WINDOW INDUSTRY NEWS Spring 2007 \$4.95 (INC GST)

- Field trial begins for Class Selector Guide
- Pilkington to spend \$130 million on upgrades at Dandenong Plant
- Panorama Windows wins with Performance Installations
 Architect Phillp Nobis balances
- safety and top views

Window and door industry council

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General Manager's Notes



It's a great thrill to welcome you all to WADIC's second issue of WIN magazine - and thank you to all those members who provided such positive feedback about the first issue.We look forward to expanding the content even further over coming months to make sure you are informed about the latest technical innovations, energy efficiency improvements, general

industry news, business development tips, as well as regulatory updates and member profiles.

In this issue you can learn all about our July AGM and more on the recent membership agreement with the HIA, which gives WADIC members a comprehensive set of HIA privileges and services. We are also delighted to present a profile of longstanding member Panorama Windows, plus news about the new and exciting 'Glass Selector Guide' software package - available to members upon request for field trial. This magazine is for your benefit: we warmly invite all members to contribute information that might be of interest to colleagues, ranging from employment opportunities and new appointments to better ways of managing workplaces. Contact us and help us to help you. James Bradley, General Manager, WADIC

Front Cover:- Thank you to Pilkington for supplying the image

WADIC needs you an



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WADIC members are compliant wi

WADIC offers many benefits to its members including management, conferences, training and access to government and association lobbying. Our goal is to promote a professional, profitable and safe timber and window and door industry.

By joining and contributing your innovative ideas and financial support we can achieve our goals. As a member of WADIC you automatically become a member of the HIA. Membership fees may be tax-deductible as ordinary and neccesary business expenses (consult your tax advisor for details).

WADIC: serving the needs of owners and operators and individual timber window and door fabricators.

James Bradley **General Manager**





WADIC's newly appointed Management Committee: Tino Basso John Rule, Ian Ramsey, Kevin Kuehl, James Bradley, Neville Taylor, Glenn Johnston, Chris Auret, Gary Evens.



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Industry News

Annual General Meeting 2007

Against a backdrop of Port Phillip Bay and cosmopolitan Melbourne close to fifty attended this year's Annual General Meeting. In an innovative move Intermac and Biesse supported a machinery expo at their Sunshine plant, inviting members to a morning exhibition and display of new plant and equipment.

Various attendees showed great interest in a number of the machines that were on display, with a strong likelihood of orders being placed, indicating the confidence in our industry and the commitment to move forward and produce world-class timber windows and doors.

Later in the day the AGM was held at the Novotel in St Kilda. We are proud to say that we had the biggest attendance at any AGM held by WADIC, which again highlights the commitment that our members have to their industry.

Under the guidance of WADIC General Manager James Bradley, who on the day conducted the agenda very smoothly, we saw a new Committee of Management elected. A new treasurer, Chris Auret was elected to replace the long-standing Neville Taylor. As most members would appreciate, Neville has been a driving force behind WADIC and leaves with a very tidy set of figures to his credit.

As part of the ceremonies speakers such as Gavin Disney from the HIA, Kevin Brownhill from reinforced some of the agenda items.

Unfortunately, we did run out of time and saw fit to carry over some



WADIC's Annual General Meeting

of the discussion to the evening dinner. We were privileged to be entertained by Mr David Higginbottom from Competive Edge, who informed and I think influenced us to consider our habits in certain areas of business and personal activities.

After Higginbottom came the opportunity for members and guests to mingle and exchange thoughts and ideas on a range of issues that are effecting the timber window industry. The AGM is the singular event that all members concerned about their future and the activities of their association WADIC should attend. Hope to see you there in 2008.



Gary Garth, Travis Palmer, Peter Garth Neville Taylor,





Neville Taylor - Past Treasurer



Neil Forbes, Tino Basso





WADIC President Kevin Kuehl





Kevin Brownhill - EMBWoodman





Gavan Disney - HIA

David Higginbottom



Kevin Kuehl, Ian Ramsey, Glen Johnston



Richard Lees

Ian Dolan



Mike McMullen



Lynne & Alan Cox

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James Bradley - General Manager

Industry News

A shared commitment. a common goal

July provided manufacturers with a unique experience to become closer to the industry and interact with other members in a welcoming environment.

A joint initiative between Biesse Group Australia and WADIC, the event provided WADIC members with a combined Annual General Meeting and 'Showcase' presentation. Many members were transported from St Kilda to a special morning 'Showcase' presentation, hosted by Biesse, Intermac and Weinig at Biesse Australia's Melbourne branch to become aware of the evolving technological solutions available to the industry.

The Timber Window & Door Manufacturing Showcase, which ran for the month of July, demonstrated purpose-built technologies designed to dramatically improve the processes involved in the manufacturing of timber window and doors.

Brenton Knudsen of Biesse Group Australia attributed the success of the event to the attendance of countless industry members, becoming proactive, getting involved and learning about all the available technologies that will help the industry move forward in the coming years.

"The response was overwhelming and we had plenty of positive feedback: many members commented on it being a great morning and congratulated the efforts of all companies involved in putting together such an interesting and interactive demonstration," said Brenton

Machinery demonstration at Intermac Victoria





Make the right selection

By John Power

WADIC members are invited to participate in a field trial assessing a new glass selection computer tool.

Glass Selector Guide, produced by Cliff Lander from Bundanoon in NSW, has been designed to help specifiers, architects, installers and window manufacturers determine the right glass selections according to the latest AS 1288-2006 provisions.

According to Cliff, the motivation for creating the tool was not only a desire to simplify adherence to Australian Standards, but also an ambition to spare designers the frustrations of paper-based or tabular calculations.

"Having worked as an industrial engineer for companies such as Leyland, I became guite familiar with spreadsheets," Cliff says. "Then I left engineering and started a joinery business some years ago."

The tool, based on a simple Excel-based format, is designed to take users along a step-by-step Q&A pathway to appropriate glass specifications for any job.

Results show correct glazing choices for single or double glazed units, incorporating minimum requirements for the proper specifications for annealed, toughened or laminated options. In addition, readings for appropriate wind classifications (N1:N6) are shown according to input topographical and shielding choices. Figures for Design Wind Pressure (ULS) and Serviceability Wind Press (SLS) are accompanied by aspect ratio and area calculations.

The user starts by typing in raw data showing glazing height, width and lowest sight line.

After keying in this raw dimensional data, the first main field of questions relates to the human impacts of the installation, commencing with: 'Is the glazing in a door?'

Once the user has selected a 'Yes' or 'No' answer, the tool goes on to present additional questions (which appear only if relevant, based on the preceding positive or negative responses) to develop and define final compliant glass selections.

The beauty of the tool, as mentioned, lies in its ability to streamline the fields of interest as options are refined. For example, if the installation is straightforward and without unduly problematic safety features, the correct glazing selection will be presented after just a few easy steps - unnecessary or irrelevant data entries are bypassed.

The sequence of steps is logical and simplified by the many obligatory requirements of AS 1288-2006; for instance, if a glass fitting is subject to human impact, there will always be a requirement for safety glass. Question pathways become more complex as the parameters broaden:

Is the glazing in a side panel or window? The answer is automatically supplied as 'Yes' in the event that the fitting is not in a door.

Can the window or side panel be mistaken for a door or opening? The answer is automatically supplied as a 'No' based on preceding information

Is the nearest sight line within 300mm of a door? The user then

nominates 'Yes' or 'No', with the response triggering the appropriate ensuing Q&A steps.

By clicking on 'Further Human Impact Criteria', results are honed even further through reference to spa or bathroom locations, etc. as applicable

According to Cliff, one of the most important features of the tool is its appreciation that mathematical determinations may not always accord with human judgement! For example, even if an installation is technically compliant with Standards, it might still feature enough characteristics to cause safety concerns. In such cases the tool will automatically generate the question: 'In your opinion is this situation high risk?' A 'Yes' response will override the system even if it has deemed that the situation is technically not high-risk.

Other valuable features include links to diagrams such as 'critical location' zones displaying low, medium or high-risk sections - a useful reminder for even seasoned professionals.

The tool is methodical and easy to use for people who possess only rudimentary computer skills.

WADIC is pleased to participate in the dissemination of the Glass Selector Guide to members on a 'field trial' basis.

"We are always on the lookout for high-quality tools that might help the industry to become more efficient," says WADIC's General Manager James Bradley. "Cliff has done a remarkable job to produce a truly user-friendly tool that will help specifiers to save a lot of time. And anything that streamlines the accuracy and speed of product compliance is always welcome."

Members who wish to trial Glass Selector Guide should contact James Bradley on 02 6024 0447 or jbradley@wadic.com.au

Timbeck - Did you know ...?

Did you know that Timbeck Cedar Products was Australia's largest importer of Western Red Cedar (WRC) last year?

The company has an amazing history, starting in 1967 when the business - known until recently as Oregon Sales - was Australia's largest importer of Oregon! In 1997 the company bought the old Hyne Timber site in Burpengary, and moved its main operations there from Brisbane.

The emphasis rapidly shifted from Oregon to WRC soon afterwards as the business began to gain market share in blinds and shutters, Venetians and louvres, panelling and cladding, as well as spa and sauna sectors.

After taking over the NSW company Timbeck in 2005, Oregon Sales began servicing the window and door sectors, which now account for 20% of all turnover.

Oregon Sales adopted the new trading name of Timbeck Cedar Products in April this year.

For more information visit www.timbeck.com.au or call

02 9709 4466.

Industry News

Welcome Kevin Brownhill

WADIC is delighted to welcome new member Kevin Brownhill from EMBWoodman, a specialist computer software company servicing woodworking industries.

Kevin hails from the 'Black Country' in the West Midlands industrial heartland of England. He studied at Victoria University, Manchester, and during his studies he spent vacations working on the factory floor at a timber window and door business. He commenced work there full-time after graduating with an honours degree in computer science and accounting.

Drawing upon his first-hand knowledge of the full production cycle and his computer skills, Kevin went on to develop computer systems for the joinery business to assist with estimating, costing and cutting list preparation.

Following the sale of the company, Kevin set up his woodworking software company EMBWoodman. His business partner during that time has now retired; consequently, Kevin and his wife (and business partner) Liz are realising a long-time ambition to live and work in Australia.

Kevin and Liz plan to settle shortly on the central coast of NSW and say they would welcome enquiries from prospective EMBWoodman agents interstate.

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The company already has agents working in NZ and the UK as members of EMBGroup.

For more information visit www.woodman.com.au

WADIC welcomes new members. For more information please contact James Bradley on 02 6024 0447. To learn more about WADIC member services log on to www.wadic.com.au





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- TEXTURED LAMINATED GLASS

Industry News

'Smart Windows'

Kintrol is paving the way in the Australian eco building and construction sector through development of a weather-sensitive 'smart window'

Kintrol has been partnering the European window automation giant Teleflex to develop automatic window control systems to combine the best of international product innovation with Australia's climatic conditions.

The result is the 'smart window'. Based around a digital system of sensors and electronic controls which detect wind, rain, temperature (natural and air-conditioned) and smoke, the smart window provides a more comfortable, safer, energy-efficient environment for housing, public buildings, hospitals and accommodation facilities, factories and offices

The systems sense what is happening in their environment and then responds appropriately.

The future for our industry is all about environmental awareness. With products like the smart window automation systems specified in a project, people will be able to control their environments more responsibly and more cost-effectively; they'll be safer and will add a terrific feature to their investment.

Kintrol's point of difference is the company's dedication to innovation which is both cost-effective and environmentally sensitive.

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The Masterwood mortisers are proving popular throughout the window and door industry; for more information contact Gabbett Machinery on www.gabbett.com





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Industry News

Centor door screen for bifold doors

An enthusiastic industry reception for the new ES2 insect Door Screen for bifold doors was unquestionably the highlight of Centor Manufacturing Industry. Architectural's busy year. The popularity of the Door Screen concept Our aim is to satisfy both the individual and specific confirmed the demand for a system which responds to the problem of annoying flying pests without compromising on style. Winning requirements of each Joiner. the prestigious Best Product award at Designbuild 2006 was proof To achieve this for you, we can provide a range of Rough positive that the design team had got the Screen just right.

The ES2 system is available to view or purchase in New South Wales, Victoria and Queensland from Centor-approved



manufacturers. Several major industry players are in the set-up phase for aluminium bifold doors incorporating ES2. ES3 - the same system adapted to suit doors using mediumheavy Centor E3 bifold hardware - will be released late in 2007.

As new manufacturers come on board they will be listed on Centor Architectural's website www.centor.com.au

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Industry News

A sustainable future

In November 2006 Pilkington Australasia announced a \$130 million investment to rebuild and improve its Dandenong glass manufacturing plant in Victoria. The investment is part of a broader strategy for the entire Australasian business to move from being largely a commodity producer of float glass products to one which is a value-added product manufacturer, complemented and driven by excellent service to customers.

As announced, the three separate components of the investment include:

new batch house for processing of raw materials
upgraded float line with a new lehr, cold end and furnace rebuild to bring increased product range, capacity and flexibility
state-of-the-art CVD glass coater.

The investment will help the business to better differentiate the products it manufactures locally, adding more value to the products it makes and offering greater value to our customers.

The business is also investing and making changes to improve our service to customers – one example being the introduction of the floatliner glass transport trucks.

Why invest in glass coating?

One key component of the investment is the installation of a state-of-the-art CVD coater. There is a greater awareness by all of us about the impact humans are having on the world we live in. As a building material glass has a major and unique role to play in reducing this impact, both in better manufacturing practices, but more significantly through its ability to make the homes and buildings we live and work in more energy-efficient.

In doing so, this reduces the unnecessary use of energy to heat, cool or light a home and moderates the corresponding creation of greenhouse gases. As consumers and building operators become aware of the need to make their homes and buildings more energyefficient and governments regulate building practices to improve their performance, we continue to see an increase in the use of energy-efficient coated glass products in Australia and New Zealand.

The installation of a CVD coater will allow us to coat glass with a Low-E (low emissivity) hard coat, so we can locally manufacture and sell products that improve the energy performance of windows by providing significantly better insulation in winter and reducing the heat of the sun in summer. Pilkington ComfortPlusTM is a well-known example of a Low-E glass.

What is a CVD coater?

The technology required to make pyrolytic 'coated glass' uses a process called chemical vapour deposition or CVD coating. The addition of the coater on the Dandenong floatline will provide the capability to manufacture a range of coated glass products, including low-emissivity products. The CVD coater will be the first of its type in the Southern Hemisphere.

There are two main ways to coat glass, the first of which has existed for many years and uses a technique commonly called sputter coating or 'soft coating' applied offline in a vacuum chamber after float manufacture. At Dandenong the CVD coater will use a technique called pyrolytic coating, meaning that the coating is applied whilst the glass is still hot in the tin bath to produce a microscopically thin hard coating. The advantage of this technique is that is can occur in a continuous process and is bonded at a molecular level to become a part of the actual glass, making the coating a highly durable 'hard coat'. CVD coating is state-of-the-art technology and represents the future of glass coating.

CVD coating process

• A gaseous chemical mixture is brought in contact with the hot glass substrate while it is still in a semi-molten state (approximate temperature range from 480°C to 730°C).

• A pyrolytic reaction occurs at the surface of the substrate leading to the deposition of a coating which bonds to the glass.

• these chemical layers bond at the molecular level, and become an integral and highly durable part of the surface of the glass.

• because we're dealing at the molecular level, the pyrolytic surface can be extremely thin and even transparent.

• the chemical composition of the coating can be changed to achieve different properties and characteristics such as Low-E or self-cleaning.

What products can be made?

By changing the chemistry of the coating we can manufacture different types of products with different performance characteristics. The coater provides the opportunity to make a range of Low-E glass products with different performance properties, such as Pilkington ComfortPlus or for use in double glazed units and even self-cleaning products. It also allows new coated glass products to be made on the line as they become commercially available.

Current Activities: November 2006 - July 2007

Work is well underway on the rebuild and will continue through until its staged completion in early 2009. Detail design of the plant is underway and the first major plant change began during June 2007 with the commencement of the new batch house. The new batch house is being built in front of the furnace for better management and delivery of raw materials. On completion the old batch plant – originally built to feed the sheet glass plant in 1962 – will be decommissioned.









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Industry News

Life can be a breeze

High performance and energy ratings are among the top design elements for specifiers these days. Breezway Australia Pty Ltd, which has been designing and manufacturing louvre windows for over 50 years, exceeds these measures with its renowned, worldclass ability to deliver quality products and exceptional service.

Breezway's fully customised Altair[™] Louvre Windows provide a modern alternative to traditional electrical air conditioners and are an energy-efficient way to maintain a comfortable, stable indoor temperature. They are ideal for providing breezeways and cross-flow ventilation and also look aesthetically pleasing. Breezway Altair[™] Louvre Windows can be left open during the day to let the heat escape, or closed in the evening to retain the cool air due to their tight sealing. They can also work in conjunction with air conditioners to maximise a cooler or warmer living environment.

The Altair[™] Louvre Window can now be automated, controlling airflow into the home with a simple flick of a switch. The new Altair Powerlouvre[™] Window is easy to operate in out-of-reach locations and the low-voltage motor is concealed within the window frame.

The new Easyscreen[™] Housing System also provides a simple and effective way to protect the home with insect or security screens. The system fits the Altair Powerlouvre[™] Window, meaning there is no visible difference between frame designs for manual or automated louvre window versions.

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Panorama Windows

By John Power

The NSW town of Bathurst, renowned for its Mt Panorama car racing circuit, has another claim to fame: four window manufacturing companies.

With such stiff competition in a catchment of just 30,000 residents, Panorama Windows has flourished by keeping a keen eve on the competition and adapting to changing conditions.

This medium-sized company, which now has 15 employees, started 32 years ago as a predominantly aluminium window manufacturing company. For the past 20 years the business has been owned and operated by the Pearce family under the stewardship of managing co-directors Nathan Pearce and his parents Alan and Rhondda, as well as Brian Stott.

When the Pearce family moved to Bathurst two decades ago, they were looking for a new business opportunity following seven years as newsagency operators.

"My parents had no experience in the building trade at all and had three business opportunities to choose from," Nathan says. "They went for Panorama Windows, which had just seven employees at the time, and we've been running the business ever since."

In the early days the mainstay of the business was entry-level aluminium product, but that emphasis has changed dramatically in recent years to accommodate more sophisticated specialty markets. Today there are four core product categories: Heritage, Lifestyle, Performance and Western Red Cedar. Timber-framed windows were introduced about a decade ago, soon after which a second manufacturing shed was purchased specifically to cater to the expanding ranges of timber product.

While aluminium products make up approximately two-thirds of all current production, Nathan says there is growing consumer interest in timber, based on both its architectural and energy efficiency merits. A great deal of this popularity can be attributed to Bathurst's tough climate, which features extreme hot and cold temperatures throughout the year and therefore encourages innovation in window performance.

"I'd say we would be classified as a 'heating' climate in terms of overall energy use, but there is certainly a call here for both heating and cooling efficiency; timber frames offer excellent results in combination with our premium window systems."

One of the most important aspects of the company is its responsiveness to change. As Nathan says, the trend towards high-efficiency window systems is now strong and clear, driven principally by homebuyers and architects rather than builders. This demand has created substantial growth in the Performance range of products - approximately 75% of all aluminum window production last month was from the Performance category, and the vast majority of these systems feature double glazing. Heritage window systems, used mainly for renovation work, are also subject



to increasing levels of double glazing and Low-E specification.

Panorama Windows, according to Nathan, has had to act swiftly to address higher client expectations of glazing efficiency, mindful that customisation still requires a decent mix of product. For example, the company offers double glazing systems equipped with an air seal and molecular absorbent sieve in the spacer bar, but it also offers sealed inert gas installations for those occasions

where maximum efficiency is required. Furthermore, these systems might also include one leaf of Low-E glass; final configurations depend on the orientation of the building, the area of glass windows and doors, and the desires of the customer

"It's interesting to note that we are doing a lot more quotes and people are spending a lot more money, which means we're also having to expand our consultancy side of the business." Nathan savs.



Panorama Windows supplied the installations for this lavish home near Burra in the NSW alpine region.

'Consultancy', more often than not, means education. "I'd take two or three calls a day from architects who are looking for ways to increase their options." Typical examples relate to buildings where a southern orientation is unavoidable, which usually reduces the flexibility to control insulation characteristics.

"There are plenty of solutions," Nathan says. "I might start off recommending double glazed safety glass and then we could examine Low-E, a tempered unit or laminate film."

The education process, Nathan adds, does not stop with efficiency ratings and window behaviours. Developments in hardware design are impacting on the way Panorama Windows satisfies the needs of specifiers and builders, directly guiding the architectural styles of the region.

"In particular, we thought a lot of the design parameters around bifolds and sliding doors were about as good as they could get, but you have new systems that allow for 200kg sliding doors, 3m-high bifolds, etc, and that has completely changed the way designers go about their work," Nathan explains. Consulting with builders and architects about such technologies is an important feature of business development.

"Certainly, I'm spending more and more time dealing with increased architectural flexibility." he says.

While this level of project management is without precedent, it is also a vital cog in the business wheel, helping to deliver a degree of customisation that rival companies may not be able to offer. Notwithstanding the benefits of providing one-on-one attention to customers, Nathan says there are other challenges that require ongoing commitment, including staff retention, logistics, machinery upgrades and management processes.

"We're in a fairly small population but it's always forefront in our minds that we need to keep our top-quality staff," he explains. "One thing I'm proud of is that we have had employees here for up to 15 years - as long as I've been with the company - but with so many manufacturers in one area we have to be aware and appreciative of our employees. As far as logistics are concerned, it's hard to transport glass for more than four or five hours, so there are no major

plans for [territorial] expansion. We probably wouldn't be able to continue to offer the same high quality of service if we did."

Staying at the vanguard of technical innovation is also vital to business success. Nathan says heavy investment in new machinery has always been a fundamental part of staying one step ahead of new developments, minimising delays in the introduction of up-to-date technologies and

increasing workplace efficiency.

As for managerial diversification, Nathan is playing a leading role in the process by training to become a top-flight Rugby Union referee. He travels to Sydney frequently to referee important matches and, as a semi-professional, has to devote at least 20 hours per week to training activities to shore up full academy accreditation.

So the next time you are tempted to boo the referee, remember he might be one of your own!

Panorama Windows has been a member of WADIC for seven years - an industry association that Nathan describes as invaluable for speedy, ongoing product compliance.

For more information about Panorama Windows, visit www.panoramawindows.com.au



Alan, Rhondda and Nathan Pearce from Panorama Windows in NSW

Case Study

Rising to a challenge

By John Power

Cliff House, a north-facing residence in the township of Wentworth Falls, lies in the heartland of NSW's famous Blue Mountains, approximately 80kms west of Sydney.

This World Heritage wonderland is as scenic as it is dangerous, featuring successions of steep escarpments and valleys in one of Australia's most bushfire-prone regions.

For Philip Nobis from Nobis Architecture, based in nearby Katoomba, working in this environment involves an omnipresent dilemma: to maximise building safety while retaining as much openness and

Toughened, double glazed window installations aid thermal insulation.



light as possible for clear views of the surroundings ... a concrete bunker, no doubt, would satisfy safety requirements but do little to gratify the communion with nature that most rural residents crave.

Therefore, Philip has built a career working closely with local planning authorities and clients to produce results that combine security with liveability.

Cliff House was completed in December 2004 following an extensive approvals and construction process. The dwelling was built to Level 3 AS 3959–99 construction specifications and rests on a steep

Different window configurations add interest to the dwelling while maximizing views.



escarpment (the incline is up to 26°). The structure features two levels of living space, extending from the street frontage and carport which represent the upper perimeter of the 1,025m² property.

"A lot of sites like this one are spectacular," Philip says, "but the more unspoiled the view is, the greater the fire risk. If you were to follow the recommendations of the Rural Fire Service to the letter, you would always end up with a small-windowed, solid building on a cleared block – and there are buildings like that in Wentworth Falls – but we wanted to avoid that style of building. In any case, recommendations of clearing to overcome issues of fire attack were not possible in this instance due to environmental reasons."

Philip says his job as an architect always requires him to acknowledge the 'wishlist' building features proposed by the client, and then to consult with engineers and authorities to deliver those outcomes as closely as possible while being up-front about possible costs and design thresholds.

The brief for Cliff House called for a contemporary design that would offer panoramic views over the surrounding valleys, preferably with as little intrusion as possible into the habitat abutting the dwelling.

The starting point involved fruitful negotiations with Local Government: "Just because Council says you need small windows doesn't mean to say there aren't ways around these issues ... you have to meet a middle ground," he says.

The result was a careful design that remains sympathetic to the surrounding bushland, screening views from neighbours while delivering an uninterrupted 270° view to the northern mountains on the horizon.

"In order to get a sense of personal relationship with the views, along with a 'disconnection' with the street, we put all the service parts of the house – bathroom, laundry, cupboards, stairs – in a zone leading in from the street frontage," Philip says. "Once you pass through this area you have a more private relationship with the house and the outside landscape."

The living-dining area incorporates a balcony with a full-length metal screen to provide privacy from an eastern neighbour.

Design considerations apart, Philip says prudent building material

selection was crucial to success. The superstructure is made form lightweight concrete block veneer and a metal-clad insulated frame.

The decking is made from hot-dipped galvanized steel and fireresistant Blackbutt, one of six such hardwoods identified by the CSIRO. The roof is Colorbond steel. In addition, the home features a wall-drenching sprinkler system to safeguard against ember attack, serviced by the property's 13,500L rainwater tank. A 2m Colorbond fence on the lower boundary, barely visible from the house, serves as a firebreak.

Glass and door selections were equally fundamental to the safety aspects of the design.

"The house includes louvre, porthole, height fixed, and awning windows, as well as sliding doors," Philip says. "There are also external and internal highlight windows – partially fixed and louvred – either side of the staircase."

All principal windows – including the large (4.7 x 2.4m) living room installations – are double glazed with toughened glass panes, created using semi-commercial aluminium frames supplied by Panorama Windows (with Lidco-sourced sections). Opposing louvre windows at either end of the main living-dining area promote cross-ventilation for superior temperature regulation in warmer months.

"I've done a number of projects using double glazing and it is always a worthwhile addition to the properties in this region," he notes. "We are in a unique pocket of the world here and we're quite different from the outer suburbs of Sydney – we can get to below freezing in winter – it can snow – and still get extreme heat in summer."

Overall, the home retains warmth and modernity, notwithstanding the non-flammable cladding, fire-retardant timber, structural steel deck and wall-drenching sprinkler system.

The trade-off is that the building may require moderately higher artificial heating than other designs using smaller windows, but the double glazing reduces heat loss significantly and the division of the home into defined living/service areas allows for targeted zonal heating.

Cliff House is now considered to be a prime local example of how site-specific engineering and expertise can defeat the obstacles imposed by a steep slope – in past years the block might have been considered too



problematic for development. In addition, the design solutions, enhanced by sensible Insulating Glass Unit (IGU) selections, have provided airiness and light while dramatically reducing the threat of fire damage.

For more information about Nobis Architecture visit www.nobis.com.au

Business Online

Turning into the world of 'now'

By David Higginbottom, Managing Director, Competitive Edge

I went to move my car at lunchtime and on 774 radio, there was an interview with a new restaurateur who is opening a state-of-theart coffee shop in the Melbourne CBD. Nothing unusual about the cappuccino explosion, except for the way in which the store had been constructed.

It seems that the concept store was sighted on the Web, and after initial enquiries and exchange of ideas online, the Italian company offered the complete turnkey shop. Measurements and a brief from the restaurateur were then sent to Italy. The company responded with the 'shop and café' concept, and sent working drawings and a completed design, to the restaurateur's delight. He then ordered the 'shop and café' online, paid for the concept and waited eight weeks until the containers arrived in Melbourne. A skilled Italian installer then arrived for three days and installed the concept 'shop and café'. The major expense was his accommodation, meals and out of pockets.

The power of the Internet to not only present information and gain awareness online, but also to drive customers to your site continues to stretch all of our imagination and previous marketing and sales concepts. The global world is clearly here, and the global trading world is coming around the corner. The Internet does not divide between developed and developing nations. China, India, Malaysia, Vietnam, Thailand, etc, can take equal advantage of this technology, and provide competitive products online to satisfy the 'fast food' consumption that drives our modern society.

Those connected with the Furniture Industry have seen China and South-East Asian countries take 70 per cent of the Australian market for lounge and dining room furniture in only four years. It took the industry to come up with an import substitution study and strategy!

The concept of Ikea down the road is now being replaced by Ikea online, and industries that thought they were immune from the bulk and risk associated with importing cabinets, kitchens, commercial construction products, etc, are under threat.

Complete kitchens and cabinets are now being imported from China and Malaysia, along with complete restaurant fit-outs from Italy. Just like furniture, the end customers are romanced into being importers and are providing the channels for market entry.

If the Window and Door Indsutry Council is to maintain its status and relevance to its Australian customers, it has to become more proactive. This means better Internet-based marketing solutions and active websites that compete with the best in the world, and are backed by the latest product technologies, best sales and marketing material, and responsive customer service and relationships.

It is no longer good enough to have the family friend or youngster do a website, put up some photos, and forget about the site until the domain registrations suggest that you might update some of the products.

The other challenge that presents itself is related to the ageing population in Australia. After years of watching us all grow old, the press and governments have suddenly seized on the skill shortage and ageing population issues as if they had just appeared. Let's face it. We've all been ageing for quite a while. The sudden 'smack in the face' are the latest statistics. Currently the over 50s age group alone will have \$120 billion in disposable income by 2008/9, which is 25 per cent more than any other Australian age group. They currently control 39 per cent of Australia's wealth, and Access Economics estimates that spending by the over 55s will increase by 61 per cent in the next 10 years.

In 15 years, their population will be just over 10 million consumers. If our population reaches 23 million by then, given that your market starts around 22 years for decision makers, the over 50s will be a major influence as they will be 57 per cent of Australia's population that can make decisions about products such as yours.

The future marketing challenges will be great, aside from the competition from imports. How will the Baby Boomers spend their money? Already many of them are downsizing into units, housing estates, aged and retirement units. Many will continue to live healthy, active lives, but they may downsize or rebuild elsewhere. Many will have units and a country or seaside home. Of course, many will be making decisions about investment properties as well. Even if they don't build, their choices in terms of space, building style, windows, etc, will be reflected by those who do build for them.

The role of the environment with global warming, water availability, natural disasters, etc, will also impact on their decision making as they reflect from an older perspective. What will be the 'drivers' in new product design and modifications: energy efficiency, wind resistance, maintenance, size and fixed versus open windows?

The challenges, as always, are great. The rewards in terms of maintaining, retaining and growing market share are certainly there because the Baby Boomers are the greatest spending generation, they have wealth, and they control markets. Who would have thought the Stones would be playing to world audiences at 60 years of age? Have you taken on board the changing nature of consumption and supply in the next decade?

The power of the Internet to not only present information and gain awareness online, but also to drive customers to your site continues to stretch all of our imagination and previous marketing and sales concepts.





Cedar School

MacLoud Investments

By Wendell MacLoud

No, I'm not talking about the dartboard of shares or property, I'm talking about investing in one's business.

Certainly a measure of success in any industry is how big your order file is at any one time. One way to grow your business is to hire a rep, but for a small business this can be a big undertaking. But what about a rep who works 24 hours a day – a website?

In doing research on a project for Forest and Wood Products Research and Development Corporation on the Australian market for Western Red Cedar and Douglas fir, an online survey was conducted targeting many sections of the market including the specifiers. From architects, building designers, interior designers and specifiers a number of common trends emerged. The designing community collectively were moving towards the web to get their product information, and 39 per cent replied that the web was the first port of call for information.

Another part of the survey asked the question, 'Are you aware of the online Cedar School?'

Ninety-seven per cent indicated they had not heard of it. Cedar School is a free online condensed educational course for all those involved in the Western Red Cedar industry. Upon completion of the course a certificate is issued. Visit http://en.wrcea-training.org for more information on the Cedar School. Good luck in all your investments.

New WADIC website online By Kevin Ezard

WADIC has a new-look website with lots of new features at http:// www.wadic.com.au for members and others interested in timber windows. This site is an important communication medium for news items, technical and product developments, and WADIC member information. The main information sections are Ideas for Your Home, Designer Information, Product Features, and Energy and Environment. Within each section a sub-menu contains a number of associated topics of interest and further sections where more information is available. Some sections are completed and others are still under construction.

The graphic design is based on the newly created brand identity for WADIC, and the site has a content management system to enable material to be dynamic and easily updateable.

Since the site has been 'live' there have been a growing number of visits, with 60 per cent being new visitors. Interestingly, there has been an average of seven page views per visitor, which is a high number for a new website.

WADIC would appreciate any comment on the overall content and suggestions for additional features that may be added. A major feature of the website design is a 'members only' section for WADIC members. This contains a wide variety of information that is secure for the benefit of members including an online forum.

The website also contains a database for member contact details. If any member details are incorrect they may be easily updated by accessing the files and making the changes required.

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Industry Partnership

All the way with HIA

By John Power

As mentioned in our Autumn 07 issue, WADIC has struck an important membership alliance with the Housing Industry Association (HIA). The HIA has more than 46,000 members representing a range of building, contracting, manufacturing and construction sectors.

Under the terms of the agreement, all WADIC members are now automatically paid-up HIA members (memberships valued at \$490+ each per year). This accord means WADIC members are welcome to benefit from the full range of services and networking opportunities that the HIA provides. Your HIA membership will remain active in tandem with your WADIC membership.

WADIC sees great merit in maintaining close ties with other industry peak bodies, as such partnerships allow our members to keep abreast of broader industry issues and trends.

HIA's Membership Administration Manager Lisa Morgan says WADIC members can look forward to receiving their own HIA membership card.

"In addition, WADIC members will receive mailouts of five issues per year of their local regional *Building News* publication, as well as five issues per year of the national *Housing* magazine," Lisa says. "They will also receive relevant member alerts and e-news by fax or email.

"WADIC members have access to the HIA website (www.hia.com. au) and can access any goods or services at member prices."

Apart from the offerings outlined in the accompanying table, members can make use of a suite of excellent marketing, research, business and information tools.

You can enhance your marketing prowess by downloading the HIA logo and making it a feature of your contracts, stationery, clothing, etc, alongside the WADIC logo!

For all matters pertaining to OH&S and safety at work, call 1300 650 620.

If you are seeking training opportunities with a view to gaining licensing accreditation, call HIA Training Services on 1300 650 620.

There is also a Business Partners Support service offering advice to spouses or partners about running businesses. Call the HIA Business Partner Network on 1300 783 345.

One of the broader industry's preoccupations at the moment is environmentally sustainable building and design. The HIA runs a program called GreenSmart, which includes a two-day training accreditation course, aimed at informing members about matters ranging from energy efficiency to waste management. See the GreenSmart link on the HIA website.

Furthermore, for all matters relating to insurances for contract works, public and products liability, subcontractor and trade liability, etc, visit www.hiainsurances.com.au or call 1800 633 467.

HIA Member Savings				
Office Supplies	Savings of up to 20 per cent through Corporate Express. Shop online at www.hia.com. au or call 1300 656 726.			
Fleet Vehicles	Save with ORIX on various leasing packages.			
Mobile Phones	Benefit from Vodafone's exclusive HIA corporate rates.			
Insurance	Contact HIA Insurance Services for competitive rates.			
Fuel Discounts	Ampol Caltex discounts on unleaded and diesel fuel and monthly statements for tax claims.			
Legal	Includes services for resolving disputes relating to industrial relations, workers compensation, etc.			
Contracts	A wide range of contracts and documents offer protection for both residential and commercial applications.			
HIA Apprentices	For advice and assistance with hiring apprentices.			

The HIA is a strong lobby group for the general building industry in Australia, and it is in WADIC members' interests to have a voice in the formulation of building policies and make sure that the window and door sector is represented in the largest possible contexts.

One of the HIA's most familiar services is its Economic and Market Research division.

Construction and renovation activity trends are of direct relevance to WADIC members' businesses; the HIA is at the forefront of market analysis to help members plan for the future and identify business opportunities and directions. Visit http://economics.hia.com.au for a comprehensive overview of the service and the information reports on offer.

For more information about the HIA visit www.hia.com.au



Advertorial

TMW - the 'Wright' approach

To all WADIC members: Wright Forest Products proudly presents Thermally Modified Wood (TMW).

The modern thermo-treatment process involves the simultaneous heating of the timber to extreme temperatures and the application of water vapour to avoid spontaneous combustion. Under this process the timber yields all of its extractives, permanently altering its cell structure. This significantly reduces moisture uptake and the end result is a durable, stable timber. The thermo-treatment process also increases hardness and transforms the timber's colouring to light chocolate.

Folklore has it that the Vikings first developed this technique for use in their longboat building. They simply set the wood alight and then scraped off the charring to reveal heat-treated wood, the properties of which were drastically altered. Thankfully, we can all benefit from the modern refinement of this method!

Typically, our TMW is Scandinavian Redwood, but the thermal modification can be applied to many species.

Most importantly, this product has impeccable environmental credentials:

- carefully sourced from the perpetual forests of Finland and processed under chain of custody certification of the globally recognised PEFC scheme;
- chemical-free durability; and
- the energy required for the thermal modification process is generated mainly from wood waste biofuel.

For joiners, TMW has so many benefits. Here are just a few:

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- gives an ultra-fine finish for those extra fussy clients;
- · readily accepts all surface coatings and silicones;
- excellent fastener holding ability;
- · consistent tone eliminates colour or grain matching issues;
- good resistance to impact;
- · great durability;
- · fine-grained material perfectly suited to mouldings and beads;
- available in sizes from 100x25 up to 200x75;
- no requirement to buy short lengths;
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- available in perpetuity from Finnish PEFC CoC holders; and
- up to 33 per cent cheaper than domestic and imported joinery species.

And TMW is well suited to many other applications such as cladding, decking and even saunas, all giving a complimentary aesthetic to the beautiful richness of TMW windows and doors.

TMW is remarkably stable, reassuringly durable, visually appealing and surprisingly affordable.

TMW – Thermally Modified Wood from Wright Forest Products.

For further information call 1800 102 045.



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"Thermowood allows me to tick every box," says John. "It has perfect environmental credentials, chemical-free durability, low embodied energy and such a rich aesthetic appeal. It's really simplified the specification process."

Thermowood is thermally modified Nordic softwood sourced exclusively from Finnish PEFC-certified perpetual forests. Free of extractives and remarkably stable, Thermowood brings certainty to any demanding joinery application.



Testing to comply AS 2047

Dengate Joinery

By John Rule

In the last issue of WIN magazine I briefly discussed that we (Dengate Joinery) had tested a number of our products to comply with AS 2047 and that the process of research and development and the testing itself had been a huge benefit to me and all my staff .

It soon became clear that there were two main causes of leakage. Firstly, the air rushing through the gaps took water with it; secondly, capillary action encouraged water to run through as well.

I will go through the testing process and note some of the things we learnt to look out for when designing a window or door for testing.

Step 1

The test sample must be prepared for mounting into the testing facility. When it is installed a pre-loading test is performed. The sample is opened, closed, locked and unlocked a number of times and then an initial pressure equivalent to 50 per cent of the test pressure is performed.

Step 2

Test for deflection: Sensors are mounted at the top, bottom and middle of the sash or door stiles to measure the amount of deflection the stiles experience when either pressure or vacuum is used to simulate wind pressure in the positive or negative directions. Timber has a huge advantage over aluminum because of the strength of the sections yet is an area that, with some thought, can be improved.

Step 3

Operating Force: This test simply measures the amount of force required to operate the moving components of the unit being tested.

Step 4

Air Infiltration: The units being tested are covered with plastic and air pressure is applied in both positive and negative directions to measure air leakage.

Step 5

Water penetration: water is sprayed onto the outside of the test unit and air pressure is applied and then maintained for 15 minutes. I have found that there is a strong correlation between air infiltration and water penetration.

Step 6

Ultimate Test: the loads are applied in both positive and negative directions and are incrementally increased and held for 10 seconds. If the unit doesn't disintegrate it's passed the test.

This is only a brief overview of my experiences with testing for AS 2047. For more technical information contact James Bradley at the WADIC office on 02 6024 0447.





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