# Shade



Shade is a practical, user-friendly form of sun protection. Well-designed and positioned shade can significantly reduce UV exposure as well as create cool, comfortable spaces.

Shade can be natural, man-made or a combination of both. It can be permanent, temporary or portable.

Ideally shade should be factored in at the planning phase of all new buildings and facilities that have outdoor spaces.

### The ideal shade scenario

- There is enough shade to protect people during the sun protection times, when the UV reaches 3 and above. In Victoria this is generally from September to the end of April.
- Shade protects users from direct and indirect UV.
- There is a combination of built and natural shade. Built shade structures provide predictable, reliable coverage, while natural shade is aesthetically pleasing and environmentally friendly.
- Shade is easily accessible, attractive, in good condition and regularly maintained.

Shade does not provide 100% protection. Some of the sun's UV can still reach you in the shade so always combine shade with protective clothing, a broad-brimmed hat, sunglasses and SPF 30 or higher sunscreen.

#### Planning effective shade

Good planning ensures effective shade. Whatever the scale of the project:

- · identify where and when shade is needed
- understand your shade options
- consider built shade
- consider natural shade.

#### What is the shaded area to be used for?

Is this area mainly used for passive activities, active play, sports, spectators or all of these? This will help determine the best type of shade structure to use.

#### Will the shade affect user comfort?

Shade areas must provide UV protection from September to April and provide cool spaces in summer. Adequate light and ventilation are also important. If the shaded area is permanent, it also needs to be warm and protected from the weather in winter so that people will still want to use it.

#### Understanding your shade options

#### Built shade structures

- Permanent structures: these must provide UV protection and cool spaces from September to April and be warm and protected from the weather in winter. They should be able to withstand harsh weather conditions and high winds.
- Adjustable systems: these are often very flexible, allowing for changes in shade as the sun moves during the day and at different times of the year.
- Shade sails: these usually require minimal support structures making them ideal when you have limited space. The design and construction of these structures is a specialised field; you will need to engage professionals to design and build this type of shade.
- Temporary structures: are easy to set up and take down, these include portable structures such as large tents, marquees and beach shelters. These are good for a space that only needs shade occasionally.
- Pre-made structures: are ready for installation on any site. They can offer a cost-effective, readily available shade solution. You will need to ensure that it is safe and provides adequate shade in the right area at the right time.

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Textile and shade cloth covered structures

Textile or coated fabric such as canvas can provide up to 99% UV block. Features can include tight weave; coating to resist mildew, rot and light exposure; and water resistance. It often has a shorter lifespan than shade cloth.

Good-quality shade cloth is an important part of your shade structure. However, effective shade depends on more than the shade cloth you use. The location of the structure in relation to the area you want shaded, its size and height, and any surrounding reflective surfaces, will all contribute to the quality of shade provided.

Shade cloth may be either woven or knitted. It allows some light, air and water through and usually has a lifespan of up to 15 years, but only offers limited protection against UV radiation.

#### Natural shade

Natural shade is well suited to large recreational areas such as parks and reserves and has a cooling effect and other environmental benefits.

The most suitable shade trees have large canopies, dense foliage, are appropriate for the soil type, climate and available water in the area, and are easily accessible. A higher canopy usually provides less overall shade. Avoid species with spiky branches, fruit or seed pods that could drop or attract bees or cause allergic reactions.

It is best to seek professional advice about your particular site and a tree species that will perform well over many years. Local councils usually have trained horticulturalists or landscape architects on staff who will be able to suggest the best tree for your conditions. Be sure to explain that you want a tree with a generous shade canopy during the period September to April.

#### Further information and resources

Shade Guidelines (PDF), Creating Effective Shade: an online shade audit tool; Being SunSmart in Victoria information sheet and other information is available at sunsmart.com.au or contact the Cancer Council Helpline on 13 11 20.

UV-protective clothing and accessories can be purchased at Cancer Council Victoria's shop or online at cancervic.org.au/store. This information is based on available evidence at the time of review. It can be photocopied for distribution.

Latest update: April 2014

