

Yealands Estate



Project **Yealands Estate**
Location **Canberra**
Product **KS 1000 CR Curve Roof**
KS 1000 AWP Architectural Wall
Panel Micro Rib Profile
Architect **C Nott Architects**
Contractor **Apollo Projects**
Building use **Winery**

Case Study

Publication date January 2009



FIREsafe™

ECOsafe

FIBREfree

AQUAsafe

*Constructive
Thinking*



Kingspan®

Insulated Panels

Kingspan Chosen for 5 Star Sustainable Design Solution for the 'Visual Theatre' of Yealands Estate

New Zealand Winery Celebrates Green Technology

Kingspan's quality engineered insulated roofing and wall panels were used in the recently completed Yealands Estate, situated amongst the rolling countryside in New Zealand's premier wine growing region in the South Island, a project focused on achieving 'world leadership' in green winery design. Through embracing green technology and best practice on every level Yealands Estate is targeting a NZ Excellence (or 5 to 6 Star) standard within the Green Star NZ rating system. Green Star NZ Industrial Building Standards is comparable to the Australian Green Building Council rating system.

Owner of Yealands Estate Peter Yealands commented that the project was undertaken quite differently to most projects as there were no tenders and everything was done by negotiation through the project leader Apollo Projects of Christchurch who brought together the best team. This meant they were able to adapt and change as the project went along and different issues were encountered.



He comments: "I wanted something that was aesthetically pleasing to the eye that would minimise its impact on the surroundings. We've utilised insulated panels that due to the very gentle curve, we could actually blend to shape and this has provided a secure and well insulated interior which made a lot of our sustainability requirements that much easier to realise. Apollo Projects tell us this is the definitely the 'greenest' winery in the country and most likely the world. The 5 Green Star NZ Industrial rating is very important to us and we are also well on the way to a total zero carbon rating for the whole enterprise. This winery has not been built on a whim; I've done a lot of research and it just made sense to do it right, right from the start."

Architect of the project Charlie Nott director of C Nott Architects Christchurch: "Architecturally we feel the project has offered a building that is both functional in terms of its purpose of wine making and, exciting in terms of its point of difference. It is a facility that primarily is a functional wine making facility, second; a utilitarian response and third a reflection and response to the rolling hilled landscape."

Pivotal in attempting to achieve its exemplary green certification, Yealands invested heavily in Kingspan's highly advanced insulated panels as solutions for all external and internal walls and roofing. (The system has a guaranteed BCA Section J compliance in Australia). The building form is defined by the dramatic sweep of the Kingspan roof using **KS 1000 CR (Curved Roof)**, its curved profile which rises almost directly from the ground on each side, simulating the gentle undulations of the surrounding hills. Complimenting this on the front and rear facades is the smart Kingspan **KS 1000 AWP (Architectural Wall Panel Micro Rib Profile)**, the clean minimalistic lines of this iconic 'image' building, enhanced by Kingspan's 'fully secret' fixed system for panel joints which required no face fixings and no flashing to hide fixings. Fast to erect the advanced panel technology provided an all in one construction system that enabled contractors to meet deadlines on time and within budget.



Innovative design and smart thinking underpin all aspects of the Kingspan brand. Exemplifying this in the Yealands Estate case study, Kingspan insulated panels provided a guarantee for excellence in thermal performance within the building envelope through its delivery of a seamless panel joint construction that ensures an airtight environment. It also provides an energy

smart, environmentally friendly all-in-one panel technology construction, with a firesafe polyisocyanurate core that contributes to it achieving a more than double the thermal protection of most other insulation systems on the market. This means that the individual fermentation tanks in the Wine Production Hall are situated in a highly stable environment enabling a very cost effective method for housing and accurately controlling the temperature of the wine in the winemaking process.

Kingspan Insulated roof and wall panels comprise the external finish, bonded to a rigid insulation core with a prefinished internal liner. The systems offer an all-in-one package. With water tight panel design, an insulation material that has double the thermal performance of most other insulations commonly in use such as insulation batts and polystyrene and spanning capabilities that can reduce the secondary steel (purlins and sheeting rails) requirement by half, the system revolutionises the traditional construction process.

Kingspan reserve the right to amend product specifications without prior notice. The information, technical details and fixings advice are given in good faith but are intended as a guide only. For further information please contact Kingspan Insulated Panels.

For more details contact Kingspan:

Kingspan Insulated Panels Pty Limited

Tel 02 9673 5069 Fax 02 9673 5068

Email info@kingspanpanels.com.au

www.kingspan.com.au