

# ANNUAL REPORT

July 2008– June 2009





## Chair's Comments



To say that the past twelve months have been difficult for industry would be a clear understatement of fact. We are collectively faced with falling export volumes, lower growth rates, struggling businesses and climbing unemployment.

The challenges posed by the current recessionary environment for the construction industry in particular are also unparalleled in recent memory. Residential building consents have reached lows not recorded since the mid-1960s, and the volume of commercial work being consented has also diminished dramatically.

Although these effects of the global economic downturn are stark at present, there has been cautious discussion of recovery. While any talk of emerging from recession is qualified as long-term and extremely demanding, *productivity* and *innovation* are generally seen as key requirements in a return to economic growth.

It is no co-incidence that these key requirements were identified during the formulation of the 2007-12 CCANZ Strategic Plan. By targeting activity within the five core strategies of *Growth*, *Competitive Construction Systems*, *Sustainability*, *Education*, *Training & Research*, and *the Legislative & Regulatory Framework* CCANZ has sought to encourage efficiency and assist advancement. Two examples of such are CCANZ's continued support of research into understanding the likely CO<sub>2</sub> uptake from modern concrete mix designs, and the updating of economic analysis into constructing concrete pavements.

Another area in which CCANZ has excelled over the past twelve-months has been government relations. Strong and mutually respectful relationships with Ministers and their departments is crucial if the concrete industry is to maximise the new National led

Government's strategy of stimulus measures, in the form of infrastructure investment and regulatory change, as a means of encouraging economic recovery.

The rewards offered through clear and well reasoned communication with policy makers was demonstrated recently with the announcement that the Ministry of Agriculture and Forestry (MAF) mandate that all new government-funded buildings up to four floors high would be required to have a design option that used wood or wood-based products as the main structural materials had been withdrawn.

On behalf of the CCANZ Board I would like to commend all those involved with CCANZ for their work and dedication over the past year. Their effort is the foundation upon which CCANZ has established its place as a leading influencer in the New Zealand construction industry. I would also like to acknowledge the contribution of Chris Munn whose two year term on the CCANZ Board concludes in October 2009.

The Board also welcomes Rob Gaimster to the position of Chief Executive. Rob's familiarity with CCANZ, coupled with his tremendous knowledge and international experience will enable CCANZ to continue developing its position as the representative authority in New Zealand on cement and concrete matters.

During my two years as Chair of the CCANZ Board I have enjoyed watching the organisation both seek out and respond to a series of challenges, the successful completion of which has benefited the entire concrete industry. While the immediate future looks no less testing, I anticipate that the current CCANZ team, along with Board support, will advance the organisation into a new and dynamic stage of existence that will serve all concrete interests.

**Glenda Harvey**  
CHAIR

## Chief Executive's Foreword



The 2008-09 year at CCANZ can best be described as one of *flux*. That is not to say that the organisation has not been busy fulfilling its leadership role of supporting the pan-industry identification and resolution of strategic issues.

The (re)confirmation of the long term 2007-12 Strategic Plan in early 2008 was a clear indication that the industry believes CCANZ is “on the right track”, and as has become customary, the list of CCANZ accomplishments during the past twelve months represents a strong completion performance within budget.

With the publication of several information bulletins and an updated version of the important Red Book, CCANZ has maintained its proud tradition of producing valuable technical documents. The organisation's contribution to ensuring concrete related New Zealand Standards remain current also accounted for a significant proportion of our resources.

However, following a year in which the organisation has gained two new Project Managers and a Chief Executive it is inevitable that a degree of internal reassessment takes place. More so, as the 2008-09 year also saw the “bubble burst” and the full impact of the global economic crisis take hold.

Therefore, taking direction from the long term 2007-12 Strategic Plan, the recently completed 2009-10 Business Plan has been developed in close consultation with aligned sector associations, to produce a fresh project schedule that is focused on appropriate issues and activities which offer deliverables that are representative of the entire concrete industry. Furthermore, the 2009-10 Business Plan is for the first time complemented by a Strategic Outlook that focuses on CCANZ's evolution towards technical excellence and the provision of a real return on our funders' investment.

In these challenging economic times it is crucial that the concrete industry be proactive, innovative and above all cohesive in the pursuit of productivity and innovation. I am confident that the strategic direction and accompanying work programme detailed in the 2009-10 Business Plan will ensure that the short and long-term requirements of all major commercial sectors in the concrete industry are well served.

The development of the 2009-10 Business Plan, and the organisation's capacity to fulfil its objectives, has gained a tremendous boost through the recent development of an interim funding model. By securing project funding until the end of the 2011 operational year, CCANZ can perform more effectively, and at the same time concentrate on establishing a long term broad based funding model.

The outlook for CCANZ has been brightened further with the recent appointment of Ralf Kessel and Bassim Bahr Aliloom as project managers. An architect (EU) from Germany, Ralf joins us by way of Ireland where he was involved in many impressive construction projects. Bassim is an experienced structural engineer, who recently returned from working in Dubai. These appointments have enabled CCANZ to enhance its technical capability and integrate international advancements and best practice to form an extremely knowledgeable team that will serve the industry's needs well.

On behalf of the CCANZ team, I would like to offer thanks to the Board for their contribution through the year and, in particular to Glenda Harvey for her guidance as Chair.

Finally, it is appropriate to acknowledge the support and assistance that we receive from a wide range of industry personnel. This input contributes greatly to the quality of output from CCANZ.

**Rob Gaimster**  
CHIEF EXECUTIVE



## Strategic Plan

In 2007 CCANZ developed a long-term 2007-12 Strategic Plan, which clearly articulated the organisation's desired business results, in particular the agreed industry objectives.

The 2007-12 Strategic Plan was (re)considered at the 2008 Annual Planning Workshop, held at the Westpac Stadium in Wellington. While some of the key issues (or drivers) of the strategy had undergone change over the previous 12-months, the strategic plan and direction were reconfirmed.

The reconfirmed Strategic Plan identified the following key objectives:

1. Cement and concrete be the material of choice in the built environment.
2. The Association be recognised as having created the right business environment for sustainable and profitable growth.
3. Growth in cement and concrete's share of sector GDP.

In order to successfully achieve these key objectives, the following core strategies were formulated:

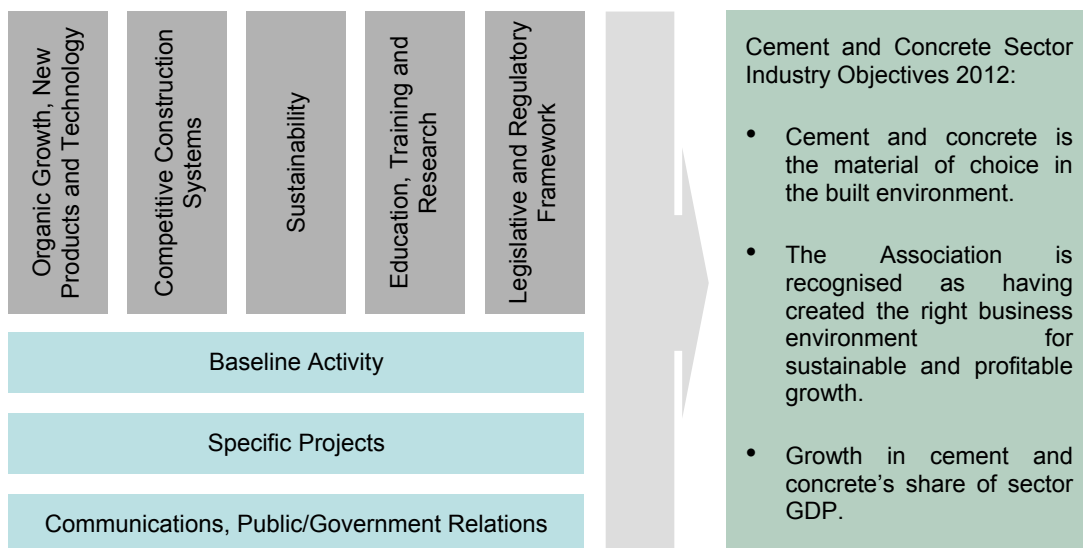
1. Organic Growth, New Products & Technologies – foster organic growth through raising awareness of cement and

concrete and promoting the introduction of new products and technology.

2. Competitive Construction Systems – identify and promote systems for development that will counter competitors' systems in order to maintain and grow market share.
3. Sustainability – position concrete as a sustainable product.
4. Education, Training & Research – increase the level of education of people within the industry; increase numbers in training; promote the concrete sector as a good career path in order to attract and retain people in the industry.
5. Legislative & Regulatory Framework – influence the legislative and regulatory framework and remove barriers to the use of concrete.

The core strategies were brought to life during the 2008-09 year through the implementation of a Business Plan that incorporated the following elements:

1. Baseline Activity.
2. Specific Projects.
3. Communications, Public/Government Relations.



## Baseline Activity

The library remains the foundation of member information support, a key aspect of CCANZ activity. Circulation figures for the re-developed *Concrete* magazine have risen as readers value to its mixture of project updates, best practice advice, international stories and new industry developments. Subscriptions to the CCANZ monthly e-newsletter *Grey Matters* have also shown an upwards trend, while the Google rankings and the total number of hits recorded by the CCANZ and the Concrete<sup>3</sup> websites are extremely encouraging.

In terms of corporate services, CCANZ Project Managers continue to act in a growing capacity as Executive Officers for the New Zealand Ready Mixed Concrete Association (NZRMCA) and the New Zealand Concrete Masonry Association (NZCMA), as well as sitting on the Executive Committee of Precast New Zealand Inc. The past year has also seen CCANZ continue its role with the New Zealand Masonry Trades Registration Board (NZMTRB), and the Construction Industry Council (CIC).

Demonstrating CCANZ's ongoing desire to cater for the technical requirements of the architectural profession in the area of concrete construction, the 2008-09 year saw the appointment of Ralf Kessel, a qualified architect. This commitment to developing a wider technical capacity enabled the CCANZ enquiry service to again field over 500 enquiries during the year. These enquires are invaluable in identifying knowledge gaps within the industry, and provided the impetus for drafting two Information Bulletins (IB) during 2008-09.

### IB 91 Applying Moisture-sensitive Floor Coverings and Adhesives to Concrete Slabs

This bulletin outlines how moisture in concrete slabs can cause problems to moisture-sensitive floor coverings and adhesives. It also stresses the importance of understanding the sources of moisture in a concrete slab, the correct design of slabs, the Building Code and Specification

requirements, and the measurement and testing methods.

### IB 89 Cement Stabilisation

Over the last ten years heavy vehicle traffic in New Zealand has doubled, as a result, more pavements now fail before they reach the end of their design life. Cement stabilisation is one method to prevent these failures. This bulletin outlines the principles of cement stabilisation, including in-situ and plant mix processes, modified and bound materials, and the principles of designing stabilised pavements.

Once again the 2007-08 year has seen CCANZ heavily involved with ongoing standards development, revision and amendment.

- NZS 3106 Design of concrete structures for the storage of liquids.
- NZS 3116 Concrete segmental and flagstone paving.
- NZS 3122 Specification for Portland and blended cements (General and special purpose).
- NZS 3123 Specification for pozzolan for use with Portland and blended cement (type PP cement).
- NZS 4218 Thermal insulation - Housing and small buildings.
- NZS 4541 Automatic fire sprinkler systems

CCANZ Chief Executive Rob Gaimster also chairs Standards New Zealand's Cement and Concrete Advisory Group, and is a member of the Building Sector Board and the Design and Construction Advisory Group.

CCANZ continued its role as the industry's voice in liaising with organisations such as the Aggregate & Quarrying Association of New Zealand (AQA) and the Institution of Professional Engineers (IPENZ). Engagement with the Building and Construction Industry Training Organisation (BCITO) has also become more frequent as CCANZ sits on sector working-groups to assist in the development of new concrete qualifications, as well as regaining a seat on its Board.



During 2008-09 two sets of CCANZ Concrete Courses were held. The three one-day courses cover an introduction to the concrete industry, concrete testing and concrete technology.

## Specific Projects

The principal means of achieving the objectives identified in the 2007-12 Strategic Plan is through the development and execution of specific projects within the core strategies. A number of specific projects were completed in the 2008-09 of which two are summarised below.

### 'Red Book' Update

The New Zealand Concrete Society conceived the original "Red Book" in 1982 as a document to support the newly published *NZS 3101 Concrete Structures Standard*. The resulting document *Technical Report No. 2 Applications of New Zealand Standard Code of practice for the Design of Concrete Structures* became a widely used design tool.

A major revision of *NZS 3101* in 1995 saw the Red Book updated in 1998 to provide actual building design examples. As such, a 10-storey building was used to illustrate structural frame and wall systems, together with a low-rise industrial building.

Following the 2006 revision of *NZS 3101* CCANZ managed a two-step update of the Red Book. Sections A1, A2, B1 and B2 (Structural Frame Building) were released in early 2008, while in the 2008-09 year sections B3, C1 and C2 (Structural Wall System & Low-rise Industrial Building) were released.

The latest updates were completed by Bassim Bahr Aliloom, CCANZ's recently appointed structural engineer, in liaison with Christchurch based engineering firm Structex Limited.

### Economic Study of Concrete Roads

In 2002 CCANZ commissioned URS New Zealand to prepare an alternative pavement assessment for the SH 20 Mt Roskill project. Several concrete pavement options were

compared against an asphalt option favoured by Transit NZ at that time. The economic evaluation concluded that a plain Portland cement pavement option was the preferred option from an economic perspective.

Earlier this year CCANZ approached URS to prepare an addendum to the 2002 report comparing a Continuously Reinforced Concrete pavement (CRCP) option and a Plain Concrete Pavement (PCP) option against what became a structural asphalt pavement. The purpose of the addendum was to carry out an updated comparison of pavement options for the SH 20 Mt Roskill project, and also consider a range of other factors such as:

- Changes in the New Zealand Transport Agency's (NZTA) Economic Evaluation Manual (EEM1) that have extended the *analysis period* from 25 to 30 years, and reduced the *discount rate* from 10 to 8%.
- The widespread overseas adoption of *grind and groove* surface technology for concrete pavements as a means to improve surface characteristics.
- The need to comment on Greenhouse Gas (GHG) emissions from constructing, using and maintaining different types of road surfaces, as well as possible regulatory framework developments for noise assessment.

The final 2009 addendum report showed that all the concrete pavement options considered would have had lower net present value capital costs, and gross present value cost investment and user costs, than the structural asphalt option used for the SH 20 Mt Roskill project.

In terms of pavement noise, new concrete pavement construction technology has emerged since the 2002 report, and would likely be adopted in New Zealand.

A thorough Life Cycle Assessment (LCA) comparison of the environmental effects of different pavement types was urged, as literature shows concrete pavements to be safer and more durable, as well as requiring less primary energy to manufacture than asphalt.

## Communications, Public/ Government Relations

Maintaining the three core areas of external communication activity as in the 2007-08 year, CCANZ has sought to develop the scope of its profile beyond the immediate concrete industry in an effort to promote the value and benefits of concrete.

### Leadership and Advocacy

In order to acquaint relevant Ministers within the new National led Government, and in turn reinforce CCANZ's leadership and advocacy role, the 2007 briefing paper *New Zealand Concrete Industry Position on Public Policy Issues* was revised.

By summarising the Government's policy platform relating to a number of key sector issues such as housing affordability, infrastructure investment, emissions trading and building regulation, and presenting the industry's position on them, the briefing paper served as an ideal tactical device to inform further discussion and associated policy development.

The effectiveness of this communications strategy was demonstrated by the decision to reallocate Ministry of Agriculture and Forestry (MAF) funding for the NZ Wood campaign into a contestable primary-sector innovation funding scheme, as well the decision to abandon the MAF policy which stipulated that all new government-funded buildings up to four floors high would be required to have a design option that used wood or wood-based products as the main structural materials.

### Campaign for Concrete

Pursuing a slight change in focus during the 2008-09 year, this consumer based communication project specifically targeted architectural practices through the distribution of *C+A (Concrete and Architecture)* magazine. By supplying a complimentary subscription to this high quality publication specializing in detailed examinations of concrete architecture,

CCANZ has established a more purposeful relationship with this influential group of specifiers, which is proving invaluable in conveying the possibilities of concrete.

### Sustainability

The Concrete<sup>3</sup> brand gained increased traction throughout the 2008-09 year. The success of its series of print advertisements and billboards in raising awareness of concrete's contribution to sustainable built environment was complemented by the inaugural *Concrete<sup>3</sup> Sustainability Award* – won by Holcim (New Zealand) Limited and Mainzeal Property and Construction for Project Century – Lion Nathan's new integrated manufacturing and warehousing facility in East Tamaki. The Concrete<sup>3</sup> brand efficacy was increased across a technical and a consumer audience with the production and widespread distribution of the short film *Concrete for a Sustainable World*.

### Proactive Media

Along with the Concrete<sup>3</sup> coverage, a sustained level of media exposure for CCANZ has been generated throughout 2008-09. In addition to contributing regular pieces to *New Zealand Construction News*, and *Builders and Contractors*, CCANZ has featured in *Building Today*, *Carbon News*, and the *Dominion Post*.

Since 2006 CCANZ has adopted a proactive approach to media relations in an attempt to achieve its key objectives.

Equivalent Advertising Value (EAV) is an accepted industry standard for measuring the effectiveness of media relations activity. The adjusted EAV below is based on the advertising rate of a particular publication, multiplied by a factor to capture the value of the independent editorial voice, and adjusted for tone and position.

Period	Number of Articles	EAV
2006	20	\$76,811
2007	42	\$133,041
2008	41	\$203,333



## Government Relations

Throughout the year, CCANZ has engaged with government to develop appropriate responses that advance the industry.

- **Building Sustainable Urban Communities**

In responding to the Department of Internal Affairs (DIA) discussion paper CCANZ argued that key to building sustainable communities, now and in the future, is a comprehensive overhaul of the Resource Management Act (RMA) concentrating on simplifying and streamlining processes while at the same time expanding ‘sustainability’ principles. Any such review of the RMA must be accompanied by a re-evaluation of the design life of all urban developments, as the current 50-years is not sustainable.

- **Proposal for a Definition of Restricted Building Work**

CCANZ raised a number of issues in relation to this Department of Building

and Housing (DBH) proposal. The most pertinent being that while CCANZ agrees that the three areas of structure, external moisture and fire protection are critical to the definition of *restricted building work*, in some instances a concrete slab may not be a structural building element (e.g. an asphaltic concrete floor in a parking building). As such the proposed definition would include such construction.

- **Waste Minimisation in New Zealand**

This CCANZ submission in response to the Ministry for the Environment (MfE) argued that a waste levy based on mass (rather than volume) disadvantages dense construction material such as concrete. Furthermore, concrete's ability to absorb atmospheric CO<sub>2</sub> once crushed should be considered in relation to the decomposition of waste timber, which creates the potent greenhouse gas methane. The current levy is inequitable, and will drive economic based waste management decisions that will not be in the best interests of sustainability.

## CCANZ Team



**Rob Gaimster**  
Chief Executive Officer



**Alan Kirby**  
Project Manager  
Civil



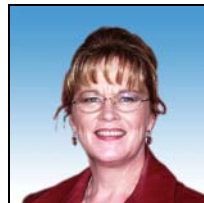
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Communications Manager



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**Angelique  
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