SYMPOSIUM ON DIMENSION STONE USE IN THE BUILT ENVIRONMENT

Sponsored by ASTM Committee C18 on Dimension Stone

April 1-2, 2020
Boston Marriott Copley Place
Boston, MA, USA

Symposium Chair: Steven Naggatz
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.

Papers selected for the Symposium on Dimension Stone Use in the Built Environment will be presented over two half-day segments on Wednesday afternoon and Thursday morning. Sponsored by ASTM Committee C18 on Dimension Stone, the symposium will be held at the Boston Marriott Copley Place in Boston, MA in conjunction with the April 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
- Durability
- Paving Systems
WEDNESDAY, APRIL 1, 2020

1:00 PM
Opening Remarks
Steven Naggatz, Symposium Chair

SESSION 1: TEST METHODS

1:15 PM
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, Raths, Raths & Johnson, Inc., Willowbrook, IL, USA

1:45 PM
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

2:15 PM
S. Scallorn, Intertek, York, PA, USA

2:45 PM BREAK

SESSION 2: PANEL BEHAVIOR AND ATTACHMENTS

3:05 PM
Improving the Resistance of Lightweight Stone Panels to Fatigue, Fire and Meteorological Events
C. Sache, Cel Components S.r.l., Villanova di Castenaso, Bologna, Italy

3:35 PM
Evaluation and Avoidance of Stone-Faced Honeycomb Panel Failures
D. Kneezel, Wiss, Janney, Elstner Associates, Inc., Northbrook, IL, USA

4:05 PM
Adhesive Attachments: An Examination of Epoxy Anchors and Limestone
J. Freedland, Wiss, Janney, Elstner Associates, Inc., Chicago, IL, USA

4:35 PM
Restoring a Marble Masterpiece Using Anchors with Precise Staged Adjustments
M. Lewis, Facade Forensics, Inc., Cincinnati, OH, USA

5:00 PM SYMPOSIUM ADJOURNS FOR THE DAY
THURSDAY, APRIL 2, 2020
8:00 AM
Opening Remarks
Steven Naggatz, Symposium Chair

SESSION 2: DURABILITY

8:15 AM
An Investigation of Suspected Salt Crystallization Deterioration of Fine-Grained Limestone Used as Architectural Cladding
L. Blank, Raths, Raths & Johnson, Inc., Willowbrook, IL, USA

8:45 AM
Evaluating the Potential for Limestone Discoloration using Accelerated Weathering Testing and Petrography
S. Carter, Simpson Gumpertz & Heger, Inc., Waltham, MA, USA

9:15 AM
A New Concept for Service-Life Prediction of Marble Clad Buildings
R. Barbosa, Ramboll, Department of Bridge and Tunnel Asset Management, Copenhagen, Denmark

9:45 AM BREAK

10:05 AM
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

SESSION 4: PAVING SYSTEMS

10:35 AM
Non-Uniform Wetting/Drying Behavior of Exterior Granite-Slab Pavers: An Interchange
J. Karras, Simpson Gumpertz & Heger, Inc., Washington, D.C., USA

11:05 AM
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

11:35 AM
A New Methodology for Evaluating the Freeze/Thaw Durability Performance of Dimension Using WUFI
M. Scheffler, Wiss, Janney, Elstner Associates, Inc., Northbrook, IL, USA

12:00 PM SYMPOSIUM ADJOURNS