



A quick guide to

# sustainable design principles

## 1) Northern glazing

High glazing ratio

Low glazing ratio

Low glazing ratio

High glazing ratio

Buildings should have a high glazing ratio on their northern face to maximise solar energy and minimise glazing on the south side to reduce heat losses.

## 2) Northern eaves

Summer

Winter

Width 'w'

Height 'h'

Summer

Winter

Width 'w'

Height 'h'

Building eaves should be designed so their width 'w' equals 45% of the window height 'h'.

## 3) Thermal mass

Winter sun

Northern glazing

Thermal mass

Winter sun

Living areas

Southern glazing

Thermal mass

Thermal mass should be positioned to collect heat from the winter sun, while being protected from the summer sun.

## 4) Space conditioning

Unconditioned stairwell

Doors closed

Comfortable upstairs and down

Excessive heat upstairs

No separation of floors

Difficult to heat downstairs

Separated floors can be heated or cooled evenly and independently, minimising energy use. Other habitable areas should also be separated from each other to ensure low use areas are not heated or cooled unnecessarily.

## 5) Home layout

Living areas

Bedrooms

Garage

Unoccupied areas (laundry, bathroom)

Houses should be laid out so that living areas receive the most warmth from the winter sun, while being protected from the hot summer sun. Garages should be orientated to the west.

**Victorian Local Sustainability Accord**

**Sustainability Fund**  
Managed by Sustainability Victoria

**CASBE**  
Council Alliance for a Sustainable Built Environment

**Moreland Energy Foundation**

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Disclaimer: These principles have been developed for southern Australia and apply only to locations between 30°S and 40°S. They should be used only as a guide. For more detailed information we recommend using Your Home Technical Manual, available online at [www.yourhome.gov.au/technical](http://www.yourhome.gov.au/technical).

Every effort has been made to ensure information is true and accurate at the time of publication.

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