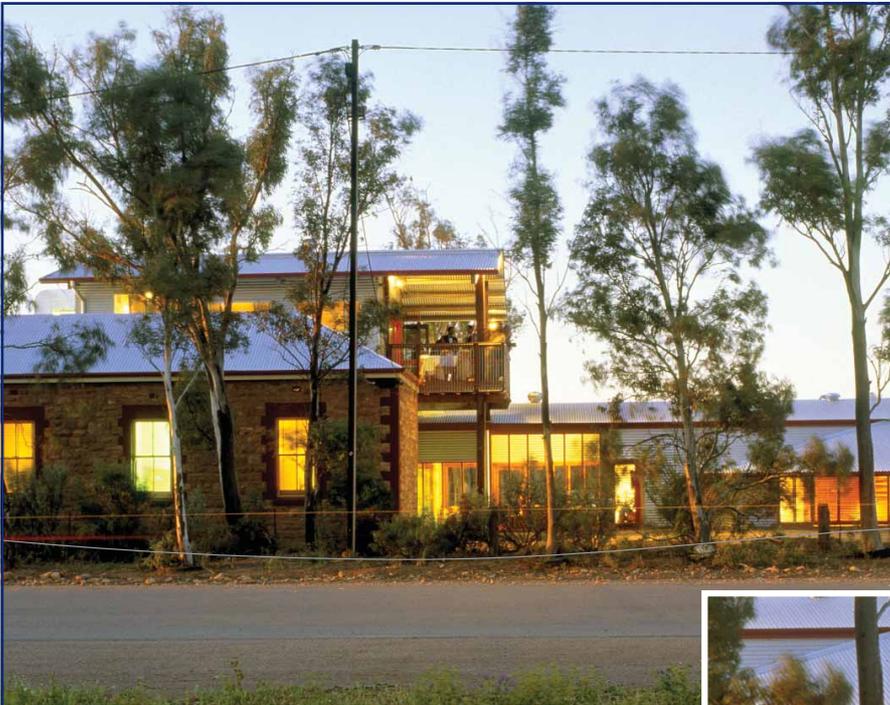




## Desert inspires energy efficient hotel



Semi-desert conditions inspired the low-lying lightweight, curved roof form of the new wing of the Prairie Hotel at Parachilna in the Flinders Ranges. ZINCALUME® steel, chosen for its thermal efficiency and "outback architectural sense", was used for the hipped roofs over the hotel units.



A simply designed hotel welcoming travellers just west of South Australia's Flinders Ranges has set a new precedent for environmentally sustainable development (ESD).

The original Prairie Hotel at Parachilna was modified by refurbishing its four existing suites and extended with eight new suites and a function space.

The building reaches international standards to complement the high level of service appropriate to its location.

Architect John Maitland said the semi-desert conditions inspired the low-lying lightweight, curved roof form of the new wing.

ZINCALUME® steel, chosen for its thermal efficiency and "outback architectural sense", was used for the hipped roofs over the hotel accommodation units.

"Corrugated steel – especially ZINCALUME® steel – is part of the architecture of the outback and its use is very appropriate," he said.

The curved roof form along the

corridor marks a separate space, which is also signalled by the change of colour to COLORBOND® steel in Surfmist®.

"There is a gap between the two roof planes of 75 millimetres, and the curved roof ties the existing together with the new," Mr Maitland said.

"Steel has lightweight, long lasting properties combined with recyclability."

"It is easy to transport and we have used it efficiently and effectively in keeping with our ESD principles," he said.

Internally cooled air is introduced near floor level and expelled through roof spaces in summer, a process reversed in winter.

"Water is solar heated for use and for space heating. Thermal mass of walls and earth work to keep

spaces comfortable, ensuring low energy use. Solar tubes cast natural light to bathrooms and the main passage," Mr Maitland said.

Roof overhangs are designed for summer shading, while orientation of the building admits sunlight in winter to northern rooms.

Built by Cox Constructions, the Prairie Hotel received an Award of Merit from the Royal Australian Institute of Architects, SA Chapter for the Energy/ESD Award.

The judges said it deserved this award for its simple and effective use of low technology in its approach to the design of a building type that too often took the easy way out with expensive air-conditioning and inappropriate construction and orientation.

For more information phone John Maitland on (08) 8410 4999

### ► IN BRIEF

#### Project:

The original Prairie Hotel at Parachilna in South Australia

#### ESD Award:

Award of Merit from the RAIA SA Chapter for Energy/ESD

#### Steel Solution:

"It is easy to transport and we have used it [ZINCALUME® steel and COLORBOND® steel] efficiently and effectively in keeping with our ESD principles,"

- Architect John Maitland

#### Architect:

John Maitland  
(08) 8410 4999

#### Engineer:

GHD Pty Ltd  
(08) 8235 6600

#### Builder:

Cox Constructions  
(08) 8261 8033

66 Steel has lightweight, long lasting properties combined with recyclability. 99

- MR JOHN MAITLAND, ARCHITECT