

Playground Surfacing

When is certified surfacing required?

All playground equipment with a fall height more than 500mm above playing surface level must have a certified impact absorbing surface beneath and around it to help minimise serious head or other injury.

Impact absorbing surfaces must comply with the AS/NZS 4422:1996. Many impact absorbing materials have been extensively tested for impact attenuation. No one material has proven to be the best solution for all occasions and decisions must be made depending on environmental conditions, cost and preference. All surfaces have advantages and disadvantages that need to be considered. The two main types of surfacing products are loose fill and solid materials.

Loose Fill

Loose fill includes products such as bark mulch, wood chips, wood fibre, rubber mulch and sand. The cushioning effect of loose fill is achieved by the trapping of air between particles. This product is generally less expensive than solid material but requires regular maintenance including top up. However, if the cost of maintenance is measured in economic terms, solid materials may compare favourably.

The depth of loose fill must be maintained at a minimum depth of **250mm** at all times.



The *Kidsafe NSW* Playground Advisory Unit recommends that a minimum depth of **300mm** be maintained to allow for product loss and dispersion as children use the playspace. AS/NZ 4486.1 suggests that materials should be raked and redistributed weekly and replenished when necessary. Loose fill products are easily displaced and should be retained by a border or edge that is constructed with an appropriate material and avoids presenting any trip hazards.

Sand as playground surfacing is a popular alternative, however, must comply with the Australian/New Zealand Standard. Each sand type varies and may have differing depth requirements. Check with the supplier for documentation on specified depths for sand.



Solid Materials

Includes products such as synthetic grass, rubber tiles and wet pour rubber. The impact attenuating qualities of solid materials varies according to the thickness of the layer and the composition of the material.

Solid materials work well with loose fill products beneath heavy traffic areas such as under swings and at the base of slides. This assists by reducing the required labour to replenish the loose fill.

If a rubber product is desired select a light color as this will absorb less heat.

Before purchasing playground surfacing material;

Ask the manufacturer for information on the "critical fall height" test results. Request a certificate of compliance as proof that the material supplied has been tested in accordance with the Australian/New Zealand Standard AS/NZS 4422:1996. Retain this certificate of compliance in your playground records. This is important for both loose and fixed playground surfacing materials.