

# Impact Areas



Playground injuries often occur when a child falls from play equipment onto a hard surface. Playground equipment that measures Greater than 600mm above ground level requires a falling space and impact area. The falling space and impact area is a safety zone that surrounds the equipment and is free of obstacles.

Certified playground surfacing is required within impact areas. Refer to the information sheet *Playground Surfacing*.

## Free Height of Fall

Free height of fall is measured from ground level to the intended point of body support e.g. foot, hand, seat or platform.

The maximum height of platforms for playground equipment varies as follows:

- All Age settings (schools and public playgrounds) is 3000mm above ground level.
- Education and Care services is 1800mm above ground level.

## Falling Space

This is the space in, on or around the equipment that a user can fall through from an elevated part of the equipment. The falling space should be free of obstacles that could injure a user in the event of a fall.

## Free Space

This is the space in or around the equipment that can be occupied by a user undergoing forced movement such as on swings, rockers, slides, spinners, carousels and flying foxes.

## Impact Area

The impact area is measured from a point directly below the elevated part of the equipment where the equipment measures greater than 600mm above ground level.

For static equipment with platforms 600-1500mm above ground level the impact area is 1500mm. AS 4685:2014 specifies a graded system of impact area for platform heights of more than 1500mm. The impact area between static equipment can overlap.

Specific impact areas apply for each type of equipment such as swings, rocking equipment (e.g. spring rockers, see saws), cableways (e.g. flying foxes) and carousels. The impact area for equipment with forced movement (swings, carousels etc.) may not overlap with those for other equipment items.

When designing a playspace, ensure that impact areas for each piece of equipment is clearly identified on the plan.

When purchasing equipment the falling space and impact area must be determined by the manufacturer in accordance with AS 4685.



# Impact Areas for Specific Equipment Types



## Swings

Impact area for swings vary depending on the swing type and height of the swing.



## Slides

Impact areas for slides vary depending on the slide type and height above ground level.

An impact area filled with certified surfacing (1m rating) is required to be provided beyond the end of all slides irrespective of height.

*Type 1 Slide* (short run-out section with long impact area) - the impact area is at least 2000mm beyond the end of the slide.



*Type 2 Slide* (long run-out section with short impact area) - the impact area is at least 1000mm beyond the end of the slide.



## Cableways

A minimum 2000mm impact area is required to each lateral side of the cable. In addition, a minimum 2000mm impact area is required beyond the end of the maximum swinging position of the grip or seat.



## Carousels

A minimum impact area of 2000mm is required surrounding any carousel.



## Giant Revolving Discs

A minimum impact area of 3000mm is required from the side of a revolving disk.



## Rocking Equipment

A minimum impact area of 1000mm is required surrounding rocking equipment.



## Spatial Networks

Refer to manufacturer's compliance requirements for impact areas.

## Moveable Play Equipment

A minimum impact area of 1500mm is required surrounding moveable play equipment items measuring 600mm or more above ground level.

An impact area of less than 1500mm is required for moveable play equipment less than 600mm above ground level. An impact area of 1000mm is recommended surrounding low equipment items that are designed for climbing, rocking or spinning.

The area for setting up moveable equipment (photo below) is indicated with the black wet pour rubber. The impact area is highlighted with the use of the red and green sections.



Contact Kidsafe NSW to assist in determining impact area requirements.

KIDSAFE NEW SOUTH WALES Inc.  
Playground Advisory Unit

P: 02 9845 0893  
E: [schn-kidsafe@health.nsw.gov.au](mailto:schn-kidsafe@health.nsw.gov.au)