

Floor plan design and orientation tips



Sustainable design and build

For any new home built in Tasmania, winter sunshine can play a large part in providing not only natural lighting but also heating. To do so effectively, rooms must be orientated to face the winter sun.

The usual approach in sustainable homes is to place rooms that are used frequently, such as living areas, on the north side and spaces that are heated or used infrequently such as bathrooms, spare bedrooms and the laundry on the south side.

In winter time the sun is low in the northern sky whereas in summer it is much higher. This seasonal movement makes it comparatively easy to predict how far sunlight will reach into a room on any particular day of the year and makes it simpler to control the penetration of the hot summer sun.

Just as the sun rises and falls through the year, every day it tracks across the sky from east to west in a predictable fashion.

In many ways a house behaves not only as a calendar but also as a sundial, allowing sunshine to penetrate deep into its easterly side in early morning, letting the midday sunlight heat north facing rooms at midday and having its westerly facing rooms exposed to the afternoon sun.

It is important that any possible obstructions to this that are unique to your site are thoroughly understood.

You may be able to remove or trim a small group of trees, but a hillside, a neighbour's home or recurring winter fog may be something that you have to live with and may require a slight change to the orientation of the house or perhaps to just the



aspect of one or two rooms.

For many sites, wind is the other major environmental influence. The prevailing winds in Tasmania are generally from the west, so unless the eastern side of the house is regularly exposed to a strong sea breeze, that may be the most appropriate place for a sheltered entry or a quiet spot for an outdoor dining area.

Where other factors such as a view or the oversight of a neighbour prevent the use of the eastern side of the house as private open space, locating the house in a position that leaves room to plant or build a suitable windbreak can provide a permanent solution to strong winds.

As with every other aspect of design where a sustainable approach is required, the solutions should be site-specific.

For free advice about these important issues, call us today on (03) 6227 9633.