

Green Walls

by Noni Young

Do you have north or west facing walls on your home that get full sun in summer and create hot spots in your garden? Do the rooms adjacent to these walls get too hot to use and require air conditioning to keep cool? Have you considered a green wall to reduce these problems?.

'Green Wall' has become a bit of a buzz term in the horticultural and garden design arenas, though the mechanisms and science behind it is nothing new. Put simply, a green wall (or green facade as it is sometimes referred to) is the approach of growing vegetation on a vertical plane. This may be against the wall of a building or a fence or on its own vertical support structure.

There are both functional and aesthetic benefits of a green wall. In the case raised by the questions above, a green wall will reduce the temperature of a wall that would normally absorb the heat of the sun. The green vegetation absorbs less heat than typical building materials and the air space between the vegetation and the wall acts to insulate and minimise temperature fluctuations, thus keeping the building significantly cooler than if there was no vegetation. By reducing the temperature, the internal rooms do not heat up as much and energy costs are reduced because, for example, less air conditioning is required.

Green walls radiate less heat back than a hard building surface and can cool the air around them through the evaporation of water through the leaves. They can also reduce noise and trap dust.

Aesthetically, green walls add texture and colour interest to the vertical planes in a garden design. They can be made a design feature or

used as a foil to other vegetation in the garden. In our shrinking urban gardens, they are a great option where space is limited and can be productive if planted with herbs or vegetables.

Green wall systems range from highly engineered, hydroponic systems (such as you might see on a commercial development) down to a simple climber on some support wire or mesh. Examples of climbers that you may consider for a green wall include:

- Chinese Star Jasmine (*Trachelospermum jasminoides*) - a hardy evergreen climber with small, white, fragrant, star-shaped flowers in spring and summer.
- Happy Wanderer (*Hardenbergia violacea*) - an evergreen, native climber with white and/or purple pea-like flowers in winter.
- Boston Ivy (*Parthenocissus tricuspidata*) - a deciduous, self-clinging climber with large, pendulous, glossy green leaves that turn to deep red and gold in autumn.



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