

# Hot air

## Use the heat in the roof cavity to keep you snug.

**A**N innovative solar heating system developed in Western Australia and recently marketed to the public harnesses the warm air in your roof cavity and distributes it inside the house.

Using the expansive roof area as a solar collector, the Solectair system pumps the stored heat through ducting into the house.

If you have ducted evaporative airconditioning, the Solectair can be connected to take advantage of existing ducts and vents, or it can be installed at the same time as you install a new airconditioning system – or on its own.

The system has been put through its paces for researchers at the Environmental Technology Centre (ETC) at Murdoch University during two months of testing in 2002. In one test, they compared night-time temperatures of two similarly built homes, one with Solectair and one without, and it was found that the Solectair house maintained temperatures three to seven degrees higher than the control house.

The ETC concluded in its report that the

product would alleviate the need for heating in autumn and spring and reduce the need for conventional heating in winter.

Houses most suitable are those with large roofs, incorporating the garage, and roofs that are darker in colour. Ideally trees should not shade any part of the roof; there should be good quality insulation in the ceiling and none under the roof cladding; eaves should be boxed or sealed; a standard ceiling height helps to maintain

constant temperatures; and brick homes perform better because brick increases thermal mass to store heat.

A comparison test run in late 2002 on collecting 26.2kW of energy showed that Solectair cost 39c, an electric bar heater, \$3.65, reverse-cycle airconditioning, \$1.46, and a gas heater, \$1.99.

There are a number of WA dealers installing the system. For details, contact Air Group Australia in Welshpool on 9350 2200.

