

TENTATIVE TECHNICAL PROGRAM



SYMPOSIUM ON DIMENSION STONE USE IN THE BUILT ENVIRONMENT

Sponsored by ASTM Committee C18 on Dimension Stone

October 18, 2022
Sheraton New Orleans Hotel
New Orleans, LA, USA

Symposium Chair: Steven Nagatz
Wiss, Janney, Elstner Associates, Inc.
Chicago, IL, USA

Symposium Co-Chair: Charles Muehlbauer
Natural Stone Institute
Oberlin, OH, USA

ABOUT THE SYMPOSIUM

Dimension stone cladding and paving systems continue to evolve and present challenges to design professionals, owners, and installation, repair, and restoration contractors. This symposium is intended to bring together the diverse interests of professionals in the dimension stone community involved with the design, construction, evaluation, and use of dimension stone for a formal exchange of information on the behavior of dimension stone in the built environment.

Sponsored by ASTM Committee C18 on Dimension Stone, papers selected for the Symposium will be presented at the Sheraton New Orleans Hotel in New Orleans, Louisiana in conjunction with the October standards development meetings of the committee.

Just as the market for dimension stone touches many continents across the globe, this symposium will bring together speakers from North America, South America, Australia, and Europe.

Symposium themes include:

- Test Methods
- Panel Behavior and Attachments
- Paving Systems
- Durability

TUESDAY, OCTOBER 18, 2022
(All times in U.S. Central Daylight Time)

8:00 AM **Opening Remarks**
Steven Naggatz, Symposium Chair

SESSION 1: TEST METHODS

8:15 AM **Dimension Stone Water Absorption and Bulk Specific Gravity: An Interlaboratory Study of the Influence of Size, Shape, and Test Methodology on Properties Determination**
J. Arnold, Rath's, Rath's & Johnson, Inc., Willowbrook, IL, USA

8:45 AM **Investigation of the Influence of Test Specimen Size and Shape on the Absorption of Granite Dimension Stone**
M.H. Frasca, MHB Geological Services, Sao Paulo, Brazil

9:15 AM **Freeze-Thaw Resistance Test Mechanics for Dimension Stone: A Study of the Influence of Variant Wetting Procedures during Exposure Cycling on Mechanically Determined Flexural Strength of Stone**
S. Scallorn, Natural Stone Institute, Oberlin, OH, USA

9:45 AM BREAK

SESSION 2: PANEL BEHAVIOR AND ATTACHMENTS

10:00 AM **Improving the Resistance of Lightweight Stone Panels to Fatigue, Fire and Meteorological Events**
C. Satche, Cel Components S.r.l., Villanova di Castenaso, Bologna, Italy

10:30 AM **Evaluation and Avoidance of Stone-Faced Honeycomb Panel Failures**
D. Kneezel, Wiss, Janney, Elstner Associates, Inc., Northbrook, IL, USA, and J. Scarpelli, PROSOCO, Bloomington, IL, USA

11:00 AM **Adhesive Attachments: An Examination of Epoxy and Limestone Anchors**
J. Freedland, Bulley & Andrews, Chicago, IL, USA

11:30 AM **Restoring a Marble Masterwork Using Anchors with Staged Adjustments to Micrometers**
M. Lewis, Facade Forensics, Inc., Cincinnati, OH, USA

12:00 PM LUNCH (on your own)

1:00 PM Opening Remarks
Charles Muehlbauer, Symposium Co-Chair

SESSION 3: PAVING SYSTEMS

1:15 PM **Non-Uniform Wetting/Drying Behavior of Exterior Granite-Slab Pavers: An Interchange**
J. Karras, Simpson Gumpertz & Heger, Inc., Washington, D.C., USA

1:45 PM **Structural Evaluation of Mortar or Sand Set Dimension Stone Pavers: Using a Probability of Failure Approach**
D. Kneezel, Wiss, Janney, Elstner Associates, Inc., Northbrook, IL, USA

2:15 PM **A New Methodology for Evaluating the Freeze/Thaw Durability Performance of Dimension Using WUFI**
M. Scheffler, Wiss, Janney, Elstner Associates, Inc., Northbrook, IL, USA

2:45 PM BREAK

SESSION 4: DURABILITY

3:00 PM **An Investigation of Suspected Salt Crystallization Deterioration of Fine-Grained Limestone Used as Architectural Cladding**
L. Blank, Raths, Raths & Johnson, Inc., Willowbrook, IL, USA

3:30 PM **Evaluating the Potential for Limestone Discoloration using Accelerated Weathering Testing and Petrography**
S. Carter, Simpson Gumpertz & Heger, Inc., Waltham, MA, USA

4:00 PM **A 21st Century Marble Revival: How Testing and Quality Assurance Can Make Marble a Durable Option for Exterior Cladding**
B. Schouenborg, RISE Research Institutes of Sweden, Department of Built Environment, Borås, Sweden

4:30 PM CLOSING REMARKS

5:00 PM SYMPOSIUM ADJOURNS