Pull the shades
Some unshaded windows let in as much heat as a small radiator (top)

Top Down
A well-insulated ceiling can reduce heat entry by 30 per cent (above)

THE BIG CHILL

A smart, yet simple, approach is your best weapon in the battle to keep out the sun's harsh rays

>> Words **Shaunagh O'Connor**

It's not easy to keep your cool when the sun beats through windows or the humidity seems determined to drive you up the wall.

Tempers get frazzled and the search is on for ways to chill out, without throwing the budget in the bin.

But it's surprisingly easy to keep the heat at bay once you know the parts of the home to tackle to keep out the sun and hot air.

And calling on commonsense tips we tend to forget from year to year also helps. Sustainability Victoria spokeswoman Katrina Wolfe says,

"There is plenty we can do to stay cool before we turn on an airconditioner, and that should be a last resort," Katrina says. "The first thing to look at is insulation in the ceiling, and then sealing gaps under doors and around windows with draught excluders and weather stripping."

A well-insulated ceiling can cut heat entry into the home by up to 30 per cent, Katrina says.

Once you know that unshaded east and west-facing windows can let in the same amount of heat as a small bar radiator, you can see the importance of tackling windows to keep the temperature even in the home.

Start by shading windows. Options include using trees with dense foliage, pergolas covered in shade cloth or vines, or a window covering, such as canvas blinds and awnings. Tinting glass is another option.

Melbourne's Wren Industries' product Renshade provides insulation through a window covering made from perforated aluminium foil reducing radiant heat flow by about 85 per cent.

"If a hot day is forecast it's best to make sure curtains are drawn," Katrina adds. You can cut half the heat entering through windows by closing fully lined, tight-fitting curtains in a box pelmet.

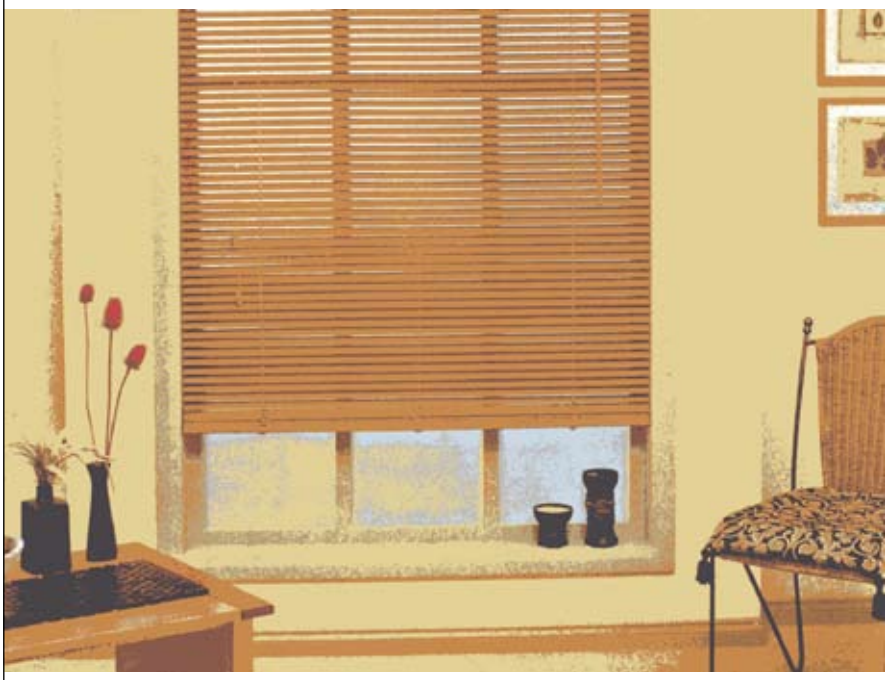
Also watch the amount of heat you are generating in the home through the use of lights and appliances. Conventional light globes give off heat, as do many appliances when they are running, such as computers and clock radios, so switch off anything not being used.

Ceiling and pedestal fans use a lot less energy than airconditioners and cool by circulating a room's air. If the house is still too warm, it may be time to turn to some form of airconditioning. But, caution is still needed.

"We recommend not setting the thermostat too low," Katrina says.

"It should be comfortable to set it between 24 and 27 degrees, because when it's hot outside it doesn't need to be 21 degrees to feel cool, it will still feel cool at 27 degrees. Every degree you lower the thermostat will cost 15 per cent more in energy use."

Evaporative coolers work on the principle of drawing hot air through a water-moistened filter and blowing it through the house. The have lower energy use and running costs compared with refrigerative coolers, which remove heat from inside the house and transfer it outside.



Blind Faith
We can all take commonsense steps to stay cool this summer (above)

Foiled again
Perforated foil works to reduce heat entry through windows (top right)

Six appeal
A 6-star-rated airconditioner cools, and is kinder to the planet (bottom right)

Sustainability Victoria's tips on using evaporative coolers include:

> To work effectively some windows and doors must be left open, preferably those on the opposite side of the hot winds.

> On days of high humidity run the fan only.

> Only run the system when you need to, to reduce running costs.

Sustainability Victoria's tips on using airconditioning include:

> Refrigerative systems have the highest energy use and running costs of all cooling, so use energy-rating labels to select an energy-efficient model.

> The external parts of the system should be installed in shade, and allow for air movement around the unit.

> Always close external doors and windows, and doors to rooms that do not need cooling. Close curtains and pull down blinds to keep out the sun.

>> clever ways to beat the heat

> Reflective window tinting allows light in, while reducing heat transfer from outside.

> Add retractable or removable blinds to skylights

> Greenery provides shade, and deciduous trees cut heat in summer and let in light in winter.

> Take advantage of cool breezes in the evening to flush out hot air from the house.

> Don't forget the chimney when you go through the home sealing places warm air can enter.

> Place a large bowl of ice in front of a fan to create an "airconditioner" cooling effect.

> Up to 42 per cent of a home's heat enters through the roof, and 24 per cent through walls, so insulating these areas is useful. The easiest way to insulate walls is at the construction stage.

> Use heat-generating appliances, such as ovens, cooktops, irons and vacuums, in the coolest parts of the day.

> Plan for salads and cold meats on very hot days

> **Source: Bradford**