

SLABS & SHRINKAGE: DESIGN TIPS & TRICKS

Presented by Concrete NZ – Learned Society

WHY YOU & YOUR EMPLOYEES SHOULD ATTEND THIS SEMINAR

Concrete floor slabs form an important part of many structures of all types. Good design is a key part of the team approach needed to achieve a great result with any floor slab. This half day seminar covers the design fundamentals of strength, shrinkage and jointing design for slabs, as well as key aspects of a good specification and construction issues for designers to be aware of.

The seminar aims to provide construction professionals with the tools and resources to design and specify conventional concrete floor slabs from residential to medium/large industrial, with a focus on efficient design, exceeding client expectations and minimising come-back/re-work. A number of examples will be presented showing slabs that have and haven't met client expectations. Further examples will be discussed, demonstrating how an understanding of the fundamentals of ordinary slab design is important for other more complex aspects of concrete structural design.

THIS SEMINAR WILL COVER

- **Design resources and tools for slab design**
 - Overview of key design resources and references important for slab design in New Zealand
- **Basics of slab design for strength**
 - Westergaard's approach to pavement loading design
 - Overview and limitations of the CCANZ slabs on grade spreadsheet
 - Summary of other design approaches
- **Jointing, shrinkage and isolation considerations**
 - Contraction/sawcut joint layout
 - Detailed design of joints, thresholds and isolation details
 - Specification issues

- Subgrade preparation
- Flatness specification
- Concrete Materials - including low-carbon concrete
- **Construction and on-site QA issues for designers**
 - Importance of weather conditions
 - Pre-pour checklists
 - Curing
- **Examples of slabs in practice and good design principles in application**

OTHER BENEFITS

- Comprehensive resources provided through the seminar notes
- Knowledgeable and experienced speakers
- The opportunity to network with industry peers

WHO SHOULD ATTEND

Structural Engineers, Graduate Engineers, Designers, Specifiers, Building Certifiers, Building Officials, Contractors, Architects and Architectural Designers.

INVESTMENT DETAILS

- **Concrete NZ member:** \$380 (GST exclusive) per person
- **Non members:** \$480 (GST exclusive) per person (includes complimentary Learned Society membership until 31 December 2026)
- **Student:** \$120 (GST exclusive) per person (includes complimentary Learned Society membership until graduation)

SEMINAR FEES INCLUDE

- Tea and coffee on arrival
- Afternoon tea
- Comprehensive seminar notes

VENUES

WELLINGTON

Tuesday 25 November

Naumi Wellington
213 Cuba Street
Wellington 6011

CHRISTCHURCH

Thursday 27 November

Sudima Christchurch Airport
550 Memorial Avenue
Harewood
Christchurch 8053

AUCKLAND

Tuesday 2 December

Waipuna Hotel & Conference Centre
58 Waipuna Road
Mount Wellington
Auckland 1060

PROGRAMME

12:30 – 1:00 pm	Registration
1:00 – 1:10 pm	Introduction
1:05 – 1:30 pm	Session 1 Design resources and tools for slab design
1:30 – 2:00 pm	Session 2 Basics of slab design for strength
2:00 – 2:30 pm	Session 3 Jointing, shrinkage and isolation considerations
2:45 – 3:15 pm	Afternoon Tea
3:15 – 3:45 pm	Session 4 Specification issues
3:45 – 4:15 pm	Session 5 Construction and on-site QA issues for designers
4:15 – 4:45 pm	Session 6 Examples of slabs in practice and good design principles in application

SPEAKER PROFILES

Kent Huxford

Kent is a Structural Engineer at Lewis Bradford Consulting Engineers, based in Christchurch. He has worked in structural design and consulting for 22 years, with significant experience in tilt-up and precast design, design of industrial, commercial and residential buildings, detailed seismic assessment and strengthening of buildings, and earthquake and fire damage assessment. For light relief from the office he has taken time off to design and build two of his own houses involving precast and tilt-up construction. Kent is passionate about construction as a 'team sport', as well as waste minimisation, efficient design, and durable, low-energy use buildings. Kent contributes to industry advancement as a Concrete NZ Learned Society Council member.

Alan Ross

Alan is a chartered engineer with over 20 years' experience designing concrete floors and pavements around New Zealand and Australia. He works with asset owners, engineers, and builders to make sure what's drawn actually works once it hits the ground - and that the slab does what it's meant to, not what it feels like. His focus is on smart detailing, low-carbon solutions, and solid performance to keep floors flat, joints behaving, and slabs from cracking - or at least cracking where they're supposed to.

PRESENTERS

The Learned Society acknowledges the support of Kent Huxford and Lewis Bradford Consulting Engineers, along with Alan Ross and CERTUS Consulting.



A) REGISTER ONLINE

Register online for the *Slabs & Shrinkage: Design Tips & Tricks* seminar at www.tickettailor.com/events/concretenz

B) REGISTRATION FORM

You can also register by filling out the form below:

Name(s):

Company:

Postal Address:

Postcode:

Phone:

Mobile:

Email(s):

Dietary Requirements:

PLEASE INDICATE WHICH SEMINAR AND VENUE:

- ☐ WELLINGTON
Tuesday 25 November
- ☐ CHRISTCHURCH
Thursday 27 November
- ☐ AUCKLAND
Tuesday 2 December

PAYMENT DETAILS

No. of member registrants [] at \$414 GST inclusive = \$

No. of non-member registrants [] at \$529 GST inclusive = \$

No. of student registrants [] at \$138 GST inclusive = \$

Total = \$

☐ I wish to pay by credit card: ☐ Visa ☐ MasterCard

A receipt will be issued once payment is processed.

Card No:

Expiry Date:

Cardholders Name:

☐ I wish to pay by bank deposit

A tax invoice containing Concrete NZ's Bank Account details will be issued on receipt of your completed registration form.

Tax Invoice: GST Registration Number 122-984-249.

Please complete this form, take a copy for your records and email to: admin@concretenz.org.nz. For all enquiries phone 027 535 5144