



# concrete

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## Communicating with you

If you've visited [www.cca.org.nz](http://www.cca.org.nz) recently, you'll have noticed some changes. The revamped and upgraded website is part of CCANZ's new communications strategy, which is putting increased emphasis on electronic media and its ability to communicate quickly and efficiently.

If we have your email address, you will also have received our first electronic newsletter earlier this month. And this edition of concrete has been reformatted to accommodate those changes and to meet the ongoing desire of readers for hard copy. Our e-newsletter *grey matters* will come out monthly and *concrete* will continue to be published quarterly.

The internet is an incredible information resource, fast becoming part of our everyday lives, and getting the web working well for the organisation and its members has driven the website re-design and the communications plan.

The new website is more streamlined, with less 'clicking' required to get to information. It's also more dynamic, allowing users to ask questions, search for information, order books, and update their membership details. Material has been ordered by subject to make it accessible to all users and several new features have been added.

- The FAQ section allows users to submit a concrete-related query to the technical experts at CCANZ - who will (generally) turn a reply around within 24 hours. Users will be able to scroll through a database of past questions, which will be stored on the site.
- The Industry Guide is a regularly updated listing of member companies, searchable by products and/or services.
- Publications are now for sale on-line.
- CCANZ membership can be taken up on-line.
- Information Bulletins can be downloaded.

"The old site," says Information officer Nancy Bakker, "was not getting updated as much as we would have liked. The new site has a lot of content so we wanted to make it easy to



[www.cca.org.nz](http://www.cca.org.nz)

update and as straight-forward as possible for people to get to the information they want."

In order to make this happen, a new structure had to be put together. "The old site was built to a standard template and was quite flat - it didn't allow a lot of interaction. The 'back end' - ie the software that drives the site - is now more sophisticated and incorporates a database that will eventually allow us to feed particular information to particular people.

The site has powerful capabilities. Its structure allows content shown on the front page to be personalised for registered users, and email updates on new information to be sent to interest groups. While these sorts of things are unlikely to happen in the short term, site users are already registering on-line for the new e-newsletter.

Nancy, who has a Masters in Information Science, was the ideal candidate to oversee the site revamp and manage its ongoing maintenance. She spends a lot of time researching concrete-related subjects on the internet, and has an excellent grasp of how information should be structured. The plan for the future is to have the site much more closely linked with CCANZ activities. It will be updated regularly, so make sure you visit often...

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## Upfront – Project-based Progress



Creating a vision and strategic purpose as well as the strategies to realise those goals are tasks shared by the governors and management of any organisation.

The first six months of this year saw the Board and myself, in consultation with staff and key stakeholders, undertake a comprehensive review of the activities and purpose of the Cement & Concrete Association.

That has been a very positive exercise and has led to the production of a new business plan, which identifies key issues facing the organisation in the pursuit of its strategic goal - growth of cement and concrete consumption.

We see three key strategic issues facing the industry. These include:

1. the identification of strategies to enable us to compete effectively with alternative commercial construction systems: steel, timber and bitumen;
2. the identification of growth opportunities: state and local roading, residential construction (single and multi-unit) and hardstand;

3. the development of strategies to minimise the economic impact of implementation of the Kyoto Protocol on Greenhouse Gas emissions.

Most importantly the plan articulates a range of projects with measurable outcomes to address these issues. For example, we are undertaking a research project to assess why developers of multi-unit apartments are going for timber construction when precast offers such advantages in terms of thermal mass and speed of construction. This will allow us to identify the barriers to concrete use and develop strategies to overcome those barriers.

Similarly, another project works on concrete roading opportunities. Our aim is to get a concrete road built in this country in the next five years. The recent thinking in Auckland to allow private toll roads is very exciting as it opens real doors for concrete. As we all know, while the initial costs of concrete roads may be higher, the real cost is reduced as maintenance costs with concrete are much lower than with bitumen. I'm sure that New Zealanders, who are getting thoroughly sick of the

constant delays caused by never-ending road repairs, will welcome more durable concrete roads.

Our new business plan also outlines the strategic support that the organisation needs to provide to the industry in order to facilitate growth. This covers such things as education and training, industry relationships, communications and public relations, standards and research.

CCANZ Chair Ross Harper has played a key role in the development of our strategic thinking and I would like to thank him for his vision. The framework that we have for our strategic and business planning is both robust and flexible. We can quickly respond to environmental changes and at the same time maintain continuity of strategic support to enable us to grow the industry infrastructure and cohesiveness necessary to achieve our vision. To operationalise our plan we have defined disciplined blocks of work and clear timetables for action to allow us to achieve and demonstrate real project-based progress.

## News...

### Branding Change for Milburn



The Milburn Cement company has undergone a metamorphosis and on September 23rd the 114 year old company became Holcim (New Zealand) Ltd.

The adoption of the Holcim brand is the logical progression of a 30 year business relationship with its Swiss parent company. The move strengthens the company's linkages with an extensive network of cement, aggregates and concrete plants in seventy countries.

The collective experience generated by these operations, along with an extensive R&D pool, and the financial

strength of one of the world's largest producers of cement, aggregates and concrete is expected to enhance Holcim New Zealand's product development and its ability to provide sound technical solutions for its clients.

The company's traditions, established under the Milburn banner, will continue and the company is confident that the blend of local knowledge and global expertise will add value for its many customers. Holcim New Zealand's products will continue to be made in New Zealand.

### Concrete Loos

The identification of a gap in the prefabricated toilet market two years ago has led to sales from around the country for a South Otago concrete company.

Precast concrete toilets

developed by Balclutha company Fulton Hogan Concrete are attracting interest from as far afield as Auckland.

The toilets, known as Prema Loos, look good in any environment - urban or rural. However, the biggest uptake, according to the company's production manager Brett Paterson, is expected to be from local bodies seeking toilets with a rugged, no-nonsense design for beaches and small towns.

After two years, the prototype Prema Loo in the South Otago town of Kaitangata has proved its worth. "It's been set on fire a couple of times and it's standing up to it very well," Mr Paterson said.

Construction takes about a month all up: precast concrete walls are erected onto a concrete base and the roof is boxed and poured in situ. Subcontractors for tiling, electrical work, plumbing, and finishing then take over.



Brett Paterson with a Prema Loo destined for the Wanaka foreshore.

## Making a Splash

Auckland's soaring concrete landmark Sky Tower was the venue for the launch of CCANZ's publication, *Building Comfortable Homes*, in early July.

More than 100 people joined CCANZ to mark the book's launch: representatives from the cement and concrete industry, architects, builders, and contributors to the project itself, including Chris Munn from CCANZ, Morten Gjerde from Victoria University and Allan Muxlow of the Open Polytechnic.

Keynote speaker Sean Fitzpatrick kicked off (metaphorically speaking) by explaining why he is currently building his third concrete house. Fitzpatrick cited comfort,

solidity, long-term durability, and adaptability as characteristics that had led him to choose a concrete home three times out of four.

On what was described as "a good night out", he then went on to entertain the crowd with tales from his days as an All Black. While a number of stories related to his infamous ability to offer referees advice on aspects of their job, on this occasion he contented himself with providing the entertainment - and didn't delve into his past as a builder to offer the contractors present any tips.



Sean Fitzpatrick chats with CCANZ Chief Executive David Gray

The success of the event in Auckland was complemented, author Chris Munn says, by the seminar series held around the country - the North Island dates taking place before the launch, and the south after. Chris and fellow contributor Morten Gjerde ran 18 seminars from

Queenstown to Hamilton, reaching all the target groups for the book in the process. 270 plus attendees, from architects to engineers to prospective home builders, heard the concrete home story.

"We got good feedback," Chris says, "about the comfort and sound absorption qualities of concrete homes in particular. And it really seems as if people are wising up to issues about sound long-term investment in

housing - some of the housing stock being built now might not deliver on the long-term front, but concrete can."

CCANZ is now evaluating the next stage in its campaign to raise concrete's profile. Both *Building Comfortable Homes* and its predecessor *Designing Comfortable Homes* have met particular needs in the market, and the organisation is keen to identify where other information gaps exist.

*Building Comfortable Homes* and *Designing Comfortable Homes* can be ordered on-line at [www.cca.org.nz](http://www.cca.org.nz), or by calling (04) 4998820.

## ACENZ Awards

Two projects featuring innovative use of concrete have won Gold Awards in the 2002 ACENZ (Association of Consulting Engineers) Innovate NZ Awards.

The Candy's Bend to Starvation Point stretch of SH73 at Arthur's Pass garnered the top award for Opus International; while Beca Carter Hollings & Ferner won for the Macau Tower & Convention/Entertainment Centre, a project undertaken in partnership with architects Craig Craig Moller.

This stretch of SH 73 was described by the judges as "truly pushing the boundaries of all the technical disciplines involved to develop leading edge geometric, pavement, structural, and geotechnical engineering solutions."

While the 338 m tall Macau project has many similarities to Auckland's Sky Tower, its site, climatic conditions and the fast-track programme meant a range of specific constraints had to be resolved. The concrete shaft of the

Macau Tower is also tapered, unlike its parallel counterpart in Auckland, which made for a more complex structure.

A number of other projects featuring innovative use of concrete also received Merit Awards from ACENZ: the Shelly Beach Road Overbridge Lane Lengthening project, which was a case study at last year's Concrete Conference; the Caledonian Relocation Project in Dunedin (which included a velodrome paved in concrete, "designed and constructed to millimetre accuracy" for a high quality surface) and Homestead Stadium Redevelopment in Invercargill, both by MWH New Zealand Ltd.

Innovate NZ awards are judged by a panel of industry leaders and seek to highlight excellence in consulting engineering and exceptionally innovative solutions that juggle environmental, social, physical, and budgetary factors for clients. Evidence of an excellent client/consultant relationship is a pre-requisite for winning an award.

## Style and Substance

Environmental sustainability and strong identity lie behind the choice of concrete for what has been described as a “visionary” new building on the Joondalup campus of Western Australia’s Edith Cowan University designed by Perth architects Jones Coulter Young.

The new Science and Health Building is a three storey, concrete framed structure that incorporates five blocks around an internal courtyard. Precast concrete panels have been used throughout, with external surfaces a limestone-coloured, graffiti-proof, sandblasted finish that ties in with the existing campus colour scheme.

Same-size rectangular panels were chosen to enhance buildability and keep costs down, with shell-like curved panels specified to dramatic effect on one block. Designed to be a maximum of 10 tonnes for easy transportability, the exception was two 40-tonne feature panels that incorporate amoebic-like cut-outs.

The building was designed as a kit of parts, with components - concrete panels, window systems, sunshading steel support framing systems, walkway systems - manufactured off-site and bolted to the structural members on site. Precast concrete planks on post-tensioned band beams were chosen for the flooring for economy and ease of construction. Concrete forms are also used for sunshading.

In environmental terms, the building’s thermal skin - ie the concrete panels - works to radiate warmth inside in winter, while in summer a specially designed heat purging system helps control temperatures. This blows cool air across the internal surface of the concrete overnight, when the building is empty and energy costs are low, giving a cooler external shell for the start of the next day.



Pic: Copyright Patrick Bingham-Hall

## Recommended Read

*Concrete Countertops* by Fu-Tung Chang with Eric Olsen comes highly recommended by Peter Housiaux of Construction Systems in Otaki.

Peter says it is very comprehensive, “definitely not your typical ‘how-to’ book but a lesson on capturing beauty and creating a unique concrete countertop.” The book offers a step by step guide to creating a concrete countertop - from building the mould, mixing and pouring concrete to curing, grinding, polishing and installation. There’s valuable troubleshooting advice and useful tips on concrete countertop maintenance. Information about personalising a top are also included. “This book demonstrates that concrete can be as versatile, desirable and beautiful as it is durable.” Peter thinks this book would be useful for architects, designers, builders, and homeowners.

## Enduring Concrete

The Channel Tunnel; Westgate Bridge in Melbourne (the largest FRP strengthening project of its kind in the world); the Britomart Interchange; runway reconstruction at Auckland Airport; Auckland’s Vector Tunnel, and more... Case studies are always a highlight of the NZCS conference, and this year there are plenty on offer.

The 2002 conference, which will be held at the traditional Wairakei Resort venue from 4-6 October, has a theme of Enduring Concrete. The keynote speaker is British engineer, Dr Phil Bamforth, who numbers the Chunnel among his projects. The Conference will also see the President of the Concrete Institute of Australia cement an agreement for closer links with NZCS. CIA wishes to support smaller, kindred organisations such as NZCS with direct access to publications and seminar materials, and a joint international conference is planned for 2004.

For more information about the conference, visit [www.theconcreteconference.co.nz](http://www.theconcreteconference.co.nz) or contact Allan Bluett, on 09 5365410.

## NZRMCA Conference

Speakers at this year’s NZRMCA conference at the Rutherford Hotel in Nelson from 11-12 October come from the United States, Australia and New Zealand.

‘Interactive’ presentations that encourage discussion are the order of the day. Topics range from South Island aggregates (in a presentation by James Mackechnie, CCANZ Fellow at Canterbury University); to business conditions; to management issues. Key environmental

issues will be covered by environmental engineer Rob Potts.

International visitors include Jean-Claude Romain from Holcim’s US office and Tom Glasby from the Concrete Association of Australia, who will discuss construction and design innovations using high strength concrete.

For more information, contact Cathy Castle at CCANZ, [cathy@cca.org.nz](mailto:cathy@cca.org.nz)

# Seismic performance of flooring systems

*Dene Cook of CCANZ updates information about Canterbury University's flooring system research.*

Groundbreaking research being conducted at the Universities of Canterbury and Auckland is illustrating the need for additional investigation into the seismic performance of flooring systems in multi-storey structures.

This research has illustrated that excellent performance can be expected from walls, beams, columns, and beam-column joint zones of ductile frames designed to NZS3101. However, for the arrangements tested, the performance of the floors did not match that of the frames.

Several papers on this topic are available on the CCANZ website - [www.cca.org.nz](http://www.cca.org.nz) - under information sources/publications, including:

- *Seismic Performance of R/C Perimeter Frames with Slabs containing Prestressed Units*, Lau, D.B.N., Fenwick, R.C, & Davidson, B.J
- *Industry Workshop on Seismic Testing of Pre-cast Flooring at University of Canterbury: Summary of Key Observations and Outcomes*
- *Results Summary*, to be read with above, Matthews, J., Bull, D., & Mander, J.
- *The Seismic Performance of Flooring Systems*, prepared by the Technical Advisory Group on precast flooring.

The last paper on the list is the most recent and was prepared by a group that includes consulting engineers and representatives from: the Universities of Canterbury and Auckland; the NZ Society of Earthquake Engineering; the Society of Structural Engineers; the NZ Concrete Society; Precast NZ Inc; Precast Floor Manufacturers; CCANZ.

The technical advisory group was formed to help disseminate the results from recent research to the industry, and to provide input into the direction of future testing. The fundamental messages the group wishes to take to the industry include:

(i) The preferred seating arrangement for hollow core units supported on concrete beams is shown below. It is considered that using this seating detail will ensure improved seismic performance, above that of the commonly used detail of providing plastic cut-offs in the cores to prevent infiltration of the topping concrete. The proposed detail has no cost penalty over the existing practice.

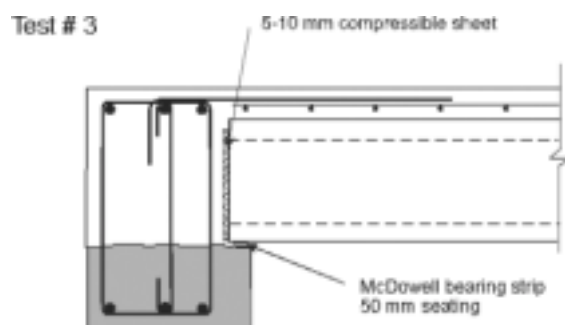
(ii) Hollowcore units should not be positioned parallel and immediately adjacent to beams. They should be located some distance away (500-800 mm) and linked to the beams by the concrete topping only.

(iii) Exterior columns should be tied back into the structure either by transverse beams or by ductile reinforcement in the floor slab. The reinforcement should be capable of resisting a force equal to 5% of the gravity axial load in the column.

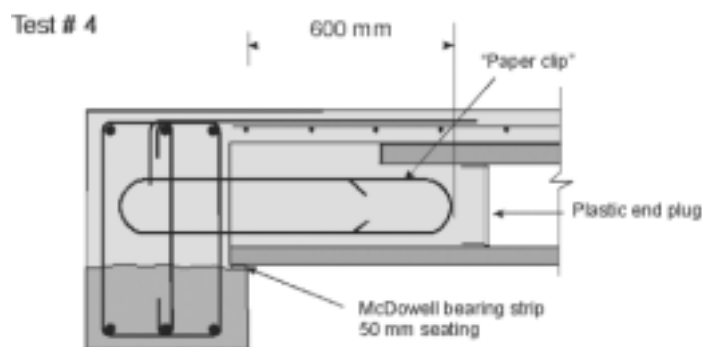
*The Seismic Performance of Flooring Systems* provides:

- Information on the reasoning behind the above recommendations

- Interpretation of recently completed research on flooring systems
- Aids to interpreting the results for structures with a different structural form to those tested
- Information about the direction of future testing.



*This test represents a detail proposed at the Industry Workshop on April 12<sup>th</sup>*



**Preferred seating detail for Hollow core**

## NZS 3101 Concrete Structures Standard

Work is programmed to commence on revision to the Concrete Structures Standard in February 2003, with completion by December 2004. In the interim, a survey will be conducted to get feedback about what users would like to see addressed by the standard committee.

It is planned that presentations - to outline some of the technical developments that could be included in the redraft, and the options for formatting style of the standard - will be held in the main centres during November.

It is important that users articulate their opinions of the standard so that the committee can address the issues from industry. If you have some ideas/comments on NZS 3101 that you would like considered, you can either attend the meetings, email the chairman Dene Cook on [dene@cca.org.nz](mailto:dene@cca.org.nz), or write to Standards NZ at Private Bag 2439, Wellington.

# Cook's Clinic...

## Spring - the cracking season

**S**pring is always welcome after a long wet winter. It is a time when activity in the concrete industry increases as people rush to complete those concreting projects before the summer holidays. It is timely however, to remember some of the challenges that the fickle spring weather brings.

Spring can signal two things, the onset of the equinox winds and massive swings in the day/night temperature. Both of these have serious implications for the placing of concrete.

Some of you may have already visited projects that have what appears to be shrinkage cracks; even though the slab has a sensible arrangement of saw cuts (see figure 1). If confronted with this, I suggest you find out what the temperature was when the slab was placed, and what it dropped to overnight after the pour. It is likely that the slab has cracked due to restrained early thermal contraction.

Concrete, like any material, contracts when it cools. So if the ambient temperature plummets, your newly poured slab will try to contract. If either friction on the base restrains this contraction, or it is built in, tensile strains will develop in the concrete. Figure 2 show the ultimate tensile strain capacity of concrete vs. time. It can be seen that concrete has its least ability to accommodate tensile strains when it is 6-18 hours old. This typically coincides with low night time temperatures. If the drop in temperature is sufficient, estimated at about 13°C, then the concrete may crack. Often the cracks are hairline and not noted when the saw cutter comes to cut the slab. They do however open up as drying shrinkage occurs.

Sadly, despite the cracking being reasonably predictable, too few are taking adequate precautions to prevent restrained early age thermal cracking. In Christchurch, after a wet and bleak winter, we suddenly got some 15-18°C sunny days with overnight frost. This coincided with phone calls about mysterious cracking. The issue is real and should not be ignored.

There are many options to prevent this cracking. These being-

- Avoid pouring when you expect day/night temperature differences to exceed 13°C, or
- Used tooled joints, crack inducers, or early entry saws to ensure that the joints are in place before the placer leaves the project. This should mean that when the

slab contracts overnight, the joints will open up rather than the slab crack, or

- Insulate the slab overnight.

Spring also means rising temperatures and increasing winds, considerably increasing the risk of plastic cracking. Again this type of cracking is predictable, and preventable.

Plastic cracking, as the name implies, happens while the concrete is still in a plastic (unhardened) state. If we have a hot, dry, windy day, the surface of the plastic concrete can dry causing cracking. Nomographs such as shown in figure 3 can be used to predict if there is a risk of plastic cracking. For about \$60 you can buy electronic thermometers that will give you the temperature, humidity, and a probe to measure the concrete temperature. The Beaufort Scale can be used to estimate the wind speed (figure 4). Following the example used in figure 3 you can estimate the surface evaporation rate. If the mix is a low bleed concrete (ie it has water reducing admixtures) then use a precautionary evaporation limit of 0.5 kg/m<sup>2</sup>/h. With higher bleed concrete use a limit of 1 kg/m<sup>2</sup>/h.

If there is a risk of plastic cracking, what can be done? Options include-

- Provide a fog mist spray to increase the humidity above the concrete. It is important that water is not added to the surface.
- Use a proprietary evaporation retardant spray. These cost very little and provide a good degree of protection if used in accordance with the manufacturers instruction.
- Use polypropylene fibres in the mix.

Some simple precautions can ensure that these troublesome forms of cracking can be controlled.

See also [www.cca.org.nz](http://www.cca.org.nz).



**Figure 1** Note the wandering crack near the saw cut.

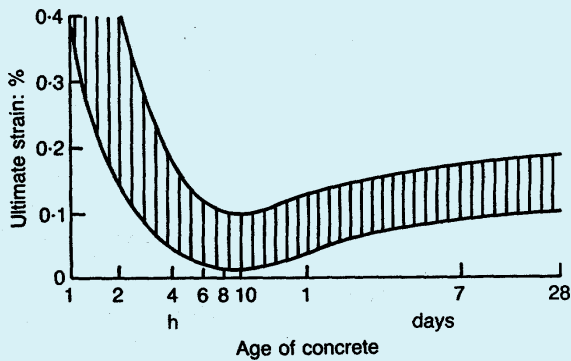


Figure 2 Ultimate tensile strain capacity of concrete with age

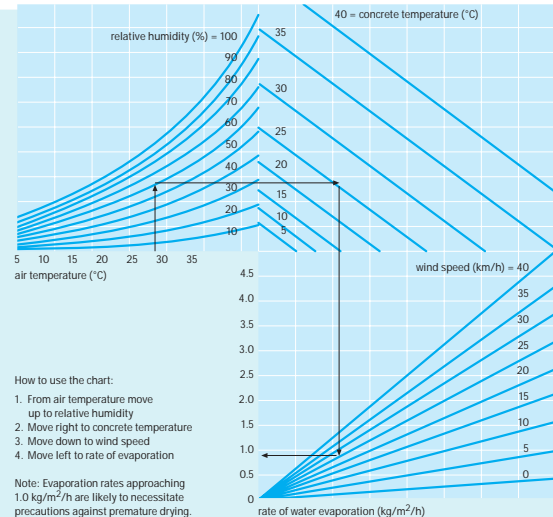


Figure 3

### Beaufort Scale

F	Wind Speed (kph)	General Description	Sea State	Land Description
0	0 - 1.5	calm	sea like mirror	smoke rises vertically
1	1.5 - 5	light	small ripples, no foam crests	smoke drifts, leaves rustle
2	6 - 11	light breeze	small wavelets, short but more pronounced, crests glassy and do not break	wind felt on face
3	12 - 19	gentle breeze	large wavelets, crests start to break, occasional whitecaps	flags extended, leaves move constantly
4	20-29	moderate breeze	small waves becoming longer, frequent whitecaps	dust moves, small branches move
5	30- 38	fresh breeze	moderate waves, long form, many whitecaps, some spray	small trees begin to sway
6	39-50	strong breeze	large waves begin to form, whitecaps all around, moderate spray	large branches move, wires whistle
7	51-60	near gale	sea heaps up, foam from breaking waves begins to blow in streaks in direction of wind	trees in motion, resistance is felt when walking
8	61-75	gale	moderately high waves, edges of crests break into spindrift, foam is blown in well-marked streaks in direction of wind	walking impeded
9	76-86	strong gale	high waves, dense streaks, spray may affect visibility	some structural damage begins

# PRODUCT NEWS

## Thermal Floors

A new thermally efficient flooring technique available in the UK has been designed to address environmental concerns about energy consumption. nu-Trenchfloor is being hailed as a cost-effective way to meet the increased insulation requirements of the revised British Building Regulations. The new requirements mean floors must have a U-value of 0.25 (as opposed to the old 0.45). Developed by the Ready-Mixed Concrete Bureau, nu-Trenchfloor is a combination of traditional ready-mixed slab and expanded polystyrene insulation.

## Going Up

Insulated concrete form infill walls are being used on a number of high rise apartment buildings in the United States, including an eleven storey block which is reportedly the tallest building to employ this system so far. Construction time for this building was reduced thanks to the ICF walls, by an estimated month or more. A special bracing system was developed by Reward Wall Systems to keep the walls straight plumb and true during the pouring and curing process. As each deck floor became ready, the crew moved in and stacked and braced the walls. Half a deck is done at a time - while one crew is placing concrete in the walls of the first half, another is stacking the second half. For more information: [www.concreteproducts.com](http://www.concreteproducts.com)

# NEWS from the ASSOCIATIONS

## CONTACTS:

### New Zealand Ready Mixed Concrete Association

Ph (04) 4990041

Fax (04) 4997760

Executive Officer: David Gray

President: Kevin Mischewski

### New Zealand Concrete Masonry Association

Ph (04) 4998820

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President: Alan Steel

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### New Zealand Master Concrete Placers' Association

Ph (04) 4998820

Fax (04) 4997760

Executive Officer: Craig Muir

### Precast NZ Inc.

Ph (09) 6360657

Fax (09) 6343485

Email ross.cato-precastnz@clear.net.nz

Executive Officer: Ross Cato

www.PrecastNZ.org.nz

### New Zealand Concrete Society

Ph (09) 5365410

Fax (09) 5365442

Email info@bluepacificevents.com

Secretary/Manager: Allan Bluett

President: Derek Chisholm

## DIARY:

### October:

- 1: NZCMA Training Seminar, Auckland
- 4-6: NZCS Conference 2002, Taupo
- 11-12: NZRMCA Conference 2002, Nelson
- 15: NZCMA Training Seminar, Christchurch

### November:

- 26-28: Concrete Technicians Course, Christchurch

### Precast Bridge Beams

PCNZ

At the end of June Transfund approved Stage 1 funding for the new standard (highway) precast bridge beams project. Participants BECA, OPUS and Precast New Zealand are now carrying out the first stage tasks, which include a survey of local precasters to determine bridge deck beam types used over the past five years and an international survey of literature and web sites.

### Construction Contracts Bill

PCNZ

Lobbying of Members of Parliament by the NZ Subcontractors Federation, Precast NZ and individual precasters appears to have paid off. It is now understood that off-site fabrication subcontractors have been reinstated into the proposed Construction Contracts Bill. It is unclear when the Bill, which will have a wide-ranging impact on the resolution of contract dispute issues, will become law. The NZ Subcontractors Federation plans to run roadshows about the Act once it is passed, and Precast NZ recommends these to its members.

### Subcontractors AGM

PCNZ

Peter Watson represented PCNZ at the NZ Building Subcontractors Federation AGM, held in Wellington in August. There were a number of presentations, and discussion on the Construction Contracts Bill, Subcontract Agreements, Retentions & Bonds and Contract Documentation. PCNZ's submission on retentions & bonds was circulated as a prompt for further industry discussion. There was also general agreement that the NZBSF should seek to draft its own subcontract agreement and work alongside Standards NZ to have the agreement incorporated as a NZ standard. PCNZ will continue to provide input into this important issue.

### BCITO - Industry Trade Training

PCNZ

Current statistics on the numbers of registered training agreements for precast qualifications are: Northern Region 20, Waikato/BOP 19, Central North Island 8, Wellington nil, Central South Island 3, Southern 8, Total 58.

### Masonry Seminars

NZCMA

Full-day training seminars have been scheduled by the NZ Concrete Masonry Association in Auckland (October 1) and Christchurch (October 15). In both cases it is anticipated that demand will result in an additional seminar being scheduled the following day, in order to limit attendees to a manageable number. The aim of the seminars is to increase familiarity with the rewritten NZS 3116, and to provide a forum for discussion about current recommended practices. Interested parties should contact President Alan Steel (on 07 849 2889) or the NZCMA. The seminars will run from 8.00 am - 3.30 pm, and will cost \$60 plus GST.

### NZCS Seminars

NZCS

The NZ Concrete Society is planning a number of seminars for next year linked into current research projects. The first series will cover the technical advisory group's report on the University of Canterbury research on suspended concrete floors. Another will follow the release of the design guide from the joint project by BRANZ and Auckland and Canterbury University research on slender tilt-up construction.

### Water-Resistance

NZCMA

The NZCMA have begun a study into the water-resistant characteristics of a variety of sealants available on the market. This research is being conducted at The University of Auckland over a 12-month period. An investigation of efflorescence and the thermal performance characteristics of concrete masonry homes are also being studied.

### NZS4230

NZCMA

The NZCMA is currently involved in the redrafting of NZS 4230, the masonry structural design standard. The current document is very out-dated and the rewrite is aimed at bringing it back to international best practice, plus using notation and philosophies consistent with other documents used together in design. The joint Australia/New Zealand standards for masonry manufacture are also currently being reviewed.

### NZ Concrete Society E-news

NZCS

Last month the NZ Concrete Society sent out its first electronic newsletter to members, which aims to keep them regularly updated about Society activities and topical issues affecting the concrete industry. This is the first of many changes being contemplated to add value to Society membership says president Derek Chisholm. "We notice that a proportion of people who attend our seminars and conferences are not society members. At our AGM at conference, we are to put up some proposals for changes to classes of membership, to encourage these people to join and get the benefit of member's rates."