# MASTERING THE CHALLENGES AND COMPLEXITY OF TODAY'S FAÇADES



presents

# WORLD OF FAÇADES

**NEW ZEALAND** 



#### **MASTERING THE DEMANDS AND COMPLEXITY OF TODAY'S FAÇADES**

The New Zealand architectural industry continues to push the boundaries of innovation, sustainability, and cultural integration. Māori design elements, symbols, and philosophies being incorporated into the projects creates a sense of cultural identity. Its architects are not just creating buildings they are crafting environments that respond to the unique challenges of their surroundings and offer inspiring solutions for the future. Whether in response to the need for earthquake resilience, environmental responsibility, or cultural significance, Auckland stands as a model for the integration of tradition and technology in the modern world.

As we come together in Auckland, the Zak World of Façades conference will serve as a platform for the exchange of ideas, experiences, and solutions in the rapidly evolving world of façade design and technology. Façades are more than just the outer skin of buildings they are a key component of modern architecture that connects design with functionality, aesthetics with sustainability. In a city like Auckland, where innovation is at the heart of architectural development, façades are being reimagined not only as protective elements but as dynamic, interactive surfaces that define the character of urban landscapes. From advanced materials and smart technologies to sustainable design practices, the possibilities are endless.

At the conference we will delve into the latest trends, from energy-efficient systems to passive design strategies, and we will celebrate the ingenuity of architects, engineers, and designers who are pushing the boundaries of what's possible in façade design. Our esteemed speakers at the conference will delve into topics such as innovative materials, low carbon design principles, challenges facing the façade industry, adaptive reuse and the integration of façades with urban ecosystems. The conference is more than just a series of presentations and panel discussions—it is an opportunity to collaborate, inspire, and spark new conversations that can lead to transformative solutions for the built environment.

Join us for the 172nd global edition of Zak World of Façades, as we gather to listen, discuss, and learn from domain experts and thought leaders who are setting the stage for a forward-thinking, collaborative conference focused on the importance of façades in modern architecture. As you participate in this exciting event, we encourage you to engage with peers, learn from experts, and challenge conventional thinking.

#### **KEY HIGHLIGHTS AT THIS YEAR'S EDITION**

Get insights on adaptive reuse, structural glass innovations, low carbon materials, regional and international project case studies and more

Opportunity to listen to and network with the industry experts who will share their experience and knowledge on designing and executing smart and sustainable building enclosures

Interact with solution providers of value-added high performance glass, modular façades, weatherproofing solutions, various cladding materials, insulation, passive fire protection and more... 18 exhibiting brands on display!



HUNUA ROOMS, LEVEL 1,
AOTEA CENTRE, 50 MAYORAL DRIVE,
AUCKLAND CBD, AUCKLAND 1010,
NEW ZEALAND

THURSDAY, 27<sup>TH</sup> FEBRUARY 2025, 08.00 HRS. ONWARDS

## **CONFERENCE AGENDA**

#### **08:00 DELEGATE REGISTRATION & NETWORKING**

**SESSION - 1 (08:50 - 10:20)** 

#### **EVENT HOST & CONVENER**



**Stijn Van den Eeden** Lead External Envelopes, Babbage Consultants

#### **08:50 WELCOME ADDRESS**

Ahad Ahmed, Director, Zak Exhibitions & Conferences

#### 09:00 FALLING IN LOVE WITH YOUR ENERGY MODEL

- Why do I need an energy model in my life? Envelope performance is inherently linked to whole building energy efficiency - if you care about one you have to care about the other
- When do I need an energy model in my life? Energy efficiency cannot be "bolted on" retrospectively it must inform the design development
- How do we verify the energy model? Strategies and tools to achieve holistic energy efficiency



**John Hawkins** Façade Practice Lead - NZ, Mott MacDonald



Alexander Blakeley Design Engineer, Thermosash

#### 09:25 CREATION OF IDENTITY IN SPORTS AND ENTERTAINMENT VENUE FAÇADES

- How the façades of large sporting and entertainment venues, can help to craft the buildings identity and become part of the fabric of the surrounding environment
- Creating a façade design which reflects the identity of its locality, taking into consideration the surrounding landscape and the history of the site
- The use of materiality that in itself creates a sense of place
- The future of façades and their ability to adapt to the changes around them, while still maintaining their own unique identity



James Pearce Senior Principal, Populous

# 09:50 ENGINEERING THE LARGEST HOLE IN THE BUILDING ENVELOPE: THE IMPORTANCE OF TEST DATA AND ENGINEERED DESIGN OF PERFORMANCE LOUVRES

- How weather resistant, acoustic and smoke relief louvres often constitute the largest, leakiest and most thermally-inefficient opening that is deliberately designed in to a building façade
- Importance of start with high-performing products that have been independently tested and certified
- Looking at ways to avoid reinventing the wheel on every project, the product is one thing, integration into the surrounding building envelope is another



Simon Hoyle Managing Director, Ventüer

#### 10:05 SHADOWS IN THE BREEZE; THE ART AND SCIENCE OF FAÇADE TESTING

- What we don't know
- Unseen trials of new facades
- New standards and guidance for façade testing



Shane Hart
Director of Client Relations,
Insol

10:20 NETWORKING TEA | COFFEE BREAK

#### **SESSION - 2 (11:00 - 13:05)**

#### FORENSIC ENGINEERING OF BUILDING FAÇADE SYSTEMS - CSI FOR BUILDINGS! 11:00

- Designing and implementing an effective forensic investigation
- Spotting and countering red herrings and code quoting from other experts
- Effectively defending and even strengthening your argument using data collected by others
- Mitigating damages by focusing the repair work on areas that are predicted to fail instead of on comprehensive repairs to all areas



**Brian Hubbs** Managing Principal | Senior Building Science Specialist, **RDH Canada** 

#### 11:25 CONSTRUCTION IS ALL ABOUT RISK AND PROACTIVE RISK MANAGEMENT. WHICH SUBCONTRACT TRADE REPRESENTS THE HIGHEST DESIGN, BUILD, TIME, AND **DURABILITY RISK?**

- The Auckland City Council has set aside \$263M for the 2024/2025 financial year for region wide active leaky building/defect claims. New Zealand is the only country in the world with ""Joint and Several Liability Law"" representing a ""last man standing"" provision which means the public purse through rate-take, underwrites the vertical construction commercial risk. Is this fair or reasonable or sustainable due to impacts on economic growth, overseas investment and productivity?
- Buildings leak due to the specified cladding system not being able to accommodate allowable NZS 1170 vertical/horizontal primary structure movements, ie the cladding system is not fit-for-purpose for the structure it is cladding. Does NZ Building Code H1 (energy efficiency) impact the design of the façade solution, is H1 more important than clauses B1, B2, E2 and who is responsible for specifying and coordinating the fit-for-purpose Code compliant products?



**David Hayes** Group Chairman & Chief Façade Engineer, Thermosash

#### 11:50 FAÇADE AS STORYTELLING: BEYOND A BUILDING

- Singular in the plural: A transdisciplinary perspective
- Emotional vs functional
- Analogue and digital



**Kaare Krokene** Partner & Managing Director, Snøhetta Australasia

#### 12:20 REVITALIZING SPACE: THE INNOVATION AND IMPACT OF THE B201 UNIVERSITY OF **AUCKLAND BUILDING FACADE**

- Design, materials, and aesthetic choices behind the façade of New Zealand's highest Green Star-rated building
- Adaptive reuse: The answer to creating world leading low-carbon spaces?
- Challenges faced and innovations implemented

#### **MODERATOR**



Rebecca Irwin Project Director. Jasmax

#### **PANELISTS**



Simon Neale Chief Property Officer, University of Auckland



**Kent Nixon** Director. Thermosash



**Chris Scott** Principal. Jasmax



**Karl Jones** Buildings Lead - NZ, Mott MacDonald

\*More panelists to be added

#### **SESSION - 3 (13:50 - 15:40)**

#### 13:50 TE MANAWATAKI O TE PAPA MUSEUM, EXHIBITION AND CIVIC WHARE

- A site of significance. A process of co-design
- Kaitiakitanga in design: Materiality and carbon
- A suspended sculpture: A mass timber hybrid structure
- A play of light: Façade articulation and parametric modelling



**Vajini Pannila** Principal, Warren & Mahoney

# 14:15 THE ENVELOPE LIFECYCLE: FROM PRINCIPLE TO PRACTICE FOR A SUSTAINABLE DESIGN

- Sustainable façade design: Principles and challenges
- Life cycle assessment: Embodied carbon, operational performance and climate resilience
- Case study: Lessons from Te Matapihi library project



**Marta Mazzilli** Façade Engineer, Aurecon



**Eloise Blewden**Sustainability Engineer,
Aurecon

#### 14:35 UPFRONT CARBON ANALYSIS OF NEW ZEALAND FENESTRATION SYSTEMS

- What is the carbon impact of the NZ building industry with current practices?
- Would choices be different if we consider the impact of upfront carbon?
- What is the impact if we change nothing?



**Dyann Stewart**Façade Consultant,
Technoform Bautec Asia Pacific

#### 14:50 INTEGRATED STRUCTURAL FAÇADE SYSTEMS

- · Thinking differently about materials
- From concept to manufacture
- Supporting each other



**Tom Donald**Director,
Eckersley O'Callaghan

#### 15:10 AESTHETICS OF ARCHITECTURAL GLASS

- The application of jumbo size glass in architecture
- The importance of flatness in architectural glass
- The importance of shape accuracy in 3D curved glass



Candice Zhao Sales Manager, NorthGlass Processed Glass BU

#### 15:25 ADVANCING FAÇADE INNOVATION WITH CARBON NEUTRAL SILICONES

- Carbon journey of silicone sealant for building façade
- Key elements of PAS2060 standards to ensure verified carbon neutrality
- Benefits of project specific carbon neutrality service



Jayrold Bautista Associate Tech Services & Development Scientist, Dow Asia Pacific

15:40 NETWORKING TEA | COFFEE BREAK

#### SESSION - 4 (16:10 - 17:35)

#### 16:10 DO YOU KNOW WHAT YOU DON'T KNOW

- Bloopers in buildings with façade design
- What are the unforeseens
- · Risks in façade, design through to site
- Who carries the blame



**Dr Marc Zobec**Building & Façade Engineer,
Marc T Zobec Design & Engineering

# 16:30 DESIGNING VENTILATED FAÇADES FOR INDUSTRY COMPLIANCE: EXPLORING THE LINK BETWEEN BUILDING FAÇADES AND SUSTAINABILITY

- Understanding New Zealand's building crisis: Flammable cladding, waterproofing, condensation, and energy efficiency benefits
- Sustainability principles
- Case studies



Paresh Dave Sales and Specification Manager – Inside Sales, Equitone

#### 16:45 CHOOSING SIMPLICITY FOR LONGEVITY

- How does building typology like BTR change how we design for façade durability?
- Is simplicity the special ingredient we often underestimate?
- Do we design/build better today than our predecessors did?

#### **MODERATOR**



**Karl Jones**Buildings Lead - NZ,
Mott MacDonald

#### **PANELIST**



**Dan Bosher** Director - NZ, Icon

\*More panelists to be added

17:30 VOTE OF THANKS & END OF THE CONFERENCE

17:35 POST EVENT NETWORKING RECEPTION

18:35 END OF THE EVENT

#### PRESENTING PARTNER



#### **ASSOCIATE PARTNERS**



































#### **DELEGATE KIT PARTNER**



### **3 STEP REGISTRATION PROCESS\***



Visit facades.nz



Fill your details in the registration form & submit the same.



You will receive an auto reply email as acknowledgment of the form. On successful acceptance of your registration, you will receive a confirmation email / SMS from us.

**HELPLINE: +64 9888 5080** info@zakgroup.com | www.zakwof.com

\*Entry only by online registration | Rights of admission reserved.

#### \*TERMS & CONDITIONS FOR COMPLIMENTARY SEATS:

Complimentary seats are reserved exclusively for Architects, Consultants, Contractors, Developers, Fabricators, Government Officials & PMC's. The organizers reserve the right to allocate these complimentary seats at their discretion. This is only an invitation and not an entry pass. Entry is only via online registration.

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