Playground injuries most frequently occur when a child falls from play equipment onto a hard surface. Playground equipment that measures more than 500mm above ground level requires a fall zone. The fall zone is a safety zone that surrounds the equipment and is free of obstacles.

Tested playground surfacing is required within the fall zones. Surfaces must have proof of testing in accordance with AS/NZS 4422. Refer to Kidsafe NSW information sheet titled Playground Surfacing.

**Free Height of Fall**
The maximum height of platforms for playground equipment in schools and public settings is 2500mm and for education and care services 1500mm. This is measured from the playing surface to the intended point of body support e.g. foot, hand, or seated position.

**Fall Zones required by AS 4685**
AS 4685 presents a graded system of fall zones for specific free heights of fall for playground equipment. The extent of the fall zone is measured from a point directly below the elevated part of the equipment where the equipment measures 500mm or more above surface level.

The required fall zone varies depending on specific equipment (e.g. swings; slides; spring rockers) and the setting in which the equipment is used (e.g. supervised early childhood settings or other settings).

If engaging the services of an equipment supply company, landscape architect or designer, request that fall zones for equipment items are clearly dimensioned on the plan.

When purchasing new equipment the fall zone must be determined by the manufacturer in accordance with AS 4685. Request and retain documentation from the manufacturer as proof of compliance to assist ongoing playground inspections.

Specific fall zones apply for each type of moving equipment such as swings, rocking equipment (e.g. spring rockers, see saws), runways (e.g. flying foxes) and carousels. Kidsafe NSW is available to discuss the fall zone and surfacing requirements detailed in the Australian Standard for different items.

**Shared Fall zones**
Fall zones between static equipment items can be shared. Refer to Figure 1 below. The fall zone for swings and carousels may not overlap with fall zones for other equipment items.

Kidsafe NSW recommends that separate fall zones for all moving equipment are provided.

![Figure 1: Example of shared fall zones surrounding static equipment.](image)
Fall Zones for Swings
AS 4685 allows for a reduction in the amount of certified surfacing required for swings that are self aligning. Contact Kidsafe NSW for further information.

Fall Zones for Slides
Fall zones are required to be provided surrounding slides elevated more than 500mm above playing surface in accordance with AS 4685. A 2000mm run-out section fall zone filled with certified surfacing (1m rating) is required to be provided from the end of all slides. Refer to Figure 2.

Fall Zones for Runways (Flying Foxes)
A minimum 2000mm (1500mm for education and care services) fall zone shall be provided to each lateral side of the runway cable. In addition, a minimum 2000mm fall zone is required beyond the end of the maximum swinging position of the grip or seat.

Fall Zones for Carousels
A minimum fall zone of 2000mm is required surrounding any carousel.

Fall Zones for Giant Revolving Discs
A minimum fall zone of 3000mm is required from the side of a revolving disk.

Fall Zones for Rocking Equipment
A minimum fall zone of 1500mm is required surrounding a rocking equipment item. A 2000mm fall zone is required between any two pieces of rocking equipment or 1500mm if they are rocking in the same direction.

Fall Zones for Spatial Networks
Refer to manufacturers certificates of compliance for fall zone requirements.

Fall Zones for Mobile Equipment
Kidsafe NSW recommends that a minimum fall zone of 1900mm be provided surrounding mobile equipment items measuring more than 500mm above the playing surface. Refer to Kidsafe NSW information sheet titled Mobile Equipment.

The area for setting up mobile equipment has been indicated with the use of the black wet pour rubber (photo above). The fall zone is highlighted with the use of the red and green sections.

Circulation zones for equipment less than 500mm above ground level
Kidsafe NSW recommends a circulation zone of 1000mm is provided surrounding low equipment items (less than 500mm above the playing surface) that are designed for climbing, rocking or jumping.