



Seminar Series

2021

ENGINEERING FOR BUILDABILITY

Designing structures for efficiency in the New Zealand construction industry

HAMILTON | CHRISTCHURCH | WELLINGTON | AUCKLAND
4 AUGUST | 11 AUGUST | 12 AUGUST | 26 AUGUST

WHY YOU AND YOUR EMPLOYEES SHOULD ATTEND THIS SEMINAR?

Structural designers typically do a great job designing compliant, structurally efficient building solutions. However, a structurally efficient solution does not always translate into an efficient solution or a great project outcome. Designers understanding how the construction industry works and how buildings get built is integral to a successful project outcome.

This workshop is intended to provide real life guidance on how structural designs progress from design documents to the constructed state. What happens to make the designs a constructed reality and why for all stakeholders its important that there is good alignment between design practice and construction practice.

Divided into four sessions, the workshops will provide an opportunity to view structures and structural designs from the perspective of structural engineers that work for main contractors. The sessions will use buildings recently constructed in New Zealand to bring to life challenges and misalignment between what designers want and what industry is able to provide. The final session of the seminar is for attendees to talk through projects they are currently designing or have recently designed.

Real projects will be used to work through many of the common issues faced at construction sites including; temporary works requirements, construction tolerance and why it is important, sequencing, and material lead times. The aim is to demonstrate through examples, that a design that is well considered regarding buildability is more likely to be faster, safer and more cost effective to construct.

Seminar coverage

- Provide insight into how structures get built, what's required in terms of temporary works and logistics
- Understand the importance of construction tolerance and how to provide for it in design
- Worked examples of real-life projects and how the designs could be altered to better suit construction practices and ultimately the ease and cost of building
- Provide an opportunity for designers to discuss their designs with peers working for main contractors and work through problems or issues they've encountered
- Discuss the consequences of designs that aren't inherently stable until construction is complete
- Discuss examples of real Safety in Design that would make buildings safer to construct and thereby provide other tangible benefits
- Gain an understanding of "preliminaries and generals" and how they can have a significant influence on construction cost

Other benefits

This is a great opportunity to network with industry peers who work for main contractors. This seminar provides a cost-effective way of acquiring additional industry knowledge.

Who should attend

Structural Engineers, Architects & Quantity Surveyors.

SPEAKER PROFILES

Andrew Blackford

Structural Engineer – Naylor Love

Andrew Blackford is a Chartered Professional Structural Engineer that works in Naylor Love’s pre-construction team. His role is to decipher plans and specifications to ensure that Naylor Love understands its obligations and risks; and opportunities for time and cost savings. Prior to joining Naylor Love, Andrew was a consulting engineer with Beca and has designed projects across multiple sectors, in NZ, the UK and North America.

Greg McFetridge

General Manager – Naylor Love

Greg McFetridge is a Naylor Love’s General Manager – Operations. He is a Chartered Professional Structural Engineer. Greg started working for a contractor over 30 years ago and has had front line roles on site from Site Engineer through to Project Manager and then on to Operational Management roles. Much of his career has been in pre-construction; developing methodologies, details and programmes as well as helping sites and designers with problem solving on active sites. Greg is an experienced Temporary Works Engineer.

Cameron Belliss CPeng CMEngNZ

Pre-Construction Engineer – Naylor Love

Cameron is a Chartered Professional Engineer that works in Naylor Love’s pre-construction team based out of Christchurch. Cameron is involved in both the pre-construction and planning phases of future construction projects, as well as providing on the ground support with temporary works design and management. Prior to joining Naylor Love, Cameron was a consulting structural engineer and has experience in the design of a wide range of commercial structures.

Sigi Kerbers

Senior Engineer - HAWKINS

Sigi is a Chartered Professional Engineer that works for Hawkins Construction Central Region team based out of Hamilton . Sigi is involved in bid management and pre-construction planning of

future construction projects, as well as providing front end support to Hawkins various sites involving temporary works design and management. Prior to joining Hawkins, Sigi was a consulting engineer with BCD Group and involved with the design of a wide range of commercial structures

Kelvin Oh

Project Engineer – ICON

Kelvin joined the Icon team in 2018 as a Project Engineer following 14 years with a leading top-tier main contractor in the fast-paced Singapore construction industry. He specialises in pre-construction, logistics and site engineering. He is a well-rounded construction professional with a unique blend of deep technical knowledge and a collaborative, inclusive, communication style.

Tomonori Kaneko

Senior Design Manager - ICON

Tomonori (‘Tomo’) is a skilled Project Engineer with over 17 years’ experience in the construction industry covering Institutional, Industrial, Education, Residential and Commercial buildings. Having worked in Japan, Singapore and Australia, Tomonori brings a unique set of skills to Icon NZ. Specialising in structural planning, methodology and logistics Tomo adds value to every project he is involved in.

Nick Bamford BE Civil, MIPENZ, MIEAust, CPeng (Aust), RPEQ, NER

Director/Structural Engineer – Bamford Consultants

Nick is a structural engineer with over 17 years’ experience working in NZ, Australia and the UK. During this time, he has worked on a wide range of projects covering residential, commercial, industrial and infrastructure structures providing both permanent and temporary works engineering. His career so far has included vertical and horizontal infrastructure work which have been all sizes from small to large.

PROGRAMME

Time	Details
1.00pm – 1.30pm	Registration
1.30pm – 2.30pm	Workshop Example 1 Material lead times and how they affect construction sequencing Does your design align to what the market supplies? Tolerance, why it’s important and how it influences construction and cost Is your structure sympathetic to building services and other non-structural elements.
2.30pm – 3.10pm	Workshop Example 2 Does your design satisfy the six month design life, environmental loading requirements during construction? Communication, why telling the storey upfront is always better than waiting to be asked.
3.10pm – 3.30pm	Afternoon tea
3.30pm – 4.20pm	Workshop Example 3 The hidden costs of construction – Contractors P+G, access + time, delays in information flow. Actual Safety in Design
4.20pm – 5.15pm	Work through questions and examples of attendee’s design projects

VENUES

Hamilton

Wednesday 4 August 2021

The Verandah
Hamilton Lake Domain
Rotoroa Drive
Hamilton 3204

Christchurch

Wednesday 11 August 2021

Novotel Christchurch Cathedral Square
52 Cathedral Square
Christchurch 8011

Wellington

Thursday 12 August 2021

Area Events, Boulcott Suites
1 O’Reily Ave
Wellington

Auckland

Thursday 26 August 2021

Ellerslie Event Centre
100 Ascot Avenue, Ellerslie,
Auckland 1050

INVESTMENT DETAILS

Seminar fees includes course notes and afternoon tea
Members \$360 (GST exclusive) per person
Non-members \$440 (GST exclusive) per person.