

The University of Sydney

Faculties of Health Sciences and Architecture

The Home Modification: Information Clearinghouse Project

Consumer factsheet:

Using Reeded (Ribbed) Timber for Decks, Ramps and Paths

1 What is reeded (ribbed) timber?

Reeded or Ribbed timber is the name given to wooden decking timber that has a rippled or grooved finish on the walking surface.

Timber is often used on the walking surface of steps, ramps, decks and paths of travel because it is cheap and pleasing to look at.



When properly maintained, the reeded or ribbed finish is

more slip resistant than decking timber with a flat sawn finish because it provides more texture and better drainage. Best results are obtained with reeding (ribbing) in conjunction with a proprietary nonslip coating. This is especially so for persons with restricted mobility, such as people with poor balance, people who use a walking sticks or crutches and people with a prosthesis, as they are most at risk of falling from slipping or tripping.

2 Points to Remember

- Remember to ask your architect and builder if the new design complies with Building Code of Australia (BCA) requirements. If not you should ask why.
- The decking timber must be fixed with the textured surface or reeds upper most.
- The reeds must run across rather than along the primary direction of travel.



Ask your builder for written maintenance instructions.



3 What are the relevant building regulations?

The Building Code of Australia (BCA) sets out the minimum requirements for built structures. The BCA calls up various Australian Standards to provide the technical specifications to meet these requirements.

This means the BCA describes the expected finished outcomes while the Australian Standard describes how to achieve these outcomes.

The BCA requirements for ramps and paths in private homes are not mandatory. However, these requirements indicate what should allow safe and independent mobility for many older people and people with a disability. So these requirements are a good benchmark for your own home.

The most relevant of these requirements are listed in the section 7 'Points to consider when planning and designing'

4 Alternatives?

Brushed concrete or steel mesh may provide a more suitable surface for people who use walking aids such as crutches or canes and in situations where water pooling or gradient problems may occur.

5 What advantage does reeding or ribbing offer?

- Offers a more slip resistant walking surface when properly maintained and installed.
- Simple and straightforward maintenance program
- Reasonably low materials cost
- Timber is relatively easy to work with so construction costs may be reduced.

6 Who can benefit from using reeded or ribbed timber?



Selecting reeding or ribbing for your timber decking reduces but does not eliminate the risk of slipping (when installed and maintained correctly). Reeding or ribbing in conjunction with a non-slip decking coating product is suitable for uncovered outdoor pathway and ramp construction.

Unfortunately, the risk of slipping increases when the reeded or ribbed timber surface is covered in leaf litter or is rotten, wet, icy, mouldy. Chances of slipping also increase as inclination grade increases, making steep ramps particularly problematic. Shoes can also make a difference and for this reason rubber soles and mobility aid tips are recommended over materials that provide less friction such as leather.

7 Points to consider in planning and design

- Find out where the services such as telephone cables and water or gas pipes are located. Damage or disruption to these services is inconvenient and relocating services can increase construction costs.
- As the gradient of a walking surface increases, it becomes more difficult to negotiate and the risk of falls increases. The maximum gradient recommended is 1:14. Also, it is important to have regular landings. 9 metres is the maximum distance recommended between landings.

- The crossfall or slope across a path should be 1:40 maximum.
- Handrails can provide extra support when walking on a sloped surface or stairs. Handrails should be rounded so they are easy to hold and usually about 865 – 1000mm high.
- The design should ensure water drains away from the walking surface. Water pooling increases the risk of slipping and the likelihood of rot occurring in the timber.

8 What else can I do to make the decking safer?

Apply a commercially available timber non slip product to both preserve the timber and to reduce slipperiness. These coating products will need to be reapplied periodically.

Constructing a cover over the path reduces the impact of the weather particularly in areas prone to ice and snow.

Ensure you check the decking regularly for signs of weathering such as timbers warping and lifting. Ask your builder for 'written' instructions on what to look for.

9 What maintenance does reeded or ribbed timber require?

- Regular inspections and cleaning of the reeded decking is not difficult or time consuming. However, completing a regular maintenance program reduces the risk of injury due to falls.
- Leaves and other organic matter should be removed. Trapped organic matter can be a trip hazard but also because it holds moisture against the timber the chance of timber rot increases.

- Periodically, clean the space between the reeds to prevent mould forming. Mould is slippery and increases the risk of falls.
- Regular inspection of the joints on the walking surface can alert you to any warping or lifting of the timber. A change in level as small as 5mm can be a trip hazard.



Timber fixings may loosen over time. This may allow the timber to lift or the screw or nail to sit proud of the walking surface. Both situations create a trip hazard.

10 What do I do next?

- Think about what your needs and preferences are e.g. what areas outside the home do you want to access?
- Talk to your occupational therapist and architect about your needs and preferences

11 Where can I find more information?

- Regional HMM service provider
- Occupational Therapist
- Architect or builder
- Resource library on our website