if extensive ramping is required, a lift becomes an affordable option. Search for local suppliers at [www.yellowpages.com](http://www.yellowpages.com), using the search term “wheelchair lifts & ramps”. The lifts are weather proof and have a lock and key for safety and security.

**Lift considerations:**

- **Lifts must sit on a sturdy platform of 5 feet wide by 5 feet long.** Cement, bricks or patio blocks may be used.
- **You will need an outside electrical outlet.**
- **An outside light is needed for safety.**
- **You may need to build a platform “bridge” from the lift (in its raised position) to the entry door.** This platform should be at least 5 feet long.
- **The lift should be able to handle a load of 300 to 400 pounds.**
- Lifts can be ordered or adjusted to meet a variety of heights.

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**Talk to your doctor or health care team if you have any questions about your care.**

The Library for Health Information is available to help you find more health information at (614) 293-3707 or e-mail: health-info@osu.edu.

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