

Wagdy Anis Symposium 2019

Building Enclosure Performance for the 21st Century

6-7 November 2019 at ABX Boston

Boston Convention Center, Boston, MA

The Boston Building Enclosure Council welcomes members of the design and construction community to a two-day Symposium in honor of the late Wagdy Anis, FAIA, LEED AP. Wagdy's contributions to the advancement of building energy performance and durability, coupled with his passion for fostering creativity and sharing knowledge, inspired this symposium. In Wagdy's spirit, please join us to explore, learn and discuss fundamental concepts, goals, and innovations to improve today's building enclosures!

Symposium Schedule

Day 1: Full-Day Training Workshop

WW | Building Enclosures 101: Controlling Heat Air and Moisture

Presenters: Wei Lam, P.E., RDH Building Science, Inc; Matt Copeland, P.E., Copeland Building Envelope Consulting.

Day 2: Panel Discussions and Presentations

TW1 | Highly Energy-Efficient Buildings to Net-Zero

Presenters: Steve Kemp and Marine Sanches, RDH Building Science, Inc.; Holly Samuelson, Harvard Graduate School of Design.

TW2 | Building Enclosure Performance for Resilience

Presenters: Deborah Rivers, AIA, LEED AP, HDR, Inc.; David Burson, Partners HealthCare Real Estate and Facilities; Wei Lam, P.E., RDH Building Science, Inc

TWL | Lunch and Keynote

Presenter: John Straube, PhD., P.Eng., Principal, Senior Building Science Specialist, RDH Building Science

TW3 | Codes and Enclosure Commissioning for Today's Issues

Presenters: Ian Finlayson, Massachusetts Department of Energy Resources, Andrea DelGuidice, P.E., Wiss, Janney, Elstner Associates, Inc.; Brian Neely, AIA, CDT, BECxP, Gale Associates.

TW4 | Building Enclosure Performance for IAQ and Durability

Presenters: Lew Harriman, FASHRAE, Mason-Grant Consulting; Jason Der Ananian, P.E., Simpson Gumpertz and Heger Inc.; Manfred Kehrer, Dipl.-Ing., Wiss, Janney, Elstner Associates, Inc.

Reception

Registration

<https://www.abexpo.com/en/education/wagdy-anis-symposium.html>

DAY ONE – Full-day Training Workshop Wednesday 6 November, 2019	
WWA, WWB, WWC, WWD Building Enclosures 101: Controlling Heat, Air and Moisture	<i>8:30 AM – 6:30 PM</i> <i>Training sessions</i> <i>lunch included</i>
The basic building enclosure science concepts in terms of durability, efficiency, economy, maintenance, and occupant comfort will be discussed. Contributions of construction materials, systems and assemblies to the overall performance of the building will be illustrated with case studies from the presenters’ professional experience. Participants will learn how to define enclosure performance goals and verify goals are met during design and construction phases. Throughout the workshop, participants will be engaged and challenged with leading questions to facilitate discussion related to applying these principles.	Presenters: <i>Wei Lam, P.E., Principal and Building Science Specialist, RDH Building Science, Inc.</i> <i>Matt Copeland, P.E., Principal, Copeland Building Envelope Consulting.</i>
DAY TWO – Panel Discussions and Presentations Thursday 7 November, 2019	
TW1 Highly Energy Efficient Buildings to Net-Zero	<i>8:30 AM – 10:00 AM</i> <i>Panel Discussion</i>
Climate change, social responsibility, energy security, and occupant health are key drivers for today’s high-performance building innovation. This panel discussion will explore the global rise of Passive House and high-performance buildings in commercial and multifamily sectors, illustrated with an example of a new state-of-the-art institutional project designed to achieve net-zero carbon emissions. Embodied energy and life-cycle analysis of materials will be considered, as well as the role of occupant behavior, reduction of peak loads and improvement of passive survivability.	Presenters: <i>Steve Kemp, Principal, Senior Energy + Sustainability Specialist, RDH Building Science, Inc.</i> <i>Marine Sanchez, Energy + Sustainability Analyst, RDH Building Science, Inc.</i> <i>Holly Samuelson, Assistant Professor of Architecture, Harvard Graduate School of Design</i>
TW2 Building Enclosure Performance for Resilience	<i>10:30 AM – 12:00 PM</i> Case Study Presentation
Resiliency is the ability to recover from or adapt to misfortune or change. In times of extreme weather events and their aftermath, we expect healthcare facilities to be resilient, so they can house and treat vulnerable populations. This session will feature a case study of Spaulding Rehabilitation Hospital on Boston’s Waterfront, to illustrate a project where symbiotic sustainable and resilient strategies have been implemented. The panel will explore features of the building designed to ensure a thermally efficient building enclosure and describe the ways integral daylighting helped to increase functionality and reduce vulnerability during storm surges and flooding, while saving energy and providing a more comfortable patient environment.	Presenters: <i>Deborah Rivers, AIA, LEED AP BC+C, WL+ELL AP Senior Healthcare Architect/Sustainability Leader, HDR, Inc.</i> <i>David Burson, Senior Project Manager, Partners HealthCare Real Estate and Facilities</i> <i>Wei Lam, P.E., Principal and Building Science Specialist, RDH Building Science, Inc.</i>

<p>TWL Wagdy Anis Symposium Keynote and Lunch</p>	<p>12:30 PM – 1:30 PM Presentation</p>
<p>Building Science: Past, Present, Future</p>	<p>Presenter: <i>John Straube, PhD., P.Eng., Principal, Senior Building Science Specialist, RDH Building Science</i></p>
<p>TW3 Codes and enclosure commissioning for today's issues</p>	<p>3:00 PM – 4:30 PM Panel Discussion</p>
<p>For two decades, Massachusetts has been a pioneer in the development of code requirements that support energy conservation. This session will begin with a discussion of current efforts of the Energy Advisory Committee to continue this trend. In response to the higher performance demanded by codes as well as by building owners, building enclosure commissioning has become an effective tool for ensuring that exterior wall, roof and foundation assemblies perform as optimally as intended. Members of a building enclosure commissioning training team assembled by National Institute of Building Sciences will describe standards for the building enclosure commissioning process which form the basis for training and certification now available from NIBS.</p>	<p>Presenters: <i>Ian Finlayson, Deputy Director, Energy Efficiency Division, Massachusetts Department of Energy Resources</i> <i>Andrea DelGuidice, P.E, Senior Associated, Wiss, Janney, Elstner Associates, Inc.</i> <i>Brian Neely, AIA, CDT, BECxP, Senior Project Manager, Gale Associates.</i></p>
<p>TW4 Building Enclosure Performance for IAQ and Durability</p>	<p>5:00 PM – 6:30 PM Panel Discussion</p>
<p>Control of air and moisture movement through the building enclosure can enhance indoor air quality while improving the performance and durability of the building enclosure. Results of indoor air quality research will be presented to demonstrate how airtight building enclosures reduce concentrations of indoor particulates. Because moisture in the building enclosure can also impact indoor air quality, as well as cause premature degradation of the building enclosure assemblies, the effect of airtightness on moisture in the building enclosure assemblies will be illustrated with case studies and a discussion on an innovative approach to controlling moisture in walls of existing buildings. The session will conclude with a presentation of tools used to evaluate building materials for moisture control.</p>	<p>Presenters: <i>Lew Harriman, FASHRAE and ASHRAE Distinguished Lecturer, Director of Research, Mason-Grant Consulting</i> <i>Jason Der Ananian, P.E., Senior Project Manager, Simpson Gumpertz & Heger</i> <i>Manfred Kehrer, Dipl.-Ing., Senior Associate, Wiss, Janney Elstner Associates, Inc.</i></p>

Symposium Committee for Boston Building Enclosure Council

Greta Eckhardt, AIA, CSI, CCS, Senior Specifications Writer, Payette

Sarah Gibson, Law Office of Sarah Gibson

Richard Keleher, AIA, CSI, LEED AP, Senior Architect, The Thompson & Lichtner Company

Sarah Krawiec, BES Assistant Project Manager, Gorman Richardson Lewis Architects.

Wei Lam, P.E., RDH Building Science, Inc; Matt Copeland, P.E., Copeland Building Envelope Consulting

Brian Neely, AIA, CDT, BECxP, Senior Project Manager, Gale Associates.

Anita Simon, AIA, Associate Principal and Unit Manager, Wiss, Janney, Elstner Associates, Inc.

Wagdy Anis, FAIA, LEED AP 1941-2018



1963: Alexandria University, Bachelor of Architecture

1968: Shepley Bulfinch Richardson and Abbott, joined firm.

1997: Shepley Bulfinch Richardson and Abbott, Principal and Director of Technical Resources.

1997: IAQ Design Guide, BSA

2000: *Air barrier requirements in Massachusetts Building Code*

2006: *AIA/NIBS agreement to establish Building Enclosure Councils nationwide*

2006: National Institute of Building Sciences, Member Award

2007: American Institute of Architects, Fellow

2008: Wiss Janney Elstner Associates, Inc., joined firm as Principal

2010: *Air barrier requirements in ASHRAE 90.1*

2012: *Air barrier requirements in IECC*

2013: National Institute of Building Sciences, Institute Honor Award

2014: Anis Building Enclosure Consulting, founding Principal

2016: Façade Tectonics Institute, Fellow

2016: *ASTM 2947 updated.*

Wagdy Anis served the architectural profession as a skilled problem solver, teacher, and advocate for the integrity and performance of the building enclosure in a career that spanned more than five decades.

During his 40-year tenure at Shepley Bulfinch Richardson & Abbott, Wagdy became a leader in the application of building science principles to the practice of building enclosure design. In 2008 he joined Wiss, Janney, Eltner as a building enclosure consultant. Seven years later he established his own practice, Anis Building Enclosure Consulting.

Wagdy's thought process was a synthesis of careful observation through rigorous field work, learning from colleagues, working through design challenges, and sharing what he had learned with others, with the ultimate goal of assuring the integrity and performance of building enclosures.

His zeal for sharing what he had learned extended beyond the firms where he worked. He was highly regarded and well known for his presentations at regional and national forums such as ABX, BEST, and the AIA Convention. Wagdy delighted in developing expertise across disciplines, and his ability to teach non-architects in the design and construction industry was remarkable. His passion was contagious. Through his explanations of basic concepts, materials, and the essential detail required to control the movement of heat, air, and moisture through exterior assemblies, he kept audiences engaged, curious, and eager to continue the discussion.

Wagdy worked with national and state code officials and standards organizations to improve the energy code, championing requirements for the control of air infiltration and exfiltration through exterior walls and roofs. His work with the National Institute of Building Sciences (NIBS) included leading roles in the establishment of Building Enclosure Councils across the country, production of the *Journal of Building Enclosure Design*, and the development of building enclosure commissioning guidelines and training. Wagdy was also a major contributor to the Boston Society of Architects, where he was a leader in the Indoor Air Quality Committee and Building Enclosure Council.

In this symposium, we aim to cover topics that were at the heart of Wagdy's work, pointing to the future as we build on his legacy.