



Lesson 1: Introduction to portable ramps

What are ramps?

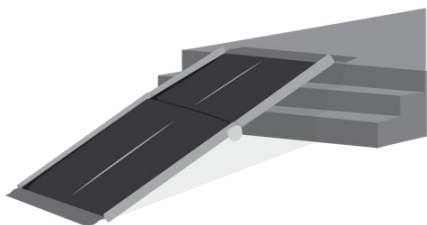
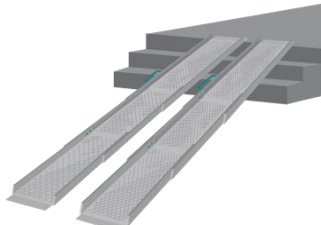
A ramp is a sloping surface joining two different levels. It is used where one or more steps prevent a person from moving from one place to another.

Ramps help a person who cannot easily use steps to get in and out of buildings and move around them. Ramps can also help a person using a wheelchair to access a large vehicle, such as a car, bus or train.

Ramps can be either:

- **Portable:** designed to be used in different environments and are not fixed in place
- **Permanent:** fixed in place.

The two kinds of portable ramp included on TAP are wide platform and twin track portable ramps. These ramps join steps on one side and a level surface on the other.

Wide platform portable ramp	Twin track portable ramp
	
A single platform wide enough for a person who is using a wheelchair or a walking aid.	Two separate, narrow tracks for the wheels of four-wheel wheelchairs.

Important features	Other features that can be helpful
✓ Strong, durable and lightweight ✓ Raised edges (some include high contrast edges) ✓ Shaped and smooth ends ✓ Anti-slip surface ✓ Foldable ✓ Weight limit (written on ramp or manufacturer instructions).	• Handles • Ramp weight (written on ramp).

Ramps not included on TAP include:

- **Wedge ramps:** to make it easier to cross thresholds
- **Hinged ramps:** to make it easier to cross thresholds higher on one side than the other
- **Permanent ramps:** these are the best option for public buildings and are designed to remain in place.

Considerations for safe use of portable ramps

Ramp ratio describes how steep a ramp is. A less steep slope is easier for people to go up and safer for people to go down. The ratio of a portable ramp should not be steeper than 1:8. A less steep ratio of 1:12 is recommended where possible.

1:8 ratio	1:12 ratio
	

Step height and length

For safety, it is recommended to only use portable ramps on:

- Steps or vehicles up to 45 cm in height
- Lengths up to 350 cm.

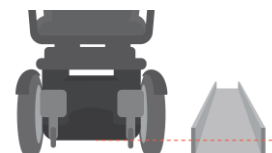
A longer ramp is larger and heavier for a person to carry and position. If a ramp longer than 350 cm is needed, consider a permanent ramp.

Always check there is a level space for the person to move and turn at the top and bottom of the ramp. A ramp in a doorway needs a level space in front of the door to allow a person to open it.

Ground type

Use a portable ramp on solid and smooth ground which supports the ramp evenly. Soft or uneven ground could make the portable ramp unstable and cause a person to lose balance.

Mobility assistive products with low ground clearance can catch on the raised edges of twin track ramps. If a mobility assistive product has low ground clearance, consider a wide platform ramp.



Who uses portable ramps?

Children, adults and older people may need a ramp if they:

- Use a wheelchair or a walking aid and need to go up and down steps
- Use a wheelchair and need to regularly get in and out of a vehicle
- Are transferring an empty wheelchair or wheeled mobility assistive product in and out of a vehicle.

A portable ramp can be provided to a person for their individual use. They can also be provided to support access for the public in buildings and on public transport. This is helpful when a permanent ramp is not available.

In some situations there is not enough space for a portable ramp, or a portable ramp is not suitable. Other options to improve access include:

Grab bars at door entrance	Permanent ramp
A person with grey hair, wearing a blue shirt and purple pants, is using a white walking aid to ascend a set of stairs. The stairs have metal handrails, and the person is holding onto one of them.	A wide, light-colored permanent ramp with metal handrails on both sides. It is situated in a room with orange walls and arched doorways in the background.

Lesson 2: Step one: Select

The TAP Portable ramps assessment form is a simple tool that can be used as a guide to decide:

- If a portable ramp is suitable
- What type to select for the person's needs.

Assess environment

First check the environment and decide if a portable ramp is suitable for overcoming barriers.

If a portable ramp will be used in a doorway, check the width of the mobility assistive product and ramp is less than the width of the doorway. Some doorways have thresholds. This can make it harder for a person with a walking aid or wheelchair to pass through. If the person has difficulty crossing over the threshold, discuss other options for access.

A portable ramp needs a solid **and** even surface to be stable and safe when in use:

- If the surface does not stay solid in wet weather, consider whether a different surface is possible
- If the surface is rocky, stony or uneven, discuss if it can be smoothed out
- If solid or even surfaces are not possible, consider a permanent ramp instead.

Measure

Measure the total height of the step/s in centimetres using a metal tape measure. Measure from the ground to the top step. The height of the step will decide if a portable ramp will be suitable and how long the ramp needs to be.

- Check total step height is 45 cm or less. If not, consider a permanent ramp.
- Calculate the required length of ramp for different ramp ratios: 1:8, 1:10, 1:12. Then circle lengths of 350 cm or less.

Always discuss personal preference for steepness before making a final decision about ramp length. Ask the person to try the ramp to make sure it is suitable.

If there is not enough space for any of the ramp ratios, explore other options for access.

Assess the needs of the person

Always select a portable ramp with the person. If selecting a ramp for a public building or public transport, consider a wide platform ramp.

Mobility and lifestyle	Twin track suitable	Wide platform suitable
Walking aid	✗	✓
Three-wheel wheelchair	✗	✓
Four-wheel wheelchair	✓	✓
Assistance	✗	✓

If a person requires assistance to use a portable ramp, check that assistance will be available every time they need to use the ramp. Check that the person or their assistant is able to carry and position a portable ramp safely. If not, consider other options for access.

It is important to consider the total weight on the ramp. This includes:

- The weight of the person using the ramp
- Weight of an assistant if needed
- Weight of their mobility assistive product.

The total weight on the ramp should be less than the weight limit of the ramp.

Use the information gathered during assessment and refer to the selection table to make a plan with the person.

Lesson 3: Step two: Fit

The second step in providing a portable ramp is to check that it fits in each place it will be used. Before positioning the ramp, check the length and weight limit of the portable ramp match the assessment.

Position

1. Place the top end of the ramp on the top step.
2. Place the bottom end on a smooth and flat surface.
3. Check the ramp is stable and does not move or slide.

Place twin track ramps straight and next to each other (parallel) and the same distance apart as wheels of the person's wheelchair.

Lesson 4: Step three: Use

The third step in providing a portable ramp is to teach the person how to use it safely and take care of it.

If a person needs assistance to position or use a portable ramp, involve their caregiver or family member. If the ramp is for a public building or transport, discuss teaching more than one member of staff.

How to use a portable ramp

Teach the person or their assistant how to position the ramp correctly and how to safely go up and down a portable ramp. If the ramp is for a public building or transport, teach the person/s responsible for the portable ramp.

- When going up a ramp, the person or assistant should lean slightly forward.
- When going down a ramp, the person or assistant should lean slightly back.

Warning! A person can lose control of a wheelchair or find it difficult to balance with a walking aid on a slope. When teaching a person how to go up and down a ramp, start by assisting until they can use it safely on their own. Stay close to the person at all times.

If the person is using an electric wheelchair, no adjustment is required for going up slopes. It may be helpful to tilt the wheelchair seat backwards slightly when coming down a slope.

Looking after a portable ramp

Teach the person, their family and caregivers, how to look after the ramp.

- Check the portable ramp for any signs of damage
- Wash the ramp with water and soap if necessary
- Remove anything that covers the anti-slip surface, such as mud/dirt/snow
- Check the ramp folds and unfolds easily
- Tighten any loose bolts or screws
- Clean and oil any moving parts
- Let the ramp dry before storing it.

Lesson 5: Step four: Follow up

It is important that people know to contact the service at any time if they have a problem with their portable ramp.

If the person is not using their portable ramp or has problems using it, find out why. The ramp may need repair or replacement, or the person may need further teaching on how to use it.

Check:

- Folding mechanisms and hinges work smoothly
- The ramp ends sit flat to the ground
- The anti-slip material is still in good working condition.

The ramp is damaged and no longer safe when:

- There are cracks or damage
- The ends of the ramp are bent or broken
- The raised sides of the ramp are bent or broken
- The surface becomes very slippery and cannot be repaired.

If the ramp is unsafe and cannot be repaired, the person will need a replacement.