concretenz LEARNED SOCIETY

JULY 2025

E NEWS

THE VALUE OF PARTNERSHIPS

As we pass the halfway mark of the year, it's great to reflect on the success of the 2025 Concrete Construction Awards in Auckland - congratulations to all the winners, which are covered on pages 3-8.

Over the past year, the Learned Society Council has focused on evolving to better meet members' needs, including stronger collaboration with Concrete NZ Groups, other technical societies, and the wider construction sector.

The Council has a clear, coordinated plan to support members by identifying and meeting needs through collaboration. This will deliver greater value and impact through stronger engagement, closer sector and international liaison, improved best practice guidance, more effective knowledge sharing, and a focus on fostering future talent. Work will start bearing fruit over the coming months, and we look forward to sharing more details with members at the Annual Meeting and conference in October.

I'd like to highlight one of our key initiatives over the past few years - building strong international connections. The Learned Society again contributed to the American Concrete Institute's (ACI) *24 Hours of Concrete Knowledge* in early July, with immediate past president Rick Henry hosting our session. Thanks to Ethan Page from WSP and Gonzalo Munoz from the University of Canterbury for their excellent presentations and for representing both the Society and New Zealand on the global stage. If you missed the virtual event, we'll share links to the ACI's YouTube channel once the recordings are available.

Another key international link is with the *Fédération Internationale du Béton* (*fib*). The Learned Society is a national member group of *fib*, one of 42, and I serve as the Head of Delegation with **Giuseppe Loporcaro** (University of Canterbury) as Deputy Head of Delegation. *fib* has a rich history and is active in promoting best practice across structural concrete, with a primary output being publishing the *Model Code*, journals and Bulletins. Learned Society members can freely access *fib* Bulletins, which provide a wealth of knowledge – see page 2.

fib operates through 10 Commissions and numerous Task Groups, overseen by a Technical Council. These cover all aspects of structural concrete, from materials and design to durability, sustainability and prefabrication. Task Groups are open to individuals from national member groups, including Learned Society members - a great opportunity to learn from international experts and build global connections. I encourage you to explore the list of **Commissions and Task Groups** and get in touch with me via **fib@concretenz.org.nz** if you're interested.

fib also host an active and enthusiastic Young Members' Group with opportunities to get involved in a variety of activities, from podcasts and webinars to an international mentoring programme. If you are keen to be involved, please also reach out to me via **fib@concretenz.org.nz**.

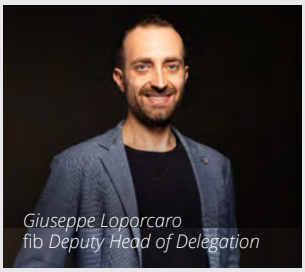
Finally, we can also look forward to the 2025 Concrete NZ Conference at the Viaduct Events Centre in Auckland, running 15-17 October. A revamped format, a range of international and national keynotes, and a packed technical programme all point to the conference being a calendar highlight.

Moustafa Al-Ani
Learned Society President

fib CEB-FIP

aci American Concrete Institute
Always advancing


Moustafa Al-Ani
Learned Society President


Giuseppe Loporcaro
fib Deputy Head of Delegation

FIB BULLETINS - FREE ACCESS

A reminder that members of the Learned Society have access to Federation Internationale du Beton (*fib*) Bulletins. These documents include model codes, application manuals, design guides, state-of-the-art and technical reports.

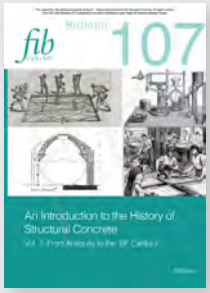
They form a detailed record of the results attained by Commissions and Task Groups in the field of research synthesis and operational application to concrete structures.

Depending on a Bulletin's status, its content is approved by a Task Group (Technical Reports or Commission (State-of-the-Art Reports), the Technical Council (Manuals, Guides and Recommendations) or the General Assembly (Model Codes).

Contact the Learned Society to arrange access to the *fib* Bulletins – **learnedsociety@concretenz.org.nz**

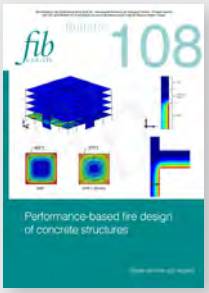
No. 106. Advances on Bond in Concrete. State-of-the-Art Report

This Bulletin explores the critical role of bond between concrete and reinforcement - essential for structural performance. While steel has been the primary reinforcement material for over a century, the Bulletin examines recent advances and challenges across five areas: general bond behaviour, anchorage and lap splices, bond under severe conditions, degradation due to corrosion, and bond in new concrete types. Its aim is to share practical insights from recent research and highlight future priorities in bond performance, helping improve both the understanding and application of reinforcement in concrete structures.



No. 107. An Introduction to The History of Structural Concrete - Vol. 1: From the Ancient to the 19th Century

The first in a series exploring the history of structural concrete, this Bulletin traces developments from Antiquity to the 19th century. More than a historical account, it highlights how past innovations, materials, and methods inform today's practices and future solutions. Understanding historical construction techniques and abnormalities aids in both the conceptual design of new structures and the accurate assessment of existing ones. By bridging past and present, the bulletin provides valuable insights for engineers, students, and anyone interested in the evolution of concrete - emphasising the importance of historical knowledge in achieving more efficient, sustainable construction.



No. 108. Performance-Based Fire Design of Concrete Structures - State-of-the-Art-Report

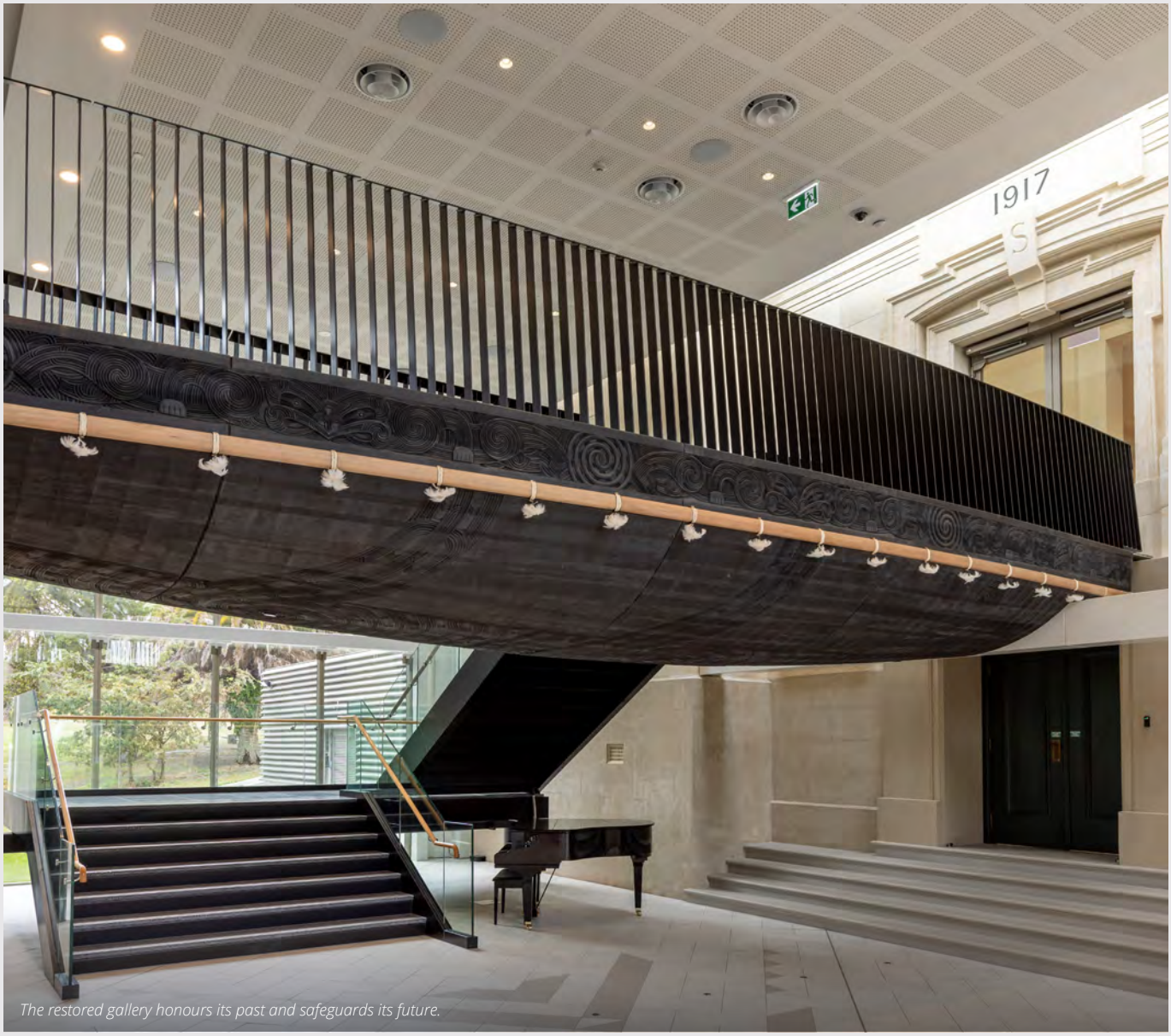
Practical guidance on applying performance-based fire design to concrete structures is the focus of this Bulletin. Unlike prescriptive approaches, performance-based design sets explicit objectives and demonstrates how the structure meets them, offering greater flexibility but requiring more effort from the designer. The Bulletin outlines the fundamentals of this approach, including fire's impact on concrete's thermal and structural behaviour, design strategies, and performance assessment. A step-by-step framework is presented, along with an appendix covering advanced calculation and probabilistic methods. It is intended as a valuable resource for engineers seeking to implement performance-based fire design in a clear, structured way.

No. 109. Existing Concrete Structures Life Management, Testing and Structural Health Monitoring - State-of-the-art-Report

This Bulletin presents a state-of-the-art guide to the through-life management of existing concrete structures, essential for maintaining safety and serviceability as infrastructure ages. Many structures are approaching or have exceeded their original design life, often facing increased loads and outdated design standards. Regular condition assessments and maintenance planning are therefore critical. Aligned with the new *fib* Model Code for Concrete Structures, the guide covers key aspects such as data acquisition, condition assessment, performance prediction, and decision-making processes. Its goal is to evaluate current structural condition and estimate remaining service life, ensuring continued reliability and safe use over time.

TE WHARE O REHUA SARJEANT GALLERY WINS TOP HONOUR AT 2025 CONCRETE CONSTRUCTION AWARDS

The refurbishment and expansion of Whanganui's iconic Te Whare o Rehua Sarjeant Gallery has taken top honour at the 2025 Concrete Construction Awards held recently at the Cordis Hotel in Auckland.



The restored gallery honours its past and safeguards its future.

The gallery project won the *Premier Award* and the *Excellence in Concrete for the Community* category in recognition of extending the structure's life, preserving architectural integrity, and transforming a nationally significant building into a world-class facility for the community at Aotearoa.

The 2025 Concrete Construction Awards celebrate excellence in concrete design, construction, innovation, rehabilitation and research, with entries judged across nine categories.

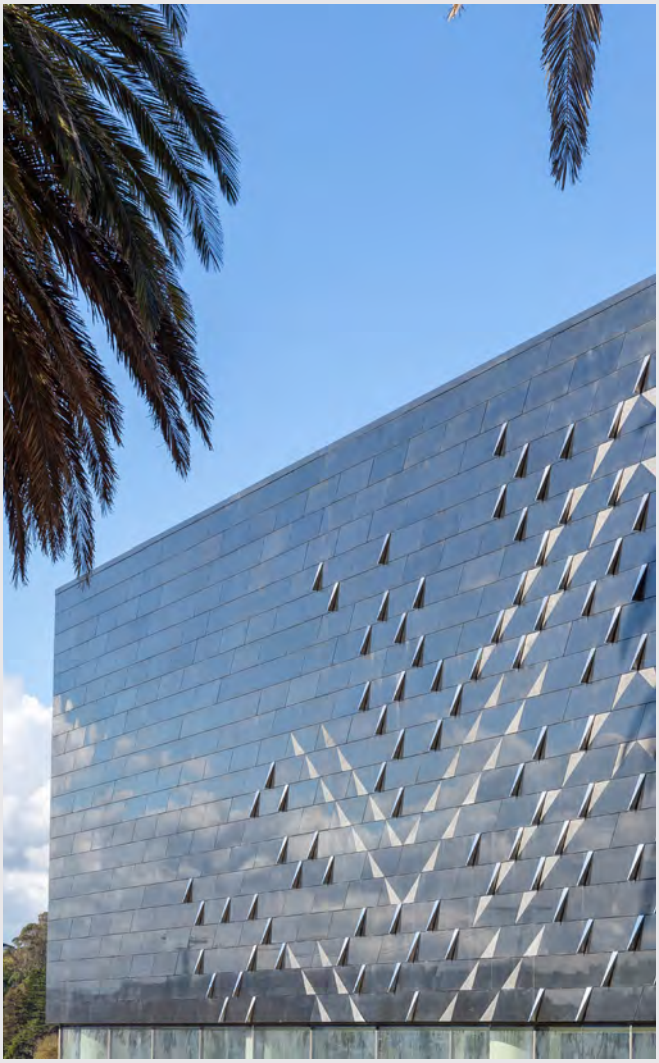
Close to 300 people attended the awards, including architects, concrete designers, engineers and developers from across Aotearoa New Zealand.

Te Whare o Rehua Sarjeant Gallery reopened in November 2024 after a major redevelopment that strengthened and restored the original 105-year-old heritage-listed structure while adding a striking new wing, Te Pātaka o Tā Te Atawhai Archie John Taiaroa.

Judges praised the project's outstanding use of concrete to deliver a discreet yet highly effective seismic strengthening solution within a sensitive heritage context. Over 300 stainless steel post-tensioned bars, new composite diaphragms, and meticulously executed concrete tie beams were employed to enhance resilience while maintaining architectural elegance.

The project team behind the Te Whare o Rehua Sarjeant Gallery transformation comprised Clendon Burns & Park, the Sarjeant Gallery Trust, Warren & Mahoney, McMillan & Lockwood, and Contech.

Greg Durkin (BCITO) presents Philip Yong, (Clendon Burns & Park), Dean Latham (Contech) and Harry Taffs (McMillan & Lockwood) with the Premier Concrete Award.



Concrete NZ Chief Executive Rob Gaimster said through hidden concrete interventions the refurbishment and expansion of Te Whare o Rehua Sarjeant Gallery delivered seismic resilience without compromising heritage value.

"The result is a restored gallery that honours its past and safeguards its future; an exemplar of how concrete can respectfully modernise historic infrastructure. This remarkable project sets a national benchmark for how concrete can restore, strengthen, and honour New Zealand's most significant public buildings," he said.

50 projects nationwide were entered the 2025 Concrete Construction Awards and were judged in categories ranging from innovation, to infrastructure, sustainability, and landscaping.

"The calibre of award entries this year has been outstanding, emphasising concrete's role in resilient, low-carbon infrastructure, as well as reinforcing concrete's position as the durable, low-carbon material of choice for modern New Zealand," Gaimster said.

THANKS TO OUR SPONSORS

Wai Ariki Hot Springs & Spa in Rotorua, recipient of the Excellence in Architectural Concrete (Monte Craven Award).

THE CONCRETE CONSTRUCTION AWARDS ALSO CELEBRATED A WINNING AND HIGHLY COMMENDED ENTRIES ACROSS NINE CATEGORIES.

Excellence in Concrete for the Community
Te Whare o Rehua Sarjeant Gallery, Whanganui

- Highly Commended: Wi Neera Walkway, Raglan

Excellence in Concrete Infrastructure
Te Ara Tupua, Wellington

- Highly Commended: Tauhara Geothermal Power Plant, Taupō
- Highly Commended: SH94 Homer Tunnel Avalanche Shelter, Fiordland

Excellence in Architectural Concrete (Monte Craven Award)
Wai Ariki Hot Springs & Spa, Rotorua

- Highly Commended: Sylvia Park BTR Architectural In-Situ Shear Walls, Auckland

Excellence in Commercial Concrete
Mānawa Bay Premium Outlet Centre, Auckland Airport

Excellence in Concrete Innovation
EcoReef® erosion solution, Akitio

- Highly Commended: KiwiKrete for KinaKrete

Excellence in Sustainable Concrete for the Planet
Shakespeare Bay Log Yard, Port Marlborough

- Highly Commended: APD Factory, Auckland

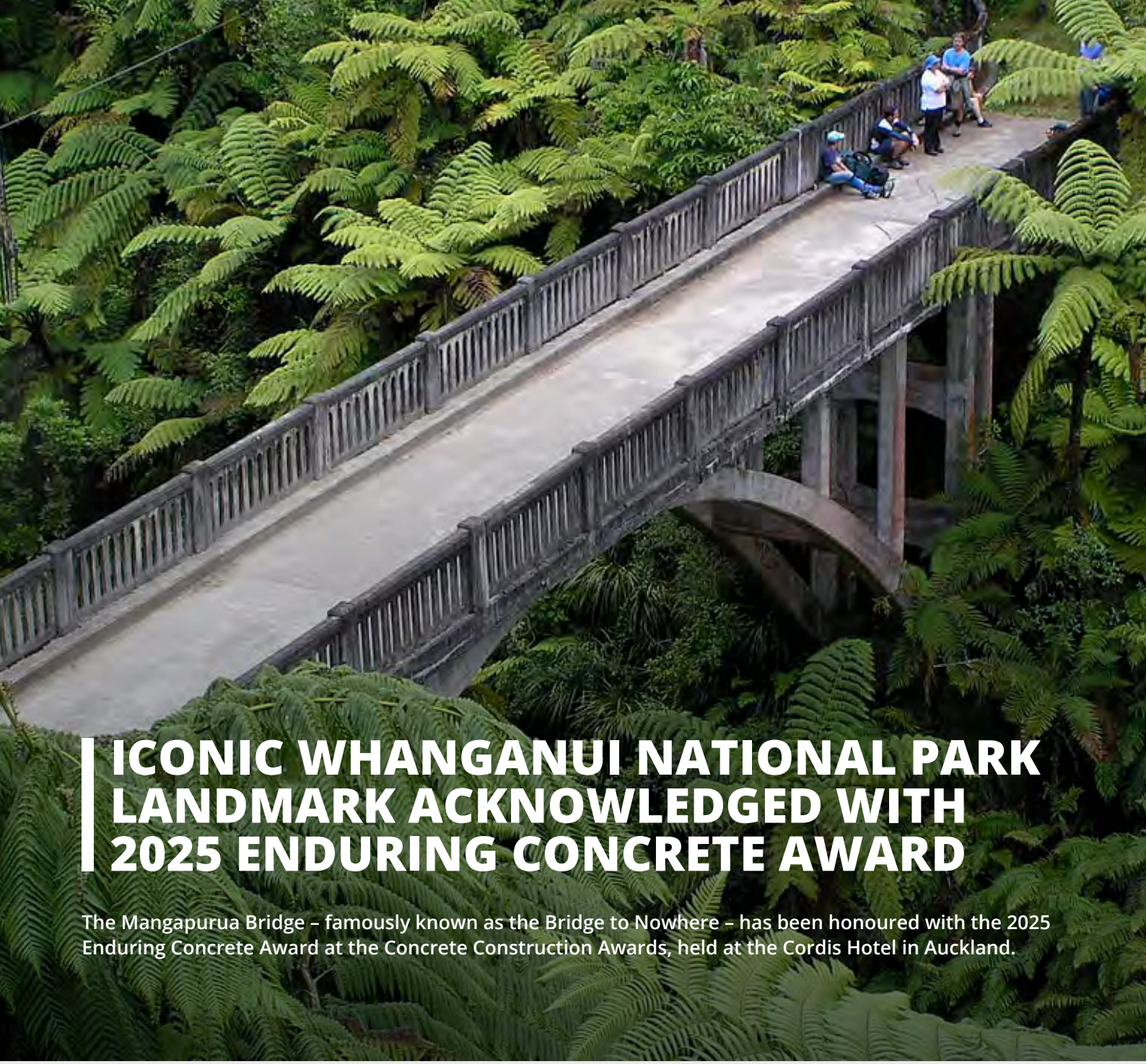
Excellence in Concrete Remediation and Reuse
Regions 3 & 4 Bridge Strengthening Programme, Waikato & Bay of Plenty

- Highly Commended: SH1 Mangatoetoenui Stream Bridge Replacement, Desert Road

Excellence in Concrete Landscaping
Waiaroha Heretaunga Water Discovery Centre, Hastings

Excellence in Residential Concrete
Iconic 3D Show Home, Hamilton

For full coverage of the 2025 Concrete Construction Awards download the latest issue of Concrete magazine from the Concrete NZ website – **www.concretenz.org.nz**



ICONIC WHANGANUI NATIONAL PARK LANDMARK ACKNOWLEDGED WITH 2025 ENDURING CONCRETE AWARD

The Mangapurua Bridge – famously known as the Bridge to Nowhere – has been honoured with the 2025 Enduring Concrete Award at the Concrete Construction Awards, held at the Cordis Hotel in Auckland.

Presented by Concrete NZ in partnership with New Zealand Independent Cement (NZIC), the *Enduring Concrete Award* recognises legacy concrete structures over 40 years old that continue to serve the community, embodying durability, innovation, and architectural or cultural significance.

Completed in 1936, the Mangapurua Bridge sits deep within the Whanganui National Park and remains a striking testament to early concrete engineering. Spanning 40 metres above the Mangapurua Stream, the bridge replaced a decaying timber swing bridge that once served the isolated valley's settlers.

Its robust design, advanced concrete formwork, and exceptional durability have stood the test of time for nearly nine decades - requiring only minor maintenance since its construction.

The judging panel noted the bridge's historical and environmental significance, its enduring service, and the ingenuity of its original construction.

"Despite its remote location, the Bridge to Nowhere continues to captivate around 30,000 visitors each year, offering a powerful reminder of the resilience and permanence of concrete," said panel chair Ralf Kessel, Head of Architecture at Concrete NZ.

The award celebrates more than structural longevity. "This category pays tribute to concrete's role in shaping New Zealand's built heritage. The Bridge to Nowhere is a remarkable example of enduring infrastructure - built with limited technology, yet still outperforming expectations nearly a century on," said Ralf.

Ownership and stewardship of the bridge rests with the Department of Conservation, who were on hand to accept the award.

The biennial Concrete Construction Awards celebrate excellence in concrete design, construction, innovation, rehabilitation and research across nine categories. More than 280 industry professionals attended this year's event, including architects, engineers, designers, and developers from across Aotearoa.

Previous recipients of the *Enduring Concrete Award* include Wellington's Beehive, the Grafton Bridge in Auckland, and the Hawera Water Tower in Taranaki.

Jim Campbell and Josh Adam (Department of Conservation) accept the award from Anthony Jones (NZ Independent Cement).

NZIC NEW ZEALAND INDEPENDENT CEMENT

The 2025 Enduring Concrete Awards was proudly sponsored by New Zealand Independent Cement (NZIC).

CONCRETE NZ CONFERENCE 2025: A MUST-ATTEND GATHERING

Mark your calendar for the 2025 Concrete NZ Conference, taking place from 15–17 October at Auckland's Viaduct Events Centre. This year's event promises an unmissable mix of technical excellence, thought-provoking discussions, and valuable networking for everyone involved in New Zealand's concrete industry.

The conference will explore the latest innovations in construction, design, and materials through a rich technical programme featuring top local and international speakers. Popular highlights such as the Lightning Talks and opportunities to present papers will ensure a lively exchange of knowledge and ideas.

Beyond the sessions, delegates can look forward to relaxed and formal functions for connecting with industry peers, including the prestigious Conference Awards night. The much-loved Concrete Cricket Bat competition also makes a return, adding a fun, competitive edge to the event.

A vibrant trade exhibition will showcase cutting-edge products, equipment, and live demonstrations, giving attendees hands-on insight into the future of concrete.

With its strong focus on collaboration and knowledge-sharing, the 2025 Concrete NZ Conference promises to be an educational and memorable experience.

See you in Auckland!

PATRONS

HOLCIM PACIFIC STEEL CERTAIN STRENGTH Golden Bay

concretenz BUILDING RESILIENCE

CONFERENCE 2025

15–17 October 2025
Auckland Viaduct Events Centre

MARK YOUR CALENDARS 15-17 OCTOBER

Expect a dynamic mix of construction expertise, knowledge sharing, and networking opportunities. The technical programme will feature top international and local speakers, insightful presentations, and the popular Lightning Talks.

Plus, don't miss the Conference Awards, social events, and the Concrete Cricket Bat competition!

With trade exhibitors, live demonstrations, and displays of the latest products and technologies, this conference is set to be both educational and engaging.

SAVE THE DATES

Make note of the following details:

- **Conference:** Concrete NZ 2025 Conference
- **Location:** Viaduct Events Centre, Auckland
- **Dates:** 15-17 October 2025

Stay tuned for more details – we can't wait to see you there!

TECHNICAL PROGRAMME OVERVIEW

Date	Day Event	Evening Event
Wednesday 15 October	Pre-conference Sessions and Meetings	**18.00** President's Reception
Thursday 16 October	**Conference Day 1** **8.30** Conference Opening Sessions Concrete NZ and Learned Society AGMs	**18.00** Formal Conference Dinner and Awards Evening
Friday 17 October	**Conference Day 2** Sessions **15.30** Close	

The Organising Committee reserves the right to make changes to the 2025 programme. A more detailed programme will be available soon.

GET READY TO BE INSPIRED!

This year's conference brings together an outstanding line-up of keynote speakers who will challenge, motivate, and inform.

From global sustainability leadership and collaborative research to workplace wellbeing and industry capability, our speakers - Dr Andrew Minson, Clare Tubolets, Sir John Kirwan and Dr Fiona Crichton - promise valuable insights for everyone committed to concrete's future and the people who make it possible.

DR ANDREW MINSON
Director Concrete and Sustainable Construction at the Global Cement and Concrete Association's (GCCA)

Andrew leads the GCCA's global sustainability agenda, championing concrete's value in decarbonised, circular construction. He oversaw the Net Zero 2050 Roadmap and drives the Net Zero Accelerator, translating global targets into national action. With deep expertise across the built environment, Andrew advocates for concrete's full lifecycle benefits. A respected Fellow of the UK's Civil and Structural Engineering Institutions, he continues to shape global dialogue on concrete's sustainable future.

CLARE TUBOLETS
CEO SmartCrete CRC

At SmartCrete CRC, Clare steers Australia's concrete sector towards collaborative research and development to enable decarbonisation. A trained microbiologist, Clare has an impressive career spanning research and government program management in sectors from IoT to agriculture. She's an agile leader passionate about connecting world-class researchers with industry to solve practical challenges. Clare thrives on driving innovation that delivers real-world impact, helping the concrete industry meet sustainability demands through cutting-edge collaborative solutions.

SIR JOHN KIRWAN
[via video link]
Co-founder of Groov

JK is a celebrated mental health advocate, best-selling author, entrepreneur, and All Black rugby legend. Through Groov, JK aims to uplift workplace wellbeing for millions globally by embedding mental health support into everyday working life. Knighted in 2012 for his mental health advocacy, JK has led courageous public conversations that normalise vulnerability. Renowned for his sporting career, JK remains dedicated to championing mental wellbeing on and off the field.

DR FIONA CRICHTON
VP & Clinical Lead at Groov

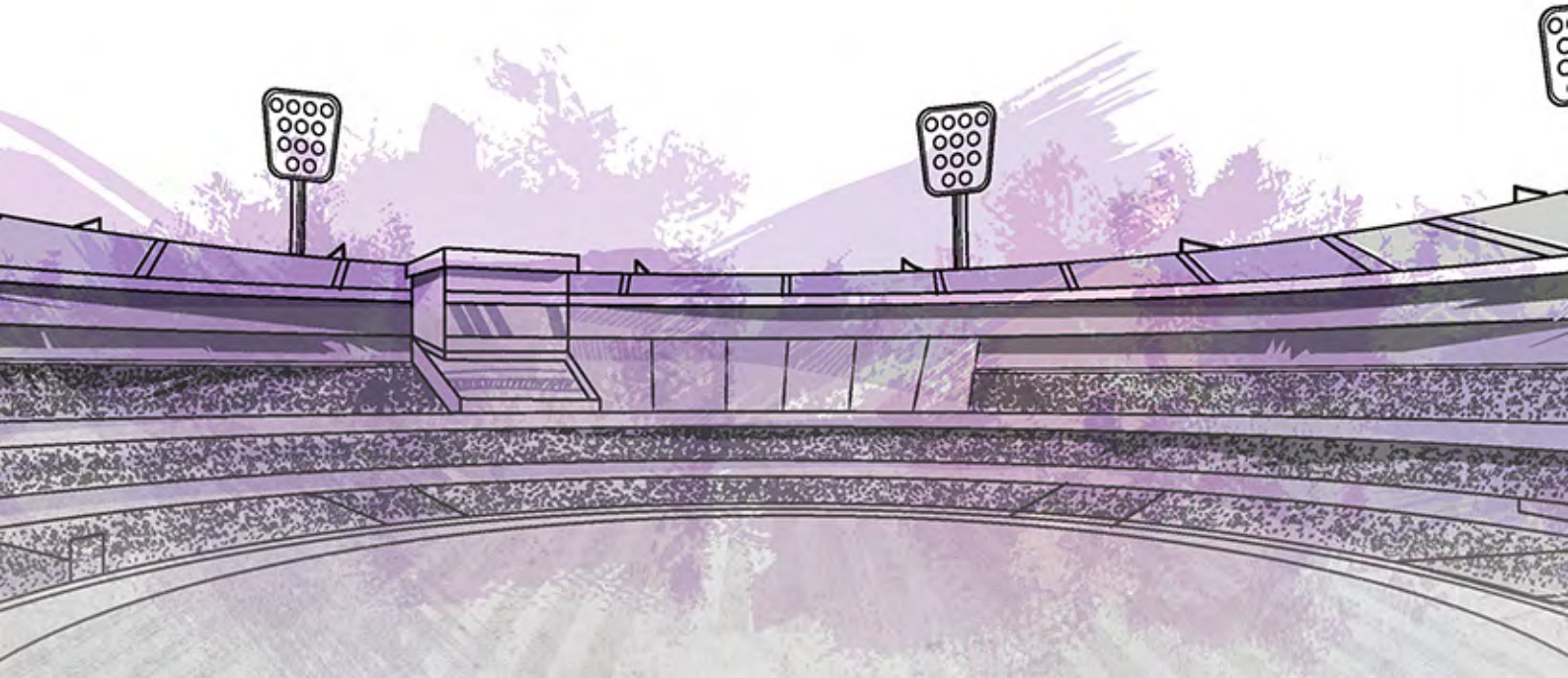
Well received at the 2024 Concrete NZ conference, Fiona is a health psychology specialist and behavioural scientist with a unique legal background. Her career bridges litigation law, legal writing, and psychology, giving her deep insight into what drives positive behavioural change. Now with Groov, Fiona helps design and implement workplace wellbeing initiatives that boost employee wellness and performance across New Zealand and Australia. Her expertise in workplace mental health makes her a trusted leader in creating healthier, more supportive work environments.

HIGGINS CONCRETE

Sir John Kirwan & Dr Fiona Crichton are proudly supported by Higgins Concrete.

VISIT THE CONFERENCE WEBSITE – https://confer.eventsair.com/concretenz2025

concretenz
LEARNED SOCIETY



Don't Get Caught Out
Register Your Interest Now!

CONCRETE CRICKET BAT COMPETITION

Hit the opposition for six with your team's combination of outstanding concrete design, construction and batting prowess.

Viaduct Events Centre, Auckland
16-17 October