



8th Biennial Residential Building Design & Construction Conference

Save the Date! March 18-19, 2026

**at The Penn Stater Conference Center & Hotel
in State College, Pennsylvania, U.S.**

You won't want to miss networking with the leading researchers in residential construction, hearing from two innovative keynote speakers, and sharing your own research with colleagues over two days at the 2026 RBDCC!

SUBMIT YOUR ABSTRACT BY APRIL 25

5 WAYS TO PARTICIPATE!

FULL PAPER
Published in
Proceedings
&
PRESENTATION

FULL PAPER
Published in
Proceedings
&
POSTER

**PRESENTATION
ONLY**

**POSTER
ONLY**

FULL PAPER
Published in
Proceedings
Only
*(No travel
necessary)*



Pennsylvania Housing Research Center
814-865-2341
PHRC.psu.edu



PennState
College of Engineering

@PHRCPenn State



CONFERENCE GOALS

The Pennsylvania Housing Research Center (PHRC), housed in the Department of Civil and Environmental Engineering at Penn State, is pleased to announce the 8th biennial 2026 Residential Building Design & Construction Conference (RBDCC). This conference series provides a forum for researchers, design professionals, product manufacturers, builders, developers, and other stakeholders to discuss opportunities and challenges to advance the quality of residential buildings by sharing new developments and innovations in the field. The event focuses on discussions related to recent research and innovative developments in the area of home building, with emphasis on state-of-the-art technologies, materials, methods, code developments, emerging materials, components, systems for residential construction, and new approaches in the field. This technical conference will encompass various types of residential buildings, such as single-family dwellings, multi-family buildings, mid-rise and high-rise residential building towers, factory-built and modular housing, dormitories, and hotels/motels. Furthermore, the conference has a special interest in high performance homes, different methods of construction, use of new and emerging materials and systems, sustainability, building science, and healthy homes.

SUBMISSION DETAILS

Experts from academia, architectural and engineering design firms, builders, developers, manufacturers, and government and code officials are cordially invited to submit abstracts by April 25, 2025 on all aspects of residential buildings, including the following topics:

- Additive Manufacturing and 3D Printing of Homes
- Aging-in-Place and Senior Living Housing
- Alternative Renewable Energy Generating Systems
- Bio-based Materials for Residential Construction
- Building Integrated Photovoltaic and Various Applications of PV Systems for Homes
- Building Performance Assessment, Verification Methods, and Occupant Behavior
- Building Science and Building Enclosures
- Energy Efficient Building Components
- Fire Damage and Protection
- High Performance Residential Buildings
- Indoor Air Quality
- Innovations in Green Roofs and Façade Systems
- Innovations in Residential Architecture
- Innovations in Panelized, Modular and Manufactured Housing
- Innovative and Emerging Housing Construction Methods and Systems
- Learning from the Performance of Residential Buildings under Natural Disasters
- Low-Income and Affordable Housing
- Mechanical Electrical & Plumbing (MEP) Systems
- Passive House Design Approach
- Resilient New Design and Retrofit of Existing Buildings
- Smart Home Technologies and Home Electrification
- Sustainable Housing Construction Materials and Methods
- Temporary Housing for Disaster Situations

Authors of accepted abstracts will be asked to submit their full papers for review and comments by the International Scientific Committee or other experts, and after acceptable revisions, the papers will be included in the Conference Proceedings. The Conference Proceedings will be an edited document and will require the authors of the papers to transfer copyright to PHRC for its publication with an ISBN number. By April 25, 2025, please submit abstracts through EasyChair conference management software using the link below.

Submit your abstract at
bit.ly/2026RBDCC

SUBMISSION DATES

Authors are invited to submit 200-300 word abstracts and indicate the topic area appropriate for their paper.

- Abstract Submission Deadline: **April 25, 2025**
- Abstract Acceptance Notification: **May 9, 2025**
- Full Paper Submission Deadline: **August 4, 2025**
- Full Paper Acceptance and Review Comments Notification: **October 31, 2025**
- Final Paper Deadline for Proceedings inclusion & Draft Presentations: **December 1, 2025**

At the conference, all presenters will have 20-30 minutes for a PowerPoint presentation on their paper and must bring their presentation to the conference on a USB flash drive.

Alternative Submission Options for Authors Who Do Not Wish to Submit Full Papers

Authors who would only like to have PowerPoint presentations or printed posters and not a full paper must submit their draft PowerPoint presentation or poster by January 12, 2026, for confirmation of a conference session and complete registration for the RBDCC. However, these presentations and posters will not be considered as part of the Conference Proceedings but will later be made available on the PHRC website, www.phrc.psu.edu/Publications/Past-Conference-Proceedings.aspx.

For any submission questions, authors may contact the Conference Secretariat:

Mindy Boffemmyer
Pennsylvania Housing Research Center
Lidia Manson Building, 3127 Research Drive
State College, PA 16801
(814) 865-1881
mub21@psu.edu

KEYNOTE SPEAKERS

Sarah Billington

*UPS Foundation Professor
Professor of Civil and Environmental Engineering
Senior Fellow at the Woods Institute for the Environment
Stanford University*

“From Concept to Community: Design Strategies for Sustainable Affordable Housing”

Goerg Reichard

*Professor and Head, Department of Building Construction
Associate Director of Operations, Myers-Lawson School of Construction
Preston and Catharine White Fellow
The Myers-Lawson School of Construction
College of Engineering, Virginia Tech University*

“The 7 Habits of Successful Builders of High-Performance Homes”

CONCURRENT 2026 PHRC HOUSING CONFERENCE

The 2026 PHRC Housing Conference highlights best practices, regulation, and innovation in the residential construction industry. This two-day event with multiple tracks such as codes, design application, construction management, and land development provides information and updates on issues of interest to the residential construction industry. Invited speakers present on a wide range of topics about regulation and best practices in the industry. As an attendee of the 2026 RBDCC, you are invited to mix and match with sessions at the PHRC Housing Conference.

2026 RBDCC Organization

Conference Chair

Dr. Ali Memari

*Bernard and Henrietta Hankin Chair in
Residential Building Construction*

Department of Architectural Engineering
Department of Civil and Environmental Engineering
Director, Pennsylvania Housing Research Center
Penn State
amm7@psu.edu

Conference Organizer

**Pennsylvania Housing
Research Center**



116 Lidia Manson Building
3127 Research Drive
State College, PA 16801
814-865-2341
phrc@psu.edu

Conference Secretariat

Mindy Boffemmyer

*PHRC Financial & Communications
Coordinator*
mub21@psu.edu

International Scientific Committee

Clinton Aigbavboa
University of Johannesburg, South Africa

Ben Bigelow
University of Oklahoma

Melissa Bilec
University of Pittsburgh, U.S.

Sarah Billington
Stanford University, U.S.

Ryan Bradley
University of the Witwatersrand, South Africa

Silvia Brunoro
University of Ferrara, Italy

Carlo Carbone
Université du Québec à Montréal, Canada

Kristen Cetin
Michigan State University, U.S.

Andre Desjarlais
Oak Ridge National Laboratory, U.S.

José Pinto Duarte
Penn State University, U.S.

Amal Elawady
Florida International University, U.S.

Alessandro Gaiani
University of Ferrara, Italy

Antonio García-Martínez
University of Seville, Spain

Corey Griffin
Penn State University, U.S.

Walter Grondzik
Ball State University, U.S.

Karim Hadjri
University of Sheffield, UK

Dan Hindman
Virginia Tech, U.S.

Eric Holt
University of Denver, U.S.

Lisa Iulo
Penn State, U.S.

Bohumil Kasal
Fraunhofer Wilhelm-Klauditz-Institute WKI, Germany

Mei Yung Leung
City University of Hong Kong, Hong Kong, China

Andrew McCoy
Virginia Tech, U.S.

Mahua Mukherjee
IIT Roorkee, India

Isabelina Nahmens
Louisiana State University, U.S.

Cilísia Duarte Ornelas
University of Porto, Portugal

Osman Ozbulut
University of Virginia, U.S.

Freddy Paige
Virginia Tech, U.S.

Shiling Pei
Colorado School of Mines, U.S.

David O. Prevatt
University of Florida, U.S.

Georg Reichard
Virginia Tech, U.S.

Rusty Smith
Auburn University, U.S.

Matt Syal
Michigan State University, U.S.

Fitsum Tariku
British Columbia Institute of Technology, Canada

Ioannis Zisis
Florida International University, U.S.