promoting the value of play

THE IMPORTANCE OF OUTDOOR PLAY

Play has an important role in human development and thus the provision of outdoor play opportunities for children.

Through play, children interact socially; learn negotiating skills; engage in dramatic play, role play and fantasy; extend their creativity and imagination; test themselves physically, developing skills and mastery over physical challenges; develop ball handling and other skills; observe the natural environment, and engage in a range of self directed activities which aid each individual to develop towards independent adulthood.

Children have a variety of interests and will want to play in different ways at different times. Consequently it is essential to provide a range of types of play spaces. Children tend to utilize all of the space for their play and thus the importance of planning for play beyond the provision of play equipment.

Play spaces will typically involve combinations of areas of hard surfaces, a grassed area for running, ball games; play equipment for different activities and skill development; small spaces with seating for individuals and small groups; intimate spaces; sand play areas, dirt, water and planting for creative activities; areas suitable for digging, and play with loose materials and surfaces; areas for dramatic /role play which might include decks, cubbies and planting; shade and shelter, drinking water and other utilities; shrubs and trees for hiding, shelter, imaginative games; tables and seats for a range of group activities; gathering spaces for assemblies, performances and community activities, and quiet spaces as well as busy spaces. Areas around buildings such as steps and stairs, doorways, and garden beds are valued play areas and will be appropriated by children for a range of activities. They should be considered when assessing the range of activities available.

TODAY'S EMPHASIS ON RISK MANAGEMENT

Community awareness of safety has increased dramatically over the past few years, and outdoor play areas and playground equipment are now under greater scrutiny. Therefore the management of risk is a high priority for management of playgrounds. Children need play environments that encourage some risk taking and that help children to develop self managed behaviour.

This information is not intended to provide risk free environments for children, but to provide advice on strategies to develop quality outdoor playspaces in accordance with Australian Playground Standards aimed to protect children from injury. Children need to be able to make informed decisions about their own safety and to develop a positive self image and competence in living skills. They need opportunities to explore and experiment in an environment that provides a degree of managed risk.

Managers of playgrounds and play equipment must accept the responsibility of providing quality outdoor play spaces and experiences for children, and therefore knowledge and implementation of relevant Australian Standards for play equipment is recommended. Whilst it is not possible to eradicate all playground accidents, our main concern is the reduction of injuries which can be avoided.

AUSTRALIAN STANDARDS FOR PLAYGROUNDS SAFETY 2012

AS4685	*2004*	*Playground Equipment* *This Standard has 6 Parts:* *Part 1 General safety requirements and test methods* *Part 2 Particular safety requirements and test methods for swings* *Part 3 Particular safety requirements and test methods for slides* *Part 4 Particular safety requirements and test methods for runways* *Part 5 Particular safety requirements and test methods for carousels* *Part 6 Particular safety requirements and test methods for rocking equipment*
AS/NZS 4422	*1996*	*Playground Surfacing - Specifications , requirements and test method, including amendment No. 1, 5th May 1999*
AS/NZS 4486	*1997*	*Playgrounds and Playground Equipment* *Part 1-Development, installation, inspection, maintenance and operation.*
AS 2555	*1982*	*Supervised Adventure Playgrounds*
AS/NZS4360	*2004*	*Risk Management*

Please note
For the purposes of risk management no Draft Standard has any status with Standards Australia and should not be referred to in Risk Assessment Reporting.

Standards on Play Equipment	AS 4685 Part 1 General Part 2 Swings Part 3 Slides Part 4 Runways Part 5 Carousels Part 6 Rocking Equipment Based on EN 1176
Height of equipment	No maximum
Falling	To be called the free height of fall; 2.5m max. or 1.5m max Supervised Early Childhood Except 2.2m max Monkey bars, track glides, upper body equipment. PRAV recommends 1.0 mm for 0-3 years.
Barriers	Requirement for a safety rail across all equipment access points to prevent accidental falls. For Supervised Early Childhood Not needed under 500mm. Where the platform is 500 mm or more, but less than 1200mm above the playing surface, a guardrail or barrier shall be provided. The height of the top of the guardrail to be measured from the surface of

	the platform and shall not be less than 650mm and not more than 750mm. The height of the top of the barrier to be measured from the surface of the platform and shall not be less than 700mm. Where the platform is 1200mm or more, but not more than 1500mm above the playing surface, a barrier shall be provided. The height of the top of the barrier measured from the surface of the platform shall be not less than 900mm. <u>For all others</u> Not needed under 500mm. Where the platform is 500mm or more, but less than 1200mm above the playing surface, a barrier shall be provided. The height of the top of the barrier, to be measured from the surface of the platform, and shall not be less than 650mm and not more than 700mm. Where the platform is 1200mm or more, but not more than 2500mm above the playing surface, a barrier shall be provided. The height of the top of the barrier to be measured from the surface of the platform and shall be not less than 900mm.
Handrails	All access ramps, stairways, stepladders, and bridges shall have a continuous handrail on each side. This does not apply to rung ladders where the rungs are used as handrails. <u>Height above platform, landing, other equipment or ground, in Supervised Early Childhood</u>. Handrails shall be continuous and extend at least as high as a point vertically above the outer edge of the platform, landing or equipment served and no greater than the following distance off the ground or lower landing will be 800mm and for all other equipment: 1200mm.
Swings	All swings need to have impact absorbing material on the fall zone area. The fall zone should be 1.75m from the point of extension of the swing seat front and back for swings or for a precise measure refer to Part 2. In other words, if you pull the swing out as far as you can and add 1.75m then this is the fall zone required. Fall zones of swings are not permitted to overlap. There shall be no hard edging within the fall zone. There is no fall zone required outside the swing posts, however there should be 1.75m either side of the central point of the swing seat that has undersurfacing on the ground. This will generally allow a reduced fall zone for swings at the side of the swing. If swings are not self aligning, reduced fall zones should not be applied.
Fall zones	Introduction of the principle of “forced movement” and it’s impact on fall zones.

	Impact attenuation surface required on lower deck where deck to deck height exceeds 1.0m. Impact attenuation on deck entries to track rides, monkey bars etc. Generally reduced fall zones dimensions for static equipment with less than 2.5m. free height of fall. Greatly reduced fall zones for swings, slides, track rides (flying foxes), spring rockers and the like. Play equipment supplier to determine, and measure according to the detailed graph included in the Standard which relates to the exact free height of fall between 500mm and 2500mm or 1500mm for Supervised Early Childhood. Special fall zone for swings; Special fall zone for slides; Special fall zone for track glides (flying foxes); and, Special fall zone for spring rockers.
Entrapment	Clearly defined entrapment conditions, tests and dimensions for finger, foot, torso, head, neck and toggle. There are new tools and tests for all entrapment conditions included in Part 1.
Structural design	AS 4685 encourages cost effective layout and design of play equipment. This is largely due to the reduced fall zone requirements. There are proximity restrictions on the placement of forced movement equipment with no overlap of forced movement equipment zones allowed with other fall zones. Play equipment can be clustered together in much closer proximity with reduced undersurfacing costs due to the smaller fall zones required, however safety is paramount and adequate falling space must be provided. The principles of layout design as in AS/NZS 4486 remain. • mportance of undersurfacing as per AS/NZS 4422; • eed to ensure suitability of topography of site and overall size for play equipment; • nsure ground conditions will accommodate footings; and, • nsure non intrusion into the fall zones of fencing, gates, trees, seats, shade structures, landscaping, taps and other services, as well as the softfall edging itself.

- AS4685 refers to Supervised Early Childhood as the only difference in specification from all other. The relevant authority will determine the status of each early childhood setting;

- Play equipment suppliers have the responsibility to ensure that all equipment satisfies the requirements of all relevant standards. In the event of an injury, death or equipment failure they can be held liable for negligence. It is their responsibility to have a clearly documented paper trail and the ISO 9001 certification is a key element in the design and documentation process;

- The play equipment supplier is also responsible for the provision of installation instructions to ensure that the completed installation satisfies all requirements of the standards, particularly with regard to structural integrity and entrapment, that has the capacity to cause serious injury or death;

- Playground installers have the responsibility to ensure that the installation is applied strictly in accordance with the instructions of the play equipment supplier. Failure to comply with suppliers instructions can result in the installer being held negligent;

- The owner of the equipment is responsible for ensuring that the maintenance of the equipment is in accord with the play equipment suppliers instructions;

- Only genuine parts should be used to replace worn parts on equipment. This is particularly so during the warranty period, otherwise the equipment warranty will be voided. Any maintenance supplier that uses non-genuine replacement parts without the approval of the play equipment supplier places both themselves and the owner of the play equipment at risk. The liability for any modification rests with the person/company recommending the modification or making the modification.

- ***Members are recommended to avoid potential conflicts of interest.***
  In the playgrounds industry there are people who work in a variety of roles and thus the potential for conflicts of interest. These functions include the design and production of play equipment, the sale of play equipment, the design of playgrounds, the audit of playgrounds and play equipment, the sale of parts, the maintenance of playgrounds, and the production and sale of undersurfacing.

HAVE YOU CHECKED THESE RECENTLY?

The major cause of playground injury is falling from play equipment onto hard surfaces. The potential for injury from a fall is greater if there is no impact absorbing material under and around the equipment.

Inadequate undersurfacing
Impact absorbing material is required for all fall heights above 500mm and tested impact absorbing material is required.

Inadequate Safe Fall Zone
Impact absorbing material should not only be provided underneath play equipment but must extend beyond the outside edges of the equipment as detailed in the requirements for fall zones. There are special fall zone requirements for swings.

Lack of Maintenance
Playgrounds should not be installed and forgotten. It is essential that all playgrounds are regularly maintained. There should be no missing, broken or worn components. All parts should be stable with no apparent sign of loosening. Impact absorbing materials should be regularly checked for depth and any signs of vandalism. A systematic inspection and maintenance plan should be in place to ensure that the playground is safe.

Equipment varies in its maintenance requirements. Some items may need daily inspection in areas of heavy use and all equipment should be inspected regularly.

Equipment should be designed and installed to avoid shear, pinch or crush points; protrusions – splinters, jagged edges and protruding bolts, which can tear skin or snag clothes.

Equipment should be checked regularly to make sure that there are no sharp edges. Moving components such as suspension bridges and track glides, should be regularly checked to make sure that there are no moving parts or mechanisms that might crush or pinch a small finger. Protruding bolts and other pieces of hardware or components of equipment can cause bruises and cuts if a child bumps into them. These protrusions can also act as hooks, which can catch a child's clothing and potentially cause strangulation if a child is caught by a hooded top. Ropes should be anchored securely at both ends so that they cannot form a loop or noose.

Loose impact absorbing soft surface materials needs more regular attention.

Repairs should occur as soon as possible after reporting. If a hazard cannot be repaired quickly it should be secured against use until repair.

Prompt repairs not only improve safety and restore play value and amenity but they may prevent further vandalism, which often occurs after initial damage "downgrades" equipment. Quick minor repairs can often prevent more costly major repairs later and therefore minimize any potential litigating circumstances.

Lack of Supervision
Supervision by an adult carer is a key factor in playground safety. To make supervision easier and more comfortable, a play area should be designed to provide shade, seating and a clear view of the play area. Young children constantly challenge their own abilities, but are often unable to recognize potential hazards. In supervising play the carer should make sure that the child uses equipment which is appropriate for his or her age/size.

Platforms without Guardrails
Raised surfaces such as platforms, ramps and bridges should have guardrails and barriers (infill) to prevent falls. It is important that rails and barriers are vertical so that they cannot be used as footholds for climbing.

Trip Hazards
Trip hazards are created by parts of playground equipment or items on the ground. Exposed concrete footings, abrupt changes in surface elevations, playground edging, tree roots, tree stumps and rocks are all common trip hazards that are often found in the play environment. Exposed concrete footings pose a serious risk for injury if a child falls on them. They should be buried at least 200mm below ground level.

Age Inappropriate Activities
The developmental needs of children vary greatly. To provide a challenging but safe play environment for all ages it is important that the equipment in the playground is appropriate for the age of the intended user. Close supervision is important of younger children in particular. Whilst it is common to provide separate areas for younger and older children, there are significant supervision difficulties in doing this. The best designed playground is one which has a diversity of age related activity within a reasonably confined area.

Overcrowded Play Areas
Serious injuries can result from collisions if the play area is overcrowded. There should be an appropriate distance, as determined by AS4685 between each piece of play equipment and all paths, fences, trees, buildings, structures and other equipment. Active play areas should be separated form quiet, creative areas. For example, a slide should not direct children into a sandpit used for creative

play. The overall design of an outdoor play area is critical for injury prevention. How children move from one activity to another is a key safety issue

Potential Entrapment
Equipment should be built and installed in a way so that a child's head, neck, limbs, fingers feet and clothing cannot become trapped. AS4685 details the tests available to ensure that entrapment is not possible within any play structure, secured or flexible.

Pinch Points and Sharp Edges
Equipment should be checked regularly to make sure that there are no sharp edges. Moving components such as suspension bridges, track rides, see saws and swings should be regularly checked to make sure that there are no moving parts or mechanisms that might crush or pinch a small finger.

Things that Protrude or Tangle
Protruding bolts and other pieces of hardware or components of equipment can cause bruises and cuts if a child bumps into them. These protrusions can also at as hooks which can catch a child's clothing and potentially cause strangulation if a child is caught by a hooded top. Ropes should be anchored securely at both ends so that they cannot form a loop or noose.

FURTHER IMPORTANT ISSUES

- Ensure ***consistency*** between inspections;
- ***Think strategically about safety***; it should not be an end in itself;
- Think about the ***importance of outdoor play*** and of ***skill development***, and the provision of an adequate range of outdoor play *settings* for the numbers and age groups of children;
- The need for ***adequate space***;
- Consider the ***variety and complexity of play activities*** provided in outdoor play environments;
- Consider the inclusion of ***natural elements*** such as sand, water, digging and plant materials, which are considered fundamental elements; and
- Consider the ***quality of the space*** so as to encourage outdoor play for as much of the day as possible, weather permitting. Shade and shelter needs to be provided to facilitate outdoor play for much of the year.

Barbara Champion
Executive Director