

BUILDINGTODAY

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WATERFRONT
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Win a very cool
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FROM THE EDITOR

RMBA chief executive David Kelly says the New Zealand Commercial Project Awards, now in their third year, have already established themselves as a highly regarded competition for commercial construction in this country.

You'll find all the results, pictures and comments on this year's event inside this issue.

We also report on Building and Housing Minister Dr Nick Smith's re-think on the Government's policy for earthquake-prone buildings and their assessment time frames.

Also, take a look at Dr Kerry Rogers' light-hearted column on the "Road to Nowhere" — and why, perhaps, you might put it on your bucket list?

And go into the draw for a Speights BBQ pack — see page 39.

Andrew Darlington — Editor

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A credit to commercial construction

Chief's Chat

By CEO David Kelly

What a great night at the New Zealand Commercial Project Awards gala recently! The awards are now in their third year and have already established themselves as a much valued and highly regarded recognition of the very best in commercial construction in New Zealand.

The awards focus on how the whole team involved is able to work together to produce a quality result — from owner, through to architect and engineer, to the builder and all the other players in the team.

All of the finalists demonstrated their passion and dedication to producing projects of quality that add real value to New Zealand's built environment.

It's always a bit dangerous to single out individuals amongst such a quality field, but I'm going to do so anyway. There are three that

I want to highlight.

The first award of the night went to Amalgamated Builders. This was the Platinum Award that recognises continued excellence over time. Brett Squire spoke of their dedication to the industry, and pride at being recognised for their contribution to an industry they are dedicated to.

Equally passionate was Mike Livingstone from Livingstone Building, whose Avantidrome National Cycling Centre won the Industrial Category and a special judges award.

Mike spoke of their commitment and belief in the importance of this project to the Waikato community, and his personal focus on ensuring every dollar spent was going into making the



bikes go faster.

The attitude was summed up by his quote: "We actually give a s__!"

But the highlight had to be Peter McGuinness from L T McGuinness, the Supreme Winner for the Clyde Quay Wharf development in Wellington.

This was a complex project on every level, which included the redevelopment of an iconic building, construction of underwater car parking, welding underwater surrounded by stingrays, and a magnificent end result.

Peter noted that this year marks 50 years that L T McGuinness has been with Registered Master Builders, and his son Sean spoke of the passion they have as a family-owned business to be the very best in the business.

Next year we are planning to streamline the entry process to encourage even more entries, as we continue to showcase the best in New Zealand construction.

My thanks to the judges for a great job, and to all of my team for a great night.

• **RMBA president John Macdonald's column returns next month.**



Registered Master Builders Association 115th Annual Conference Lest We Forget

Claudelands Conference and Exhibition Centre
Hamilton 2-4 July 2015



RMBA is very proud to have themed our conference in honour of the worldwide commemoration of 100 years since the Gallipoli landings and we are particularly thrilled to have Willie Apiata VC leading our fantastic line up of speakers.

Our programme is designed to include something for everyone with residential and commercial building streams as well as an open invitation to non-member LBPs to attend on Friday 3 July to experience our industry leading event.

Don't miss this opportunity to keep your business up-to-date as well as enjoy a line-up of the best social and networking events that the Waikato has to offer.

For a full programme and to register go to www.masterbuilder.org.nz



Winning apprentice has design and build ambitions

It was a humbling experience for David Gare, employed by Barry Stewart Builders, when he was named the Southern Registered Master Builders Carters 2014 Apprentice of the Year.

The recent graduate decided to gain practical building experience through an apprenticeship to use alongside his architecture degree. Winning the regional award has seen the many years of training and study pay off.

“A lot of the older guys thought I was just a ‘little architect’, he laughs. “Once I talked them around, got into the trade and showed that I’m actually keen to learn, things took off really quickly.”

“A lot of people see architecture and building as quite different trades. The opportunity to prove to them that you can be a good architect as well as a good builder really encouraged me to compete.”

David impressed judges, who say he is a confident apprentice who displayed an in-depth knowledge of the building industry.

“At David’s site visit his high standards of leadership and passion for his project were clear. His assured manner and obvious skills are a credit to him — David has what it takes to become a true building professional,” they said.

David says he found the awards really beneficial.

“I gained a lot of confidence and experience talking to people higher up in the industry. It was awesome to be part of a bunch of like-minded young fellas all doing the same thing, and heading in the same direction. We’re the next industry leaders and so it’s great to get in touch with them.”

David says the most challenging part of the competition was the practical component, and the time pressure involved.

“The time management was really challenging — making sure you’re getting enough done,



David Gare (left) with employer Barry Stewart.

and also keeping the quality high,” he says.

“You have to ask yourself, do I get it all done fast and complete it, or do I take longer but do it well. It’s a big compromise and decision — probably the biggest hurdle I struggled with.”

David’s plans in the future involve getting back into architecture and then owning his own business which involves a design and build combination.

Entries are currently open for 2015 Apprentice of the Year. Carpentry apprentices can enter the competition online at www.apprenticeoftheyear.co.nz, with entries closing on Thursday, June 11.

Apprentices, employers and young people

aspiring to be a part of the construction industry are encouraged to join the Facebook page at www.facebook.com/apprenticeoftheyear, or follow us on Twitter at @AOY_NZ.

For more information, visit www.apprenticeoftheyear.co.nz.

Owned by the Registered Master Builders Association, the Apprentice of the Year competition is made possible thanks to principal sponsor Carters, the Building and Construction Industry Training Organisation (BCITO), and supporting sponsor the Ministry of Business, Innovation and Employment (MBIE).

House of the Year judges hit the road

Judges have started their trek up and down the country on the hunt for New Zealand's finest homes in this year's Registered Master Builders 2015 House of the Year competition.

Judges will assess more than 350 homes as they travel from the top of the North Island to the bottom of the South Island before regional event winners are announced in July and August.

They are on a mission to find the finest houses in the country, ranging from new homes and show homes, to renovations and builders' own homes.

Registered Master Builders Association chief executive David Kelly says the judges' high standards and the level of quality entries contribute to the success of the competition year after year.

"Every year the quality of the entries continues to increase. It's fantastic to see the teamwork and passion coming from the builders. They all deserve recognition for their work," he says.

"The House of the Year is a fantastic opportunity to drive excellence within the construction industry. It encourages our members to strive to be the best and gain invaluable recognition for their work at the same time."

The Auckland area has seen a 26% increase in entries from 2014, with entry increases also in the Bay of Plenty, Canterbury, Waikato, Wellington and Taranaki areas.

Mr Kelly says that Registered Master Builders is extremely proud of running an annual competition that showcases the high quality of

building in New Zealand.

"House of the Year is the perfect vehicle to help New Zealanders find builders at the top of their game to turn their new home or renovation plans into reality. It's an extremely gratifying project to be a part of."

Judging concludes in June/July, before the first of 11 regional events in Manawatu/Wanganui and Mid-South Canterbury on Friday, July 10.

The Awards are made possible through the support of PlaceMakers, Master Build Services, James Hardie, GIB, Nulook, Future-Proof Building, Carters, ITM, Plumbing World, Resene, Westpac and Mitre 10.

For more information about the competition, visit the Registered Master Builders web site at www.masterbuilder.co.nz.

House of the Year Regional Event details:

Region	Date and time	Venue
Auckland/Northland	Saturday 8 August, 6.30pm	Viaduct Events Centre, Auckland
Waikato	Friday 24 July, 6.30pm	Claudelands Events Centre, Hamilton
Bay of Plenty	Saturday 15 August, 6.30pm	Wairakei Resort, Taupo
East Coast	Saturday 25 July, 6.00pm	Old Church Restaurant & Bar, Napier
Manawatu	Friday 10 July, 6.00pm	Awapuni Racecourse, Palmerston North
Taranaki	Friday 7 August, 6.00pm	Devon Hotel, New Plymouth
Wellington/Wairarapa	Friday 7 August, 6.30pm	Te Papa, Wellington
Marlborough/Nelson/ West Coast	Saturday 25 July, 6.30pm	Marlborough Convention Centre, Blenheim
Mid-South Canterbury	Friday 10 July, 6.30pm	Caroline Bay Hall, Timaru
Southern	Saturday 11 July, 5.30pm	Ascot Park Hotel, Invercargill
Canterbury	Friday 31 July, 6.00pm	Wigram Airforce Museum, Christchurch

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Successful win for a Napier home



Redshaw Homes won the Ministry of Business, Innovation & Employment New Homes under \$250,000 at the Registered Master Builders 2014 House of the Year with this entry.

Michael Redshaw of Redshaw Homes was thrilled when his name was read out as the winner of the Ministry of Business, Innovation & Employment New Homes under \$250,000 at the Registered Master Builders 2014 House of the Year.

He says after being a finalist for the past three years, it was great to be recognised for his company's hard work and to be a national winner.

"Winning the award gave us recognition for the quality of work that we're doing," Mr Redshaw says.

"It gave us reassurance that we're doing the right thing, and confidence that we're up there with the best."

Mr Redshaw says it was a simple design and straightforward build, yet has created a unique home of high quality.

"For a two-bedroom house, it felt very luxurious! It's nice, light and airy with fantastic decor," he says.

"The clients painted the exterior blue, which was a unique touch and made the home stand out from other houses in the area."

The judges called this home "well balanced" and suitable for the occupants' lifestyle.

"This home has two bedrooms and two bathrooms, double garaging with internal access, and the main living areas are well complemented with adjacent, fully-equipped kitchen and a north-facing outdoor living area," they said.

"Building a home of this quality, including all the home comforts for its owners, is no easy task in this restricted price range."

Mr Redshaw says there were a range of benefits in taking part in House of the Year.

"It's great for marketing our work and helps us stand out from the rest," he says.

"The competition doesn't only help us reach out to more clients, but more sub-traders want to work for us too."

Mr Redshaw has been a proud member of Registered Master Builders since 2009.

"I think it's really important to be part of an association. Master Builders plays a key component in our business," he says.

The Awards are made possible through the support of PlaceMakers, Master Build Services,



Kirsteen and Michael Redshaw.

James Hardie, GIB, Nulook, Future-Proof Building, Carters, ITM, Plumbing World, Resene, Westpac and Mitre 10.



NEW ZEALAND COMMERCIAL PROJECT AWARDS 2015

THIS YEAR'S WINNERS

Registered Master Builders Supreme Award for the 2015 New Zealand Commercial Project

Clyde Quay Wharf Redevelopment in
Wellington – LT McGuinness Limited

Special Project Award

Avantidrome National Cycling Centre of
Excellence in Cambridge – Livingstone Building
New Zealand Limited

Value Awards

Commercial Project Under \$2 million Award:

Ambassador's Residence in Wellington –
Armstrong Downes Commercial

Commercial Project \$2 million – \$5 million

Award: Hurstmere Green in Takapuna – Kalmar
Construction Limited

Allied Concrete Commercial Project \$5 million

– **\$15 million Award:** Norwest on Victoria in
Christchurch – Fletcher Construction

Commercial Project Over \$15 million Award:

Clyde Quay Wharf Redevelopment in
Wellington – LT McGuinness Limited

National Category Winners

Retail Project Award: Masu Restaurant in
Auckland – Naylor Love Construction Limited

PlaceMakers Tourism and Leisure Project

Award: Botanic Gardens Visitor Centre in
Christchurch – Leighs Construction Limited

NALCO Health Project Award:

Christchurch
Eye Surgery in Christchurch – Leighs
Construction Limited

James Hardie Commercial and Civic Award:

Norwest on Victoria in Christchurch – Fletcher
Construction

Industrial Project Award:

Avantidrome National
Cycling Centre of Excellence in Cambridge –
Livingstone Building New Zealand Limited

Restoration Project Award:

15 Stout Street in
Wellington – McKee Fehl Constructors Limited

Education Project Award:

Wintec Engineering and Trades Facility in
Hamilton – Chow Hill Architects

Winstone Wallboards Residential Project

Award: Clyde Quay Wharf Redevelopment in
Wellington – LT McGuinness Limited

Gold Award Winners

15 Stout Street in Wellington – McKee Fehl
Constructors Limited

Ambassador's Residence in Wellington –
Armstrong Downes Commercial

Avantidrome National Cycling Centre of
Excellence in Cambridge – Livingstone Building
New Zealand Limited

Botanic Gardens Visitor Centre in Christchurch
– Leighs Construction Limited

Building 303 Level 1, Undergraduate
Laboratories in Auckland – Fletcher
Construction

Christchurch Eye Surgery in Christchurch –
Leighs Construction Limited

Clyde Quay Wharf Redevelopment in
Wellington – LT McGuinness Limited

Hurstmere Green in Takapuna – Kalmar
Construction Limited

Norwest on Victoria in Christchurch – Fletcher
Construction

Ocean Shores Retirement Village
Redevelopment in Mount Maunganui – Stanley
Construction

Rangi Ruru Girls' School Science Centre,
General Academic Building & Gibson Centre in
Christchurch – Leighs Construction Limited

South Island Blood Centre in Christchurch –
Hawkins Construction South Island Limited

Tasti Products – Office Building in Auckland –
Macrennie Commercial Construction Limited

Wintec Engineering and Trades Facility in
Hamilton – Chow Hill Architects

Silver Award Winners

312 Lambton Quay in Wellington – Naylor Love
Construction Limited

C Company Memorial House in Gisborne – Bain
Construction Limited T/A Landmark Homes
Gisborne

Centre Place Redevelopment in Hamilton –
Foster Construction Limited

Masu Restaurant in Auckland – Naylor Love
Construction Limited

Moffat Building in Christchurch – HRS
Construction Limited

Paul Keane Gymnasium, St Mary's College
Auckland – RCG

Sandilands Edwardian Development in Feilding
– Colspec Construction Limited

Shed 6 in Wellington – Naylor Love
Construction Limited

Shed 10 in Auckland – Macrennie Commercial
Construction Limited

Southern Cross Hospital Hybrid Theatre in
Christchurch – Fletcher Construction

Spruce Goose Cafe in Wellington – Naylor Love
Construction Limited

St Patrick's College Silverstream, New Sports
Hub Project – Gymnasium in Upper Hutt –
Maycroft Construction Limited

St Peter's Junior School in Cambridge –
Livingstone Building New Zealand Limited

Te Puni Kōkiri in Wellington – HITECH
Commercial Interiors

The University of Auckland Medical School
Upgrade in Auckland – Fletcher Construction

Unitec Wharekai in Auckland – Kalmar
Construction Limited

Bronze Award Winners

51 Shortland St in Auckland – The Buchan Group

Cawthron Institute – Stage 1 in Nelson –
Scott Construction Limited

Jumpstart Preschool in New Plymouth –
Gareth Collins Building

New Zealand Management Academy in
Auckland – Brosnan Construction

Platinum Award Winner

Amalgamated Builders Limited

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NEW ZEALAND COMMERCIAL PROJECT AWARDS 2015

SUPREME AWARD WINNER

A SUPERBLY DESIGNED LANDMARK

A design, engineering and construction masterpiece, this development is a fantastic enhancement to Wellington's waterfront.



REGISTERED MASTER BUILDERS SUPREME AWARD FOR THE 2015 NEW ZEALAND COMMERCIAL PROJECT, WINSTONE WALLBOARDS RESIDENTIAL PROJECT AWARD AND COMMERCIAL PROJECT OVER \$15 MILLION AWARD

Project: Clyde Quay Wharf Redevelopment, Wellington
Owned by Willis Bond & Co
Entrant: LT McGuinness Limited (Construction Company)
Project partners: Athfield Architects Limited (Architect/Designer), Dunning Thornton (Engineer)

Judges' comments:

A key design element of the Clyde Quay Wharf Redevelopment project was to retain a sense of the original building and heritage elements where practical. The new, 'above wharf' building reflects many of the original roof lines as well as expressed grid lines in the external wall elements.

Demolition revealed a number of heritage items including large mosaic panels, a world clock and a spire – all of which have been incorporated into the new structure.

The technical challenges were extreme, ranging from the long term ones of providing a durable building in an extreme marine environment, to the more immediate, with stages of work only able to be undertaken at low tide.

This project team ventured into thoroughly uncharted territory, and by building strong partnerships with the regulatory authorities and a whole range of local and international experts, have delivered a superbly detailed landmark building that is more than deserving of this accolade.

INDUSTRIAL PROJECT AWARD AND SPECIAL PROJECT AWARD

Project: Avantidrome National Cycling Centre of Excellence, Cambridge
Owner: Avantidrome National Cycling Centre of Excellence
Entrant: Livingstone Building New Zealand Limited (Construction Company)
Project partners: Chibnall Buckell Marovic Team Architects Limited (Architect/Designer), LHT Design Limited (Engineer), Jewkes Boyd Cost Management (Quantity Surveyor)

Judges' comments:

An eye catching landmark located near Cambridge this world-class facility and the Home of Cycling will serve as a hub for national track cycling champions as well as being open for sports people of all ages and abilities. The project team's obvious commitment to delivering this facility on time and on budget is second to none. Just the second indoor velodrome to be constructed in New Zealand, the Avantidrome is a fantastic facility for the Waikato community.



NEW ZEALAND COMMERCIAL PROJECT AWARDS 2015

CATEGORY WINNERS

RETAIL PROJECT AWARD

Project: Masu Restaurant, Auckland
Owner: SKYCITY Entertainment Group Limited
Entrant: Naylor Love Construction Limited (Construction Company)
Project partners: Moller Architects (Architect/Designer), Xigo (Engineer)

Judges' comments:

Expertly managing difficult working conditions with regard to noise levels and ensuring minimum disruption to the hotel and SKYCITY, the project team has produced a fantastic Japanese restaurant situated in the entrance lobby of the Grand Hotel. Architectural finishes and materials used were of a very high standard resulting in a beautiful restaurant that has already reached iconic status in Auckland.



PLACEMAKERS TOURISM AND LEISURE PROJECT AWARD

Project: Botanic Gardens Visitor Centre, Christchurch
Owner: Christchurch City Council
Entrant: Leighs Construction Limited (Construction Company)
Project partners: Patterson Associates (Architect/Designer), Cosgroves Limited (Fire Engineer), Ian Harrison & Associates (Quantity Surveyor), eCubed Building Workshop Limited (Services Engineer), Xona Limited (Structural Engineer)

Judges' comments:

The vision for the new visitor centre was to provide a place where visitors can learn more about Canterbury's unique flora and fauna and enjoy a stylish, serene setting. A popular visitor attraction for both local Cantabrians and visitors, the centre is a stunning contemporary building that is a credit to all the disciplines involved in this project.



NALCO HEALTH PROJECT AWARD

Project: Christchurch Eye Surgery, Christchurch
Owner: Christchurch Eye Surgery
Entrant: Leighs Construction Limited (Construction Company)
Project partners: Wilson & Hill Architects Limited (Architect/Designer), Pedersen Read Limited (Electrical Engineer), The Health Planner (Health Planner), Powell Fenwick Consultants (Mechanical Engineer), Lewis Bradford Consulting Engineers (Structural Engineer)

Judges' comments:

This state of the art building is a fully serviced surgical unit consisting of two operating theatres, a large pre-operative area, post-operative rooms, recovery spaces, reception, administration and consultancy spaces and office areas. Quietly nestled into a residential area, it could easily be mistaken for a stunning home proving that health facilities need not adhere to the somewhat clinical and cold designs of the past.



JAMES HARDIE COMMERCIAL AND CIVIC PROJECT, COMMERCIAL PROJECT \$5 - \$15 MILLION

Project: Norwest on Victoria, Christchurch
Owner: Norwest on Victoria Limited
Entrant: Fletcher Construction (Construction Company)
Project partners: MAP Architects (Architect/Designer), Structex Metro Limited (Engineer)

Judges' comments:

Situated on a narrow corner site, the principle behind the design is an arrow, pointing Northwest showing an interaction of the mountains and the city. Glass panels on one side reflect the Victoria Clock Tower while exposed Mt Somers limestone and recycled timber and corten steel louvres on the Northern side of the building assist with controlling the sun's heat. Standing proudly on its site, this building was one of the early rebuilds after the devastating Christchurch earthquakes.



NEW ZEALAND COMMERCIAL PROJECT AWARDS 2015

CATEGORY WINNERS

RESTORATION PROJECT AWARD

Project: 15 Stout Street, Wellington
Owner: Argosy Property Limited
Entrant: McKee Fehl Constructors Limited (Construction Company)
Project partners: Warren and Mahoney (Architect/Designer, Engineer), The Building Intelligence Group (Client Project Manager), McKee Fehl Constructors Limited (Quantity Surveyor)

Judges' comments:

Originally built in 1939, and once the biggest office building in Wellington, 15 Stout Street sat empty for years. The project team have delivered an environment consistent with the latest standards in workplace design while at the same time recognising the special character of the original building. With this composition they have produced a building to rival international new build office spaces.



EDUCATION PROJECT AWARD

Project: Wintec Engineering and Trades Facility, Hamilton
Owner: Wintec Siteworx
Entrant: Chow Hill Architects (Architect/Designer)
Project partners: Fletcher Construction (Construction Company), Greenstone Group – Hamilton (Project Manager), Jewkes Boyd Cost Management (Quantity Surveyor)

Judges' comments:

A collaborative learning facility for students and staff, this design grew from the clients' drive to implement a new philosophy of trades training and engineering study. This inspirational building has a mix of formal studios, social breakout areas and practical learning workshops. It features exposed structure and services to demonstrate these to trainees – a showcase for engineering and construction skill.



COMMERCIAL PROJECT UNDER \$2 MILLION AWARD

Project: Ambassador's Residence, Wellington
Owner: Ambassador's Residence
Entrant: Armstrong Downes Commercial (Construction Company)
Project partners: Peddle Thorp & Montgomery Limited (Architect/Designer), Clendon Burns & Park (Engineer), Mallard Cooke (Quantity Surveyor)

Judges' comments:

Originally built in 1931 this unique Neo-Tudor style building has been restored to more than its original splendour. It is now spectacular yet classically understated with the latest in technology, services and finishes. This stunning restoration included hundreds of photos being taken in the pre-construction phase to enable exact matching in the finished detailing to original designs. Outstanding workmanship by a dedicated team of master craftsmen has delivered a wonderful home and workplace that will be enjoyed for many years to come.



COMMERCIAL PROJECT \$2 - \$5 MILLION AWARD

Project: Hurstmere Green, Takapuna
Owner: Auckland Council
Entrant: Kalmar Construction Limited (Construction Company)
Project partners: Sills Van Boheman (Architect/Designer), Jawa Structures Limited (Engineer), WT Partnership (Quantity Surveyor)

Judges' comments:

This project is the rejuvenation of what was an overgrown and underutilised park that was primarily used as a shortcut. The finished product demonstrates a high degree of expertise evident in a design that integrates carved elements that recall the myth around the creation of Lake Pupuke and Rangitoto, hard concrete landscaping, organically shaped green areas and cleverly designed seating areas. A vibrant, open space where people congregate and have fun that is a shining example of how to create the world's most livable city.



Amalgamated Builders goes Platinum!

Southern-based construction company Amalgamated Builders Ltd describes its award-winning formula in three simple words — “a strong team”.

“Team performance and the spirit of the team underlies everything we do, and transcends across our four regional branches — Queenstown, Invercargill, Dunedin and Christchurch,” area manager Brett Squire says.

“It is about the enthusiasm we show as a team that extends out to the broader project team — the architects, the engineers — and to the client. It’s no great secret, but it is the foundation of everything we do.”

And awards are something ABL knows a lot about. This month, the company — that has won five national titles in the New Zealand Commercial Project Awards — received a once-in-a-lifetime Platinum Award from the Registered Master Builders Association (owners of the national awards) for its “outstanding excellence in the commercial construction sector”.

The accolade is only given to an organisation that has received five or more national titles.

ABL was recognised for its national category wins for Queenstown’s Sofitel Hotel (2006 Seismic Tourism and Leisure Project), Wanaka’s Rippon Hall at Rippon Vineyard (2013 Tourism and Leisure category, \$2m to \$5m value award), and Wanaka’s Puzzling World Sculptillusion Gallery (2014 Tourism and Leisure category, under \$2m value award) — projects Mr Squire says remain close to the company’s heart.

“We’re extremely proud and humbled to receive the Platinum award. We’re not the type of people that often pat each other on the back, so it’s really great to have this recognition,” he says.

Alongside the building award, Queenstown’s luxury Sofitel Hotel has won a plethora of accolades in the past, from the World’s Best Hotel Spa to Best New Zealand Hotel.

Rooms and suites greet guests with five-star design, sophisticated and refined aesthetics, luxurious materials and sensory indulgences, including the divine comfort of a Sofitel MyBed and the extravagance of a double spa bath in every room.

In 2013, Rippon Hall was praised by judges as a building with a “truly timeless quality” that realised the owners’ vision “magnificently”. Built largely from rammed earth from the site and larch timberwork also milled on site, the Hall works in harmony with the natural environment.



Rippon Hall at Rippon Vineyard, Wanaka.



The Sofitel Hotel, Queenstown.

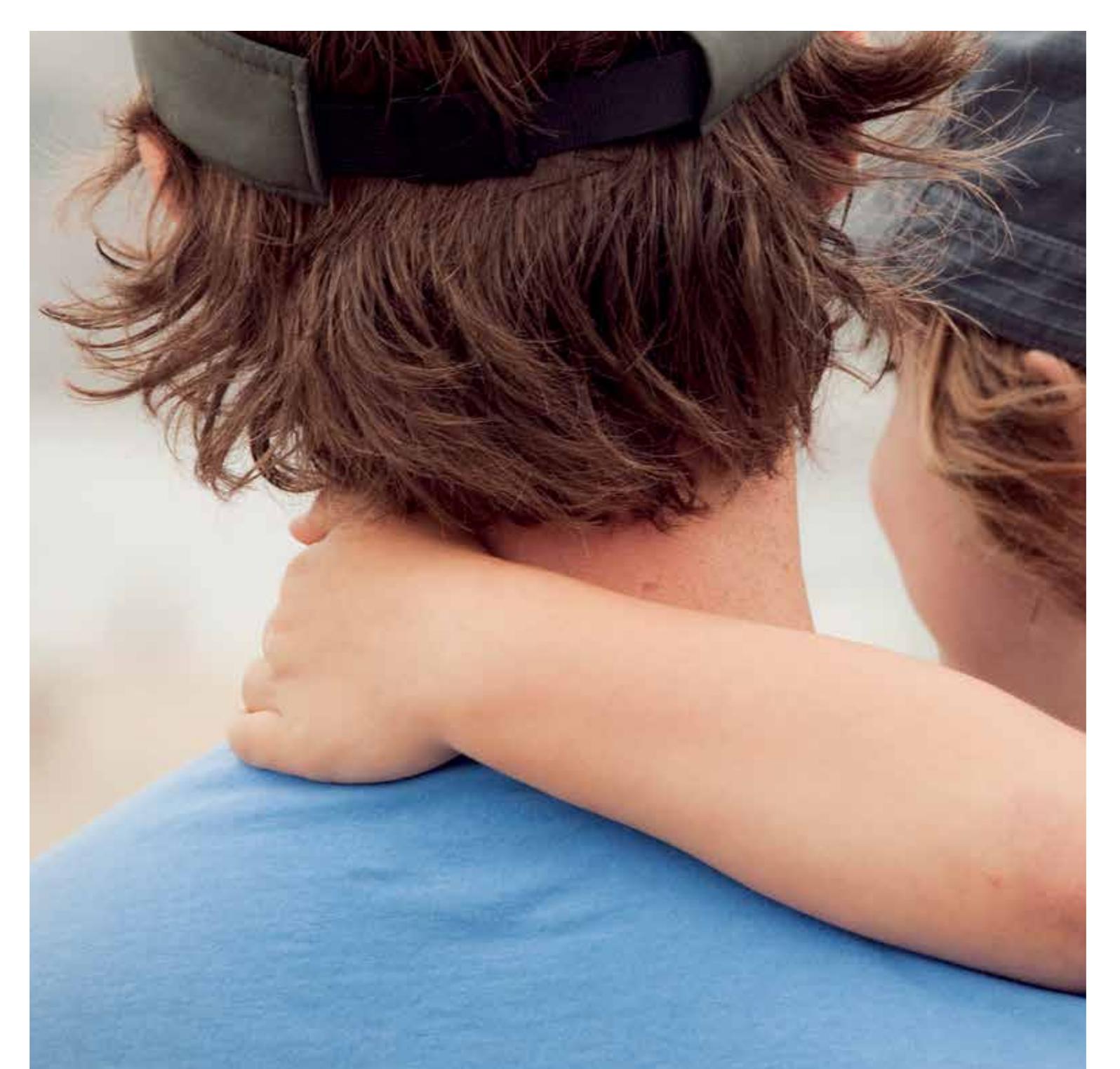
Wanaka’s Puzzling World Sculptillusion Gallery invites visitors to wander around the various larger-than-life exhibits that showcase visual trickery at its best. From living walls, wave ceilings, stone carpet and hanging waterfalls, the visitor is met with stunning ideas that, when coupled with building over one of the coldest winters on record, made the project a complex undertaking for all concerned.

“While these three projects are ones that we’re particularly proud of, we feel proud to work on every project we do, whether it’s an international hotel like the Sofitel, or a concrete plant,” Mr Squire says.

“Every project matters and every client matters. We love what we do. That’s why our clients return.”



Wanaka’s Puzzling World Sculptillusion Gallery.



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War Memorial art display reaches new heights

A spectacular memorial artwork to commemorate the 100,000 New Zealanders who fought in World War I was brought to life on Anzac Day thanks to the generous efforts of Kiwi companies such as Hirepool.

The company donated specialist equipment, allowing thousands of brass, poppy-shaped “quatrefoils” to be installed on the exterior of the historic St David’s Church on Khyber Pass Rd in Auckland.

They cascaded their way down the church’s imposing tower and onto the surrounding grass, in a manner similar to the acclaimed Tower of London art installation which featured more than 800,000 bright red ceramic poppies late last year.

New Zealand’s own artistic tribute was devised by celebrated painter Max Gimblett who grew up in Grafton and used to attend St David’s Church. He is now based in New York and his artworks hang in galleries all over the world.

Hirepool general manager of sales and marketing Gary Richardson says the idea was a moving way to commemorate Anzac Day and the centenary of the Gallipoli campaign.

Almost 7000 brass quatrefoils (which are also a symbol of peace and new life) will glow and shimmer in the light over the next three months, creating a magnificent display against the aged red brick and Oamaru stone of St David’s.

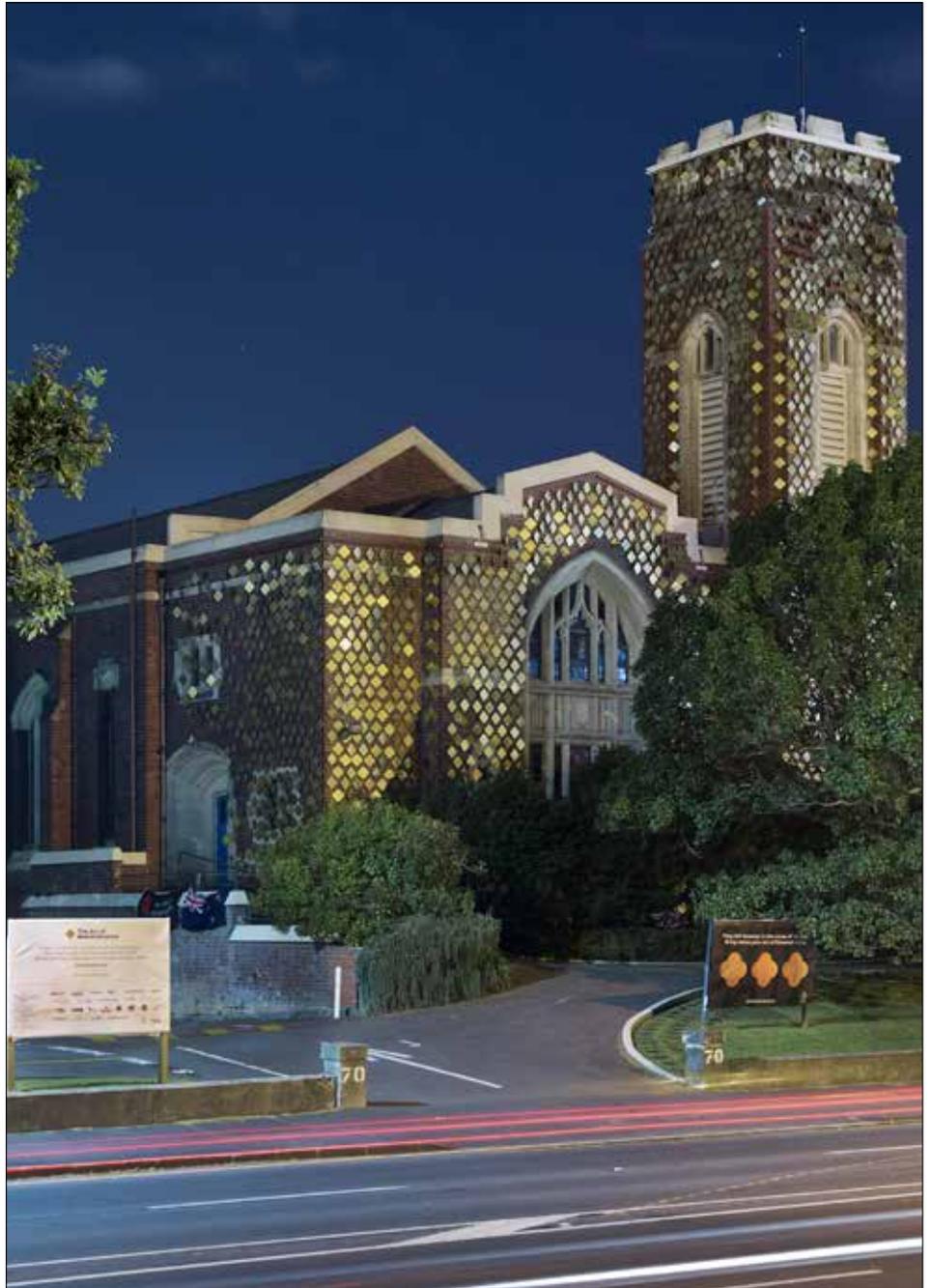
“It looks spectacular, and Hirepool is honoured to have been asked to help make this project possible,” Mr Richardson says.

“I wouldn’t be surprised if images of the display go viral around the world, just like the Tower of London’s poppies did. It looks beautiful, but is a sombre reminder of how many people gave their lives in World War I for our freedom.”

Hirepool donated one of its large self-propelled articulating booms which can reach a height of 25m. That allowed the delicate installation process to occur during the week before Anzac Day.

“Hirepool has been part of the New Zealand business community for nearly 60 years. We’ve always keen to support good causes and show our national pride, and we couldn’t think of a better way to do that on Anzac Day than by helping bring this wonderful idea to life,” Mr Richardson says.

The memorial artwork was organised by the Friends of St David’s Trust, who raised money to restore the war memorial building. St David’s is also known as the “Soldier’s Memorial Church” — its foundation stone was



Almost 7000 brass quatrefoils were installed on the exterior of St David’s Church in Khyber Pass Rd in Auckland. The spectacular artwork is a memorial to the 100,000 New Zealanders who lost their lives in World War I, and will glow and shimmer in the light over the next few weeks, creating a magnificent display against the aged red brick and Oamaru stone of St David’s.

Photo: Jessica Gernat

laid on Anzac Day in 1927.

Each glimmering quatrefoil is the size of an outstretched human hand, and 100,000 of them have been made in total. The trust plans to sell them for \$80 each, with discounts for RSA members and Gold Card holders.

It’s hoped the quatrefoils will end up in homes, art galleries and museums across New Zealand

and overseas at the end of the installation period.

“Hirepool really hopes New Zealanders will get in and support this wonderful initiative,” Mr Richardson says. “Each quatrefoil commemorates, with gratitude, those who died for us on World War I battlefields. Together, we will remember them.”



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More targeted approach to earthquake-prone buildings

New Government policy as to how quickly earthquake-prone buildings will need to be assessed and strengthened has been announced by Building and Housing Minister Dr Nick Smith.

The changes would reduce the number of buildings requiring assessment from an estimated 500,000 to 30,000, and bring down the total estimated cost from \$1360 million to \$777 million.

The Government came under pressure to review its policy around earthquake strengthening after landlords of older buildings faced huge bills and uncertainty, and groups using heritage buildings predicted they would need to be abandoned or pulled down.

At present, buildings that could be a risk need to be assessed within five years, with any strengthening carried out within 15 years.

Dr Smith outlined a new zoning of the country according to the risk of a big earthquake, and the time frames for assessment and strengthening of buildings.

Affected buildings in low-risk areas such as Auckland, Northland and Dunedin will now need to be identified and assessed within 15 years and strengthened within 35 years.

The time frame is 10 years and 25 years for buildings in medium-risk areas, including Hamilton, Tauranga, New Plymouth, Rotorua, Wanganui, Nelson, Invercargill and Timaru.

High risk zones, including Wellington, Christchurch, Palmerston North, Napier, Hastings, Gisborne and Blenheim, will keep the



Building and Housing Minister Dr Nick Smith.

existing time frame of assessment within five years and strengthening within 15 years.

"The return period for a significant earthquake (MM8) ranges from 120 years in Wellington, to 720 years in Christchurch, to 1700 years in Dunedin, and only once every 7400 years in Auckland," Dr Smith said in a speech to the National Party's Mainland regional conference in Ashburton recently.

"We need to ensure the response is proportionate to the risk, that the costs are minimised, and that we retain as much of our built heritage as possible.

"Education and emergency buildings will be targeted by requiring that in high and medium seismic risk areas they be identified and strengthened in half the standard time," Dr Smith says.

"We are prioritising all education buildings

regularly occupied by 20 people or more. We also want to ensure buildings like hospitals can maintain services in the aftermath of a significant earthquake."

Dr Smith says the effect of the policy changes is that buildings such as schools, universities and hospitals in high and medium seismic risk areas will have to be upgraded more quickly, but buildings in low risk areas like Auckland and Dunedin more gradually."

He says the current earthquake-prone building definition as being less than 34% of the new building standard would remain in place.

However, farm buildings, retaining walls, fences, monuments, wharves, bridges, tunnels and storage tanks would be excluded, with the new rules focusing on older buildings made from materials such as unreinforced masonry.

Dr Smith says building owners would be encouraged to upgrade buildings ahead of the allowable time frame through the establishment of a web-based public register of buildings needing work, and requiring notices on such buildings that highlight the level of risk.

There will also be a new requirement to strengthen earthquake-prone buildings when doing substantial alterations.

The select committee is considering the Bill containing the changes, and will report back to Parliament in July with passage later this year.

"This is the most comprehensive policy of any seismically-active country for dealing with older buildings, and strikes the right balance between safety, cost, heritage and practicality."



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Excerpt from paper Performance of Residential Houses in the Darfield (Canterbury) Earthquake, Buchanan & Newcombe, 2010

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Research: Construction sector's staffing shortage will have huge implications

The construction sector may be unable to capitalise on the industry boom if it doesn't take measures to attract more potential employees.

In the midst of huge demand for construction, research from HR and recruitment experts Randstad reveals that construction firms are becoming increasingly less attractive to potential employees.

The Randstad Award employer branding research shows that the attractiveness of the construction sector has decreased for the fourth consecutive year. When asked, only 20% of respondents said they would like to work for companies in the construction sector, compared to 26% in 2012, 24% in 2013 and 22% last year.

Country manager of Randstad New Zealand, Brien Keegan, believes if the construction industry doesn't take immediate action to rectify the situation, there will be major implications.

Sector needs to retain top talent

"Presently, New Zealand is experiencing a surge in residential and non-residential construction projects, especially in Auckland and Christchurch. To meet this demand, the construction sector will have to attract new talent and ensure they retain their top talent," Mr Keegan says.

"The Randstad research shows that the construction sector is failing to maintain its attractiveness to current and potential employees. This will have serious consequences for the sector, which is already facing staff shortages and an inability to fill positions.

"However, the implications could reach further than the construction sector. According to a recent report, Auckland may need as many as 113,800 homes built by 2031, and Christchurch, after years of delay, is finally starting to rebuild the city.

"If construction firms are unable to complete projects such as these, there will be consequences for New Zealand as a whole."

Interestingly, despite a continued drop in attractiveness, the research shows that the construction sector has managed to maintain its name awareness at 43%, which is on par with last year's result, but a substantial increase on 34% in 2013.

"We know that the construction sector is in the midst of a boom and there is a huge demand for staff to fill the existing and future shortages. What this year's results also make clear, is that potential employees recognise companies within the sector," Mr Keegan says.

"The challenge for construction firms is to ensure that this recognition is positive. In order to recruit and retain the top talent, firms within the sector need to ensure they are perceived as good employers, offering Kiwis what they want in a job, such as a good salary and work-life balance."

Five years since the first Randstad employer survey was undertaken, the most important criteria for New Zealanders when choosing an employer continues to be salary and employee benefits, according to 21% of respondents.

This was followed by pleasant working atmosphere (10%), good work-life balance (10%), long-term job security (12%) and interesting job content (11%).



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Buildnz designex, New Zealand's award-winning and largest industry exhibition specifically for builders, project managers, designers, architects, specifiers and related trades professionals, returns next month bigger and stronger than ever before.

For the first time in the event's history, buildnz designex will be joined by The National Safety Show (NSS), the country's leading trade exhibition dedicated to workplace safety.

NSS has a natural alignment with buildnz designex as businesses search for the latest innovations and technology to provide a safe and healthy working environment.

Whilst substantial improvements have been made in construction health and safety in recent years, there is still a long way to go. One needs only to look at the facts.

In 2014 alone, five workers died on construction sites and many more were seriously injured. NSS 2015 is helping the industry better understand its obligations around tightening safety standards and regulations.

At this year's event workplace safety experts will showcase their specialist products and services, help solve business safety problems and offer safety education.

buildnz designex 2015 is set to be one of the best yet, showing that the industry is strong and there is confidence in the future. With more than 5000 visitors expected to visit, and four halls at the ASB Showgrounds filled with exhibitors over three days, there will be something for everyone, including product demonstrations, networking opportunities, industry education and keynote speaker sessions.

The event itself is supported by local and central government bodies, including MBIE, Worksafe NZ, Auckland Council Design Office, Waterfront Auckland and leading industry trade associations, including the Registered Master Builders Association.

One of the show themes in 2015 focuses on urban design and housing density challenges facing Auckland. As pressure on land supply and housing demand continues, a market is developing for innovative building solutions



delivered on time, on reduced budgets and often in small spaces.

buildnz designex will be displaying several features where visitors can experience examples of solutions that offer high quality, practical and environmentally-responsible solutions.

Visitors can join the debate by attending leading speaker sessions from the Registered Master Builders Association, MBIE, BRANZ and the Auckland design office of the Auckland

Council, as well as a keynote session.

Seminars will contribute to LBP skills maintenance points (1 hour of learning = 1 LBP point).

buildnz designex and The National Safety Show runs from June 21 to 23, 2015 at the ASB Showgrounds, Greenlane, Auckland. And it's free to attend!

See www.buildnz.com for details and times for all sessions, and to register for the show.

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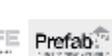
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Christchurch's Church Square achieves sustainable NZ-first

Christchurch will soon boast one of New Zealand's most sustainable homes, with a house under construction in Addington achieving 9 out of 10 under the Homestar rating system — the highest Homestar rating awarded to date.

Homestar is the independent system that rates the health, comfort and efficiency of New Zealand homes, on a scale of 1 to 10. It takes into account energy, water, waste, ventilation, health and comfort, and other environmental factors, at the design and built stages.

The 140sq m, two-storey home in Church Square, Addington, is under construction and due for completion in late June 2015. An adjacent single-storey house in the development is also targeting a 9 Homestar Design rating.

Developer and architect Bob Burnett is a long-standing advocate for sustainable design. He's also part of an industry group aiming to encourage 1000 new houses in Christchurch that rate 7 Homestar or more, in a bid to create a more sustainable rebuild.

"The rebuild is an unprecedented opportunity to make the city's housing stock warmer, healthier and more energy efficient. A little extra thought and good design at the outset will lead to a lifetime of savings and good health," Mr Burnett says.

New Zealand Green Building Council chief executive Alex Cutler says it's particularly pleasing to see an inspirational example of sustainable architecture in Christchurch.

"As the city rebuilds, a project like Church Square shows that embracing sustainability is not only smart but desirable. This home is stylish, energy efficient and built to high standards of earthquake resistance — it's a fantastic milestone for sustainable home building in New Zealand," Ms Cutler says.

"Congratulations to Bob and the team for getting the first 9 Homestar Design rating and showing real leadership in the sector."

The home features rain water harvesting and grey water, water-efficient fittings, photovoltaic solar power and energy-efficient lighting and electrics. All paints and sealants are low VOC,

and other materials are certified by Environmental Choice NZ or the Forest Stewardship Council.

A solar wall ventilation system uses the sun's energy to pre-heat ventilation air, substantially reducing heating expenses. Slab-edge insulation (to stop heat loss from concrete floor slabs) and innovative hydronic underfloor heating also keep the home snug.

The strict waste management plan meant there was no skip bin on the building site, forcing workers to think about how to reuse and recycle as much as possible.

A high-performance thermal envelope has been achieved thanks in part to an innovative framing system called "Frame Saver", which significantly reduces the amount of timber used and allows room for more insulation.

Additionally, external wall frames are at least 140mm thick and have a chemical-free Rigid Air Barrier (RAB). These innovations also provide superior resistance to wind and earthquake loads that far exceed Building Code requirements.

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It is only recently that smart devices — used to access social media, digital newspapers and mates — are becoming a useful part of a tradie's toolbox. And the technology is increasing efficiency on building sites.

Technology is increasingly seen as one of the fastest growing ways to increase productivity in New Zealand's construction industry, and a leading solution in New Zealand and globally is BuilderTrend.

The cloud software connects clients, project managers, builders, subbies and anyone else who needs to know what is going on with a job, all in real time, and it integrates with Xero and Quickbooks.

The software is accessible from any smart device or computer, which means everyone is up to speed at any time, and there is less need to invest in additional hardware.

However, are Kiwi builders using such systems to their advantage?

In 2010, the New Zealand Building and Construction Productivity Partnership, a collaboration of industry and Government, was established to address low productivity in construction.

The New Zealand Institute of Economic Research (NZIER) researched industry innovations builders thought should be focused on, and identified "project management is complex and underdone. Co-ordinating house builds is very complex but, generally, builders do not put enough effort into it, maybe because the value proposition is not apparent."

High levels of subcontracting made it difficult to identify the true size of construction companies.

"At times when there are 20 to 25 different trades working on a house simultaneously, productivity is highly dependent on good co-ordination and strong project management," the report said.

With the advent of cloud software, large construction companies don't have to be the only ones tapping into technology to increase productivity and streamline the build process.

However, the NZIER report identified that "in principle, industry structure and networks should facilitate innovation — they can also hinder diffusion of some technology".

This could explain why the industry has been slow to adopt information technology.

A large number of people need to be on board with the technology before any useful value is perceived by individual tradespeople.



No 1 Homes director Dan Turner has used cloud software BuilderTrend to provide efficient job management and communication between contractors, subcontractors and home owners.

"For instance, emailing has helped subcontractors hugely, but there was little individual incentive to move to email until everyone else did," the NZIER report says.

The same behaviour may apply to adoption of project management systems that rely on cloud technology.

Efficiently manage a large number of jobs

BuilderTrend makes it feasible to efficiently manage a large number of jobs at one time, without the construction team spending its day on the phone or writing notes in diaries to follow up later.

The post-earthquake building boom in Christchurch and the housing shortage in Auckland have put the pressure on builders to make homes quickly and cost-effectively.

No 1 Homes director, Dan Turner, has a lifetime of construction industry experience, starting out as an apprentice in the 1980s, and he knows the daily challenges on a building site.

"No 1 Homes started using BuilderTrend early in 2014, aiming to make housing more affordable without compromising quality," Mr Turner says.

"I had also used other BIM (Building Information Modelling) systems, but when I saw BuilderTrend I thought it was a really positive step, and the platform was ideal for residential builders."

Mr Turner needed the software to provide efficient job management and communication between contractors, subcontractors and home owners.

"BuilderTrend is an essential tool in our business because it increases productivity and reduces downtime."

In March, Mr Turner was managing 24 projects with BuilderTrend, and was anticipating more large contracts that would add to the

workload.

"In the past, we would text contractors, and then we progressed to emails when everyone had smart phones.

"Now, if we have a problem or query onsite, we can photograph it, use voice to text for comments and make the information available immediately. Decisions can be made within minutes, not hours.

"It can be added to a 'to do' list, multiple people can access the same document from their smart device, and the contractor can take action without spending time phoning numerous individuals."

Some elements of jobs involve multiple tradespeople, and when instructions are entered into the system once, everyone concerned is notified and the resolution is communicated to all parties.

The manager of the BuilderTrend account can restrict levels of access to complete projects, as well as specific elements within projects.

Reports identify any conflicts within the schedule — for example, where one contractor has been allocated to two jobs at the same time.

The home owner can also follow building progress and add queries that all approved contractors can see and respond to.

Being cloud-based means records are secure, and information will not disappear if someone loses their phone or their computer crashes.

The software does need a little bit of training but Mr Turner sees it as very user-friendly. And when he has contacted the United States-based help desk he was quickly assisted.

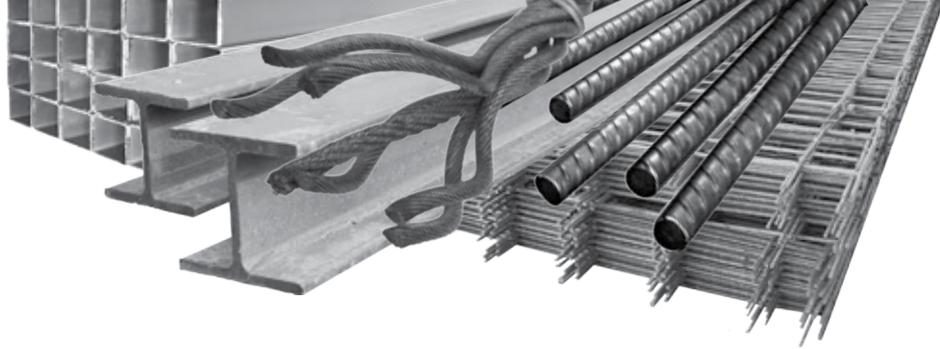
Australasian regional manager for BuilderTrend, Trudy Atherton, saw its potential to assist the teams involved in the Christchurch rebuild.

The record-keeping system is also useful for protecting builders with the increased requirements for Licensed Building Practitioners.

"Although BuilderTrend was founded nine years ago, when we introduced it to New Zealand in 2012, systems like this were relatively unknown," Ms Atherton says.

"The evolution of Xero has seen a boom of cloud systems develop that seamlessly integrate accounting software with productivity software, which creates greater efficiencies," she says.

BuilderTrend was approved as a Xero add-on in December 2014, and has seen a rapid uptake since its release.



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Rinnai launches new-look online trade hub

Leading appliance solutions company Rinnai has further committed to helping Kiwi tradespeople upskill with the unveiling of its revamped Tradesmart Hub.

The new look trade web site at www.rinnai.co.nz/tradesmart is an intensive redesign and upgrade of the Tradesmart trade portal which will house tech bulletins, spec guides, advertising templates and online training courses for the company's trade and retail customers.

It includes Rinnai's popular professional development training courses for trades personnel, which enable them to gain Continuing Professional Development (CPD) points issued by the Plumbers, Gasfitters and

Drainlayers Board (PGDB).

Experts in water and home heating, Rinnai launched the free online courses in 2012, and the innovative company has seen an extensive uptake of the training.

"It's proved to be very popular, with more than 14,400 PGDB CPD points issued since the programme started," Rinnai training manager Mark Dobson says.

"We make these courses available to people for free, and online so they can do them in their own time. And earning CPD points helps them keep their licenses up to date and relevant.

"We're proud to be involved in helping to upskill these personnel, as well as the industry

as a whole, through this programme."

The Tradesmart training web site has now undergone an extensive redesign, making it easier to use. It is now linked to the Rinnai consumer web site, which has also undergone a significant revamp, meaning it's simple to find and is included as a core part of the Rinnai brand, Rinnai marketing manager Kathryn Geck says.

For those already registered with Rinnai online training, log-in details will remain the same for the new look site, so they can easily access the expanded new trade hub and their details without having to re-register.

For more information, visit www.rinnai.co.nz/tradesmart.

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BCITO launches provocative promotion to recruit 5000 new apprentices

With a \$100 billion construction boom now a reality, the Building and Construction Industry Training Organisation (BCITO) is doing everything it can to recruit more people into construction apprenticeships.

Early in April the BCITO launched an edgy campaign aimed at raising general awareness of the incredible career opportunities now available in construction due to skills shortages across the country.

“Since 2012, our construction sector has grown by nearly 9%, in contrast to the wider economy which has grown around 2.5%,” BCITO chief executive Ruma Karaitiana says.

“This has never happened before, and construction is now one of the fastest growing parts of the economy, predicted to grow 3.2% per annum until at least 2017,” he says.

“The downside of this is that we are now very short of professional tradespeople, and there seems to be a lag in market response to opportunity.

“Sure we’re signing up more apprentices now, but most career seekers are behaving in the same way, going down the same pathways that they have been going down for decades. While nearly 30% of school leavers are going off to uni, less than 7% are taking up trade apprenticeships. We’re trying to change that.”

Mr Karaitiana says the BCITO is looking for motivated people in particular — those who are driven to succeed, and want to be future managers. This means targeting career seekers who may well be considering more academic pathways, and putting BCITO messages in front of them.

“One of the key issues we’re really honing in on with this promotion is student loans. We’ve always been a little perplexed by the ‘elephant in the classroom’ that is the \$14 billion of student debt plaguing many learners.

“The average domestic student’s debt in 2014 is up 57% on 2011, to almost \$25,000. We’re trying to get the message out there that it doesn’t have to be this way. Our apprentices don’t have student loans — they have jobs.”

In fact, Mr Karaitiana says recent BCITO research shows that 98% of graduated BCITO apprentices are in full-time employment. Of these, 32% expect to progress into supervision or management in the next two years, and 27% see themselves starting their own business.

“Compare some of these numbers to other



pathways, and we’ve got a very positive proposal. By comparison, only 56% of Bachelor degree graduates get a job in their first year after graduating. Now we just need to get the word out,” Mr Karaitiana says.

The BCITO’s “It’s Not” recruitment drive aims to do just that. It’s a tongue-in-cheek campaign underpinned by some real truths — challenging preconceived misconceptions of construction trades. Adverts will be placed in digital, outdoor and print channels.

“This is the biggest recruitment drive we’ve done in a long time,” Mr Karaitiana says.

“We are going to push a few boundaries, but in a fun way. In competing head on with other tertiary institutions, we are coming up against marketing budgets which are huge in comparison to our own. We hope that by pushing a few buttons we’ll attract attention, and hopefully draw public interest to what is a \$100 billion issue.”



The BCITO launched an edgy campaign in April aimed at raising general awareness of the incredible career opportunities now available in the construction industry.



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Nuplex launches a breakthrough technology for the coatings industry

New, innovative coating technology, Acure, introduced by global, specialist chemical company founded in New Zealand

Nuplex has unveiled the world's latest technological breakthrough in coatings, Acure, an innovative technology that will significantly benefit manufacturers around the world.

Manufacturers traditionally need to balance the dry time of a coating with the time at which the paint becomes unusable, referred to as its pot life.

Nuplex's research and development teams around the globe have decoupled this adverse relationship to produce Acure.

Acure harnesses leading-edge chemistry, giving paint and coating formulators the ability to dial in fast dry times with remarkably long pot lives. Acure has the potential to reduce manufacturing times significantly when used in coatings applied in large-scale manufacturing processes.

Nuplex chief executive Emery Severin says Nuplex scientists started working on the technology in 2007, and have developed a system that has potential to be used in almost all the different industrial coatings markets.

"Acure is built on Michael Addition chemistry which, up until now, has been too reactive to be manageable in a coating context," Mr Severin says.

"Developed to precisely control this reaction, the Acure system delivers very fast dry times, extremely long pot life and cures at low temperatures.

"We've already introduced the Acure system to a select group of customers and received very positive feedback. We anticipate the system will be a breakthrough for Nuplex and the manufacturers that use it," he says.

Acure is being introduced immediately in Europe and America, then in Asia, Australia and New Zealand towards the end of 2015.

The product offers increased comfort for workers applying coatings that use the new technology because it is a low volatile organic compound (VOC), and is isocyanate and tin-free. This is good news for workers and the environment.

In addition to working conditions and environmental benefits, manufacturers that use paints and coatings with Acure will benefit from enhanced efficiency, less wastage in application and greater flexibility when operating at low temperatures.

Acure is currently being trialled in a number of market segments, including agriculture and construction equipment, and protective coating markets.

Nuplex has long been dedicated to creating innovative solutions for the coatings industry.

"Acure is the result of Nuplex's global investment in research and development. The system was invented in Nuplex's Innovation

Centre in The Netherlands and refined in R&D laboratories in Europe and the United States," Mr Severin says.

The technology was unveiled at the recent European Coating Show (ECS) and was awarded the "Best Paper Award" for the ECS Congress.

The ECS is the largest of its kind in the world, bringing together industry leaders behind paints and coatings used in markets around the world.

Nuplex employs more than 1700 staff globally, currently operates 16 manufacturing sites in 12 countries, and is New Zealand's oldest listed company.

About Nuplex

Nuplex is a leading global manufacturer of resins used in paints, coatings and structural materials.

The company has an integrated sales, manufacturing and R&D network located across Europe, Australia and New Zealand, Asia, and the Americas, and sells its products in more than 80 countries worldwide.

The global coating resins operations supply resins used in a wide variety of paint and coating applications, including:

- *Decorative and trim paint,*
- *Automotive coatings,*
- *Vehicle refinishing,*
- *Wood flooring and furniture coatings,*
- *Metal furniture coatings,*
- *Consumer electronics and white goods coatings,*
- *Marine and protective coatings, and*
- *Coatings for infrastructure and transport.*

In Australia and New Zealand, Nuplex is also a leading producer of resins used in composites and pulp and paper products.

How to pass your pre-line moisture test!

By John Oliver, Hiandri Solutions Ltd

New Zealand is a wet country, and a key challenge for builders and construction companies is passing the pre-line moisture test — and with so much rain, wet bottom plates are a major problem.

Failure to pass will cause a chain reaction of delays, and the costs soon add up to hit you where it hurts in the pocket.

The new Hiandri bottom plate packer lifts timber framing bottom plates 12mm above the floor and keeps bottom plates and frames from sitting in water, allowing the frames to drain and air to circulate around the bottom plate.

This is a simple solution to a major problem. Switched on housing companies, and builders, are requesting Hiandri packers to come pre-installed on their pre-cut frames, doing



away with the need for damp proof course H3.2 bottom plates.

The bottom plates and frame can drain and dry naturally. There is no need to worry about drying out frames, not to mention the costs of hiring dehumidifiers and heaters, an expensive last resort.

The product is an example of lateral thinking, and a simple common sense solution to a very expensive problem.

Ask for Hiandri bottom plate packers to come pre-installed from your pre-cutter, and/or request a free sample pack at www.hiandri.com, where visitors will find full technical information and specs.

It's Black and White
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BT's Back in Time

20 years ago:

- Building products manufacturers were being encouraged to have their products accredited by the Building Industry Authority (BIA).

NZMBF chief executive Trevor Allsebrook said the fact that the Master Build Services five-year new home guarantee covered materials as well as Registered Master Builders' workmanship made it important that materials lived up to their manufacturers' promises.

"Builders have the right to be confident that they can rely on the performance statements made by manufacturers and suppliers," he said.

15 years ago:

- An industry working party was to work with Associate Commerce Minister Laila Harre and the Ministry of Commerce on proposals to strengthen construction industry laws.

The move came about after a meeting between Ms Harre and trade representatives to discuss security of payment in the industry.

"It's quite evident that many people in the construction industry aren't being paid on time. I believe they should be, and am looking for solutions," Ms Harre said.

The working party was to be made up of representatives of the Registered Master Builders Federation, the New Zealand Contractors Federation, the New Zealand Building Subcontractors' Federation and unions.

10 years ago:

- Incoming Registered Master Builders Federation president — and current *Building Today* columnist — Mike Fox, outlined what he hoped to bring to the presidency in his acceptance speech at the Federation's conference in Waitangi.

He said the industry faced a period of considerable change, and that there was a need to help members "over the licensing hurdle".

"It is fitting, if not overdue, that builders will now be recognised, licensed and rewarded for the professionals that they are. For too long have our qualifications and true market costs been watered down and hijacked by opportunists," Mr Fox said.

5 years ago:

- Milestone Homes general manager Stephen Murray slammed the Government for fuelling insecurity among property investors, warning it would increase pressure for housing demand.

He said for months the Government had been tipping changes to the way property investment was taxed.

"Its failure to provide any clear direction about those changes has damaged confidence in the market," Mr Murray said.

"Large scale developers and mom and pop investors alike have been holding back on building.

"They're understandably nervous about putting money into bricks and mortar because they simply don't know how the Budget announcement will affect their investments."

His comments came in the wake of a dramatic fall in the number of building consents authorised between February and March 2010, a trend that had been continuing since March 2009.

Ease the stress of time management with KISS!

Terry Sage of Trades Coaching New Zealand mulls over whether you decided to implement his Yes/No advice last month . . .

Well, did you do it? Did you say no to anybody? I hope not. What I hope you said was “yes we can do that, but . . .” So if you managed this approach your month should have been a little less stress-filled. But keeping 60 minutes of work to 60 minutes of time and not trying to cram in 80 minutes of work for every 60 minutes is only part of the solution.

There are dozens of books on the shelves that cover the subject of time management, and how to live a stress-free life. And in those pages are hundreds, probably thousands, of first-class tips, and they will all work, guaranteed. So why don't I just read a couple, cut and paste some of the good ones, make myself look oh so clever and not have to think of any more words to write?

Well, the truth is you don't need thousands of world class tips. You don't even need 10 because the more you try, the more confused your life will become. Business should be simple not complicated — think about the KISS (Keep It Simple Stupid) principle in every aspect of your business and this, in itself, will ease the stress of time.

Let's start with a basic but great one.

Stop. Take a breath. Now take a look at your life. Over the course of a week or two write down everything you do. “Yeah rite!” I know it sounds like I want to turn you into J K Rowling and you have probably not written anything more significant than a cheque or a shopping list for a very long time, but hang on a minute. All you need to do is shorthand — “quoted Mrs Buckets for 45 minutes”, for example.

When you have a couple of weeks' worth you can then identify what takes up most of your time. Now note next to each one if you enjoy them or not — put a tick or a cross. Then put a dollar sign next to the ones that make you money.

Normally the ones you don't like or the ones that don't make you money take the longest because you don't want to do them or, worse still, you don't do them.

A prime example of this is invoicing. I met a young lad the other day who was on stop credit with his supplier. He had been so busy he had not invoiced for three months, so had no cash in the bank to pay the bills.

When asked why he had not invoiced, he said, “I can't stand it, all that writing and adding up — I would rather be on the job earning money”.

Hello! There are no more jobs because there are no more materials. Note to you — there should be a dollar sign next to your “invoicing people” section.

The point of all this is that everything is important to keep the wheels of your business turning. Nothing can be missed, especially the boring parts.

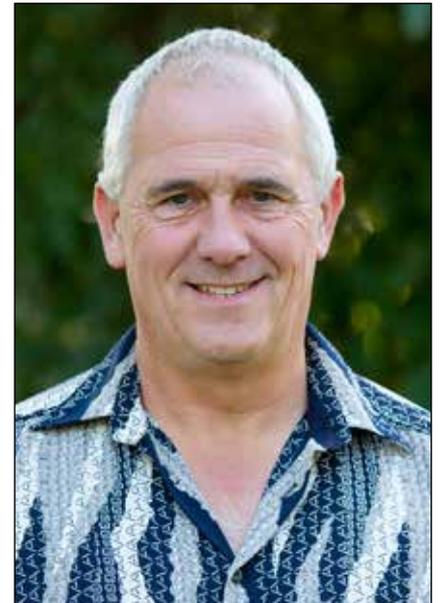
By working out what you have to do, how long it takes and if it produces a dollar, we can start to prioritise when each item gets done and how long we are going to spend on it.

Some quick tips.

- Try and do all your quoting (visiting the jobs) on the way to work or on the way home or, better still, all on the same day. Don't keep leaving a job to do a quote as you lose all momentum.
- Set aside time to write up your quotes, a morning or afternoon if possible, or one evening a week if it has to be. Not every evening of every week.
- Set time aside — a designated time either weekly or monthly — and do all your invoicing in one go.
- Plan your week, get all materials at the start of the week and not daily.

Perhaps we are getting ahead too much here — first do the lists I mentioned earlier.

Next time I will go into the tips and the philosophy behind them, and we can analyse the results of the list. Good luck with your writing, and don't lose the bits of paper!



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The Nautilus leaky building decision — judgment finds in favour of the plaintiffs but there's only two solvent defendants!

Timothy Bates, principal of Auckland law firm Legal Vision, reports on the very recent High Court leaky building decision concerning the Nautilus multi-unit residential development in Orewa, just north of Auckland.

Background

The Nautilus is a multi-unit residential complex situated in Orewa in close proximity to Orewa Beach.

It is a 12-level mixed use development, with shops and cafes on the ground level, two levels of car parks, and residential units contained in the floors thereafter.

It was constructed between 2002 and 2004 at a cost of \$35 million, and it was alleged by the plaintiffs that it would cost more than \$23 million to repair it.

A claim was brought by the plaintiffs, being the body corporate/unit owners as against the builder (Multiplex), the council, the architect (Walker Architects Ltd), the cladding manufacturer/installer (Facade Technologies Ltd), and the waterproof membrane installer (Charles Norager & Sons Ltd).

The plaintiffs contended that due to failings in the construction work completed by these parties, the complex suffered from water ingress. The council joined in Bostik New Zealand Ltd as a third party contending that the liquid membrane it supplied for use on the decks was defective.

Justice Gilbert found for the plaintiffs, with the lion's share of the judgment to be met by the council, due to the insolvency of the other parties responsible for the construction defects.

The plaintiffs claimed that the complex suffered from a long list of defects typically associated with leaky building syndrome. The construction defects were contained within the following building components — roof and roof



edge, cladding, decks, balustrades and podium.

The claim brought against the council was threefold. It was alleged that it had not reached the requisite standard of care in terms of its issue of the consent, the inspections it carried out and the Code of Compliance Certificate issued.

The claim as against the architect was twofold. First, it was claimed that it had not reached the requisite standard of care in terms of the design details it provided, but part of the claim brought related to its contract administration and observation role.

In summary, the council was found liable for the remedial costs associated with the defects in the plant room on the roof but not for the skylights.

It was also found responsible for all of the costs associated with the cladding defects, including the roof edge. It was also responsible for the damages in relation to the podium walls, but not in relation to the incompatible membranes at the base of the stairs.

It was not found liable for all of the defects localised on the decks, but since all the repair work to the balustrades was required to

remedy the defects for which the council was found responsible on the decks, all repair costs to the balustrades were ruled recoverable from the council.

As head contractor, Multiplex was found liable for all defects. Walker Architects were found liable for all defects other than the skylights and the absence of cap flashings on the podium.

Charles Norager & Son Ltd was found liable for the damages associated with the decks and the discontinuous membrane at the base of the podium stairs.

However, since it was decided that Multiplex had no insurance cover for the liability claim brought, it means the council and Charles Norager & Sons Ltd are the only solvent parties that the plaintiffs can execute judgment against.

This is particularly grim news for the council and/or their underwriters, as Charles Norager & Sons Ltd was only found liable for the damages associated with the decks and the discontinuous membrane at the base of the podium stairs.

In respect of the deck, it was ruled that the apportionment of liability as between the council and Norager was 20%/80% respectively.

I note that this success for the plaintiffs is claimed to be the largest leaky building award thus far, with the value of it recorded as \$25.7 million in a *New Zealand Herald* article.

However, the insolvency of the responsible parties means that, proportionately, the council must meet the majority of that liability on its own, with the exception being the costs to repair the deck which it shares with Charles Norager on the proportions as set out above.

It is for this reason that the finding made in favour of Zurich Insurance — that there was no cover for Multiplex — is critical, and may become the subject of further scrutiny.

Note: This article is not intended to be legal advice (nor a substitute for legal advice). No responsibility or liability is accepted by Legal Vision or *Building Today* to anyone who relies on the information contained in this article.



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Cast aside

Architect Don Bunting regrets the virtual demise of a wonder metal of the 19th Century — cast iron.

Noticing the poignant wording on an old footpath grating — “Patent applied for” — reminded me what a great building material cast iron is, or was.

While the technology is as old as 5th Century BC China, cast iron is seldom seen today. Even its close cousin, wrought iron, is generally only seen in craftwork produced by amateur blacksmiths and artisans.

Up until the 1980s common grey cast iron was universally used for footpath and road installations — manhole covers, stormwater catchpit gratings and access panels for service installations.

In many cases these have now been replaced by products manufactured from recycled plastics, precast concrete, aluminium or steel. Cast iron was also once commonly employed for larger stormwater and sewer pipes, and for architectural decoration such as downpipes, verandah posts and railings.

Once, nearly every major city in New Zealand had access to a cast iron manufacturer, but costs and the difficult and dirty manufacturing process led to its slow demise.

All around Auckland city you still see manhole covers marked TPF, standing for the Te Papapa Foundry. Not surprisingly, the old foundry burnt down in the 1980s, and was never rebuilt or re-established. The very high temperatures involved and the difficult and dangerous nature of the process meant it was probably an accident waiting to happen.

I recall being disappointed when the robust cast iron surface drain slotted covers were no longer available, and I was compelled to use what seemed a poor and flimsy plastic alternative. These plastic gratings and their aluminium equivalents are still used widely today, but never seem to perform their function as well as the heavier cast iron gratings.

Architectural cast iron

While cast iron was never used extensively as a structural element in New Zealand buildings, there are numerous examples of early cast iron-framed and clad buildings in cities such as New York and Chicago. The Soho and Tribeca areas of New York, for example, contain many significant cast iron buildings.

When it came to installing a sewer system into downtown Chicago in the late 19th Century,

thousands of cast iron jacks were used to lift the five to seven storey buildings up to a level allowing for reasonable drainage falls in what is a very flat city.

As well as being relatively cheap in mid-19th Century terms, cast iron was formed into elaborate and relatively lightweight shapes to create interesting facades more cheaply than using stone.

By the late 19th Century cast iron was being replaced for most building purposes — first by wrought iron and later by steel with its increased tensile strength. It took only 7300 tonnes of wrought iron to create the 324 metre tall Eiffel Tower.

Built for the 1889 World's Fair in Paris as a temporary entrance archway, the tower is now the single most recognised structure in the world, and still attracts millions of visitors each year.

Ductile iron

Cast iron hasn't been completely cast aside, as some ancillary footpath and roading products are now manufactured from ductile iron. Ductile iron, also known as nodular cast iron, spheroidal graphite iron, or SG iron, was invented in the 1940s.

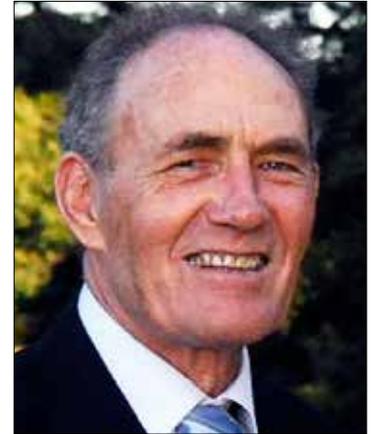
While most varieties of cast iron are brittle, ductile iron has more impact and fatigue resistance, due to its nodular graphite inclusions. With older grey cast iron, the carbon content is in the form of flakes distributed throughout the metal.

Both types of cast iron, if manufactured correctly, develop a protective surface scale, making them more resistant to corrosion than steel or wrought iron.

Modern equivalents

In recent times a greater emphasis on the quality and form of our infrastructure has led to a growing employment of professional landscape design and installation techniques by government, councils and developers.

This has encouraged manufacturers and importers to make available a wide range of well designed and robust roading and footpath products using various combinations of coated steel, cast aluminium and stainless steel, in addition to both ductile and wrought iron.



While the appearance, quality and usability has probably improved over the essentially prosaic and workmanlike nature of old cast iron equivalents, inevitably the cost of these more sophisticated alternatives had also increased significantly. So what's new?

Forgotten heroes

In today's safety first environment, some of the past's greatest advances in human knowledge might never have happened. Particularly those forming the very basis of our modern health and safety regime, were developed almost by chance by people whose names are no longer remembered.

Self promotion helped some to gain a status perhaps not justified by their abilities. It's said, for example, that Edison called himself a sponge for other inventors' ideas. His great strength was his ability to first develop practical solutions and then successfully promote these new innovations — such as electric lighting — to the public.

One of many now forgotten heroes is Alexander Cruickshank Houston, who first came up with the idea of chlorinating the public water supply.

This first occurred in Lincoln, England, in 1905 following a serious typhoid fever epidemic, with no public debate or discussion. He just went ahead and did it.

While this was only a temporary measure, the idea was later picked up and used for the first permanent treatment of a city water supply by Jersey City, New Jersey, in 1908.

Today, with chloride of lime replacing the original chlorine gas, it remains the basis for the treatment of most public water supplies throughout the developed world. Almost by chance.

The bridges of Møre og Romsdal County

Dr Kerry Rodgers contemplates the “Road to Nowhere”, an engineering masterwork.

It has been declared the world’s best road trip. It is a major feature of www.dangerousroads.org. One dashboard cam video has attracted 8 million hits on YouTube.

Tourists come from across the globe just to drive it. Popularly, it has been dubbed “The Road to Nowhere”.

It is Norway’s Atlantic Ocean Road. Although just 8.3km long and taking seven minutes to drive, it is a civil engineering masterwork.

There had long been plans to connect a group of islands scattered along Norway’s Atlantic coast with the mainland. The idea for a rail line was abandoned in the early 20th Century in favour of a road. World War II then intervened and it was not until August 1983 that construction began.

The notion was to extend a section of County Road 64 so as to provide a physical connection between a number of sparsely inhabited islands and smaller, uninhabited islets that form an archipelago between Eide and Averøy in Møre og Romsdal, Norway.

The remoteness of the area meant a two-lane highway was all that was required, but despite its relatively short total distance, numerous causeways and eight bridges were needed to link all the islands and the mainland.

Those bridges range from 52m to 293m in length, and from 3m to 23m high. Each is a

major engineering work.

The most prominent and spectacular is the Storseisundet Bridge. It is not your usual sort of State Highway 1 connector but a hair-raising switchback hung out over the sea.

Where the island of Averøy links with the mainland via the Romsdalshalvøya Peninsula, the road is fully exposed to the Norwegian Sea. During king tides and with just a little wind, the waves break across the roadway.

This was fully appreciated by the construction crews when 12 windstorms hit during their work. These are the strongest extratropical cyclones experienced in Europe.

The road was opened on July 7, 1989, and the total cost was 122 million Norwegian krone. Three quarters of this came from the public purse, with the remainder financed by tolls.

The public had grumbled loud and long about the tolls. The roadway was not expected to attract much traffic, and the tolls were regarded as a disincentive to using it.

However, the naysayers did not take into account the international petrol heads. The planners did though. They even built in four roadside viewpoints and rest areas along the route.

These, plus the spectacular nature of the journey, saw the bridge fully paid off in 10 years. It has been toll-free since mid-1999.



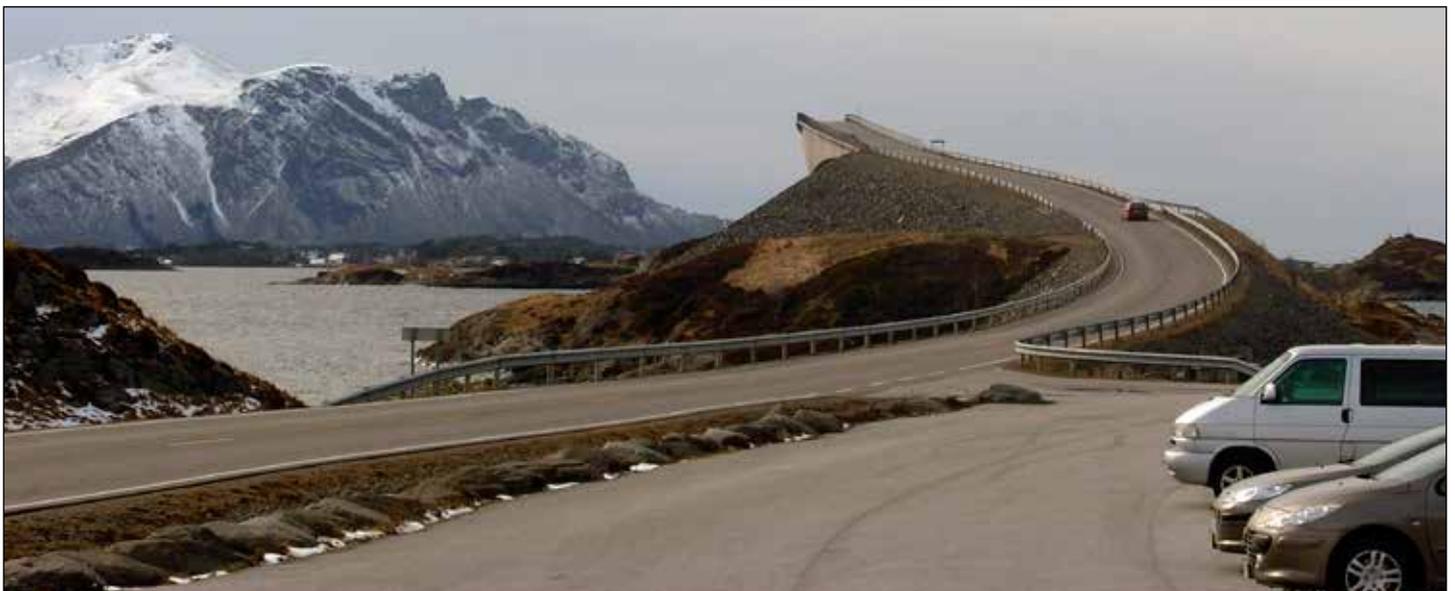
The road was awarded the title of Norwegian Construction of the Century, and is now a designated cultural heritage site. It is classified as a National Tourist Route, and has proved popular for filming car commercials.

Many would argue that in a good Atlantic storm it is the most dangerous road in the world to drive — which is, of course, what all tourists hope for.

Since 2009 it has been complemented with the opening of the Atlantic Ocean Tunnel from Averøy to Kristiansund. The two provide a single fixed link between Kristiansund and Molde.

Readers wondering if there’s a need to add the Road to Nowhere to their bucket list can check out the pics on www.dangerousroads.org/europe/norway/164-atlantic-ocean-road-norway.html, or take a spin on YouTube where there are many dashboard videos.

That switchback over the Storseisundet Bridge in a decent storm can set the heart racing. Or take it slow in snow: www.youtube.com/watch?v=uizjyT_tNQ.



Norway’s Atlantic Ocean Road — it’s just 8.3km long and takes seven minutes to drive, but is, nevertheless, a civil engineering masterwork.

Building Consents Information

For All Authorisations, March 2015

Dwellings	\$907,184,000
Domestic Outbuildings	\$17,648,000
Total Residential	\$924,832,000
Non-residential	\$426,508,000
Total All Buildings	\$1,351,340,000
Non-building Construction	\$35,167,000
Total Authorisations	\$1,386,507,000

Number of new dwellings consented

	Mar 2015	Feb 2015	Mar 2014		Mar 2015	Feb 2015	Mar 2014
Far North District	18	19	13	Horowhenua District	4	5	8
Whangarei District	36	32	35	Kapiti Coast District	9	8	17
Kaipara District	14	10	10	Porirua City	13	18	12
Rodney District	76	114	31	Upper Hutt City	25	6	16
North Shore City	223	61	119	Lower Hutt City	99	11	21
Waitakere City	42	62	47	Wellington City	40	48	24
Auckland City	183	149	167	Masteron District	3	4	3
Manukau City	108	58	86	Carterton District	6	2	7
Papakura District	82	44	78	South Wairarapa District	9	5	8
Franklin District	42	52	33	Tasman District	29	21	20
Thames-Coromandel District	25	15	18	Nelson City	15	15	14
Hauraki District	7	7	6	Marlborough District	15	16	19
Waikato District	45	17	38	Kaikoura District	4	5	5
Matamata-Piako District	12	7	11	Buller District	1	2	4
Hamilton City	64	83	39	Grey District	7	2	2
Waipa District	37	40	96	Westland District	4	5	2
Otorohanga District	3	2	4	Hurunui District	15	9	14
South Waikato District	3	0	5	Waimakariri District	69	55	98
Waitomo District	7	2	0	Christchurch City	341	333	342
Taupo District	15	9	14	Selwyn District	112	81	102
Western Bay of Plenty District	26	20	18	Ashburton District	17	16	16
Tauranga City	90	72	97	Timaru District	20	8	21
Rotorua District	9	6	6	Mackenzie District	4	6	3
Whakatane District	9	4	1	Waimate District	6	2	3
Kawerau District	0	0	0	Chatham Islands Territory	0	0	0
Opotiki District	1	0	0	Waikati District	8	4	5
Gisborne District	4	6	6	Central Otago District	6	9	13
Wairoa District	1	1	1	Queenstown-Lakes District	46	40	47
Hastings District	19	21	13	Dunedin City	30	18	48
Napier City	7	8	14	Clutha District	4	4	5
Central Hawke's Bay District	7	5	3	Southland District	7	7	6
New Plymouth District	23	22	32	Gore District	1	2	2
Stratford District	4	1	3	Invercargill City	18	5	11
South Taranaki District	3	2	5	Area Outside TA	0	0	0
Ruapehu District	1	3	0				
Wanganui District	5	2	5				
Rangitikei District	2	2	3				
Manawatu District	11	7	10				
Palmerston North City	19	21	13				
Taranaki District	1	0	1				

• Based on 2006 census areas
 • Each dwelling unit in a housing project is counted separately
 • Figures in these tables may differ from published statistics
 Source: Statistics New Zealand

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