



#PlayToday

info@playaustralia.org.au  
www.playaustralia.org.au

*promoting the value of play*

## SANDPITS

If you can only afford one major piece of play equipment, give priority to a sand pit, which is highly used and loved by children. Sand is an excellent and important medium for creative play. It provides a prop for many social/dramatic activities for small or large groups. It may be provided in many ways ranging from small portable trays and containers through to large and natural free flowing settings such as multi-level, landscaped sandpits.

Having a tap connected to either mains, water tank or bore allows the addition of water to increase the complexity of the play, change the consistency, ensure periodic flushing, and enable the cleaning of feet and equipment at the end of play.

There are no Australian Playground Standards specifically applicable to the design and management of sandpits however general requirements concerning fall heights, fall zones and ground surfaces as per the Playground Standards apply.

### Size of sandpit

Ideally one large sandpit is better than several smaller ones. Size is dependent on the number of children using the service but a general guideline is 15 square metres for 20 children, 30 square metres for 40 children and 40 square metres for 60 children. (Kidsafe NSW) in the centre. It is understood that rarely is there sufficient outdoor space to provide this size, so rule of thumb is, as large as possible.

### Sand Depth

A depth of approximately **600 mm** is recommended, with an extra 150mm of gravel underneath **plus drainage** for sand pits that are going to be subjected to boisterous digging. However some smaller sand pits may need less sand if they are to be used for driving trucks or simple moulding or cooking experiences. It is also beneficial to have a slip resistant flat area outside the sandpit onto which sand can be deposited temporarily as part of the play. Sand needs to be replaced entirely if it becomes dirty or contaminated.

### Choice of sand

Sand must mould together when damp. Fine white double or triple washed river sand (uniform particle size <1.5mm) is ideal. Avoid coarse gritty sands such as granitic sands and strongly coloured sands that can stain clothes. These may be used in smaller more easily monitored sand experiences such as sand trays or 'dinosaur pits'.

### Sandpit Surrounds

#### Height of edges

Sandpit edging can either be flush with the ground or have raised edges. Both types of edging have advantages and disadvantages. It is desirable to have at least one part of the sandpit raised with access for a child in a wheel-chair to play with the sand on the same level as other children.

### Edges flush with surrounds make it:

- ◆ easier to sweep sand back into from a paved surround;
- ◆ easier for young and/or disabled children to access; but
- ◆ more likely to spill out, causing a slippery surface on paving.

### Raised edges:

- ◆ may help prevent spillage;
- ◆ can be useful for seating or perching, or for a table or shelf for children to work on; but
- ◆ may be a trip hazard if too low (i.e. less than **100 mm.**) and a fall hazard if too high (more than for **300-500 mm-** onto grass **125-200mm** onto concrete or brick);
- ◆ may be difficult for younger children to climb if it is higher than **200 mm**;
- ◆ may need to be raised to allow hooks for attaching covers.

### Edging materials

#### *Timber:*

- ◆ must be durable or treated for in ground use;
- ◆ splinters must be smoothed off and edges slightly rounded;
- ◆ bolts, hooks, nails and other fixing devices must be recessed so that they do not protrude.

#### *Brick and concrete:*

- ◆ initial cost of concrete is relatively low;
- ◆ durable and flexible in terms of shape and design; but
- ◆ very hard materials to fall onto; and
- ◆ expensive to remove if a change is required.

#### *Rocks*

- ◆ provide natural organic shape;
- ◆ can inspire creative play; but
- ◆ need to be carefully chosen to provide rounded and flat surfaces for sitting and moulding;
- ◆ can graze;
- ◆ can be slippery when wet if smooth.

#### *Synthetics - Rubber or polyurethane 'anti-stumble,' kerbs and edging can be:*

- ◆ useful where falls onto edges are likely, such as in centres where children may have mobility and balance problems. and in very small yards; but
- ◆ expensive.

### **Working surfaces in and around sandpits**

Provide wide flat surfaces in or surrounding the sandpit to set out play equipment to encourage and stimulate play. Children need space to mound and stir and space is needed for both adults and children for sitting. If edges are narrow include some additional surfaces such as decking, timber rounds or smooth boulders, but remember that sand can be slippery on smooth decking surfaces.

### **Protection from sun and wind**

Young children spend much of their time in the sand pit and it is generally one of the most favoured play space. Protection from sun and wind and rain is essential.

The provision of solid covering enables sand play to continue even in wet weather. A solid roof or pergola also provides opportunity to suspend pulleys or scales to extend play.

A range of choices is available:

- ◆ roof or verandah;
- ◆ pergola;

- ◆ deciduous trees or creepers;
- ◆ large umbrellas anchored securely;
- ◆ makeshift awnings of shade cloth or other fabric tied to trees or buildings;
- ◆ roll up awnings; and
- ◆ shade sail.

The Cancer Council has excellent resources in state and territories available to support the provision of quality shade in playspaces across Australia.

### **Cover**

Sandpits should be covered when not in use. The need for cover on sandpits is becoming of increasing concern.

Sandpit covers are necessary where fouling or littering is a problem. For regular shapes a piece of shade cloth may be attached to a piece of hollow PVC pipe. For irregular shaped sandpits a cover may be assembled from a piece of cloth with a heavy galvanized chain sewn into the hem to keep it in place.

Covers should:

- ◆ be light and easy to remove to ensure they are removed daily to aerate the sand and that the sandpit is available for play in spite of weather forecasts;
- ◆ be durable;
- ◆ allow sun and rain to penetrate, preventing the sand from becoming stagnant (eg mesh or shade cloth); and
- ◆ be able to be stored safely during sandpit use.

They can be:

- ◆ custom-made to any shape and fixed with hooks (which must not protrude); or alternatively
- ◆ cloth may be simply held in place with sufficient tyres to prevent the cover from moving.

The provision of covers should be considered in the planning process and there are people who make covers, which can be contacted via the Yellow Pages. Our best advice, particularly for rural services is to find a local manufacturer who makes items from fabrics of one kind or another, and ask them to measure the sandpit and give a quote. Because the fit of a cover is so important, it seems that there is little point in ordering from a distance.

**NOTE: Unless covers fit completely with no gaps, their usefulness is negated.**

**Drainage** is important and should be in accord with building regulations available from Local Government. Sand pits may be drained by:

- ◆ naturally well drained soils;
- ◆ grading the sub base to a collection point;
- ◆ screenings in a graded base, separated from sand with fabric;
- ◆ agricultural pipe in screenings;
- ◆ a sump below the level of the sand; or
- ◆ a brick base with gaps for drainage, graded to drain.

### **Construction**

It is preferable to use timber rather than concrete in construction, and the sides may be formed from treated pine or moulded rubber edging. Timber treated with CCA is not recommended. The softer the surface the better.

### **Maintenance**

Inspect daily and maintain regularly. The sand needs to be raked over and debris removed, turned over to aerate the sand and replenished when the sand level drops 100mm below the desired level.

Sand should be kept moist so that fleas cannot breed.

There are centres who use orange peel to keep cats out of the sand and garden beds. Apparently cats don't like citrus fruit so the staff scatter the peel around the edges of sandpits.

**Digging patches** should not use sand but loose soil, to which you might add sandy loam to make it easier to dig. Digging patches need to be turned over regularly so as to prevent the soil compacting. Digging in soil provides different play experience from sand play, and should be provided in a separate area, away from the sand pit to prevent any spilt soil from mixing with the sand area.

The digging patch provides opportunities for large muscle play given that metal spades are often used. For this reason it must be sited where it can be easily seen and supervised by staff. To minimise accidents it must also be kept out of the main traffic areas. As this area is frequently messy due to the nature of the play, siting away from entry areas or immediately outside buildings is advisable for aesthetic reasons and to avoid the trampling of mud indoors.

Where boundaries are necessary these may be defined by shrub planting, smooth boulders, logs, planks, bricks or any combination of these.

Digging areas need:

- ◆ a convenient water supply;
- ◆ to be large enough for large muscle activity;
- ◆ a depth of **500-600 mm**;
- ◆ soil which can be manipulated by small children, (add old sand and lawn clippings and dig over periodically to keep this workable); and
- ◆ to be sited away from underground services.

Having an old table or cable reel adjacent allows the soil to be utilised as mud play.

### **Sand for circulation areas**

Granitic sand is recommended

Particle size 3.00mm maximum to 1.5mm minimum.

Recommended depth - 200mm.

Clay particles may be mixed with the sand to provide a more stable surface.

Consider use of an automatic light to scare away drug users.

### **Management of Pests in Schools and Early Childhood Centres**

PLAY AUSTRALIA suggests that if you are having a problem in your service that you take the following steps:

Contact a Pest Controller in your area who is trained to know about pests and pest management. We suggest you find such a person through your local council or the local Yellow Pages. This person will give you specific advice concerning the particular pest, and will suggest what pesticides they recommend to deal with the problem;

This document is a wonderful resource suggesting environmentally effective strategies to deal with cockroaches, ants, fleas, flies and mosquitoes, lice, spiders, rodents, timber pests and ticks and is also free. Website address is:

[www.tec.nccnsw.org.au/member/tec/ipm/online/common.html](http://www.tec.nccnsw.org.au/member/tec/ipm/online/common.html)