



## Consumer Factsheet

# Slip resistant floor surfaces

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The purpose of this factsheet is to assist people to avoid slips and falls in their home. Slipping and falling on a floor is a major cause of home injuries. Older people, children, and people with reduced abilities are most at risk. You can lower your risk of fall injuries at home by installing and maintaining slip resistant floor surfaces.

## Do I need to have slip resistant floor surfaces in my home?

The Building Code of Australia (BCA) requires slip resistant floor surfaces on all newly constructed and installed ramps and stairs (treads and landings) in homes and in common areas of multi-dwelling (e.g. apartment) buildings. New multi-dwelling buildings must also have a slip resistant path to the entry of some apartments, and to and within common areas of the building. These include parking garages and any gardens, pool, or shared laundry areas.

New homes specially designed for older people and people with disability, are also required to have slip resistant floor surfaces on the path to the entry of the home and inside the home. This further lowers the risk of slipping for people who are at most danger of falling and being badly injured. However, for all other housing, there are no BCA requirements for slip resistant floor surfaces inside or outside the home, other than on new stairs and ramps. It is up to the owners and residents to have floors that will help them to avoid slips and falls.

## Where else in my home are slip resistant floor surfaces needed?

The 'wet areas' of the home: bathroom, kitchen and laundry, are where there is likely to be water on the floor. Floors in wet areas create a higher risk for slipping, and are where slip resistant surfaces are most important. However, floors in other areas, such as hallways, bedrooms and living rooms, can become wet through spills and leaks. Floors in entrance areas can become wet from shoes, coats and umbrellas in wet weather. Wet floors outdoors include pathways, verandas and patios that are exposed to the weather. It is advisable to have slip resistant floors in wet areas, and any other areas where floors could become wet.

## How do I choose a slip resistant floor material?

Some types of flooring, such as vinyl, tiles and pavers, are supplied with a slip resistance classification. This classification is the result of testing the slip resistance of the new floor material in accordance with Australian Standard *AS 4586*, and is used to indicate the risk of slipping on the flooring when it is wet or dry. There are different types of slip resistance classification, based on different methods of testing the slipperiness of floor materials. The classification will be a letter or a letter and number. For each classification type, a higher number or letter in the range means a lower risk of slipping.

The BCA provides the minimum slip resistance classification that would satisfy its requirement for slip resistant floor surfaces on new stairs and ramps (Table 1). The classifications are different for wet and dry surfaces.

**Table 1 Minimum slip resistance classification ‘deemed-to-satisfy’ the BCA slip resistance requirements for newly constructed and installed stairs and ramps in dwellings and dwelling buildings**

<b>Stairs</b>	<b>Dry surface</b>	<b>Wet Surface</b>
Stair tread surface	P3 or R10	P4 or R11
Stair nosing strip	P3	P4
<b>Ramps</b>	<b>Dry surface</b>	<b>Wet Surface</b>
Building with apartments, units (Class 2-9 building)		
Ramp steeper than 1:14 but not steeper than 1:8	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
House, townhouse, villa (Class 1 building)		
Ramp with gradient not steeper than 1:8	P4 or R10	P5 or R12

Although there is no BCA requirement for other areas of the home, you might prefer to choose a floor material that has a suitable slip resistance classification, especially in wet areas. Australian Standards have recommendations for the slip resistance classifications that are suitable for floors in public and commercial areas, in *SA HB 198:2014*. These recommendations can be used to guide the selection of slip resistant floor surfaces in and around your home (Table 2).

**Table 2. Guide to slip resistance classifications for areas of the home that could become wet, based on SA HB 198:2014 recommendations for public and commercial areas**

<b>Area of the home</b>	<b>Wet Pendulum Test (P0-P5)</b>	<b>Wet Inclining Platform Test Barefoot (A-C) / Oil (R9-R13)</b>
Outdoor level paths, driveways, balconies	P4	B   R11
Indoor wet floors: showers	P4	B
Indoor floors likely to get wet: kitchens, bathrooms, laundries	P3	B
Indoor floors less likely to get wet	P2	R9

Other types of flooring are not available with a slip resistance classification. This could be because the floor material has not been tested by the supplier, or because it is a surface like a concrete path, that is made at your home. In this case, it is best to avoid smooth and shiny surfaces. Lightly textured surfaces are usually more slip resistant, but only when they are kept clean. If the texture fills up with dirt and grime, the floor can become very slippery.

Sudden changes in the slip resistance between two floor areas can increase risk of slipping and tripping. It can unexpectedly change the speed of your feet moving on the floor, making you lose balance. You should choose a floor material with slip resistance similar to the floors near it.

## **What if the floors I already have in my home are slippery?**

Often, slipperiness of existing floors can be reduced by thorough cleaning. If this is not enough, there are other options to modify your floors. Timber, concrete, stone and tile floors can be treated with acid or abrasives to roughen the surface. Floors can also have slip resistant sealers or coatings painted on. Another option is to fix slip resistant materials onto the floor.

Before deciding on any of these modifications, you should check:

- how it will affect the appearance of the floor;
- how the floor will need to be cleaned; and
- how often you will need to repeat the modification of the floor to keep it slip resistant.

## **How do I keep the floor slip resistant?**

Cleaning and maintaining the floor are very important to prevent slipping. Even slip resistant floors can become very slippery when they are covered in grime or become worn.

When choosing your floor surface, you need to find out how often the floor needs to be cleaned, and the correct method for cleaning. Floors inside and outside some areas of your home might need cleaning very often because they get very wet or dirty. It might be possible to reduce the amount of cleaning by having:

- good drainage, to avoid water pooling on floors, especially in bathrooms and on outdoor paths;
- overhead cover, to protect outdoor paths from rain, ice and fallen tree leaves; and
- floor mats, or removing your shoes, to avoid dirt and water being tracked into your home.

Some floor materials might also need extra maintenance, like reapplying a special coating. If the cleaning or maintenance of a floor is difficult for you, and you don't have someone to assist with this, a different type of floor material might be more suitable.

## How else can I avoid slipping on the floor?

Even when floor surfaces have good slip resistance, sometimes slips and falls can happen. This might be because someone in your home has mobility difficulties, or perhaps there has been a spill or dirt on the floor.

There are other things you can do to help reduce slipping:

- avoid wearing socks, or shoes with very smooth or hard soles, which will not grip the texture of the floor surface;
- have handrails on stairs and ramps to help stop a slip becoming a fall; and
- add extra lighting in areas where it could be difficult for people to see the floor properly.

## Where can I find more information?

- The HMinfo *Industry Factsheet: Slip Resistance of Ramps*, available from the [www.homemods.info](http://www.homemods.info) website
- Home Modification & Maintenance service providers
- Occupational Therapists
- Architects or builders
- Other home modification resources on the [www.homemods.info](http://www.homemods.info) website

## Checklist for choosing a slip resistant floor surface

Do you have information on how the floor will be used, to make the best flooring choice:

- who the users (residents and visitors) are and whether they have a higher risk of slipping?
  - how often the floor surface would be used?
  - what type of footwear would likely be worn on the floor, and/or would users be barefoot?
  - what items would be used on the floor, e.g. furniture, floor rugs, assistive equipment?
  - what could affect the slipperiness of the floor surface, e.g. water, dirt, grime, leaves?
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### Information from the supplier

Has the flooring supplier given you information on:

- the slip resistance classification of the floor material or floor surface treatment?
  - how to clean the floor surface properly and how often cleaning is needed?
  - whether any other maintenance, such as recoating, is needed and often it should be done?
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### Making sure the floor surface is suitable for you

- Does the slip resistance classification of the floor surface suit the area of your home?

*If there is no slip resistance classification available,*

- does the floor surface have a suitable texture, without a high gloss, OR
- do you know if this floor surface has been slip resistant in a similar type of area, OR
- could you select a different floor surface that has a suitable slip resistance classification?

- Does the appearance of the slip resistant floor surface suit your home?
- Is the slip resistance of the floor surface similar to the slip resistance of the floors near it?
- Can you or others at home do the cleaning and maintenance of the floor surface that is needed to keep it slip resistant?

*If you or others at home would have difficulty cleaning and maintaining the floor surface,*

- could friends or family assist you with cleaning and maintenance OR
- could you use cleaning and maintenance services OR
- could you select a different floor surface that needs less cleaning and maintenance?

*\*\*This information was correct at time of printing.*