Shade for the home

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
- Slop on 30+, broad-spectrum sunscreen
- Slap on a broad brimmed, bucket or legionnaires hat
- Seek shade
- Slide on wrap around sunglasses.

Many homes have outdoor areas such as front and back yards, courtyards, decks, swimming pools, play areas and sandpits. Providing effective shade at home will allow your family and visitors to spend time outside while reducing their exposure to harmful ultraviolet (UV) radiation. Well-designed shade can also make your home more attractive and comfortable.


The right shade for your home
Shade can be built (verandahs, sail cloth, pergolas, gazebos) natural (trees, shrubs, vines, ground cover) or a combination of both.

Effective shade:
- falls in the right place;
- provides a barrier that blocks or absorbs a high level of UV radiation;
- protects against indirect or reflected UV radiation; and
- is comfortable and attractive for use in both winter and summer.

Establish your shade priorities
Have a look around your home and work out where you need shade the most, for example:
- Outdoor eating areas, decks and patios.
- Sandpits and play equipment.
- Pool areas.
- Verandahs.

Existing shade
Assess the existing shade at your home and make the best use of it before starting to plan and design extra shade. For example, can you move chairs or play equipment to a shaded area or prune low branches from trees to allow access to shady areas?

Climate, season and comfort
It’s important to choose or design shade that will be comfortable and attractive to use all year round. Four key elements will help make your shade comfortable:

1. Air temperature.
2. Humidity.
3. Air movement.
4. Heat radiated from the sun and surroundings.

Take your prevailing climate into account. For example, if it is hot and sticky, provide shade to block out the sun and allow cross-ventilation to capture the breeze for cooling.

If it is cold and windy, provide windbreaks to keep out the breeze and use north-facing openings to collect warmth and light from the sun.
Consider too the impact of your shade in different seasons. During summer (when the sun is higher in the sky), shade should minimise UV radiation exposure as well as cool the area. During winter (when the sun is lower in the sky and the temperature is cooler), shade should minimise UV radiation exposure but also make the most of heat and light. Adjustable shade systems, such as moveable awnings and deciduous trees, shrubs and vines (which shed their leaves in winter), will allow flexibility between the seasons.

**Reflected UV radiation**

UV rays reach us directly, in a straight line from the sun, as well as indirectly, by bouncing off surfaces such as light-coloured walls, concrete, sand, water and snow. Coarse or soft surfaces, such as brick pavers or grass, reflect less UV radiation than hard or smooth surfaces, such as concrete.

**Natural shade**

Natural shade (such as trees, shrubs and vines) should be a major element of shade for outdoor areas around the home. Trees with dense foliage and wide-spreading canopies provide the best protection. Choose species that suit local soil and climate conditions as well as the character of your home and local area. Root barriers and subsoil drainage will help to avoid damage caused by tree roots. Consider whether deciduous plants (those that lose their leaves in winter) or drought-tolerant species are more appropriate for some areas.

Temporary built structures can be used to provide shade until the trees grow large enough to provide adequate shade.

In many situations, combining natural and built shade will be a good option.

**Different shade structures available**

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.
- Portable shade (tents, beach cabanas, umbrellas).

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.

**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 (UPF) rating 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.

Download:


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
- Greenwood JS, Soulos GP, Thomas ND. Under cover: Guidelines for shade planning and design. Sydney; The Cancer Council NSW and NSW Health Department; 1998