



Energy

PROJECT

Emirates Wolgan Valley Resort

LOCATION

Wolgan Valley, NSW

CLIENT

Emirates Hotels (Australia) Pty Ltd

ARCHITECT

Turner & Associates (Project director:
Nick Turner, Design/Project Architect:
Dominic Bennett)

BUILDER

Hansen Yuncken Pty Ltd

WINDOW FABRICATOR

Windoor

PRINCIPAL GLASS MANUFACTURER

Viridian

PRINCIPAL GLAZING

External glazing to main building and
pool building: Viridian ComfortPlus™
Clear in varying thicknesses - minimum
6.38mm

Main building entry walkway and walkway
between main building and pool building:
toughened, laminated frameless glass

Ensuite skylights: Viridian SolTech™ 8.38mm

SUSTAINABLE LUXURY

Text – Samantha Senior
Photography – Brett Boardman

EMIRATES WOLGAN VALLEY RESORT WAS AWARDED THE OVERALL WINNER IN THE MBA EXCELLENCE IN CONSTRUCTION AWARDS 2010.

The project was also awarded the winner in the categories of Hospitality Buildings \$50,000,001 & Over and Best Use of Timber.

Understated but effective design, a palette of natural building materials and extensive Viridian glazing are a few key elements of Emirates Hotels' first foray into the sustainable luxury resort market here in Australia. Designed by Sydney based architectural practice, Turner and Associates, the exclusive Wolgan Valley Resort and Spa caters for an emerging clientele who are looking for a luxury experience without the environmental price tag.

Viridian
New World Glass





Emirates Wolgan Valley Resort and Spa represents a new type of accommodation that combines luxury with sustainability. The first of its kind in Australia, the concept is modeled on Emirates Al Maha Desert Resort and Spa in Dubai, which has been providing ecologically sustainable luxury for the past decade. Located approximately 190km from Sydney, the resort is set amongst 1,600 hectares of protected conservation reserve area at the foot of towering sandstone escarpments in the Blue Mountains, and is the only resort in recent history to receive permission to be built adjacent to a World Heritage listed area.

'Wolgan Valley Resort is a unique project with a unique set of circumstances,' says project architect, Dominic Bennett. 'The buildings do not attempt to compete with the spectacular nature of their context, nor is the architecture designed to make a big statement. Rather it is about deferring to the landscape and providing guests with the opportunity to make a connection with the surroundings.'

Despite the understated design ethos, there is a definite sense of luxury prevalent throughout the resort, which takes up only two per cent of the overall property

area. Forty freestanding villas are laid out around the main resort facilities, which comprise a homestead building, pool, sauna and gym building and day spa. The homestead building contains reception, dining, conference and bar facilities, while the spa facility offers a variety of treatment and therapies. A stable and tennis courts provide for nature friendly recreation.

The design references simple, identifiable Australian rural building forms, and enriches them with refined contemporary detail elements, allowing the character of the buildings to unfold slowly to the user. The natural materials palette was sourced locally or from recycled products wherever possible to reduce the embodied energy involved with long distance transportation.

'Local stone, Australian hardwoods and corrugated iron were used as the primary external materials. The buildings will weather into the landscape as the regeneration of the degraded farmland takes hold. Also, the natural materials selection again contributes to that sense of connection with your surroundings,' says Dominic.



Along with the natural material selection, the resort's sustainability focus is demonstrated through a range of ESD initiatives addressing issues such as solar control, natural cooling and heating, water management and energy efficiency. Contemporary technologies such as solar power, heat pump technology for the pool, composting toilets and waste water treatment are incorporated into the design, along with passive design elements including verandahs with large eaves to minimise solar heat gain, stone elements for thermal mass and screened outdoor living spaces.

All buildings are designed to operate effectively as naturally ventilated spaces through a combination of timber framed operable windows and doors, clerestory glazing providing a release for hot air, and ceiling fans. Performance glazing from Australian glass manufacturer Viridian has been used throughout the main facilities as well as the villas to increase thermal comfort and provide superb natural daylighting. In addition to large expanses of floor to ceiling windows, natural light is further improved through the inclusion of skylights and clerestory glazing in all buildings.

'Glass was specified extensively in the homestead building in order to maximise the expansive view' says Dominic.

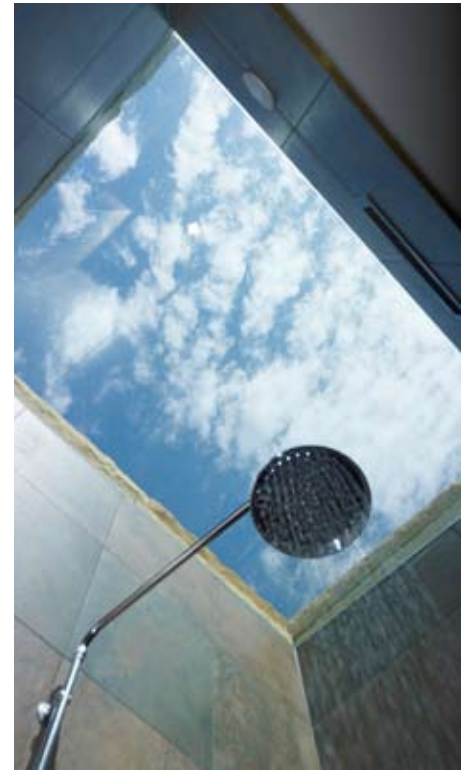
Viridian ComfortPlus™, a performance Low E laminate, was chosen for its ability to provide thermal insulation and reduce heat loss by over 30% compared to standard glass, while retaining transparency for maximum natural light.

'The homestead building floor plate is quite deep so we also used high level roof windows, to get light into the middle of the building. Additionally, we relied heavily on operable glazing, specifically bi-fold doors, throughout the restaurant and cafe to blur the boundaries between inside and outside,' says Dominic.

Over to the spa building, and a sculptural hardwood batten shade skirt is positioned over full height operable glazing along the building's circulation corridor, providing dappled light to the space and encouraging natural cross ventilation.

'In the actual spa treatment rooms privacy was the key consideration, however we still wanted to retain some connection to the outdoors. We were able to achieve this with high level glazing,' explains Dominic.

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In the guest villas, wide verandahs and individual swimming pools complement the indoor living space, which comprises separate living and bedroom areas, walk-in wardrobe, ensuite and double-sided fireplace. The living area overlooks the villa pool via fixed floor to ceiling glazing, while bi-fold glazed doors along the outer perimeter of the pool provide the option of indoor or outdoor swimming. To achieve the desired level of privacy, villas are fitted with elements such as privacy screening and fly-screening to the external living areas.

'As with the other resort facilities, glass plays an important role within the villas,' says Dominic. 'Most of the glazing is operable to provide guests with maximum control.'

One of the most unique features in the villas is a clear glass roof over the shower, again emphasizing the connection to the outdoor surroundings.

'The glass shower roof transforms an everyday activity into a really special experience where you have either the stars or clouds above you as you shower,' says Dominic. 'It's just one example of the targeted approach to glazing throughout the project. Whether it be to provide views, natural light, ventilation or to integrate indoor and outdoor spaces, each glass installation in the resort was the result of a specific objective,' says Dominic.