Facade Tectonics

VITRUVIAN
HONORS & AWARDS

Presented on September 18, 2025
By the Facade Tectonics Institute

Contents

Welcome

The third Vitruvian Honors & Awards program was held in 2025. The program celebrates outstanding achievements in the field of Facade design and delivery. It recognizes outstanding projects, as well as individuals that have made extraordinary contributions in the Facade field. The projects and contributions demonstrate the goals of the Institute in advancing the art, science, and technology of design, planning, and construction of high-performance building facades for the benefit of the planet and people.

This year's project categories included New Facade—Low rise, Mid-rise, and High Rise, Adaptive Reuse, Heritage Facade, Facade Innovation, System Integration, Unbuilt Facade, Facade Research, and Facade Product Development. For the first time, the program included a category designed specifically for student projects. In addition, a category was added for Facade Educator, alongside Emerging Professional, Unsung Hero, and Collaborative Achievement.

I am delighted to report that we received one hundred submittals from around the world. Thanks to our hard-working and dedicated jury, we were able to announce the winners and runners-up in a timely manner. Thank you, Peter Weismantle, for serving as the jury captain! Thank you, Angel Ayon, Karen Brandt, Graham Dodd, Mitsu Edwards, Stacey Hooper, and Dan Shannon, for your participation on the jury.

In addition to the awards ceremony once again held at the Center for Architecture in New York City on September 18th, we planned a half-day educational forum to complement the evening program. The theme of the forum was Adaptive Reuse and included a keynote presentation given by Dr. Ajla Aksamija, Professor and Distinguished Chair for Resilient Places at the University of Utah, entitled, "Facade Retrofits: Design Methods for Improving Facade Performance of Existing Buildings." Two panels followed, curated by CookFox Architects and CetraRuddy.

I would like to recognize our sponsors who help defray the costs of these events—our Gold sponsors, Technoform, Kuraray; Student Award sponsor, W&W Glass; the Architect's Newspaper, Enclos and all those supporters who were part of our program book.

Finally, I would like to thank our Executive Director Katerina Hojgrova for her coordination of this year's event and Katie Gould for putting together the program book. We could not have done it without them!

Peter Arbour, RA
Founder/CEO
Liquid-Wall

The Facade Tectonics Institute

Facade Tectonics started as a series of invited round-table discussions at the University of Southern California School of Architecture in 2007; a strategic response to the escalating importance and complexity of building facade technology. The round-tables grew into a series of conference events that drew hundreds of participants with a broad range of interests in the building skin. The accelerating change of facade technology and the growing awareness of the facade as not only integral to, but the very fulcrum of holistic building design, propelled Facade Tectonics to the forefront of the emerging dialogue of building skin. The facade system uniquely combines considerations of performance and appearance; it is, quite simply, the most interesting and vital aspect of architecture and urban habitat today.

The major milestone in the evolution of Facade Tectonics was the formation of the Facade Tectonics Institute in 2015, with the mission of carrying out progressive and broad-based research in building facade technology. The intent is to catalyze and foster a deep dialogue of collaborative research activity that bridges the fragmented market segments of the building industry, pairing industry, government, academia, the profession, and ownership. Integral to our mission is the dissemination of historical, theoretical and practical information derived from this research to the building marketplace, thereby acting as a conduit and facilitator for both learning and further collaborative research pursuits.

We are an international member organization with headquarters based in California. In addition to our research activities, the Institute conducts a biennial World Congress and an annual series of Regional Forums. We produce a range of publications, including World Congress proceedings, technical guides, research reports, and podcasts, that address various aspects of building facade technology.

Vision

We envision a future that fully realizes the potential of the building facade to create delightful, human-supportive, sustainable and resilient built environments.

Mission

We promote innovation in the art, science and technology of the building facade in pursuit of accelerating change in the performance of built environments.

MISSION STRATEGY

- Develop active members who are thought leaders from across the building industry.
- Serve as a platform for knowledge-sharing and active communication between industry players.
- Provide highest quality education, actively sharing new knowledge.
- Initiate actions to bridge industry silos and fill targeted knowledge gaps between them.
- Do not displace or compete with existing organizations, but partner and collaborate with them.

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Facade Tectonics Institute

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Lawrence Berkeley National Lab

The Vitruvian Honors & Awards

The Facade Tectonics Institute's Vitruvian Honors & Awards program celebrates outstanding achievements in the field of facade design and delivery. The program recognizes outstanding projects, project teams and individuals that made extraordinary contributions to facade design, engineering, fabrication, installation and life-cycle performance. The projects and contributions demonstrate the goals of the Institute in advancing the art, science and technology of designing, planning, and constructing high-performance building facades for the benefit of the planet and people.

BACKGROUND

Our climate is in crisis, representing nothing short of an existential threat to humanity. We are chagrined to acknowledge that buildings—our business—are a major part of the problem. Yet this awareness has failed to drive corrective action. We continue to move in the wrong direction, carbon ppm continues to rise along with species extinction and environmental destruction. We recognize the building skin as the linchpin to achieving resilience and sustainability goals in buildings and urban habitat; nothing in architecture combines attributes of both performance and appearance as does the building facade. You, today's project teams, are building our future. We must drive change; in thinking, in regulations, in practices, in tools and techniques. We hereby challenge building teams—utilizing the building skin as a mechanism of whole-building integration—to disrupt the conversation, to move the building arts and sciences from a big part of the problem to a leading component of the global solution.

It is our hope that the Vitruvian Honors program will significantly contribute to the following:

- New processes for designing, testing, modeling, procuring, fabricating and assembling deeply integrated buildings and facade systems.
- A deeper understanding of the life-cycle performance of facade system materials and assemblies.
- Formal and performative design practices based on anticipated climate change and predicted climate data as opposed to historical data.
- Adaptive facade designs that optimize passive strategies first but integrate carbon neutral or carbon positive strategies as appropriate to realize life-cycle health and environmental goals.
- Utilization of the facade system as the key to a deeper level of building systems integration with the aim of achieving life-cycle and environmental goals.
- The utilization of empirical over modeling methods, wherever possible, in exploring design alternatives, and the use of empirical evidence to calibrate modeling processes.
- Accelerate the transformation to truly resilient and sustainable built environments.

A Special Thanks

Meet the Jury

Angel Ayón, AIA, NOMA, NCARB, LEED AP, APT RP

Principal
AYON Studio Architecture and Preservation

Karen Brandt, AIA

Senior Principal
Heintges Consulting Architects & Engineers

Graham Dodd

Arup Fellow, Director
Arup

Mitsu Edwards, MEng CEng MIStructE

Director of Facades and Special Structures
Eckersley O'Callaghan

Stacey Hooper, AIA, LEED AP BD C

Partner
NBBJ

Dan Shannon

Managing Partner
MdeAS Architects

Peter Weismantle
Vitruvian Awards Progam Founder, 2025 Jury Captain

Director of Technical Architecture
Adrian Smith + Gordon Gill

Assessment Criteria

The Roman architect Vitruvius in his treatise on architecture, De Architectura, asserted that there were three principles of good architecture:

- **Firmatis (Durability)** It should stand up robustly and remain in good condition.
- **Utilitas (Usefulness)** It should be useful and function well for the people using it.
- **Venustatis (Beauty)** It should delight people and raise their spirits.

With these principles in mind; each submission was required to address the following areas of consideration:

- **Durability**
  Lifecycle planning
  Resilience: passive/active/adaptive
  Resistance to obsolescence (in its many forms)
  Materiality: appropriateness and embodied carbon efficiency
  Quality of design and construction
- **Usefulness**
  Functionality: fitness of purpose
  Health, wellness and productivity
  Carbon efficiency (operational)
  Integration: holistic attributes
  Cost effectiveness
- **Beauty**
  Tectonics, material and formal

All project award submissions were evaluated in the overarching context of innovation and sustainability, which includes diverse considerations ranging from design concepts to project delivery strategies, supply chain management and life-cycle performance attributes. Additional assessment criteria:

- **Clarity**
  Narrative and graphic representation

- **Collaboration**
  The extent to which collaboration and collaborative processes among the project team were demonstrated to have played a definitive role in outstanding project outcomes.

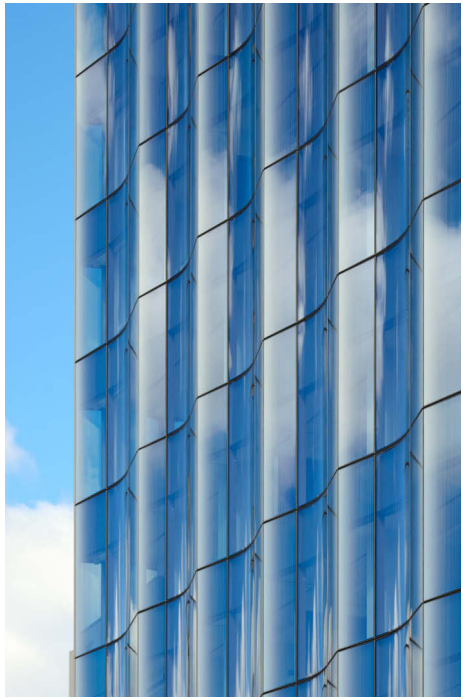
- **Innovation**
  Creativity, novelty and positive disruptive potential

- **Sustainability**
  The extent to which the innovation contributes to resilience and sustainability goals in buildings and urban habitat.

kuraray

The Advanced Interlayer Solutions (AIS) of Kuraray is the global leader in high-performance laminated-glass interlayers—home to the original SentryGlas® ionoplast and the Trosifol® PVB portfolio. From structural glazing that resists hurricanes, blasts, and loads to ultra-clear films for UV protection, acoustics, and bird-friendly, our range is tested and certified. SentryGlas® delivers stiffness, tear resistance, and open-edge durability; Trosifol® UltraClear adds color and printability. For Facades, and solar, AIS elevates safety, resilience, and design freedom.

trosifol.com



heintges

Heintges is a professional consulting firm specializing in the building enclosure. Since our founding in 1989, we have consulted on more than 200 million sf of facades throughout the U.S. and internationally. We focus exclusively on the design, engineering, inspection, and commissioning of all aspects of the building envelope, including custom high-performance curtainwall, structural glass, roofing and waterproofing, and innovative adaptive reuse. Our expertise and commitment to excellence have made us a leader in the profession and redefined the role of the enclosure consultant as an integral part of the project team.

heintges.com

INNOVATIONGLASS

High Performance Glass Curtain Walls

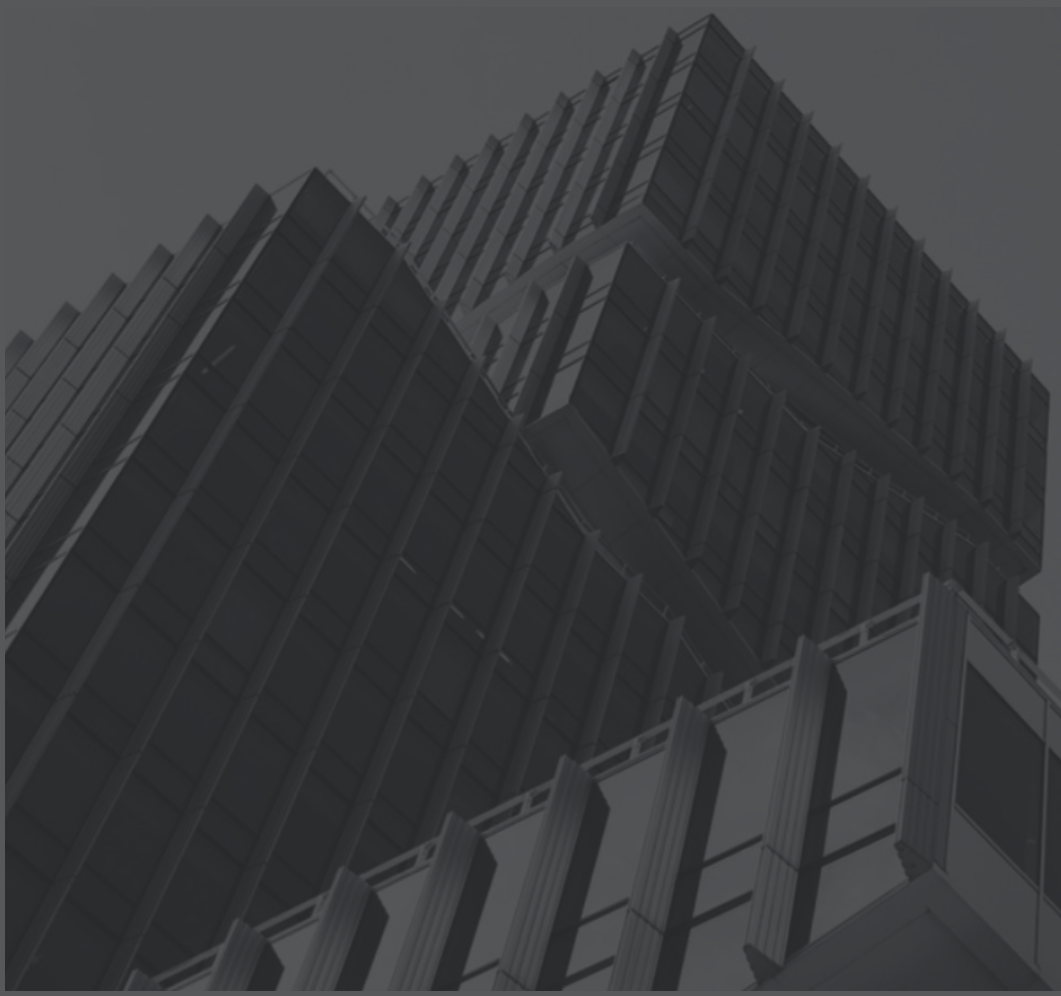
Innovation Glass is a curtainwall supply company founded in 2006. VS1 is our revolutionary advancement in stick-built glass facade technology.

This simple “kit of parts” offers an unprecedented level of flexibility while eliminating transoms and fitting hardware from daylight openings. The VS1 glass curtainwall system was created for designers, enabling them to provide new architectural responses, achieve superior building performance and faster project delivery at great value.

Use it to create excellent architecture.

innovationglass.com

Project Awards



New Facade

Low-rise
Mid-rise
High-rise

Adaptive Reuse

Heritage Facade

Facade Innovation

Facade System Integration

Unbuilt Facade

Facade Research

New Facade

Viettel Headquarters Hanoi
© BM Windows

The *Outstanding New Facade* is awarded to a deserving facade application on a new building project.

OUTSTANDING NEW FACADE LOW-RISE

Orange County Museum of Art
Costa Mesa, CA


Photo © Mike Kelley

Completed
2022

Owner
Orange County Museum of Art

Architect
Morphosis Architects

Structural Engineer
John A. Martin & Associates

Facade Engineer Consultant
Walter P Moore

General Contractor
Clark Construction Group.

Facade Material Supplier
Boston Valley Terra Cotta

Structural Material
Steel Frame

Building Type
Cultural

Building Stories 3

Building Area 53,000 ft^2

OUTSTANDING NEW FACADE MID-RISE

Viettel Headquarters Hanoi

Hanoi, Vietnam

© Hanoi's Panorama & Skyline Gallery

Completed
2020

Owner
Viettel Group

Architect
Gensler

Structural Engineer
Vietnam National Construction Consultants Corporation

Facade Engineer Consultant
Van Aelst | Nguyen & Partners

Facade Contractor
BM Windows Joint Stock Company

Facade Material Supplier
BM Windows Joint Stock Company

Structural Material
Reinforced Concrete

Building Type
Cultural

Building Stories 8

Building Height 37.75 m

Building Area 24,000 m^2

Facade Area 12,500 m^2

Glass
Glass

Facade Systems
Unitized

Facade Types
Primary Facade Assembly – Unitized Curtainwall

Ground Floor Frameless Point-Fixed Glazing Assembly

Aluminum Cladding Assembly

OUTSTANDING NEW FACADE HIGH-RISE

VIVO Shenzhen Headquarters

Shenzhen, China

Completed
2025

Owner
VIVO smartphone

Architect
NBBJ

Structural Engineer Tongji Architects

Facade Engineer Consultant
Inhabit

Facade Contractor
Zhongnan

Lighting Consultant
BPI

Structural Materials
Steel Frame, Reinforced Concrete

Building Type
Commercial

Building Stories 32

Building Height 150 m

Building Area 97,000 m^2

Facade Area 35,000 m^2

Facade Systems
Unitized

Facade Types
Tower Facade – Unitized Curtainwall System

Sky Garden Inner Facade – Stick System with Steel Blade Integrated Mullions

Lobby Facade – Top-Hung Full-height Glass with Structural Glass Fin

Podium Facade – Stick System with Aluminum and Hot-dip Galvanized Steel Frame

Adaptive Reuse

PENN 2
Image Credit: Magda Biernat

The *Outstanding Adaptive Reuse* is awarded to a deserving building renovation (the adaptive reuse, refit, or modernization of an existing building) in which a significant facade system intervention plays a leading role in the success of the program.

OUTSTANDING ADAPTIVE REUSE

PENN 2
New York, NY

Completed
2024

Owner
Vornado Realty Trust

Architect
MdeAS Architects

Structural Engineer
Severud Associates

Facade Engineer Consultant
GMS Consulting Engineers

Facade Contractor
W&W Glass LLC

General Contractor
Turner Construction Company

Facade Material Suppliers
Sotawall Inc.
BAMCO Inc.
IDA Exterior Systems LLC

Structural Materials
Steel Frame

Building Type
Commercial

Building Stories 32

Building Height 490.5 ft

Building Area 161,900 ft^2

Facade Area 574,513 ft^2

Facade Systems
Glass & Metal Curtainwall

Facade Types
Tower – Triple-glazed IGU

Sorefront and Mini Bustles – Double-glazed Jumbo Curtainwall

Penthouse – Double-glazed Jumbo Curtainwall

Roof Pavilion – Double-glazed Curtainwall

Bustle – Double-glazed Jumbo Curtainwall

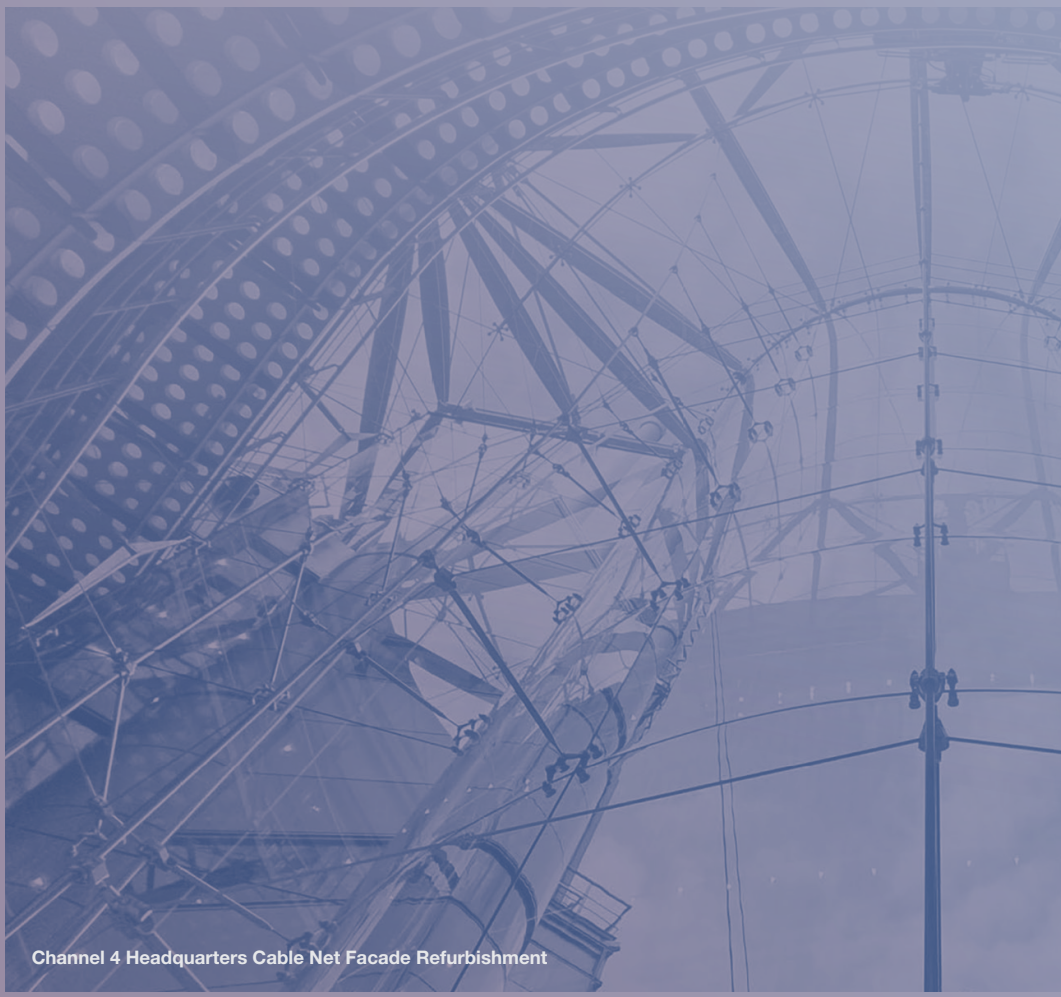
Bulkhead – Aluminum Metal Panels

Lobby – Triple-height Structural Glass Fin System

Recessed Terraces – Double-glazed IGU

Image Credit: Magda Biernat

Heritage Facade



Channel 4 Headquarters Cable Net Facade Refurbishment

The *Outstanding Heritage Facade* award is intended for a deserving facade system intervention in the general context of the following definitions adopted from the U.S. Department of the Interior:

Preservation *focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time.*

Rehabilitation *acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.*

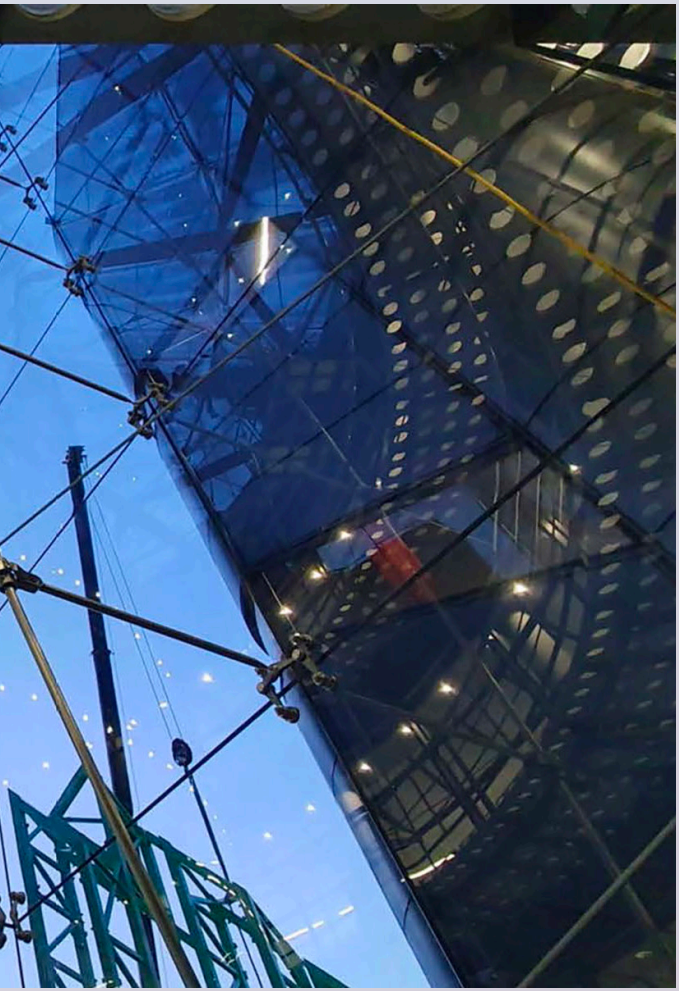
Restoration *depicts a property at a particular period of time in its history, while removing evidence of other periods.*

Reconstruction *re-creates vanished or non-surviving portions of a property for interpretive purposes.*

OUTSTANDING HERITAGE FACADE

Channel 4 Headquarters Cable Net Facade Refurbishment

London, UK



Completed
2023

Owner/Developer
Channel 4 Television

Architects
Richard Rogers & Partners

Structural Engineers
Octatube, Arup

Facade Engineer Consultants
Octatube, Arup

Facade Contractor
Octatube

Structural Materials
Cable Net

Building Type
Commercial

Glass
Monolithic toughened curved glass

Facade Systems
Glass & Metal Curtainwall

Facade Innovation

Le Visionnaire, Espace François Dalle

The intent of the *Outstanding Facade Innovation* award is to single out truly innovative contributions to the art, science or technology of the building skin.

OUTSTANDING FACADE INNOVATION

Le Visionnaire, Espace François Dalle
Paris, France

Completed
2023

Owner
L'Oréal S. A.

Architect
Ange-Jacques Gabriel and Alain D. Moatti

Structural Engineer
Bellapart Group

Facade Engineer Consultant
RFR

Facade Contractor
Bellapart Group

General Contractor
PLENDI by VINCI Construction

Facade Material Supplier
sedak GmbH & Co. KG (laminated glass)
Kuraray (interlayer)

Building Type
Commercial Office

Building Stories 5

Building Height 82 m

Glass
Laminated 8.8mm Tempered Glass with 1.52mm Trosifol® UltraClear PVB and a 14mm Cavity Filled with 90% Argon

Facade Types
Main Facade and Dome – Quadrilateral-shaped IGU Glass Panes with Double Curvature

Building Perimeter and Apex Perimeter Facade – Triangular-shaped IGU Glass Panes with Double Curvature

Facade System Integration

University of Pennsylvania Vagelos Laboratory for Energy Science & Technology
© Brad Feinknopf

Whole building design, holistic building design, and building systems integration are terms that point to the escalating importance of considering and balancing all of the myriad variables that impact aspects of building performance. The building facade system is the nexus of many of these often-competing considerations, critically impacting performance at the multiple scales of facade system, building, and urban habitat. The Facade Tectonics Institute views the facade system as the great integrator of these many variables and the lynchpin to truly resilient and sustainable buildings and urban habitat.

The intent of the *Facade System Integration* award is to single out facade systems that demonstrate the most considered, comprehensive and appropriate integration and adaptive responsiveness within the context of a given building project.

OUTSTANDING FACADE INTEGRATION

University of Pennsylvania Vagelos Laboratory for Energy Science & Technology

Philadelphia, PA

Completed
2024

Owner
Facilities and Real Estate Services
University of Pennsylvania

Architect
Behnisch Architekten

Structural Engineer
Knippers Helbig Engineering DPC

Facade Engineer Consultant
Knippers Helbig Engineering DPC

Facade Contractors
Lindner Fassaden GmbH, Lindner Facades Inc. and Eastern Exterior Wall Systems

General Contractor
LF Driscoll

Facade Material Suppliers
Vector Foiltec (ETFE)
Bischoff Glass (triple-glazed IGU)
Tiger Drylac Metallic (powder coating)
QC Facades (penthouse glass panels)

Structural Materials
Steel Frame, Reinforced Concrete

Building Type
Education, Research

Building Stories 8

Building Height 112 ft

Building Area 114,000 ft^2

Facade Area 70,000 ft^2

Facade Systems
Unitized and Mega Panel

Facade Types
East – Unitized Curtainwall with Integrated ETFE Sun Shading System

West – Unitized Curtainwall with Integrated ETFE Shading and Double-height Glazed Collaboration Zones

South – Unitized Mega Panel and Unitized Curtainwall with Angled Horizontal External Brise-soleils

North – Curtainwall with vertical shading elements

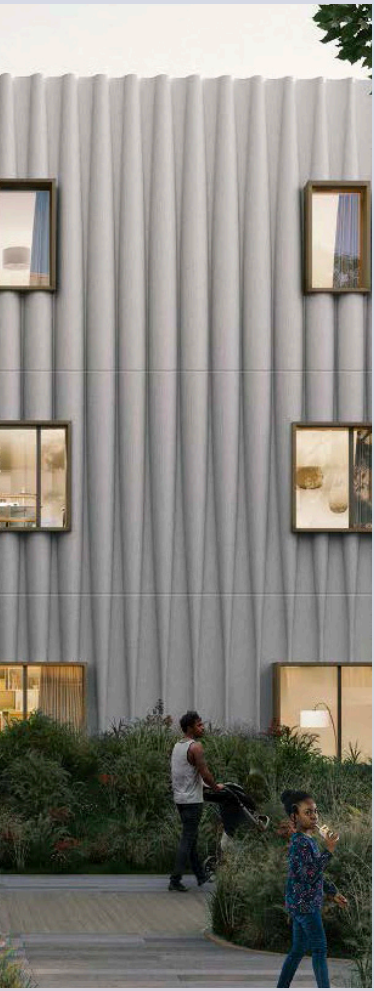
Unbuilt Facade

Phoenix Low-Carbon Facade

The *Outstanding Unbuilt Facade* is awarded to an unbuilt facade system or system element, whether intended for a new or existing building application, or as a purely conceptual work. The work may include a research component, but is not fundamentally a pure research project. This award recognizes and honors unbuilt works of particular merit (conceived and documented in 2023 or later). Notwithstanding the above quotes, qualified entries include not only purely conceptual works, but also developed facade designs up to and including prototypes, mockups, and system testing, but with no current intention for final facade construction.

OUTSTANDING UNBUILT FACADE

Phoenix Low-Carbon Facade
Oakland, CA



Completed
2026

Architect
MBH Architects & Autodesk Research

Facade Engineer Consultant
Heintges

Facade Contractor
Kreysler & Associates

Facade Material Supplier
Ecovative

Structural Material
Wood Frame

Building Type
Residential

Facade Materials
FRP, Mycelium Composite

Facade Systems
Double Skin

Facade Type
BioFRP Facade – FRP Sandwich Panel with a Carbon-sequestering Mycelium Composite Structural Core

Facade Research

Recent Adaptive Textile Facade Systems
University of Stuttgart

The *Outstanding Facade Research Award* recognizes and honors outstanding research in the field of advanced building facade science and technology.

OUTSTANDING FACADE RESEARCH

Recent Adaptive Textile Facade Systems

Lucio Blandini,
University of Stuttgart

Abstract
Adaptive facade systems are a promising approach to achieve a dynamic response to varying weatherconditions and user demands. The interdisciplinary Cooperative Research Centre 1244 “Adaptive Skins and Structures for the Built Environment of Tomorrow” at the University of Stuttgart explores the technical and architectural potential of such adaptive systems. The CRC’s overarching objective is to reduce the consumption of natural resources, the generation of waste, and the emission of greenhouse gases, while increasing user comfort. The parameters targeted for the design of adaptive Facades therefore include among others solar radiation, daylighting, temperature control, and user interaction.

D1244, a 36.5 m high adaptive tower, serves as an experimental platform for the research work performed in the framework of CRC 1244: 24 hydraulic actuators are integrated into the tower’s steel structure. Thus, D1244 can react actively to external loads such as strong winds or earthquakes. The facade of the tower was initially made of a temporary single-layer recycled membrane. This temporary skin is now replaced floor by floor with different adaptive Facade systems developed by the research team. In 2023 the focus lay on the Facades on the first two floors: light adaptive textile systems and user interaction are the main themes of the first (ground) floor, whereas the second-floor kinetic skin deals with daylighting and shading technologies.

At the ground floor researchers installed a parametrically designed veil-like screen (FiberSKIN), which protects from weathering and regulates light transmission. The two panels at the front side are made of fully recyclable glass and basalt fibers and can be completely opened through a double-sliding mechanism. At the back side of the ground floor an interactive Facade system responds dynamically to human touch (MagneticSKIN). Featuring an interaction layer both inside and outside, the Facade makes use of electromagnetic actuators to generate a pulse-like sensation when it is activated, thus engaging in haptic interaction with the users. On the second floor, a textile kinetic shading solution for controlling daylighting and reducing heat island effect (KineticSKIN) is currently under construction.

Read the full paper

Scan the QR code to download and read about the award-winning research on Recent Adaptive Textile Facade Systems.

TECHNOFORM

Technoform's warm edge spacer supports energy-efficient design at 66 Galen Street in Watertown, Massachusetts | Bringing advanced glazing components together, Press Glass fabricated the project's IGUs integrating Technoform's plastic hybrid stainless steel (PHSS) warm-edge spacer. The result was a fenestration system that delivers superior thermal performance, enhanced condensation resistance, and alignment with the project's design vision—ensuring the Facade meets demanding energy performance standards and aesthetic goals.

Technoform provides high-performance solutions that improve thermal performance and condensation resistance without sacrificing durability or design.

technoform.com

Eckersley O'Callaghan

We are an engineering design practice with 11 offices around the world. We offer a full-service design approach to building envelopes with an in-depth knowledge and expertise of the full range of materials which can be used when designing and building facades. We have established an international reputation for our creative yet rigorous approach to designing facades and structures. Our engagement with architecture and industry underpins our pioneering use of materials to realise projects of exceptional quality, efficiency and elegance. Sustainable thinking informs all our projects, beginning at the earliest conceptual stages and continuing right the way through to completion

eocengineers.com

RAiNA CONFERENCE

RAINSCREEN PROFICIENCY

THE PARTS, PRECISION AND PERFORMANCE

PHILADELPHIA, PA NOVEMBER 5, 2025

The 2025 RAiNA Conference is where the rainscreen community comes together to share ideas, spark innovation, and shape the future of high-performance enclosures.

Join us November 5 in Philadelphia for "Rainscreen Proficiency: The Parts, Precision & Performance"—a day packed with expert insights, real-world case studies, and industry networking.

Don't miss this must-attend event!

rainscreenassociation.org/raina-conference/

facades+ Presented by The Architect's Newspaper

Facades+ is the leading conference on high-performance and high-design building skins. Presentations and panels examine the fast-paced evolution of facade technology, address new perspectives on building skins, and explore innovative, sustainable design practices. Join the robust dialogue that covers all aspects of building envelopes and connect with architects, fabricators, developers, consultants and other design professionals.

2025 REMAINING DATES & CITIES

Chicago September 12

Toronto September 26

Boston October 17

Seattle November 20

Los Angeles December 11+12

For more information on upcoming Facades+ events go to:

facadesplus.com

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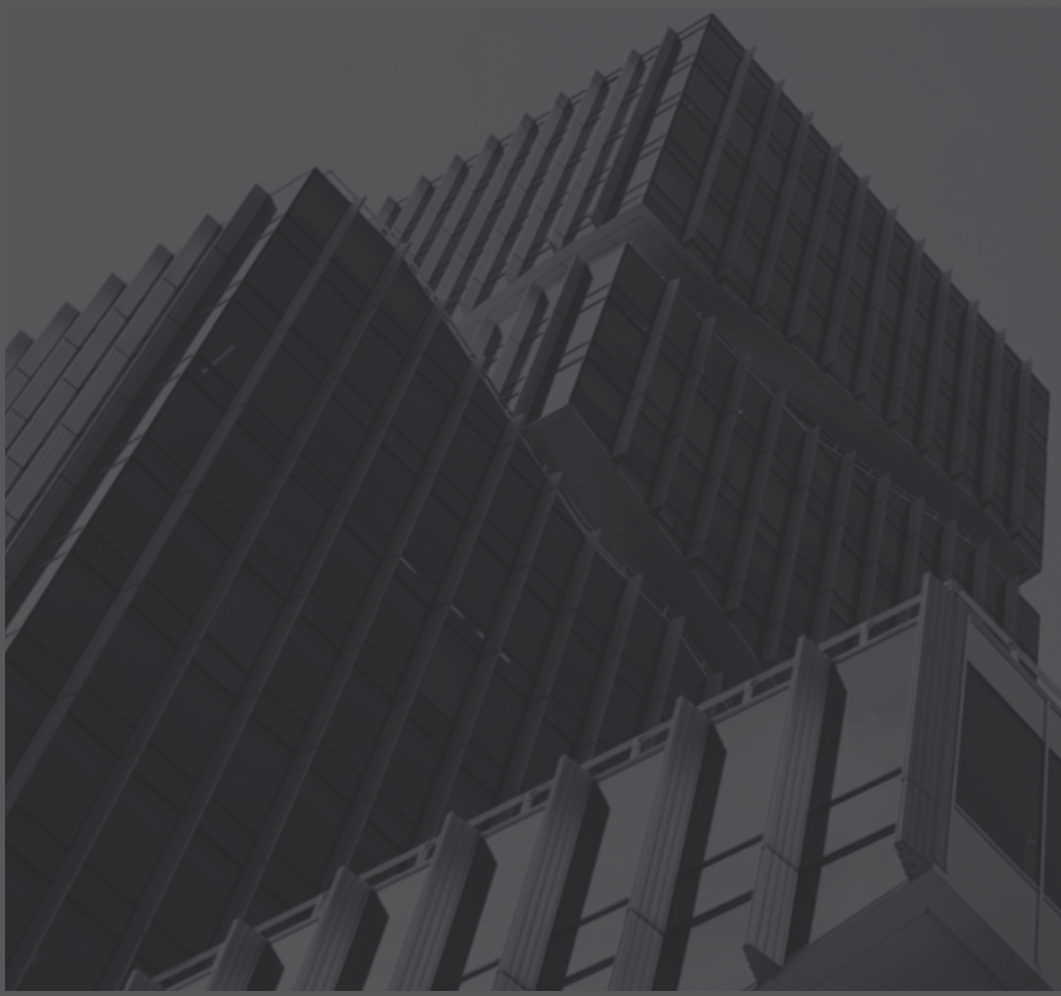
Student Project Awards



Student Project Awards

Sponsored by

W&W GLASS

The *Student Project Award* recognizes and honors students who are showing exceptional promise, to showcase these individuals and their work, and introduce them to the building industry.

Honorable Mentions

Anran Long
USC, School of Architecture - ARCH 202B, Juan Salazar

WAVE A kinetic panel system designed to adapt to both human interaction and environmental stimuli.

Roxanne Natal
USC, School of Architecture - ARCH 202B, Yo-Ichiro Hakomori

Beam Brick A light manipulation concept.

Jude Ryan Bell
Louisiana Tech University - ARCH 530, Damon Caldwell, Baylee Craighead

Louisiana Tech University Student Center A speculative gradute project that boldly re-imagines the student center at Louisiana Tech University.

Award Winners

Mohammed Ibrahim
Delft University of Technology

Glass Serviceability Limit: New Evidence from Human-centered Studies
A bespoke electro pneumatic experimental setup was used to expose 38 participants to controlled glazing deflections at, below, and above current design thresholds. The study measured perception, acceptance, and perceived safety under different lighting conditions. Results reveal that current serviceability limits may be overly conservative, as participants generally accepted larger deflections, especially during the day.

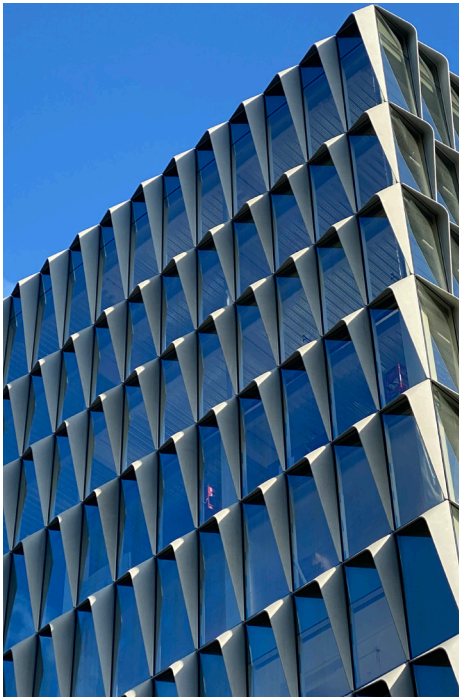
Changes in reflection, not view distortion, was the main trigger for discomfort. These findings suggest opportunities for evidence-based glass thickness reduction, promoting material efficiency and lowering the embodied carbon of Facade systems.

Vivila Leigh
UCLA Architecture & Urban Design - AUD403A-C.4 Julia Koerner

Kinepies: Fit for the Future - Quasicrystals
3D printing is usually considered a method best suited for prototyping rather than finished, final results. This project looks to quasicrystalline patterns and kinematic fabrics to develop building facade skin-systems with the goal of progression of utilizing 3D printing technologies beyond the prototyping phase. Primary considerations include modularity, repairability, replicability, flexibility in application, scalability, production efficiency, and functional performance beyond visual aesthetics. Ideal material and proudction methods would be recycled PET/PETG and consumer-scale FDM printing, which would allow for community interaction and contribution, ex. through makerspaces, recycling centers, and recreational events.

Justin Lee
USC, School of Architecture - ARCH 202B, Juan Salazar

Desert Machine
Placed in Joshua Tree, this small dwelling space for a resident artist allows transparency into the surrounding desert while having facade panels that move and open in response to their position to the sun. This acts as a response to solar conditions, glare, and controlled privacy throughout the day, while being a spectacle in itself.



KREYSLER & ASSOCIATES

Our advanced, composite facade material offers a path to a more resilient, creative, and economical design beyond the limits of conventional materials.

- LIGHTER WEIGHT
- LOWER EMBODIED CARBON
- LONGER LIFESPAN
- HIGHER STRENGTH

KREYSLER & ASSOCIATES
Shaping the future since 1982

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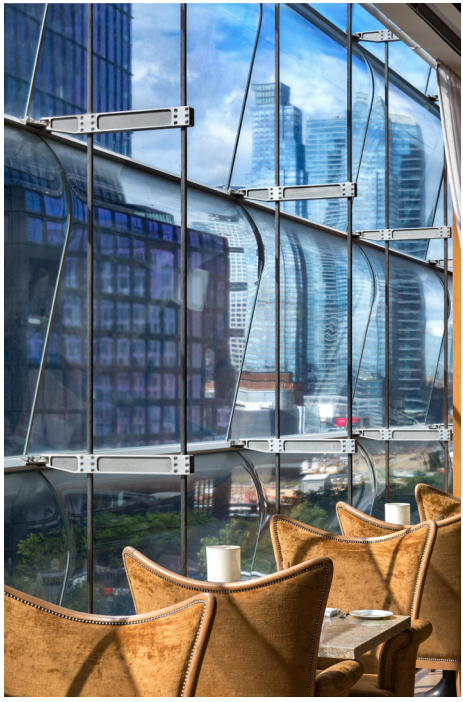
TRIPYRAMID

TriPyramid is a design, engineering, and fabrication firm founded in 1989. The company was born out of a desire to integrate high performance technology and materials into the architecture and building industries. For over 30 years we have brought innovation to projects worldwide.

Among recent projects is the West Podium Art Wall that frames the retail entrances at 20 Hudson Yards. The wall was designed and built in collaboration with James Carpenter Design Associates, Schlaich Bergermann Partner and W&W Glass, LLC.

tripyramid.com



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Get wall-like R-values — with the aesthetic and daylighting benefits of glass.

With VacuMax™ vacuum insulating glass (VIG) by Vitro Architectural Glass, it's possible to achieve R-values as high as R16 in a nominal 1-inch insulating glass unit. VacuMax™ VIG —the ultimate thermal insulation in a window.

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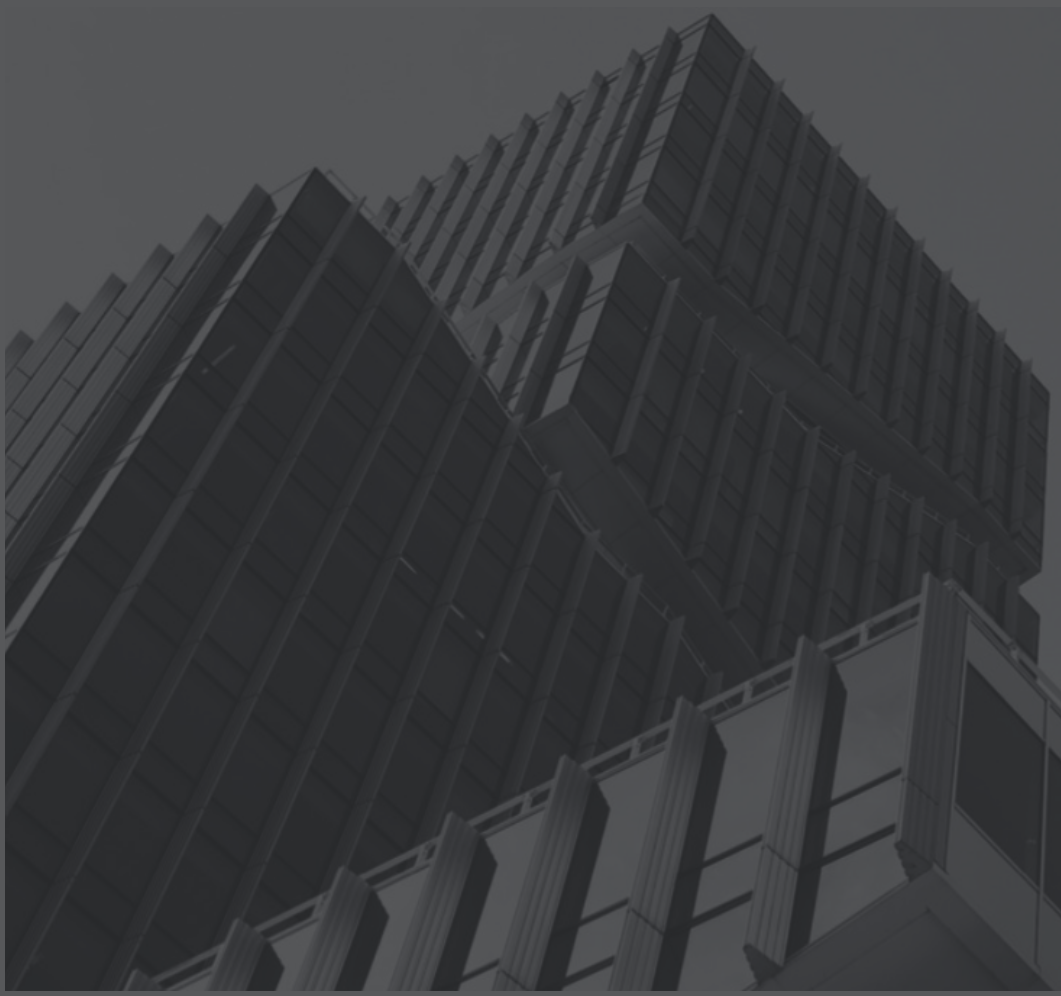
People Awards



Collaborative Achievement

Unsung Hero

Emerging Professional

Facade Educator

Collaborative Achievement

The *Collaborative Achievement Award* recognizes the teams responsible for project, research, product development, or other advances in Facade technology, who have made extraordinary contributions to the art, science and technology of building Facade systems through demonstrable, deep collaborative processes.

COLLABORATIVE ACHIEVEMENT AWARD

Architectural Ceramic Assemblies Workshop (ACAW)

FOUNDERS

John Krouse

Chairman of the Board
Boston Valley Terra Cotta

Omar Khan

Professor and Dept. Head
Carnegie Mellon University's School of Architecture

ACAW is a collaborative research and education initiative dedicated to advancing the use of terra cotta in contemporary architecture through experimentation, interdisciplinary exchange, and material innovation. Founded in 2016 and spearheaded by Boston Valley Terra Cotta, ACAW brings together leading architects, engineers, designers, artists, and educators to explore the possibilities of ceramics in the building envelope and beyond.

What distinguishes ACAW is its uniquely integrative approach—bringing together academia, industry, and design practice to reimagine the role of ceramics in contemporary architecture. Each year, invited teams composed of architects, engineers, and artists work closely with Boston Valley's manufacturing experts and academic partners to prototype full-scale terra cotta assemblies. These efforts culminate in a public symposium that shares the outcomes with a wider professional audience, fostering knowledge exchange and ongoing dialogue.

Since its founding, ACAW has facilitated the creation of over 50 unique ceramic prototypes and supported the involvement of more than 40 design firms and institutions. Several past prototypes have informed real-world building applications, and the workshop's impact is increasingly visible in practice, research, and education.

ACAW's success is made possible through the dedication and collaborative spirit of the team. Their diverse backgrounds and shared commitment to innovation have helped define ACAW as a leading model for how industry and academia can come together to elevate architectural materials and processes.

Each year, ACAW brings together interdisciplinary teams composed of architects, engineers, artists, academics, and industry experts to research and prototype large-scale architectural ceramic assemblies. The initiative, hosted by Boston Valley Terra Cotta in partnership with leading academic institutions including Carnegie Mellon University and University at Buffalo, serves as a hands-on incubator for ideas that challenge conventional uses of terra cotta and explore its capabilities in new forms, textures, and assemblies.

Over the past eight years, ACAW has produced more than 50 full-scale ceramic mockups. These projects are the result of months of ideation, design development, and technical refinement, culminating in a week-long fabrication workshop at University at Buffalo's SMART Lab and a final public symposium where outcomes are shared with the broader architectural community.

The process engages participants in a full design-to-fabrication cycle: from sketching and modeling to production, glazing, and kiln firing. ACAW's collaborative format pushes boundaries while remaining rooted in material realities—ensuring that even the most radical ideas are tested for constructability and potential future application.

ACAW is more than a workshop—it is a collaborative movement that is redefining material intelligence in architecture. By uniting the creative vision of architects with the hands-on mastery of manufacturing and the critical thinking of academics, ACAW is generating real, scalable impact. The program's dedication to discovery, experimentation, and implementation has made it a model for collaborative achievement in design, construction, and education. In a time when architecture is urgently seeking new materials, new methods, and new models of cooperation, ACAW stands as a shining example of what can be accomplished when boundaries are dissolved and disciplines unite in pursuit of innovation.

Unsung Hero

The *Unsung Hero Award* is an acknowledgment that there are often unrecognized individuals and entities that play a pivotal and indispensable role in the realization of extraordinary facade system contributions.

To employ a sports metaphor, the unsung hero is not the ball carrier but the blocker without whom the ball carrier could not score. This award is intended to bring such individuals or entities to the forefront.

UNSUNG HERO AWARD

Richard Green

Facade Designer, Engineer and Consultant

Green Facades

Richard is the Founding Principal of Green Facades and a facade specialist with over 30 years of experience as a global expert in the area of facades and structural glass. His experience encompasses all stages of a building enclosure's life-cycle. He received both Bachelor and Graduate Diploma in Structural Engineering from Monash University in Australia specializing in light-weight structures, and he has formal training in corrosion technology.

Richard's specialty is the design and analysis of complex fa~ade structures. He has been involved with a number of world leading and award-winning projects covering a wide range of building types. Curtainwall and high-rise towers include Mahanakhon with OMA/Ole Scherin, Shenzen Stock Exchange with OMA, and Brookfield Place in Calgary with AFK/Dialogue. He has worked on significant airport extensions in Melbourne and Sydney in Australia, Changi Airport in Singapore, and was the lead designer for the fa~ade of the Main Terminal Building of Helmut Jahn's Suvarnabhumi Bangkok International Airport in Thailand.

Richard has worked on cultural facilities on six continents and such iconic buildings as the Stavros Niarchos Foundation Cultural Center by Renzo Piano in Athens, Greece; the restoration of the Sydney Opera House; the Amazon Spheres with NBBJ; and, the refurbishment of the Seattle Space Needle with Olson Kundig.

Richard is the technical chair for the ASTM Structural Glass Committee and has an advisory role to Eurocode EC10. He is a member of the technical committee for the American glass standard ASTM E1300 and he was previously a member of the technical working group for Australian Standard AS1288, Glass in Buildings. Richard also represents the United States on International Organization for Standardization ISO (TC160) as an 'Expert' for matters regarding strength and use of architectural glass.

Richard is a Professional Engineer registered in the states of Washington, Colorado, Idaho, Montana, New York, Oregon, Texas, Utah and Wyoming, USA and is a Chartered Professional Engineer in Australia, where he also is a Registered Building Practitioner in the State of Victoria. He has presented at many international conferences including giving keynote speeches for Glass Performance Days, Facade Techtonics and COST Structural Glass.

Emerging Professional

The *Emerging Professional Award* recognizes and honors young people early in their career who are showing exceptional promise, to bring these individuals to the forefront of the facade industry and the attention of their more senior colleagues.

EMERGING PROFESSIONAL AWARD

Adrian Lowenstein

Managing Director

Skyline Windows + Schüco

Adrian Lowenstein is a Licensed Professional Engineer and business developer who holds a Bachelor of Mechanical Engineering and an MBA in Finance from the University of Delaware. He is a recognized voice in the facade and glazing industry, passionate about driving innovation and fostering collaboration across all project stakeholders. Adrian was named one of the glass industries Most Influential People by U.S. Glass Magazine.

The Vitruvian jury was most impressed with Adrian's commitment to sharing daily educational content with a large and engaged LinkedIn audience and through a popular industry podcast, with the expressed intent of using both platforms to spread awareness, challenge conventional practices, and promote positive change in building design and construction. As he states in the intro to his podcast:

"I believe that we all have something unique to offer — join me as I dive into the world of architectural innovation, together with our very own industry experts. Each episode unfolds an exclusive fabric of insights and experiences. I hope this journey will excite and keep you on your toes."

With experience spanning facade consulting, glazing contracting, and manufacturing, Adrian has worked extensively on high-end new construction & existing building projects featuring unitized custom windows, curtainwall, and window wall systems. His background includes driving business development, leading design engineering efforts, and scaling operations across diverse markets throughout the United States.

Facade Educator

Educating students of the building arts and sciences about the critical relevance of the facade system—and the opportunity it represents in realizing vital goals of resilience and sustainability in buildings and urban habitat—is a challenging undertaking. The *Facade Educator Award* recognizes and honors those confronting this challenge with a facade-forward approach to educating the future leaders of the building industry.

FACADE EDUCATOR AWARD

Liz McCormick

Associate Professor, Architecture
University of North Carolina Charlotte

Liz McCormick is a licensed architect, educator, and researcher whose work explores healthy, climatically sensitive, and contextually appropriate building design strategies that connect occupants to the outdoors while also reducing the dependence on mechanical conditioning technologies. Her recent book, Inside OUT: Human Health & the Air-Conditioning Era (Routledge), tells the rich story of both the social and technological drivers of the conditioned indoors while making an argument for thoughtful interventions in the built environment. It brings together a multi-disciplinary group of experts of the indoors, including scientists, anthropologists, engineers, and architects, to discuss the future of human habitation with a dominant focus on human health in a post-pandemic world. Liz is also the lead-PI for the NSF-supported research study abroad program to Tanzania (through 2026).

Liz is a WELL and LEED Accredited Professional and a Certified Passive House Consultant. With over 10 years of experience as a practicing architect, she has worked on a variety of project scales from single-family passive houses to LEED-certified commercial office buildings and campuses. She received a PhD in Design from North Carolina State University, Master of Science in Building Technology from the Massachusetts Institute of Technology as well as bachelor's degrees in architecture and fine arts from the Rhode Island School of Design.

Liz was the recipient of the 2021 AIAS/ACSA New Faculty Teaching Award, which "honors architectural educators for exemplary work in areas such as building design, community collaborations, scholarship, and service," the announcement reads. Liz is also an active member of numerous professional and academic organizations, including the American Institute of Architects (AIA), AIA Charlotte Committee on the Environment (COTE), National Passive House Alliance (PHAUS), the Society of Building Science Educators (SBSE). Additionally, she is an invited board member of the Softwood Lumber Board (SLB) and the president-elect for the Building Technology Educators Society (BTES)

FACADE EDUCATOR AWARD

Julia Koerner-Al-Rawi

Associate Adjunct Professor

UCLA Department of Architecture & Urban Design

Julia Koerner is an award-winning Austrian designer, innovator, and pioneer in 3D printing, with exemplary cross-disciplinary work. Koerner has been sought after for collaborations that include 3D-printed costumes with Ruth E. Carter for Marvel's "Black Panther" and "Wakanda Forever," earning two Academy Awards. Prior to that, she collaborated with Iris Van Herpen and Chanel on 3D-printed Haute Couture. Furthermore, she has developed research on innovative uses of 3D printing with Swarovski, Stratasys, and Materialise. She is internationally recognized for design innovation in 3D printing and recently was awarded for her architectural design for ICON's 3d-printed affordable housing Initiative 99.

Koerner has been a faculty member at UCLA Architecture and Urban Design since 2012 and teaches graduate design studios, building construction, and research studios. Her research studio "Fit For the Future: Sustainable 3D printed building facades" has been widely published. Since 2021, she has been the Director of UCLA AUD Summer Programs TeenArch and JumpStart.

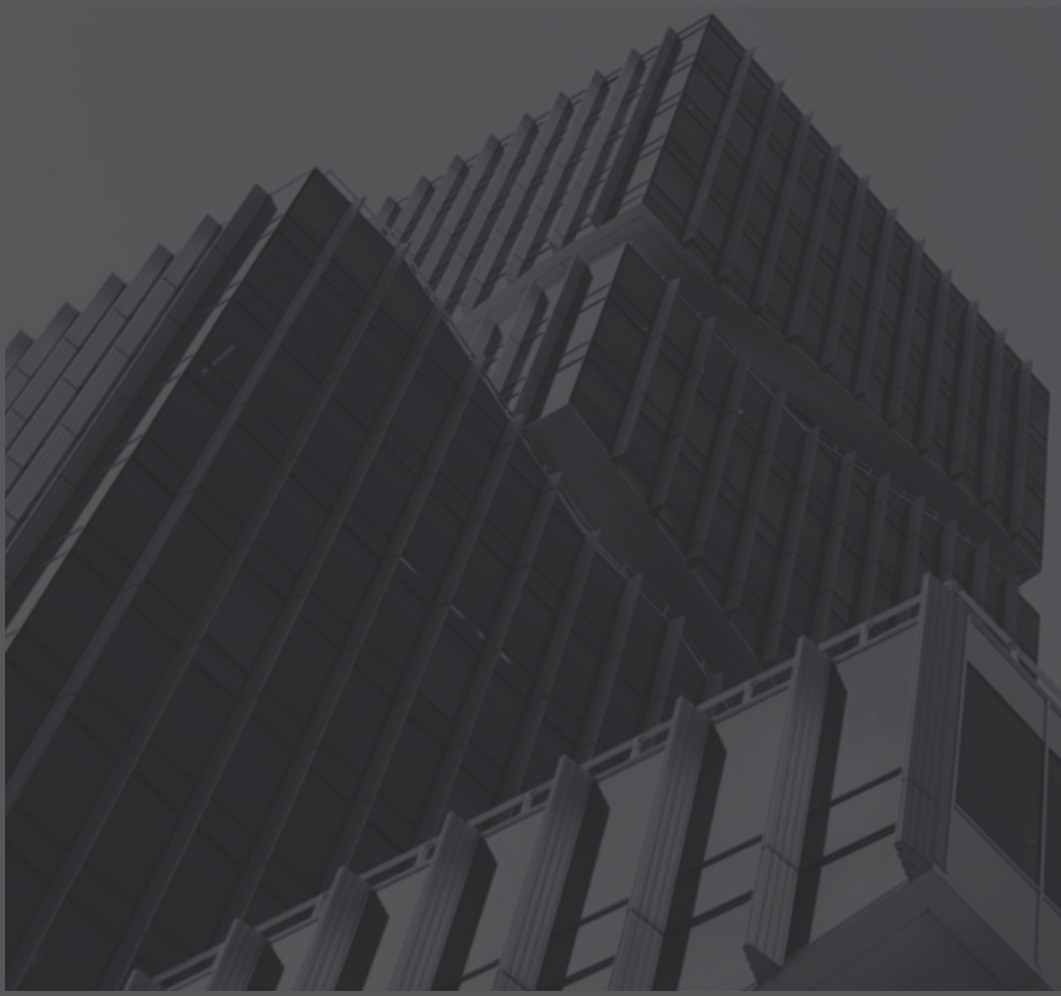
Koerner's work has been acquired and exhibited at institutions such as the Metropolitan Museum of Art in New York (MET), the High Museum of Art in Atlanta, the Philadelphia Museum of Art, the Phoenix Museum of Art, the Vancouver Art Gallery, the MOMU in Antwerp, the Palais des Beaux Arts in Brussels, Museum of Applied Arts MAK Vienna, and Ars Electronica. Her designs have been featured in National Geographic magazine, Vice, Wired, Dezeen, Architectural Digest, Metropolis, and the New York Times. Her peer-reviewed architectural research has been published in Springer Construction Journal, Robotic Fabrication in Architecture, Art and Design, Acadia Conference, and AAE Conference, among others. In 2019 ARCHINECT named Julia Koerner "Architecture's Queen of 3D Fabrication".

Koerner is the founder of JK Design and JK3D, focused on iconic, sustainable, and innovative 3D-printed architecture, installations, fashion, and home decor products. Her design work constantly embodies a beautiful organic aesthetic and leverages the unique capabilities of architectural design processes and digital fabrication to their fullest potential.

Born in Salzburg, Austria, Koerner received master's degrees in architecture from the University of Applied Arts in Vienna and the Architectural Association in London. She is based in Los Angeles and Vienna, and has previously practiced in London and New York and held academic appointments at the University of Applied Arts in Vienna, Lund University in Sweden and the Architectural Association Visiting Schools in France and Jordan.

She serves on the Creative Industries Council of the Federal Ministry of Labour and Economy of Austria as part of the "Innovation Program for the Creative Industries 2030."

Membership Program



As a member-based non-profit, our membership is comprised of thought leaders from across the building industry doing the urgent work of moving the built environment toward critical health, resilience and sustainability objectives. The facade system is pivotal to this endeavor – amplify your impact by joining us in collective action!

Why Join?

The Facade Tectonics Institute (FTI) is the only member-based research and education institute dedicated to advancing building Facade technology for a resilient and sustainable built environment. We champion the building envelope's role in energy efficiency, durability, occupant health, and design innovation.

Through conferences, education, publications, and collaborative networks, FTI connects professionals across industry, academia, and ownership to accelerate innovation and deliver meaningful impact—always independent of commercial interests, and for the benefit of all.

Learn More & Join Today

Scan the QR code for membership levels and benefits and register as a member.

Corporate Membership

Declare your leadership in advancing sustainable buildings and cities.

Open to architects, developers, owners, contractors, engineers, manufacturers, real estate firms, and service providers. Benefits include:

- Brand visibility through events, speaking opportunities, publications, and media.
- Exclusive research access with opportunities to contribute to groundbreaking initiatives.
- Powerful networking with executives and decision-makers shaping the built environment.

Academic/Nonprofit Membership

Advance education. Accelerate research.

Universities, institutes, and nonprofit organizations help shape the global conversation on Facades. Members receive exclusive resources, collaboration opportunities, and discounted rates to engage in FTI's research and knowledge-sharing mission.

Individual Membership

Mobilize your inner Facade Geek!

Join a dynamic community of designers, engineers, academics, owners, and industry leaders united by a passion for Facade innovation and building excellence.

VITRUVIAN HONORS & AWARDS

Presented by the Facade Tectonics Institute