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ADNZ winner offers solutions

A café in Auckland's North Shore with a unique design philosophy has taken out the Supreme title at the 2013 ADNZ Resene Architectural Design Awards.

CONSTRUCTED FROM FOUR SHIPPING CONTAINERS, the Long Bay Showroom + Café by Cameron Cotton of Cubular was named best architectural design from 130 entries across New Zealand. It also took out the Commercial and Industrial Architectural Design Award category.

Astrid Andersen, General Manager of Architectural Designers New Zealand (ADNZ), says the judges were delighted to see an entry that tackles the housing affordability crisis.

'This design is robust, environmentally sustainable, energy efficient, affordable

and relocatable,' she said. 'It is also beautifully designed and constructed. The industrial nature of the shipping containers has been embraced, left unclad and painted with heavy-duty matt black container paint.

'It is a beautiful mix of solid, ribbed, robust steel combined with smooth, translucent glass. ADNZ encourages all of its designers to look at solutions to New Zealand's building problems - particularly designs that are as simple and as elegant as this one.'

The judges of the ADNZ Resene Architectural Design Awards were Duncan Joiner, Tony van Raat and Italian architect Caterina Steiner. See some of their comments with the category winner photos opposite.

They said of the Long Bay Showroom + Café, 'This building reflects the systems approach to the procurement of buildings that is essential in situations like the Christchurch rebuild, where large numbers of buildings were needed in a hurry.

'These buildings can be factory prefabricated and moved on to site. This building ended up looking far, far better than you would expect the assemblage of containers to look.'

The ADNZ Resene Architectural Design Awards recognise successful design in residential and commercial architecture across a range of categories including new homes, multi-unit dwellings, interiors,

alterations and additions and industrial design.

In addition to the supreme award winner, there were six category winners:

- Campbell House in the Waikato, designed by Kris Wilson of Design House Architecture, won the Residential Compact New Home up to 150 m² - sponsored by the Ministry of Business, Innovation and Employment.
- Potter Hart House in Wellington by Brynn McCauley of BMC Design won the Residential New Home between 150 m² and 300 m² award - sponsored by Gerard Roofs.
- Evans House by Christchurch architectural designer Cymon Allfrey of Cymon Allfrey Architects took out the Residential New Home over 300 m² award - sponsored by James Hardie.
- The Blake Residence in the Waikato designed by Diana Blake of Diana Blake Design won the Residential Interiors Architectural Design award.
- Rothesay Bay House in Auckland, designed by Mark McLeay and Daniel Eiem of Creative Arch took out the Residential Alterations and Additions Architectural Design award.
- RA Design Studio by Tane Cox of Red Architecture in the Waikato won the best Commercial Interior award - sponsored by GIB.

For more Visit www.adnz.org.nz



RA Design Studio – 'exactly the kind of intervention that should be done in tens of thousands of buildings around New Zealand'.



Long Bay Showroom + Café – ‘all designers are encouraged to look at solutions that are as simple and elegant as this one’.



Campbell House – ‘the plan has been very well arranged with a clear division around a slice of circulation that runs through the building’.



Evans House – ‘one of the most impressive things about this house is how many things have been stripped back to their bare essentials’.



Blake House – ‘restful spaces with enduring qualities and dramatic connections to the outdoors’.



Rothesay Bay House – ‘makes good use of the sea view and waterfront location’.



Potter Hart House – ‘the house sits beautifully on its site, uncompromised by fussiness around any of its edges’.

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News

Changes to earthquake policy

The government will introduce legislation to change the system for managing earthquake-prone buildings following recommendations by the Canterbury Earthquakes Commission and a review by the Ministry of Business, Innovation and Employment (MBIE).

MANY EARTHQUAKE-PRONE buildings in New Zealand are not being managed in a consistent, timely and cost-effective way.

The new system is designed to strike a better balance between protecting people from harm and managing the costs of strengthening or removing earthquake-prone buildings.

Key government decisions:

- To identify those that are earthquake-prone, territorial authorities will have to complete a seismic assessment of all non-residential buildings and

all multi-unit, multi-storey residential buildings in their areas within 5 years of changes to the legislation taking effect.

- All earthquake-prone buildings will have to be strengthened or demolished within 20 years of the new legislation taking effect.
- A publicly accessible register of earthquake-prone buildings will be established by MBIE.
- Buildings with potential falling hazards and strategically important buildings such as those on transport routes will be

prioritised for assessment and strengthening.

- Owners of buildings such as farmhouses with little passing traffic and where the likelihood of them failing is minimal will be able to apply for exemptions from the timeframe for strengthening.
- Owners of earthquake-prone category 1 buildings (listed on the register of historic places) and those on the proposed national historic landmarks list will be able to apply for extensions of up to 10 years. ◀

FROM THE HORSE'S MOUTH

'Architecture is basically a container of something. I hope they will enjoy not so much the teacup, but the tea.'
Yoshio Taniguchi.

'The challenge for the Council, and the construction sector – developers, architects and contractors – is to convince Aucklanders that intensive development does not mean mediocre buildings.'
Richard Goldie, Chair, Auckland Branch, New Zealand Institute of Architects.

Education

Your business and the Unitary Plan

BRANZ IS HOLDING A BREAKFAST SEMINAR on the Auckland Unitary Plan on 11 October in Auckland.

The seminar will look at the increased demand for multi-units the plan will create and the need to maintain and adapt Auckland's existing housing stock as current dwellings age and family types change.

Suited to designers and builders, the seminar will cover likely changes in the Unitary Plan

following public feedback. The challenging forecasts in the plan will be discussed and how realistic these are will be analysed.

The event covers:

- BRANZ forecasts of new housing numbers over the next 8 years
- housing types - detached, low-rise multi-unit and high-rise multi-unit
- approximate locations by suburb including a dwelling price analysis

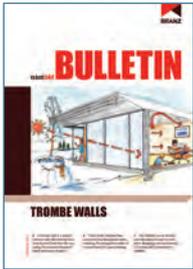
- traditional repairs, maintenance, alterations and additions work to housing.

The main presenter is Ian Page, BRANZ's Manager Economics, who has prepared a BRANZ study report on the draft plan.

Details Visit www.branz.co.nz and click Education. ◀

What's new?

Space heating for free



HOW WOULD YOUR CLIENT REACT if you said that you could reduce conventional winter space heating requirements by an average of 35%? Bulletin 564 *Trombe walls* reveals how this can be achieved.

A Trombe wall consists of a glazed external weatherskin in front of a thermal mass wall of concrete or concrete masonry that absorbs heat from the sun

and releases it inside the house at night.

While it reduces the need for space heating in winter, the wall does need to be shaded in summer and the house interior well ventilated so temperatures do not become too high.

The bulletin outlines:

- the benefits and performance of a Trombe wall
- the ideal wall orientation
- how to construct a Trombe wall
- the materials that can provide sufficient thermal mass
- a calculation to determine the required thermal mass area for a given room size
- the options for preventing summer overheating.

Details Available for \$13.50 from the BRANZ Shop at www.branz.co.nz or call 0800 80 80 85.

BRANZ EMPLOYEES RECOGNISED

BRANZ's Principal Structural Engineer Graeme Beattie and Senior Fire Safety Engineer Ed Soja were recently awarded Standards New Zealand meritorious service awards for their work on standards technical committees and their exceptional contributions to standards development.

Graeme has been on several standards technical committees and served as Chair of P4229, which developed NZS 4229:2013 *Concrete masonry buildings not requiring specific engineering design*.

Ed sits on Standards New Zealand's Fixed Fire Protection Group and serves on a number of technical committees.

IN BRIEF

SPANBILD IS ACCREDITED

Design, manufacture and construction specialist Spanbild now has Lifemark accreditation. 'For us, it makes good sense to use design standards that make it easy and safe for residents of all stages in life and of varying abilities to stay living in their home as their needs change,' says Peter Jensen, Chief Executive of Spanbild Holdings.

KENNARDS OPENS

Long-established Australian company Kennards Hire has now set up operations in New Zealand, renting out a wide variety of high-performance equipment nationwide. For a full list of tools and equipment, visit www.kennardshire.co.nz.

APPRENTICES TAKING OPPORTUNITY

The Building and Construction Industry Training Organisation (BCITO) has seen a 95% annual increase in new building apprentice sign-ups in the Waikato, suggesting a positive uptake of the government's Re-boot subsidy and signs that the local building industry is rebounding.

INDUSTRY LOSES A LEADER

The building industry is mourning the passing of Bill Smith, formerly General Manager of Tasman Insulation and known affectionately as 'Mr Pink Batts' for his development of the insulation product. He was an early advocate of environmental sustainability and was on the Board of the Energy Efficiency Council and was a director of the Building Research Association of New Zealand.

WINNING SURVEYOR

Michael Tagg, survey manager at Envivo, took out the New Zealand Institute of Surveyors (NZIS) 2013 award of excellence, gold level, for his work on the Edge ASB theatre refurbishment project. 'This was a complex but thoroughly interesting project, and it was crucial that each design aspect was placed correctly,' Michael says. 'It's Kiwi ingenuity in the way we used the robotic theodolite with a self-levelling pole for high-precision set-out on a technically challenging site.'

BRANZ SCHOLARSHIPS

Applications are now open to postgraduate students for BRANZ scholarships, available to those undertaking research in areas of importance to the construction sector as outlined in the Building a Better New Zealand research strategy. For more information on the scholarships, visit www.branz.co.nz/scholarships.

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Christchurch project kicks off

Arrow International (NZ) has secured the rights to build the Awly Investment project, the largest commercial project to be awarded since the Christchurch rebuild began.

WITH CONSTRUCTION SET TO BEGIN in mid-September, the 5-storey multi-use complex in Durham Street will sit on the western bank of the Avon River. Designed by Warren and Mahoney, the complex will neighbour the Convention Centre, Avon River Park and the Cultural and Performing Arts Precincts.

The Awly project will have three separate blocks of retail and office space circumferenced by cycle parks, sheltered courtyards and 123 on-site car parks.

'The design is inspirational, and the construction technologies behind the build are leading edge,' says Mark

Hopwood, Chief Executive Officer of Arrow International (NZ). 'That applies to both seismic and environmental elements of the complex. The Awly complex has many green features and is designed to achieve a



5-star rating under the New Zealand Green Building Council scheme.

'Key to the Arrow proposal was recognising the unique demands of the Awly building and the timeframe within which the project is to be delivered. To that end we proposed an in-house Mechanical and Electrical Manager as part of the build team to meet the requirements of pace and coordination.

'We also have strong links with local suppliers and will be working closely with them for the likes of excavation, piling, waterproofing and concrete,' he says. ◀



The 5-storey, multi-use complex will be circled with bicycle parks and sheltered courtyards.

Crouch-pause-set

As director of the architecture programme at Victoria University of Wellington (VUW), Mark Southcombe is coaching the minds of the next generation of New Zealand architects.

HIS CONCERNS ABOUT SUSTAINABILITY, the usefulness of prefabrication and the need for New Zealanders to embrace good design are at the heart of his teaching and were given expression in a student project that gained national recognition.

In the aftermath of the Christchurch earthquakes an applied design-led project with New Zealand Historic Places Trust, Wellington City Council, Cuba Street owners and external professional engineers and architects redesigned, seismic-upgraded and redeveloped Wellington's Cuba Street Mall.

In real world contexts there are many inhibiting factors practising architects have to face.

'For example', Mark says, 'green architecture is core teaching, and there is widespread acknowledgement of its importance by clients within the building industry, yet too often, environmental concerns are met with token responses in everyday practice.'

'Auckland is where the developer-led model of housing production has most clearly shown its failings. Design quality is too often reduced to the minimum that will gain consents and maximise short-term profit.'

'The monotony from seemingly endless repetition of the same or similar design without an understanding of the wider built environment and community identity is obvious to everyone.'

Another issue hindering good New Zealand design is the give-it-a-go nature of New Zealanders.

'Built environments affect people, what they can and can't do and even how people



Mark Southcombe
– 'don't settle for
second-best design'

feel about and look upon the world around them,' he says.

'Kiwis can do anything and tend to think they can design anything too. They undervalue the need for good design yet recognise poor built environments or good ones, which they describe as having 'character'.

'Great environments come from the sweat of great architects and designers. Don't settle for second-best design.'

Landscape and the design spaces around and between units also need far more attention.

'There is a need for more hands-on, design-led suburban intensification directly by advocates for the built environment such as governmental and institutional bodies as medium-term investors.'

'This old-fashioned model of housing delivery can still deliver medium-density housing of higher quality and lower cost by removing the developer margin and the short-term focus from the housing equation.'

Many of our building problems, including the need for faster, more streamlined building processes, could be answered by prefabrication, according to Mark.

'There is an urgent need to design buildings for ease of assembly and disassembly to avoid repetition of the vast demolition waste we saw in Christchurch,' he says.

'Prefab building processes are rapidly updating and upskilling the building industry. Digital modelling and virtual assembly processes, file to factory production and the better building that results from prefabrication suggests that prefab is an increasing part of future design and building.'

As for what has personally inspired him during a career devoted to creating and teaching about great design, Mark mentions the late Spanish architect Enric Miralles, particularly the Igualada cemetery near Barcelona and, locally, David Mitchell and Jules Stout's Heke Street house in Freemans Bay, Auckland as well as Chris Kelly's Peregrine Winery in Central Otago. ◀

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First NABERSNZ rating

Treasury has gained a 3-star NABERSNZ rating for its tenancy at 1 The Terrace, Wellington, the first such rating awarded under the new energy measurement and rating scheme for New Zealand office buildings.

TO ACHIEVE THE RATING, Treasury went through an in-depth process with a NABERSNZ assessor, examining energy usage data alongside the types and numbers of equipment, staff and hours of use.

Bill Moran, Deputy Secretary for Strategy, Change and Performance, says it is appropriate that Treasury is among the first organisations rated since one of its key objectives is to promote efficiency gains and better value for money across the state sector.

‘Getting a NABERSNZ certified rating has been invaluable in helping us understand how well we are using energy and how we could be using it better,’ he says.

‘Having this insight into how our tenancy is performing has identified many opportunities for improvement. We’re now firmly focused on improving the way we use energy that will lead to higher certified ratings in future and, most importantly, lower energy costs.’

Living Built Environments course

THE CREATION OF BUILDINGS that are net zero in energy, water and waste and are built from non-toxic, locally sourced materials is the goal of a new education programme for construction professionals that will be run by the Centre for Sustainable Partnership in 2014 in Auckland and Dunedin.

The course will be led by Jerome Partington who has worked in sustainable architecture and education for 25 years. The International Living Futures Institute in Seattle recently awarded him a Living Building Challenge Hero award for inspiring leadership in New Zealand.

The Living Built Environments course will address the goals of the Living Building Challenge international standard (for more on the Living Building Challenge, see

Build 136, pages 48-49). Integrated design and procurement practices that deliver these goals will be considered. Students will practise implementation from their own professional experience as well as learning the theory.

‘The Living Building Challenge is an award-winning, internationally recognised philosophy, advocacy and performance certification tool,’ says Partington. ‘The challenge has been effective worldwide with commercial, civic and educational projects now complete. Building Codes have been changed as a result of the challenge standards and manufacturers’ products reformulated to remove toxic ingredients.’

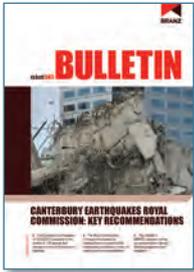
For more Visit www.op.ac.nz



Jerome Partington – involved in sustainable architecture and education for 25 years.

What's new?

Where to next?



THE ROYAL COMMISSION of Inquiry into Building Failure caused by the Canterbury Earthquakes has published its findings as a series of reports and recommendations. The final, 7-volume report has 189 recommendations that are freely available online.

Bulletin 565 *Canterbury earthquakes Royal Commission: key recommendations* is BRANZ's summary of the key findings and recommendations that have a direct impact on the work of construction industry professionals including engineers and designers.

The bulletin covers the findings and recommendations for:

- site investigation and soil testing
- ground improvement
- foundation loadings and design philosophy

- lateral loading and foundations
- building elements that are not part of the primary structure
- means of egress
- general recommendations directed to design engineers
- roles and responsibilities.

Further sections cover key recommendations for:

- low-damage building technologies
- existing earthquake-prone buildings including strengthening earthquake-prone buildings, the inclusion of residential buildings and an earthquake risk grading system.

Details Available for \$13.50 from the BRANZ Shop at www.branz.co.nz or call 0800 80 80 85. ◀

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BIM win

CHRISTCHURCH COMPANY BIMstop took out the MBIE Best Hi-Tech Start-up Company of the Year award at the 2013 NZ Hi-Tech awards.

BIMstop works with building product manufacturers by enabling architects to specify their products through 3D smart models that contain all of a product's options and specifications.

Architects connected to BIMstop can then drag and drop the models on to plans and building specifications. By incorporating the products within the design, BIMstop increases the probability that clients will then go on to buy the product, based on the architect's specification.

BIMstop has also been selected alongside three Australian start-ups to pitch at IBM's annual trans-Tasman Smart Camp in Sydney. ◀

BOARD APPOINTEES

The Building Research Advisory Council has appointed two new directors to sit on the Building Research Association of New Zealand Inc and the BRANZ Ltd Board of Directors.

They are Pieter Burghout and Richard Carver, who replace outgoing directors Chris Preston and Rob Kidd. Pieter Burghout was CEO at BRANZ for 5 years and is currently General Manager Canterbury Operations, Fletcher Building, while Richard Carver is the owner of Jennian Homes franchise.

Education

Passive design

THE OCTOBER–NOVEMBER BRANZ SEMINAR will cover the range of design criteria collectively described as passive design.

A key aim is to provide tools that will enable designers and builders to incorporate passive design features into their buildings to make them warm, dry, well ventilated and comfortable while reducing the need to purchase expensive energy to provide space and water heating and cooling.

The seminar will include:

- improving subdivision layout
- building siting and planning
- using the sun wisely to provide heating while avoiding overheating
- using the building form and prevailing winds to enhance cooling and ventilation while reducing the need for mechanically assisted cooling
- providing sufficient thermal mass for effective heating
- solar water heating
- rain and greywater retention and usage
- on-site power generation
- incorporating photovoltaics
- reducing stormwater run-off.

The presenters will be resident BRANZ architect Trevor Pringle and Greg Burn of Structure Ltd, a design consultancy.

For more Visit www.branz.co.nz and click Education. ◀

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Auckland winners



The Herne Bay house built by WG de Gruchy Construction Limited.



The Westmere house was renovated by Barton Builders Limited.

A NEW HOME build in Herne Bay described as ‘a masterpiece’ and a renovation in Westmere won the Supreme Awards in the Auckland Registered Master Builders 2013 House of the Year.

Built by WG de Gruchy Construction, the Herne Bay house was also awarded first prize in the new homes over \$2 million category as well as the craftsmanship award and the outdoor living award.

‘Starting out originally as a renovation, before changing paths to become a 100% new build, the degree of difficulty experienced by the builder in order to create this masterpiece is amazing,’ the award judges said.

‘The exacting standards and incredible attention to detail displayed in this home is almost beyond belief. The exterior timber cladding, timber windows and extensive use of textured timber wall linings internally were all crafted perfectly. This is one of those exceptional homes that you seldom see.

Barton Builders won the Registered Master Builders Supreme award for the Renovation of the Year and also won in a further category, the Future Proof Building award.

The renovation was of the architect’s own home and involved complex detailing that provided major challenges for the builder.

‘From the installation of structural steel frames supporting the upper floor to large exterior stacking louvre shutters, the execution of this renovation was difficult to fault,’ the judges said.

‘An extremely high level of workmanship extends into the interior of the home with the fitting of very large shoji-style shutters, extensive American oak timber flooring and the fitting of large sculpted wave-like fins to the skylight over the dining room, all carefully detailed and skilfully interpreted by the builder.’

National category winners and Registered Master Builders Supreme awards will be announced in November. ◀

News

Betting on CLT

MELBOURNE’S EMBRACE of cross-laminated timber (CLT) is continuing, with the announcement that the city will soon be home to Australia’s first CLT public building, the Docklands library and community centre.

Around 574 m³ of CLT will be the primary structural material in the building, combining engineered timber and reclaimed wood.

It will be used for upper floor slabs, roof, columns, beams and core wall construction, while the height and placement of the building responds to wind mitigation strategies to protect a new public space and reduce the effects of downwash from surrounding towers.

The use of CLT is one of several sustainable initiatives for the library that is aiming for carbon neutrality and a 5-star Green Star rating. ◀