

Tentative Technical Program



TENTH SYMPOSIUM ON ROOFING RESEARCH AND STANDARDS DEVELOPMENT

Sponsored by ASTM Committee D08 on Roofing and Waterproofing

December 3, 2023
Washington Hilton
Washington, District of Columbia, USA

Symposium Chair: Sudhakar Molleti
National Research Council
Ottawa, Ontario, Canada

Symposium Co-Chair: Walter Rossiter
WJ Rossiter & Associates
Clarksburg, Maryland, USA

ABOUT THE SYMPOSIUM

The symposium provides a forum for contributing to the fundamental understanding of acceptable roof performance, with the primary emphasis being current research and development work. The symposium will center on the influence of both laboratory and field investigations in the development of standards for roofing and waterproofing materials and systems.

SUNDAY, DECEMBER 3, 2023

8:30 AM **Opening Remarks**
Sudhakar Molleti, *Symposium Chairman*

SESSION 1 – MOISTURE AND THERMAL PERFORMANCE

Session Chairperson: Emily Lorenz, International Institute of Building Enclosure Consultants

8:45 AM **Evaluation of Moisture Accumulation in Composite Roof Decks in High Humidity Environments such as Natatoriums in Cold Climates using Hygrothermal Modeling**
Gourish Sirdeshpande, Armstrong World Industries Inc.

9:15 AM **Condensation in Cool Roofs - Code Challenges, Field Observations, and Hygrothermal Modeling**
Kade Gromowski, Terracon Consultants, Inc.

9:45 AM **Advancing the Thermal Design of Commercial Roofs: Impact of Mean Operating Temperature, Thermal Bridging and Thermal Bypass**
Sudhakar Molleti, National Research Council, Canada

10:15 AM BREAK

SESSION 2 – BEYOND ROOFS: AIR BARRIERS AND WATERPROOFING

Session Chairperson: Maciek Rupa, National Roofing Contractors Association

10:45 AM **The Difficulties of Transitioning Control Layers from the Roof to the Wall**
John Jay Saldana, Holcim Building Envelope

11:15 AM **The Need for Dedicated Air Barriers Within Low-Slope Roofing Assemblies**
Paul G. Johnson, Architectural Consultant and Kevin D. Nolan, VaproShield LLC

11:45 AM **Compressive Deformation of Hot-Applied Rubberized Asphalt Waterproofing**
Nicholas Simmons and Philip Moser, Simpson Gumpertz & Heger, Inc.

12:15 PM LUNCH (on your own)

SESSION 3 – LABORATORY AND FIELD EVALUATIONS

Session Chairperson: Heather Estes, GAF

1:30 PM **A Case Study of the Assessment of a Tensile Membrane Roof**
Christopher DeRosa, Walter P Moore & Associates, Inc.

2:00 PM **Lessons from Roof Refurbishment Projects in the UK and Ireland**
Keith Roberts, Roberts Consulting

2:30 PM **New Research on Hail Damage to 55% Al-Zn Alloy-Coated Steel Roofing**
Ron Dutton, Ron Dutton Consulting Services LLC, and Rob Haddock, Metal Roof
Advisory Group

3:00 PM BREAK

SESSION 4 – STEEP-SLOPED ROOFING

Session Chairperson: Phil Moser, Simpson Gumpertz & Heger

3:30 PM **Final Report: Does the Underlayment Matter?**
David Roodvoets, DLR Consultants

4:00 PM **Performance of Aged Asphalt Shingles and Development of Climate-Dependent
Durability Index**
Flonja Shyti, National Research Council Canada

4:30 PM **Closing Remarks**
Walter Rossiter, Symposium Co-Chair

4:35 PM SYMPOSIUM ADJOURNS