

Shade for the childcare services

Key point

Shade is an effective means of sun protection however shade alone cannot provide total protection. When the UV Index is 3 or above Cancer Council recommends protecting your skin in 5 ways:

- Slip on clothing that covers as much skin as possible
- Slap on 30+, broad-spectrum sunscreen
- Slap on a broad brimmed, bucket or legionnaires hat
- Seek shade
- Slide on wrap around sunglasses.

Providing adequate shade for children and staff is an important health and safety issue that childcare services, regardless of their size, need to address.

Cancer Council's Shade Handbook contains a step-by-step approach to conducting a shade audit and how to plan and implement a shade project. Download the Shade Handbook at www.cancercouncil.com.au/sunsmart.

Service types

Shade planning and design for each service type will be influenced by the number of children in care and the size of the outdoor play space.

Decision-making process

Depending on the type of service, it can be of benefit to gather together representatives from management, staff, parents and relevant professionals such as architects or landscapers to be involved in the design process. This will ensure that the need for shade is considered within the context of other issues and requirements.

Planning and design issues

It is important to note the different areas of the outdoor space of an childcare service. These areas may include:

- an open area for gross motor skills, such as running;
- a quiet area for focused play, such as a sandpit;

- a formal quiet area for contained play, such as painting;
- an active area for busy physical play, such as climbing; and
- a transition zone between indoor and outdoor areas, such as a verandah.

While each area has its own shade requirements, they should be considered within the context of the whole site.

Existing shade

Try to optimise the use of existing shade. For example, move play equipment to a shaded area or prune low branches from trees to allow children to play underneath.

Use of outdoor area

It is important to take into account the usage patterns of the outdoor area, including the type of activities that occur, where they occur, and when they occur. Sufficient shade should be available at the times of heaviest use, particularly when UV radiation levels are most intense.

Climatic conditions

Consider the characteristics of the climate zone as well as any local weather conditions, such as strong winds or salt (which leads to corrosion). These factors will affect the design of a shade structure as well as the selection of plant species.

Seasonal considerations

Ensure new shade does not make an area uncomfortable and cold in winter. A shade structure can also provide protection from the rain.

Reflected UV radiation

Shade structures should be:

- Designed to minimize reflected UV radiation. For example, replace smooth concrete with brick or grass. Vertical surfaces such as walls should also be made of materials that reduce reflected UV radiation.
- Shade structures should be of a sufficient size to ensure people can move away from the edges. The shade canopy should extend at least one metre past the areas of use with vertical barriers built into the sides.

Aesthetics

Shade design should be both practical and attractive to encourage children to use it. An approach that combines both natural and built shade is often preferable and using a range of different shade structures can help create a more interesting play space. Attractive components include:

- coloured sails;
- structures with textured sides or spaces to look through;
- structures that support flowering vines;
- rees, shrubs and vines with different seeding, flowering and fruiting habits (ensure these are not potentially hazardous to children).

Supervision

Staff and children need to have a clear view of each other during teaching activities and outdoor play. Designs that may hinder supervision and views include shade structures with solid or opaque sides, or low placement of overhead sails. Trees and shrubs can obstruct supervision if they are inappropriately located.

Approval

Check local government requirements for built shade structures, as you may need development approval.

Natural shade

Natural shade should be a major element of shade in an outdoor play space. Trees with dense foliage and wide-spreading canopies provide the best protection, although leaves can create ongoing maintenance problems for sandpits and may build up on paths. Choose species that suit local soil and climatic

conditions and the character of the environment. Root barriers and subsoil drainage will ensure that tree roots don't damage nearby paved areas.

Dense shrubs can also provide shade. They should be planted around the perimeter of a site so they don't obstruct supervision. Pruning shrubs on the underside may create shaded play nooks underneath. Shrubs and trees selected for the play space must be safe for children. For example, avoid species that:

- have toxic leaves or berries;
- have seed pods or stone fruit (a potential choking hazard for children under five years);
- attract bees;
- have thorns or spikes;
- are known to cause adverse health effects such as asthma and skin irritation;
- drop branches.

Temporary built structures can provide shade until trees mature.

Built shade structures

In many situations, combining built and natural shade will be the best option. There are many types of built structures that can provide effective shade, including:

- permanent structures (pergolas and verandahs);
- demountable shade (marquees and tents);
- adjustable systems (awnings);
- shade sails.

Materials used can range from glass, fibreglass, canvas and polyvinyl chloride (PVC) to steel sheeting. For built structures, regardless of the size, it is recommended to seek professional advice from a shade installer, builder, landscaper or architect to ensure it is safe and will provide the desired amount of shade. Permanent shade structures usually require council approval before installation.

Selecting shade cloth

Shade cloth is often the most common and simplest way to provide sun protection. Keep in mind that different fabrics have different abilities to block or absorb UV radiation. Fabric that is dark, close weave and heavy will block or absorb more UV radiation. Shade cloth often states the level of UV protection it provides, either as an Ultraviolet Protection Factor rating (UPF) or percentage figure. Purchasing good quality shade cloth is important. So too however is the style and size of the structure in providing good shade.

Safety

It is important to ensure that shade structures do not create safety hazards. Support systems such as upright posts should be clearly visible and ideally have rounded edges or padding. Wherever possible, avoid guy ropes, which can be a tripping hazard. Vertical barriers at the sides of shade structures should be designed to prevent children using them for climbing.

Scale

Shade structures should allow adults to view and access the children's play areas. A head clearance of about two metres is recommended for shade structures. The useability of the floor space underneath the structure must also be considered. It should be of a sufficient size and shape to allow children to gather or play actively underneath.

Demountable structures

Demountable shade structures should only be used to supplement more permanent forms of shade. Some demountable structures, such as umbrellas, offer only limited protection and may be unstable during windy conditions.

Rain protection

It may be desirable to design shade structures that offer protection from both UV radiation and rain.

Existing services

Consider the location of existing services such as drainage, power lines, gas and water.

Further information

For more information about the SunSmart Childcare Program contact the SunSmart Info Line on (02) 9334 1761, email sunsmarchildcare@nswcc.org.au or visit www.cancercouncil.com.au/sunsmart

Download:

- The Shade Handbook www.cancercouncil.com.au/publications/sun-smart-resources

The information contained in this resource has been sourced from:

- The Cancer Council Western Australia. The Shade Handbook; A practical guide for shade development in Western Australia. Perth; The Cancer Council WA; 2007
- The Cancer Council Victoria. Shade for everyone; a practical guide for shade development. Melbourne: The Cancer Council Victoria; 2004
- Greenwood JS, Soulos GP, Thomas ND. Under cover: Guidelines for shade planning and design. Sydney; The Cancer Council NSW and NSW Health Department; 1998