

PT SEMINAR SCORES WELL

The two-day *Design & Construction of Post-tensioned Concrete Buildings* seminar held at the end of May was very successful. Covering a specialised topic, it attracted more than 50 delegates – and the software workshop offered as a third day also proved popular.

The seminar explored the know-how and tools needed for the efficient and economical design of post-tensioned concrete structures.

Based on the results of a satisfaction survey conducted at the end of proceedings, the subject matter, format and venue all resonated well with the vast majority of delegates. Most respondents scored it at between 4 and 5 (on a scale of 1 to 5, 1 being Poor, and 5 Excellent).

Below is a sample of the feedback:

- I particularly enjoyed the focus on how E/Q is incorporated into PT design as it applies to NZ
- Excellent presentation by experts in their field(s). Very engaging and relevant. Will become more useful as the industry adopts, which seems inevitable
- All presentations were good. Bijan and Florian were excellent presenters
- Well-presented but hard to hear speakers at times. Bijan is very well-spoken
- Overall good content.

Delegates were also asked to list any topics they'd like to see covered at future seminars. Suggestions included:

- PT applications in NZ (examples), lessons learnt, typical design and site implementation specific to NZ
- PT in retrofitting of existing structures
- Concrete mix design and testing
- Specific design of diaphragms in PT slabs
- PT and seismic
- PT associated with bridges
- Water-retaining RC
- Key design considerations; Key design pitfalls; Key construction issues
- Concrete foundation design; Ductile RC buildings; DSA of RC buildings/RFP strengthening of RC buildings
- Detailing for ductility
- Seismic design of the floor diaphragms
- Capacity design of RC frames (case studies); PT design case studies to NZ standards
- Additional discussion on movement joints (products, problems, remediation).

These ideas have all been taken on board and will be woven into our future programme.

The Society is particularly grateful for the contribution of the NZ content – presented by Marc Stewart (BBR Contech), Grant Thomas (Dominion Constructors) and Jeff Matthews (Holmes Consulting).

FRP SEMINAR SERIES REMINDER

As flagged in our April issue, the three presentations of the *fib-Short Course (Reinforcing & Strengthening of Structures with Advanced Composites)* are scheduled for early July.

A joint event between CNZ-LS & *fib*, the presenters include a quartet of international experts. They are:

Stijn Matthys – courtesy of Ghent University

Gyorgy Balazs – courtesy of Budapest University of Technology

Thanasis Triantafillou – courtesy of University of Patras

Maurizio Guadagnini – courtesy of University of Sheffield

Representatives from NZ industry practitioners will also be sharing project case studies.

Venues for the three seminars are:

- **Tuesday 3 July Christchurch** - Chateau on the Park – a DoubleTree by Hilton, 189 Deans Ave, Riccarton
- **Wednesday 4 July Wellington** - James Cook Hotel Grand Chancellor, 147 The Terrace
- **Thursday 5 July Auckland** - Ellerslie Event Centre, 80-100 Ascot Avenue (Ellerslie Racecourse), Greenlane

For more information please visit the link below. You will also be able to [download registration forms here](#).

CONFERENCE REGISTRATION

Please note that registering for our national Conference (11 - 13 October) will soon be available on our website. An email will be circulated to the industry as soon as the website facility goes live.

Only one sponsorship spot is still available, and only a few trade exhibit spots. If you want to secure a place, speed is of the essence.

For more information please visit:

<http://www.theconcreteconference.co.nz/>



ANOTHER RED BOOK CHAPTER

Following the successful Red Book seminars in October/November last year (covering the proposed amendments to NZS 3101), a second series has been organised now that that standard has been released.

The Red Book provides real examples of the NZS 3101 Standard and the chapter on Shear Walls – a crucial component – has been on hold pending the release of the revised standard.

Section B3 of the Red Book, covering wall design, has been revised to comply with the updated standard. It covers the design of two wall systems – a **coupled wall** and a **flanged cantilever** ('shear') wall. The calculations are presented in considerable detail, and illustrate the process in a way that can be applied to structures more (or less) complex than the example selected.

Delegates attending the seminars – *Examples of Concrete Structural Design to NZS 3101: Section B3 – Wall Building* – will be provided with a hard copy of the Shear Walls chapter. It's easily inserted into your Red Book. Copies of the Book, for those without one, can be ordered at a discounted rate when registering for the seminar.

Presenters

■ Nicholas Brooke

After more than a decade in the structural engineering industry, Nicholas has a broad range of experience in analysis, design and research related to reinforced and prestressed concrete.

A consulting engineer at CompuSoft Engineering Ltd, he previously worked as a lecturer in the Department of Civil & Environmental Engineering at the University of Auckland. He has had extensive involvement in the assessment of damaged structures following the Christchurch and Kaikoura earthquakes.

He is a committee member of the New Zealand Concrete Society, and a member of the review committee for NZS 3101.

■ Alistair Russell

Alistair is a senior project engineer with Holmes Consulting in Wellington. He was previously the structural engineering manager at the Cement and Concrete Association (CCANZ). While there, he also served as the research project manager with the University of Canterbury Quake Centre, looking after a programme of concrete research addressing recommendations from the Canterbury Earthquakes Royal Commission.

He is involved in research into assessing the capacity of existing precast flooring systems, and is the chair of the technical committee for NZS 3101:2006.

Venues

- **Tuesday 24 July Wellington**, James Cook Hotel Grand Chancellor, 147 The Terrace
- **Wednesday 25 July North Harbour**, QBE Stadium (formerly North Harbour Stadium), Stadium Drive, Albany
- **Tuesday 31 July Christchurch**, Chateau on the Park, a DoubleTree by Hilton, 189 Deans Avenue, Riccarton
- **Thursday 2 August Auckland**, Ellerslie Event Centre, 80-100 Ascot Avenue (Ellerslie Racecourse), Greenlane

The Concrete NZ – Learned Society acknowledges the support of CompuSoft Engineering and Holmes Consulting Ltd for making this seminar series possible.

For more information phone (09) 536 5410

or email to concrete@bluepacificevents.com

IDENTIFYING PRIORITIES

The Project Advisory Team – a group representing Concrete NZ's six sector groups – is responsible for identifying and prioritising research projects which will best benefit the industry. This process is a particularly significant given the limited funding available.

Dene Cook, Past President, Honorary Member and Council Member, is the Learned Society's representative, and recently attended a meeting to discuss the possibilities with other sector groups.

Among the Society's proposed projects are:

Acidic ground conditions – clarification of NZS3101. The standard provides guidance in Table 3.3 but is unclear about how the mix recommendations relate to an "and" condition between the various columns of the table. Technical guidance similar to BRE is required for NZ conditions.

Review of NZS3604 (Masonry) – NS3604 is about to be reviewed. It presently contains some mention of hybrid construction with the use of timber and masonry walls. But the wording is vague, so timber/masonry hybrids domestic buildings require SED. This is a structural issue.

SCC and AS5100 – a recent amendment to AS5100 has changed the cover requirements when using SCC. This is bound to raise questions in NZ and the industry needs to have reviewed all information to be able to provide guidance locally.

