

PHRC News



PHRC

Getting in touch

Contact us to find out more about the PHRC or to seek assistance.

www.engr.psu.edu/phrc

PHRC

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PENNSSTATE



PHRC's 10th Annual Pennsylvania Housing Conference

Mold in Houses Uniform Construction Code Update Basements & Crawlspace

Same conference...three locations:

February 20, 2002 ~ Monroeville

February 28, 2002 ~ Valley Forge

March 7, 2002 ~ State College



SAVE THE DATE!

For additional information on the Conference, visit www.engr.psu.edu/phrc.

Designing Wood Frame Buildings

The PHRC has scheduled two hands-on program on "Wood Frame Design for Buildings (NDS-97 Based)". Each program provides an overview of the basic design principles as well as opportunities to take part in problem-solving activities. It is intended for design professionals (architects and engineers), engineering staff from modular and manufactured housing, and building code officials.

Most model building codes are of limited applicability to wood frame construction. Any deviation from a simple design, such as cantilevers, goes beyond the scope of the code and references the *ANSI/AF & PA National Design Specification (NDS) 1997 for Wood Frame Construction*. This program is even more relevant as the Commonwealth of Pennsylvania moves toward adopting a statewide building code. The program was first given earlier this year in State College. Because it was very well received, we have decided to repeat it on:

**May 14 - 15 ~ Philadelphia Area
and**

May 21 - 22 ~ Harrisburg Area

For more information, please contact Mark Fortney at (814) 865-2341 or at PHRC@psu.edu.

Moisture Control Workshop

About 48 people—builders, developers, architects, educators—attended a one day workshop on Moisture Control in Buildings in Valley Forge on November 8th. This workshop consisted of a series of alternating presentations by Eric Burnett of Penn State and John Straube from the University of Waterloo in Canada.

The program before lunch was devoted to Building Science, i.e., the basic principles involved in the control of not only moisture but also heat and air into, within, across and out of the building enclosure. The afternoon sessions were directed at the performance of the enclosure components, i.e., roof systems and walls above and below grade.

The participants in the workshop were very attentive and the question and answers sessions were lively. Based on both questionnaires and individual comments, the workshop was very well received. It is likely that this workshop will be repeated probably in May 2002 in Harrisburg. Some architects and designers were interested in a workshop that was more technical and more focused on their needs. If there is enough interest in a more technical moisture control workshop, we would willingly provide one. Please let us know.

NAHB Student Chapter

This year the student chapter of the National Association of Home Builders has 29 members drawn largely from the CEE and AE Departments in Engineering and Architecture. The officers elected for this academic year are:

- Jenny Holden - President
- Josh Vallimont - Vice President
- Kelly Doyle - Secretary
- Josh Nicholson - Publicity & Habitat for Humanity
- Keith Beidel - Treasurer

This year's awards dinner was held on November 13 at the Nittany Lion Inn. Some 48 people sat down to dinner including Dean Wormley and his wife, Associate Dean Larry Burton and Andrew Scanlon and Richard Behr, the heads of the CEE and AE departments respectively. Also in attendance were Chuck Farrell, the incoming President of the Pennsylvania Builders Association (PBA), and David Sheppard, the Executive Vice-President of the PBA. Nevin Long who was accompanied by his wife, represented the Builders Association of Central Pennsylvania.

The main speakers of the evening were Richard Hankin of the Hankin Group who spoke about the development of

Eagleview near Philadelphia. Bernie Hankin was instrumental in endowing a chair in housing at Penn State and Mrs. Henrietta Hankin and Sam Hankin were also in attendance. Roger Glunt, a past president of the NAHB, talked about the National Housing Endowment and the NAHB's role in fostering education for the housing industry. The Glunt endowment funds the annual Glunt Fellowship for graduate study in housing. Jenny Holden then gave a hilarious account of her visit to the NAHB Annual Convention in Atlanta earlier this year.

The following awards were then made:

Five Travel Awards to attend the NAHB Convention in Atlanta in February 2002 to:

- Keith Beidel and Jenny Holden presented by David Sheppard on behalf of the NAHB
- Julie Masser presented by Roger Glunt on behalf of the National Housing Endowment
- Joshua Nicholson and Joshua Vallimont presented by Chuck Farrell on behalf of the PBA

Four Scholarships to:

- Kelly Doyle presented by Maurice Simpkins on behalf of the Ryland Group
- Megan Hawk presented by Nevin Long on behalf of the BA of Central PA
- Joshua Nicholson presented by Steve Shirley and Karen Caraccio on behalf of Toll Brothers
- Eric Sobel presented by David Sheppard on behalf of the PBA



J. Roger Glunt, Glunt Building Company presents Julie Masser, current Glunt Fellow, with a NHE Travel Award

Calendar of Events

ACRONYMS: MHRC—Modular Housing Resource Center
WTC—Pennsylvania Weatherization Training Center
MHTI—Modular Housing Training Institute

PHRC—Pennsylvania Housing Research Center
PCT—Pennsylvania College of Technology
CTC—Code Training Consortium

| Date | Meeting/Course/Workshop | Location | Contact Information |
|---------------------|--|--|---------------------|
| Nov. 27 - 28, 2001 | WTC - Diagnosing Moisture Problems | Pennsylvania College of Technology | PCT-(570) 327-4768 |
| December 4 - 7 | WTC - Home Energy Auditing | Pennsylvania College of Technology | PCT-(570) 327-4768 |
| December 7 - 8 | Comprehensive IRC Program | Builders Association of Northwestern PA | PHRC-(814) 865-2341 |
| December 11-12 | MHRC-Fundamentals of On-Site Completion | Bus. & Tech. Resource Ctr. at Penn College | PCT-(570) 327-4768 |
| December 11-12 | MHTI Course | Pennsylvania College of Technology | PCT-(570) 327-4768 |
| December 11 & 18 | Comprehensive IRC Program | HBA of Chester and Delaware Counties | PHRC-(814) 865-2341 |
| December 12 | BOCA/CABO Transition Program | BIA of Lancaster County | PHRC-(814) 865-2341 |
| December 13 - 14 | Comprehensive IRC Program | Lebanon County Builders Association | PHRC-(814) 865-2341 |
| December 19 | BOCA/CABO Transition Program | HBA of Chester and Delaware Counties | PHRC-(814) 865-2341 |
| December 21 | BOCA/CABO Transition Program | Lebanon County Builders Association | PHRC-(814) 865-2341 |
| January 8 - 9, 2002 | MHTI Course | Pennsylvania College of Technology | PCT-(570) 327-4768 |
| January 9 | CTC Meeting | Mechanicsburg, PA | PHRC-(814) 865-2341 |
| January 10 & 17 | Comprehensive IRC Program | Wayne County Builders Association | PHRC-(814) 865-2341 |
| January 11 & 12 | Comprehensive IRC Program | Central Susquehanna Builders Association | PHRC-(814) 865-2341 |
| January 15 & 22 | Comprehensive IRC Program | Lawrence County Builders Association | PHRC-(814) 865-2341 |
| January 16 - 17 | MHRC-Fundamentals of On-Site Completion | Bus. & Tech. Resource Ctr. at Penn College | PCT-(570) 327-4768 |
| January 16 & 23 | Comprehensive IRC Program | Franklin County Builders Association | PHRC-(814) 865-2341 |
| January 24 - 25 | Comprehensive IRC Program | Lehigh Valley Builders Association | PHRC-(814) 865-2341 |
| January 29 - 30 | Comprehensive IRC Program | Berks County Builders Association | PHRC-(814) 865-2341 |
| February 6 - 7 | Comprehensive IRC Program | Builders Association of Adams County | PHRC-(814) 865-2341 |
| February 12 - 13 | MHTI Course | Pennsylvania College of Technology | PCT-(570) 327-4768 |
| February 14 | Energy Code Training Program | BIA of Lancaster County | PHRC-(814) 865-2341 |
| February 20 | 10th Annual PA Housing Conference | Radisson Hotel Pittsburgh—Monroeville, PA | PHRC-(814) 865-2341 |
| February 20 - 21 | Comprehensive IRC Program | Greater DuBois Area Builders Association | PHRC-(814) 865-2341 |
| February 20 - 21 | MHRC-Fundamentals of On-Site Completion | Holiday Inn—Carlisle, PA | PCT-(570) 327-4768 |
| February 28 | 10th Annual PA Housing Conference | Adams Mark Hotel—Philadelphia, PA | PHRC-(814) 865-2341 |
| March 7 | 10th Annual PA Housing Conference | Nittany Lion Inn, State College, PA | PHRC-(814) 865-2341 |
| March 13 - 14 | Comprehensive IRC Program | Mercer County Builders Association | PHRC-(814) 865-2341 |
| March 13 - 14 | MHTI Course | Pennsylvania College of Technology | PCT-(570) 327-4768 |
| March 14 & 21 | Comprehensive IRC Program | York County Builders Association | PHRC-(814) 865-2341 |
| March 19 | BOCA/CABO Transition Program | BIA of Lancaster County | PHRC-(814) 865-2341 |
| March 20 - 21 | Comprehensive IRC Program | Carbon Builders Association | PHRC-(814) 865-2341 |
| March 26 & 27 | Comprehensive IRC Program | Blair County Builders Association | PHRC-(814) 865-2341 |
| April 3 & 10 | Comprehensive IRC Program | Franklin County Builders Association | PHRC-(814) 865-2341 |
| April 11 | PHRC Spring Advisory Council Meeting | State College, PA | PHRC-(814) 865-2341 |
| April 16 - 17 | Comprehensive IRC Program | Elk/Cameron County Builders Association | PHRC-(814) 865-2341 |
| April 16 - 17 | MHRC-Fundamentals of On-Site Completion | Holiday Inn—Bethlehem, PA | PCT-(570) 327-4768 |
| April 24 - 25 | MHRC-Fundamentals of On-Site Completion | Holiday Inn Express—Wilkes-Barre, PA | PCT-(570) 327-4768 |
| May 14 - 15 | NDS Training Workshop | Philadelphia Area | PHRC-(814) 865-2341 |
| May 15 - 16 | MHRC-Fundamentals of On-Site Completion | Mountain View Inn—Greensburg, PA | PCT-(570) 327-4768 |
| May 16 - 17 | Comprehensive IRC Program | West Branch Susquehanna Builders Assoc. | PHRC-(814) 865-2341 |
| May 20 - 21 | NDS Training Workshop | Harrisburg Area | PHRC-(814) 865-2341 |
| July 24 | CTC Meeting | Mechanicsburg, PA | PHRC-(814) 865-2341 |
| October 10 | PHRC Fall Advisory Council Meeting | Harrisburg, PA | PHRC-(814) 865-2341 |
| October 16 | CTC Meeting | Mechanicsburg, PA | PHRC-(814) 865-2341 |

Training, Education and Development Specialist

The **Pennsylvania Housing Research Center** at The Pennsylvania State University invites applications for a new position as **Training, Education, and Development Specialist**. The position will be responsible for providing leadership and direction for the development, implementation and management of technical training programs for builders, remodelers, design professionals and building code officials. Topics may include residential and commercial building codes, energy efficiency, alternative building systems and housing technology and applied building science.

This position will also identify opportunities and develop proposals for funding of training programs, and assist in the management, implementation and administration of contracts. Additional responsibilities include writing technical reports and correspondence, serving as liaison with state and federal agencies, trade and professional associations, and individuals associated with the construction industry.

Work Related Experience: Construction related experience and building code enforcement experience; strong communications skills are required.

Interested applicants should submit a resume, a statement of interest, and the names of three references to the PHRC, Box A, 219 Sackett Building, University Park, PA. Applications will be considered until the position is filled. [Review of applications will begin December 17.](#)

Director: Factory Built Housing Programs

The Director will work closely with the Factory Built Housing clients of the Pennsylvania Housing Research/Resource Center. This person will be responsible for all the factory built housing initiatives involving the PHRC at Penn State and at Penn College. The responsibilities are to provide assistance in industry research and development, publish reports and data, and address industry-related problems. Minimum qualifications include a Bachelor Degree in Construction and Design Technologies or a related discipline, or an equivalent combination of education and experience in management and education; five or more years of production, technical, or operations management experience within the factory built housing industry; and experience in the management of federal programs and with residential construction principles and building methods. Nationwide and state-wide travel will be required.

Submit a completed College application and a letter of interest, resume, and names, addresses, and telephone numbers of three professional references to: **Human Resources (47), Pennsylvania College of Technology, One College Avenue, Williamsport, PA 17701**. Also see the website at www.pct.edu/humareso/stafjobs.htm or call (570) 327-4770. Position will remain open until a suitable candidate is identified.

Projects for 2002

Each year, the Pennsylvania Housing Research Center (PHRC) seeks to identify projects that collectively satisfy the needs of the home building industry. Projects must be affordable and feasible, given the resources available, and be a balanced program of projects that address both the long and the short-term needs of all sections of the industry.

This PHRC work plan is the result of input and assistance from numerous individuals and groups. The PHRC Advisory Council and the Operations Committee, in particular, make the final choice of topics. These housing industry-based bodies consist of manufacturers and suppliers, builders, remodelers, industry associations, and government agencies.

Projects planned for 2002 include:

Training Technical Assistance and Outreach

- Workshops
- Builder Briefs
- Moisture and Enclosure Design Handbook
- Building Code Workshops
- Annual PA Housing Conference
- Speaker Service

Land Development

- Site Improvement Standards
- Innovative Land Development

Factory Built Housing

- Technical Concerns for the Modular Housing Industry
- Support for the MHRC and the MHTI
- Cost Estimation and Comparison
- Quality Assurance for Factory Based Housing

Applied Research

- Atlas for Weather and its Impact on Buildings in PA
- Moisture Control in Wall Systems
- Steel Frame Construction
- Convective Drying in Wall Systems
- Properties of Structural Composite Lumber

Publications, Reports and Software

The PHRC offers a series of reports and publications to the general public. The following is a brief list of some of our recent reports:

| Reports | | |
|--|---|--|
| Report Number | Title | Price |
|  | Training Manual-Pennsylvania's Uniform Construction Code (UCC) (ACT 45 of 1999) and 2000 International Residential Code (IRC)~ "Just tell me what I need to know!" | \$50.00 |
|  | Code for the Conservation of Space Conditioning Energy for Housing in PA: <i>The PHRC Alternative to Chapter 11, Energy Efficiency, of the IRC 2000 for use in PA</i> | \$12.00 |
| 72 | Energy Code Provisions for the use of Light-Gauge Cold Formed Steel Framing | \$25.00 |
| 71 | Evaluation of Energy Code Trade-offs for Pennsylvania | \$25.00 |
| 70 | Thermal Envelope Assessment of Energy Code Provisions for Pennsylvania | \$25.00 |
| 69 | Climate Zones for Energy Conservation in Pennsylvania | \$25.00 |
| 68 | Glazing Proportions for New Housing in Pennsylvania | \$25.00 |
| 66 | Residential Site Improvement and Subdivision Design Standards: A Review | \$25.00 |
| 65 | Training and Education Needs Assessment for the Home Building and Remodeling Industry in Pennsylvania | \$25.00 |
| 62 | Marketing Modular | \$25.00 |
| 61 | Building Code Training Needs in Pennsylvania | \$25.00 |
| 59 | The Use of Housewrap in Walls: Installation, Performance and Implications | \$25.00 |
| 58 | Steel-Stud-Framed Wall Systems | \$25.00 |
| 56 | The Importance of Modular Housing in Pennsylvania | \$25.00 |
| 55 | Economic Assessment of Basement Insulation | \$25.00 |
| 53 | Flood Damage to Basements: a Starting Point | \$25.00 |
| 52 | A Builder's Guide to Modular Housing | \$25.00 |
| 51 | Foundation Wall Systems for Houses | \$25.00 |
| 50 | Below-Grade Construction: Issues and Needs | \$25.00 |
| Briefs | | |
|  BB0301 | Builder Brief — Mold | Downloadable for free at www.engr.psu.edu/phrc |
| TB0201 | Technical Brief — Site Design Considerations for Manufactured Housing | |
| TB0101 | Technical Brief — Soil Freeze Depth Guide for Manufactured Housing in PA | |
| BB0201 | Builder Brief — Blower Door Testing | |
| RB0199 | Research Brief — Composite Action and Floor System Stiffness | |
| BB0199 | Builder Brief — New and Improved Basement Wall System | |
| Software | | |
| 54 | Evaluating the Costs of Modular and Stick-Built Construction Using ACE (includes a copy of Report #52 - A Builder's Guide to Modular Housing) | \$125.00 |

For a complete list of PHRC reports and publications, visit our website at www.engr.psu.edu/phrc. Executive summaries of each of the reports are also available on-line for your review. These reports can be ordered by calling (814) 865-2341. Payment methods include Master Card, Visa, or company or check.

We're on the Web
www.engr.psu.edu/phrc/

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Speaker Service

The PHRC offers a Speaker Service for groups or organizations related to the housing industry. The presentations range from ½ hour to 1½ hours and usually focus on technical issues of interest for the particular group.

Over the past 12 months the PHRC has provided 27 programs to over 2,160 individuals in the housing industry. Topics have included: *The use of steel studs in houses*, *Crawlspace design to avoid moisture problems*, and *Overview of the PA Uniform Construction Code*. This service is available at no charge to member industry groups. Programs are scheduled on a time available basis. For more information call Mark Fortney at (814) 863-2366.

Membership

A portion of the financial support for the PHRC is obtained from membership fees. Financial and other forms of support for the PHRC are very important. Industry-based funding, individual or corporate or association, is critical for our continued operation. We warmly welcome the new members of the PHRC. We thank new and existing members for their support of the PHRC and its efforts to serve the home building industry in PA.

New Members

Benjamin Obdyke Incorporated
Pennsylvania Housing Finance Agency

Current Members

Blair County Builders Association
Cedar Knoll Associates
Celotex Corporation
CertainTeed Corporation
Comfort Home Corporation
Curtis E. Schneck, Inc.
Dow Chemical Company
DuPont Nonwovens
Franklin County Builders Association
Glunt Building Company, Inc.
Greater Dubois Builders
HBA of Chester and Delaware Counties
HBA of Metro Harrisburg
Lackawanna Home Builders Association
Lebanon County Builders Association

Lebanon County Planning Department
Lehigh Valley Builders Association
Liberty Homes Custom Builders
Middle Department Inspection Agency
Nolen Companies, Inc.
PA Concrete Masonry Association
PA Dept of Community & Economic Development
PA Manufactured Housing Association
Pennsylvania Builders Association
Pocono Builders Association
Ryland Group, Inc.
S&A Custom Built Homes, Inc.
Trus Joist
York County Builders Association