

4TH RESIDENTIAL BUILDING DESIGN & CONSTRUCTION CONFERENCE

FEBRUARY 28 - MARCH 1, 2018 | STATE COLLEGE, PA



ANNOUNCEMENT & CALL FOR SUBMISSIONS

ABOUT THE CONFERENCE

The Pennsylvania Housing Research Center (PHRC), housed in the Civil & Environmental Engineering Department and the Architectural Engineering Department at the Pennsylvania State University, is delighted to announce the 4th Residential Building Design and Construction (RBDC) Conference. The 4th RBDC Conference will provide a forum for researchers, architects, engineers, other design professionals, product manufacturers, builders, developers, and code officials to discuss challenges to sustainable, energy efficient, healthy, environmentally friendly, natural hazard resistant, and affordable residential construction, and share recent research findings, state-of-the-art technologies, and innovative projects and approaches in the field. This conference will focus on various types of residential buildings including single-family dwellings, multi-family multi-story apartment buildings, mid-rise and high-rise residential building towers, factory-built and modular housing, dormitories, and hotels/motels.

DETAILS ABOUT YOUR SUBMISSION

Experts from academia, A/E design firms, builders, developers, manufacturers, and government and code officials are cordially invited to **submit 200-300 word abstracts by March 15, 2017** on all aspects of residential buildings, including the following topics:

- » Aging-in-Place and Senior Living Housing
- » Alternative /Renewable Energy Generating Systems
- » Building Information Modeling (BIM) Application in Residential Construction
- » Building Integrated Photovoltaic Systems
- » Building Performance Assessment/Metrics/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/Envelope Systems
- » Innovations in Residential Architecture and Design
- » Innovations in Modular and Manufactured Housing
- » Innovative and Emerging Housing Construction Methods/Systems
- » Innovative Wall, Floor, Roof, Window, and Siding Systems
- » Learning from the Performance of Residential Buildings under Natural Disasters
- » Low-Income and Affordable Housing
- » Panelized Building Components
- » Resilient New Design and Retrofit of Existing Buildings under Natural Disasters
- » Retrofit of Existing Buildings for Energy Efficiency
- » Rural and American Indian Housing
- » Serviceability and Life Safety Damage Aspects
- » Smart Home Technologies
- » Sustainable Housing Construction Materials and Methods
- » Temporary Housing for Disaster Situations
- » Whole Building Design Approach
- » Zero-Net Energy Homes and Passive House Design

Authors of accepted abstracts will submit their full papers for review and comments by the Organizing Committee and/or Scientific Committee for inclusion in the Conference Proceedings. The Proceedings will be made available at the time of the conference in digital format on USB memory sticks for all Registrants. 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.



KEY CONFERENCE SUBMISSION DATES

Abstract Submission Deadline: **March 15, 2017**

Abstract Acceptance

Notification: **April 12, 2017**

Full Paper Submission Deadline: **August 23, 2017**

Full Paper Acceptance and
Review Comments Notification: **October 4, 2017**

Camera-Ready Final Full Paper
Deadline for Inclusion in the
Proceedings: **November 30, 2017**

At the conference authors will present a 20-30 minute Powerpoint presentation, and should bring their own presentation with them on a USB memory stick.

Please submit your 200-300 word abstract through e-mail to:

Sarah Klinetob Lowe, Conference Secretariat
slowe@enr.psu.edu

Pennsylvania Housing Research Center
219 Sackett Building
University Park, PA 16802

Phone: (814) 865-7915; Fax: (814) 863-7304

www.PHRC.psu.edu

ALTERNATIVE SUBMISSION OPTION

Authors who do not wish to submit full papers for the proceedings but would only like to submit a presentation must submit their Power Point slides by **January 22, 2018** for distribution at the conference. These Power Point slides will be included along with the Conference Proceedings on the USB memory sticks that will be distributed at the conference. These slides, however, will not be considered as part of the Conference Proceedings, but will later be made available on the PHRC website.

CONFERENCE REGISTRATION

Registration Fee for General Admission:

Until November 15, 2017: **\$450**

After November 15, 2017: **\$500**

Please register at PHRC.psu.edu under "[Conferences](#)"

KEYNOTE SPEAKERS

Prof. Dr-Ing. Bohumil Kasal

Director of the Fraunhofer Institute for Wood Research,
Fraunhofer Wilhelm-Klauditz-Institut, Germany

***"German Residential Construction:
What Can We Learn from It?"***

Professor Ryan E. Smith

Associate Dean of Research + Community Engagement
Director, Integrated Technology in Architecture Center (ITAC)
University of Utah, College of Architecture + Planning

***"Global Innovations in Residential Building:
Prefabrication, Modularization & Automation"***

LOCAL ORGANIZING COMMITTEE

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CONTACT INFORMATION

With any questions or concerns, please contact:

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CONFERENCE VENUE

The conference is a two-day event, February 28-March 1, 2018, and will be held in **The Penn Stater Conference Center Hotel in State College, PA**. Information about the hotel and location can be found at: www.thepennstaterhotel.psu.edu/ThePennStaterHotel/photo-gallery/index.cfm

INTERNATIONAL SCIENTIFIC COMMITTEE

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Joint Committee on Building Science Education, USA

Theresa Weston

DuPont, USA

Jack Willenbrock

Lancaster, PA, USA

Tom Williamson

Timber Engineering LLC, USA

CONCURRENT: 26TH ANNUAL HOUSING & LAND DEVELOPMENT CONFERENCE

The 4th RBDC Conference will be held simultaneously with the 26th Annual Housing & Land Development (H&LD) Conference, February 28 - March 1, 2018 at the Penn Stater Conference Center Hotel. Registrants for either conference may mix and match sessions with no additional registration required.

The H&LD Conference has been a successful PHRC program for over two decades with emphasis on topics of interest to developers, builders, remodelers, design professionals, planners, regulatory and code official, modular and HUD code builders, and housing product manufacturers. The presentations for the H&LD conference are by invited speakers only, whereas the RBDC Conference presentations are based on submitted abstracts and peer reviewed papers. Full details on the H&LD Conference can be found on PHRC's website at phrc.psu.edu under "Conferences".