Residential Building Committee
Meeting Minutes
Orlando Winter Meeting
January 25, 2016

These draft minutes have not been approved and are not the official, approved record until approved by this committee.

### Attendance

**Members Present:**
- Max Sherman (Chair)
- Chris Mathis (Vice-Chair)
- Costas Balaras
- Robert Bean
- Charles Culp
- Steven Emmerich
- Philip Fairey
- Paul Francisco
- Roger Grochmal
- Neil Leslie
- Dan Pettway
- Iain Walker
- Dan Int-Hout (ExO)

**Members Not Available:**
- David Lee
- Theresa Weston
- Glenn Hourahan (Consultant)
- Jim Vallort (CO)

**ASHRAE Staff**
- Lilas Pratt (Staff Liaison)
- Mark Ames
- Jim Scarborough

**Guests:**
- Tim Beggs (SubC Member)
- John Cohen
- Audrey Dupuis
- Pat Graef
- Paul Haydock (SubC Member)
- Mark Miller
- Manalee Nabar
- Wayne Reedy
- David Springer
- Chris Van Rite
- Eric Werling
- Peter Wouters

### Principal Motions

**Motion #1:** Culp moved that RBC endorse a request from GGAC for the development of one-page information sheets on residential focused standards.

**Vote:** Passed by unanimous voice vote.

**Motion #2:** Programs subcommittee moved that Tech Council approve a $5000 line item added to the RBC budget to fund travel expenses for highly qualified speakers with hardship situations who do not traditionally attend ASHRAE meetings.

**Vote:** Motion passed 10-0-1, CNV

**Motion #3:** Publications subcommittee moved that the specifications from the subcommittee be presented to the AEDG SC.

**Vote:** Motion passed 11-0-0, CNV

**Motion #4:** The Technical Subcommittee moved that RBC co-sponsor the SPPC 62.2 Unvented Combustion Device RTAR.

**Vote:** 11-0-0, CNV

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1 All motion votes are listed as yes-no-abstain.
### New and Open Action Items

**January 25, 2015 Chicago Winter Meeting**

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**April 17, 2015 Conference Call**

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**October 2, 2015 Conference Call**

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**January 25, 2016 Orlando Winter Meeting**

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Meeting Minutes

Monday, January 25, 2016, 9:00am-12:00pm

1. Call to Order – Meeting convened at 9:05am EST
   a. Robert’s Rules of Order
   b. ASHRAE Code of Ethics [www.ashrae.org/codeofethics]
   c. Committee Structure
      • Max Sherman encouraged Subcommittees to add members from outside the committee as needed and noted that an approval process for this will be added to the MOP.

2. Review of Agenda
   • No changes or additions

3. Approval of minutes (Sherman)
   a. Minutes approved without changes (minutes sent via email on 1/5/2016).

4. Liaison Reports
   a. Marketing and Communications (Attachment A)
      • Jodi Scott sent the update in Attachment A via email prior to the meeting.
   b. Programs
      • Neil Leslie reported that the Program Subcommittee is working on potential sessions for the technical program at the St Louis Annual meeting.
      • He also noted that there were four technical sessions at the Expo that are open to the public so as to generate interest in ASHRAE activities.
      • There are plans to do the same thing in Las Vegas in January 2017 with 3 to 4 residential themed sessions. The subcommittee will be working with John Cohen to develop content for this special track – need initial input by April 2016.
      • There is a potential tie-in between this special track and a special Journal issue focused on residential that is tentatively scheduled for February 2017.
      • One of the sessions might be to highlight the results from the planned stakeholders workshop in September 2016.
   c. Staff Report
      • Lilas Pratt reported that the contractor for the Standard 62.2 User’s Manual is being approved at this meeting. The work is expected to begin in March.
      • Work on the Standard 55 User’s Manual is somewhat stalled but the final document is expected to be completed by the St Louis meeting at the latest.
   d. Report from Executive Officer (Attachment B)
      • Dan Int-Hout provided the presentation in Attachment
   e. Washington Office Report (Attachment C)
      • Mark Ames and Jim Scarborough gave a presentation on the current activities and priorities of the Grassroots Government Advocacy (GGAC) committee.
      • Chris Mathis noted that RBC will have lots of action items for GGAC in regards to advocacy in the residential area that will benefit ASHRAE members.
• The committee discussed how GGAC and RBC should interact and share information moving forward. Specifically, it was noted that GGAC could use a one page write-up on residential focused standards.
• The DOE Residential Energy Code Field Study Data has been completed. The results will be sent to the committee with the meeting minutes.

Motion #1: Culp moved that RBC endorse a request from GGAC for the development of one-page information sheets on residential focused standards.
Discussion: Mark Ames has a template of the kind of information that is needed. These sheets would help support the government affairs efforts to promote these standards in legislation.
Vote: Passed by unanimous voice vote.

AI 1: Pratt to send the government affairs listserve link to the RBC committee (Note: Link sent via email on 2/10/2016).
AI 2: Mark Ames to send Pratt a link to the coalition for distribution to the RBC committee.
AI 3: Mark Ames/Jim Scarborough to provide information to Sherman for possible inclusion on the RBC website.
AI 4: Mark Ames to send a template for a standards information one-pager to Pratt.

5. Old Business
   a. Review of Action Items (Attachment D)
      • See Attachment D.

AI 5: Mathis to send a copy of the draft residential Distinguish Lecturer (DL) presentation to the RBC committee for review and feedback.

6. Subcommittee Reports
   a. Conferences (Attachment E)
      • Chris Mathis reported on several topics from the subcommittee meeting. Additional details are shown in the subcommittee notes in Attachment E.
      • Thermal Envelope Conference
      • IAQ 2016
         ▪ Paul Francisco noted that sessions are being sought for IAQ 2016 that are not based on a paper. This is the first time that ASHRAE has done this at a specialty conference. The intent is to give practitioners a chance to present on what is happening in the industry without requiring them to write a paper.
         ▪ There is not currently a way to archive these sessions, so there is discussion about making their presentations available.
         ▪ Eric Werling noted that he will be attending the IAQ steering committee meeting this week and will take the concerns of this committee to that meeting.
      • RBC Activities at other ASHRAE conferences and events
      • Support of Stakeholders workshop
   b. Programs
      • Neil Leslie explained that the Planned approach for technical sessions has been to go into TC program subcommittee meetings and ask them to take ownership of some residential content, so that the TC’s own the content and RBC encourages and supports
      • Orlando Meeting Sessions – Mr. Leslie noted that there is a residential track at this conference. There was a concerted effort to make this happen and the result was a strong content for the
program. Additional participation is needed to maintain this level of effort for future conferences.

- St Louis Meeting Sessions – There is a February 8 deadline for seminars. One item under consideration is a Forum “Who cares about multi-family housing.” Chris Mathis will help write the abstract.
- Las Vegas Meeting Sessions – Special Track to be conducted at AHR Expo
  - Neil Leslie noted that several different approaches were possible for building the track requested by CEC (John Cohen, Programs Chair) – free sessions at Expo.
  - The suggested process is to identify people (individuals) first and then identify a topic through discussion with those people. The goal is to get non-traditional attendees (such as ACCA) involved.
  - Conference Paper Abstracts are due March 14, 2016.
  - Seminar, Forum and Workshop Proposals are due August 8, 2016.
- Travel questions – The lack of compensation for travel expense reimbursement for speakers at ASHRAE conferences may be inhibiting the ability of this committee to line up high quality speakers. The subcommittee would like to request a travel budget to fund non-traditional speakers for ASHRAE events.

**Motion #2:** Programs subcommittee moved that Tech Council approve a $5000 line item added to the RBC budget to fund travel expenses for highly qualified speakers with hardship situations who do not traditionally attend ASHRAE meetings.

**Discussion:**
- Candidates would be selected by this committee, a process for this would need to be added to the MOP. This budget amount would likely cover about three speakers per year.
- This line item is different from the proposed budget line item for members of this committee to attend other conferences or programs.
- The background to the motion should include an example such as the California Energy Commission staff who are unable to get funding to travel out of state.

**Vote:** Motion passed 10-0-1, CNV

*(Note: Technology Council subsequently approved this budget request on an annual basis with a 5 year sunset clause and requested that RBC develop appropriate procedures for selection and tracking of this program.)*

c. Publications (Francisco)

- Paul Francisco reported on several topics from the subcommittee meeting.
- Publications Gap Analysis
- Residential AEDG Scope – The Subcommittee had been asked to provide some scope details to the AEDG Steering Committee on residential buildings. They agreed that there is a gap for multi-family design guidance. If Standard 90.1 is the baseline, it makes sense to focus on mid-rise and high-rise construction.

**Motion #3:** Publications subcommittee moved that the specifications from the subcommittee be presented to the AEDG SC.

**Discussion:** The subcommittee recommends that the final document be provided as a free download. The specifications are to be sent to the AEDG SC are as follows:

- Building types to be covered and excluded
There is a lot of guidance for high performance design of single family residential buildings, but there is a gap in design guidance for multi-family residential buildings. The definitions should look to Standard 90.1, so that they agree with building codes. Low rise is defined as three stories or less; mid-rise defined as four to eight stories, and high-rise is over 9 stories. First priority should be multi-family buildings comprised of apartments (mid-rise and high-rise). Second priority should be Multi-family apartment buildings (low/mid-rise).

- System types to be covered and excluded
  - Served by on-site conditioning systems/fuels (e.g. not district heating)
- Targeted audience (e.g., developers, home owners, etc)
  - Contractors, designers, developers, program developers/administrators
- Baseline to be used and % savings suggested from that baseline (i.e. 30%, 50%, etc).
  - 50% better than 90.1-2004
  - With all recommendations to be at least as stringent as 90.1-2016
  - Recommend checking current levels for Multi-Family in IECC 2015
- Organizations to be included in development
  - ASHRAE, AIA, IES, USGBC, DOE, HUD, NAHB, HIRL
- Potential Funding sources
  - DOE, HUD, EPA, DOD

Vote: Motion passed 11-0-0 CNV

**Al 6:** Pratt to send scoping specifications for an AEDG residential guide to the AEDG Steering Committee.

- Residential Professional Development Course – The Subcommittee was asked to review an outline for two separate courses from the Professional Development Committee (PDC). The original outline had too much information for presentation in too short a time frame. The subcommittee has provided feedback to the PDC.
- Journal/Periodical Articles
  - Paul Francisco noted that there will be a full Journal focused on residential for February 2017. It is intended to cover a broad spectrum of issues. The issue will need roughly 15,000 words broken up amongst multiple articles. The deadline for all articles is October 2016 in order to allow for the peer reviews.
  - A periodic column (quarterly) on residential was also discussed. The first column is proposed for the May 2016 issue first. A write-up with 1500 words is due in March.
- Volunteers are needed for both these items.

**Al 7:** RBC Committee members to send Paul Francisco ideas for topics and speakers for both the residential Journal issue and the residential Journal column.

d. Stakeholders ([Attachment F](#))

- Dan Pettway reported on the status of the Stakeholders Workshop planning. Additional details from the subcommittee meeting are shown in Attachment F.
- Stakeholders List – sent to committee
- Stakeholder Workshop
  - A theme was selected for the workshop: *Partners for an Evolving Housing Market.*
  - The subcommittee discussed whether the workshop should be help in September in conjunction with IAQ 2016. That conference is a Monday to Wednesday event.
The desired level of attendance at the workshop was also discussed. The current budget will cover an attendance limited to 125 people. If the committee wants to open it up to more people, there may need to be a small registration fee to cover costs.

The consensus is that the attendance should be limited to a specific invitee list.

- RMI Residential Energy Workshop – a recap of this workshop will be sent to the committee with the meeting minutes.

**AI 8:** RBC Committee members to review Stakeholder Subcommittee notes on the planned workshop and the stakeholders list to provide feedback to Dan Pettway.

e. Technical ([Attachment G](#))
   - Phillip Fairy reported briefly on several issues. Additional details are shown in the subcommittee notes in Attachment G.
   - ICC 700
   - Multi-Family IECC (NBI)
   - Water Efficiency Rating Index (RESNET)
   - Thermal Comfort Ratings (IBACOS) – Mr. Tim Beggs from IBACOS has joined the technical subcommittee and reported on the Thermal Comfort Rating Metric (TCRM), a thermal comfort based asset rating for homes. Details on the program on shown in the [IBACOS presentation slide](#) in Attachment G
   - SSPC 62.2 Unvented Combustion Device RTAR

**Motion #4:** The Technical Subcommittee moved that RBC co-sponsor the SPPC 62.2 Unvented Combustion Device RTAR.

**Discussion:**
- There is a position document on this issue. EHC is already a co-sponsor for the RTAR and TC 2.3 has been approached as another potential co-sponsor.
- While the RTAR is fairly broad based, the core of the project is for a field study to develop actual data rather than use presumed data, looking at existing devices to inform Standard 62.2.
- The American Gas Association is looking to co-fund this as long as scope is not too broad.

**Vote:** 11-0-0, CNV

7. New Business – Discussion Deferred
   a. 2016-17 Budget Review ([Attachment H](#))
   b. Manual of Procedures
   c. RBC PowerPoint
   d. Distinguished Lecturers for Residential
   e. RMI Residential Energy ([http://www.rmi.org/residentialenergyplus](http://www.rmi.org/residentialenergyplus))

8. Close of Meeting
   a. Review of Open Action Items

9. Adjourn – **Meeting Adjourned at 12:00pm EST**
Committee Roster:

Voting Members:
- Max H Sherman (Chair)
- R Christopher Mathis (Vice chair)
- Constantinos A Balaras
- Robert Bean
- Charles H Culp III
- Steven J Emmerich
- Philip W Fairey
- Paul Francisco
- Roger D Grochmal
- David F. Lee
- Neil P Leslie
- Daniel C Pettway
- Iain S Walker
- Theresa A Weston

Non-Voting Members:
- Glenn C. Hourahan (Consultant),
- James K Vallort (Coordinating Officer)

Subcommittees:
- Conferences: Weston (Chair), Balaras, Lee, Walker
- Programs: Leslie (Chair), Balaras, Grochmal, Walker
- Publications: Francisco (Chair), Bean, Emmerich, Haydock, Hourahan
- Stakeholders: Pettway (Chair), Culp, Grochmal, Hourahan, Lee
- Technical: Fairey (Chair), Bean, Culp, Emmerich, Haydock

Return to Minutes
From: Scott, Jodi
Sent: Tuesday, January 19, 2016 11:57 AM
To: Max Sherman
Cc: Pratt, Lilas; Chris Mathis; Comstock, Steve; Scott, Jodi
Subject: RE: Residential PR Activities

All
Here is a quick summary of PR activities related to residential. I’m copying Steve because his group may have more marketing items related to publications/education.

Jan. 6 – a news release was distributed highlighting residential sessions at the 2016 Winter Conference
Sept. 16, 2015 – a news release was distributed - Compliance Path based on Use of Filtered Recirculated Air Proposed for ASHRAE Residential IAQ Standard
Sept. 2, 2015 – a news release was distributed - New Residential IAQ Guideline Contains Changes Regarding Use of High Efficiency Filters

Sept. 4 – received a media enquiry from Good Housekeeping: Industry professional for story on humidifiers
Jan. 8, 2015 – Max Sherman media interview on common myths on residential heating. (This story deemed one of top read articles in ASHRAE’s eIndustry newsletter for 2015)

Jodi Scott | Communications Manager

Return to Minutes
ASHRAE Update

ExO Report to Committees

Strategic Plan: Next Step

- Moving to implement Strategic Plan Initiative 4, Expanding ASHRAE’s Role in Global Community
- Studied two geographic areas as pilots on where ASHRAE should expand
  - Europe as mature market
  - Middle East as emerging market
- Final recommendation for a business plan has been submitted to Planning and Board of Directors at this Conference
- Board to consider how and in what manner to proceed for expanding global presence

Presidential Ad Hoc: Impact of Centralized Training on CRCs

- Charge: consider effect of centralized training on attendance at Chapters Regional Conferences (CRCs)
- Gathered data and statistics related to attendance at CRCs and Centralized Trainings
- Surveyed past Membership Promotion and Research Promotion Committee chairs to get feedback on experiences
- To present findings at 2016 Winter Conference

Presidential Ad Hoc: Chapter Volunteerism and Engagement

- Developing an easily replicated plan to mobilize, engage, and inspire chapter volunteers to bring the message of ASHRAE’s mission to the broader community
- Identified three broad areas for further investigation (titles are preliminary and descriptive only)
  - Mentoring/Rewards
  - Facilitating Chapter Participation/Volunteering
  - ASHRAE Message to Broader Community
- To provide final report at 2016 Annual Conference

Presidential Ad Hoc: Building Performance Alliance

- Charge: develop a strategy to create training and tools that will enable building operations staff to meet or exceed a building’s design performance potential
- Held a workshop in Washington, D.C., with 11 organizations represented
- Good feedback provided on key questions
- Final committee report expected at 2016 Annual Conference

New Tools
90.1 ECB, 90.1 Energy Cost Budget (ECB) app
- A tool for modeling compliance with ASHRAE/IES Standard 90.1-2010
  - Automates calculations needed to show a building project's compliance with Standard 90.1-2010 using the Energy Cost Budget (ECB) Method
  - Input project parameters and then calculate proposed design's projected performance and compliance—no need to build your own spreadsheet.
  - Output results in Microsoft Excel for clients and project records
  - Learn more at 901ecb.ashrae.org

Updated TC Websites
- Goal: to simplify editing process of technical committee websites
- All sites that chose to migrate are now live; ahead of previous goal of 2016 Annual Conference
- Very positive response
- Demo available at www.ashrae.org/TCWebsiteDemo

Collaborative Software and Handbook
- Launching document collaboration software for Handbook chapters
- Allows several authors to work on a document together
- Eliminates members having to email large files
- Good record of changes
- Available spring 2016

Legionella – Standard 188
- Establishes minimum legionellosis risk management requirements for building water systems
- Less than two months after publication, portions adopted in New York City following an outbreak that left at least 12 confirmed dead and more than 220 cases of infection

IAQA Update
- Discovering more opportunities for ASHRAE/IAQA collaboration: IAQ 2016, IAQ Position Document
- Full complement of staff on board
- In process of implementing reciprocal membership discounts
- Current focus is on growth of IAQA

Make Plans to Attend!
- March 14–16: 6th International Conference on Energy Research and Development: State of Kuwait
- April 21: ASHRAE Webcast, Making Net Zero Positive: Solving the Efficiency and Cost Paradox
- Jun 25-29: 2016 Annual Conference, St. Louis, Missouri
- Aug, 10-12: ASHRAE/IPSA-USA Simbuild 2016, Building Performance Modelling Conference
- Sept. 27–29: AHR Expo Mexico, Monterrey, Mexico

Return to Minutes
2016 Winter Conference

Grassroots Government Advocacy Committee

Mark Ames, Senior Manager, Federal Government Affairs
Jim Scarborough, Manager, Grassroots Government Affairs

Monday, January 25
Orlando, Florida

A Brief History of GGAC

- Problem to solve: Lots of gov’t activity occurring within ASHRAE committees (even if they didn’t realize it), little coordination or strategic planning. Effectiveness suffered.
- Formed from the old Advocacy Committee and Grassroots Government Activities Committee plus a few others.
- Unique innovation of the new GGAC is that it now has full geographic representation from all Regions and all Councils. All focused on gov’t affairs.
  - TechC Rep: David Conover
  - Pub Ed Council: Bill McQuade
  - Members Council: Erich Binder

GGAC and RBC share common goals

GGAC shall be responsible for grassroots activities and issues that relate to local, state, federal and provincial government bodies in areas of interest to ASHRAE members, in order to better coordinate efforts and understanding between ASHRAE grassroots members and local government

Orlando, Florida

Purpose of GGAC

The Residential Building Committee is responsible for identifying major residential trends impacting the practice of HVAC&R, informing the ASHRAE leadership and membership of trends and their potential impacts, making recommendations on new activities and policies in response to these trends. The committee will identify, recommend and coordinate relationships with societies and organizations that focus on residential buildings. The committee will also be responsible for implementation of the residential aspects of the Strategic Plan.

Public Policy Priorities

- Building Performance
  - Building labeling/rating
  - LEQ
  - Use of ASHRAE technology in energy disclosure programs
  - Adoption of ASHRAE standards
  - Adoption of energy codes in all jurisdictions
- Workforce Development
  - STEM education
  - Post-secondary curricula
  - Certification
  - Professional development
  - Licensure issues
    - Support licensing of professionals
    - Educational requirements for licensure
What Does GGAC Do?

• Draft and respond to legislation
• Comment on regulations
• Guide Executive-level actions
  • Assist government leaders in determining issues to focus on and establishing goals
  • Suggestions for what leaders should spotlight in stories of success or problems to address
  • Proclamations, Executive Orders, vetos

More than anything else, GGAC organizes ASHRAE members and catalyzes action.

Residential-Focused Gov’t Affairs Policymaker Educational Efforts

Promotions:
• Standard 62.2 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings
• Multifamily aspects of Standard 90.1 Energy Standard for Buildings Except Low-Rise Residential Buildings
• Standard 90.2 Energy Efficient Design of Low-Rise Residential Buildings
• Standard 103 Methods of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces
• Standard 106 Methods of Testing for Rating Seasonal Efficiency of Unitary Air Conditioners and Heat Pumps
• Standard 118.2 Method of Testing for Rating Residential Water Heaters
• Standard 119 Method of Testing for Direct Evaporative Air Coolers
• Standard 152 Method of Test for Determining the Design and Seasonal Efficiencies of Residential Thermal Distribution Systems
• Standard 164.1 Method of Test for Residential Central Air Humidifiers
• Standard 164.2 Method of Test for Self-Contained Residential Humidifiers
• Standard 180 Integration: Risk Management for Building Water Systems
• Guideline 14 Measurement of Energy, Demand and Water Savings
• Guideline 24 Ventilation and Indoor Air Quality in Low-Rise Residential Buildings
• ICC 700 National Green Building Standard

In Addition, ASHRAE Supports...

• Valuing energy efficiency & high performance in mortgage underwriting
• Property assessed clean energy (PACE)
• Resiliency
• Climate change mitigation
• Net zero energy/high performance green buildings
• Indoor environmental quality
• Building energy use disclosure & rating
• Refrigerant management
• Understanding the impacts of the Internet of Things

Discussion

What do you need from us? What can we do to help your committee?

Your Contacts in ASHRAE’s Government Affairs Office

Mark Ames & Jim Scarborough
WashDC@ashrae.org

Orlando, Florida

Return to Minutes
January 25, 2015 Chicago Winter Meeting:

- **AI 6:** Publications Subcommittee to develop a recommendation for improving general building science education. **On-going**
- **AI 8:** Conferences Subcommittee to send the Buildings Conference organizing committee proposal for CEC about increasing ASHRAE involvement to the committee. **Completed**
- **AI 9:** Programs Subcommittee to develop an approach to making information and assistance available to the chapters on ASHRAE’s current residential information. **On-going.**

April 17, 2015 Conference Call:

- **AI 2:** Mathis to develop draft MOP for the Residential Buildings Committee. **Closed.**
- **AI 3:** Technical Subcommittee to review ASHRAE’s current residential information for gaps on the topic of moisture and report recommendations for any additional guidance. **On-going.**
- **AI 6:** Technical Subcommittee to review STDs 90.1 & 90.2 for useful guidance to include in IECC’s proposed residential multi-family code and report back to Mathis. **Completed**

October 2, 2015 Conference Call:

- **AI 1:** Weston to contact Bill Bahnfleth regarding the residential content of IAQ 2016 Conference. **Complete**
- **AI 2:** All RBC members to send Neil Leslie ideas on conference/technical papers for future ASHRAE conferences. **Completed**
- **AI 3:** Publications Subcommittee (Francisco) to develop a formal proposal for a residential Handbook index for presentation to the appropriate committee under PubEd Council. **On-going.**
- **AI 5:** Subcommittee Chairs to review and update the initial Subcommittee descriptions and send to Mathis for inclusion in the Manual of Procedures (MOP). **On-going (and still needed).**
- **AI 6:** All Committee members to send content information to Mathis for inclusion in the RBC PowerPoint presentation. **Completed**
- **AI 7:** Hourahan to report back to committee on the November RMI Residential Energy meeting. **Complete**

January 25, 2016 Orlando Winter Meeting

- **AI 1:** Pratt to send the government affairs listserv link to the RBC committee (Note: Link sent via email on 2/10/2016). **Completed**
- **AI 2:** Mark Ames to send Pratt a link to the coalition for distribution to the RBC committee.
- **AI 3:** Mark Ames/Jim Scarborough to provide information to Sherman for possible inclusion on the RBC website.
- **AI 4:** Mark Ames to send a template for a standards information one-pager to Pratt.
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- **AI 7:** RBC Committee members to send Paul Francisco ideas for topics and speakers for both the residential Journal issue and the residential Journal column.
- **AI 8:** RBC Committee members to review Stakeholder Subcommittee notes on the planned workshop and the stakeholders list to provide feedback to Dan Pettway.
Residential Building Committee
Conference Subcommittee Meeting Minutes
Lake Nona Room, Orlando Hilton, Orlando, FL
January 24, 2016

The meeting was called to order at 8:30 am by Chris Mathis, substituting for Theresa Weston, Conferences Subcommittee Chair.

There were 11 people in attendance: Chris Mathis, Steven Emmerich, Dan Pettway, Max Sherman, Michael Cooper, Audrey Dupuis, Nick Giannitsanos, Tony Giometti, Art Gressler, Nick Kourakos, Chris Van Rite.

Those in attendance discussed several topics related to conferences where the Residential Building Committee (RBC) might best share ASHRAE's engagement and involvement in the residential building marketplace.

Thermal Performance of the Exterior Envelopes of Whole Buildings Conference (Buildings XIII), December 5-8, 2016 in Clearwater Beach, FL. It was noted that this was a conference where ASHRAE has long been a co-sponsor. It was also noted that many of the topics planned for presentation there addressed residential building performance issues and research. Several ideas for RBC involvement were discussed, including:

1. Seek to have an RBC representative be one of the keynote speakers or one of the plenary speakers, to highlight RBC and ASHRAE activities.
   a. Seek to do this for the upcoming meeting in December.
   b. Seek to also do this for the next conference (if held) in 3 years.
   c. One idea also included having an ASHRAE Distinguished Lecturer give a residentially-focused DL presentation. (Sherman and Mathis are working on this content.)
2. Review the accepted papers for the upcoming conference and write an ASHRAE Journal article on the residential content set for December. This article would be targeted for the November edition of the Journal. Staff advised us that we would have to target 3 months in advance to be certain of getting in the November edition, requiring this task to be completed by August.
3. ASHRAE usually sponsors the conference proceedings. How can these proceedings (website, printed, etc.) highlight RBC initiatives?

The next conference discussed was the Indoor Air Quality (IAQ) conference planned for Sept. 11 – 14, 2016 in Alexandria, VA. It was noted that the call for programs is out now. Proposals for presenting there are due March 7. Some of the ideas discussed for RBC engagement included:

1. Identify, sponsor or give residentially-focused presentations, workshops, seminars and panel discussions

It was noted that this conference is heavily focused on ventilation and that RBC interests may be substantially broader. It was also noted that we need to at least let those in attendance know about the RBC interest and activities.

The next item discussed was potential RBC activities at future ASHRAE conferences and events. Items discussed included:
1. Schedule a Forum at the St. Louis conference. Possibly on the need for new technical committees (Multi-family building performance, single family building performance, etc.).
2. One idea was to entitle the Forum “Who Cares about Multi-family Buildings?” to amplify interests.

The next topic was how we can best support the planned Residential Stakeholders Workshop. Several ideas were discussed.

1. It was acknowledged that many of the organizations that we are targeting for participation in the workshop are headquartered or otherwise have offices in the Washington, DC area, so we should again target DC for our second workshop.
2. We should give these targeted organizations at least a 90-day advance notice of the event.
3. It was noted that the Stakeholders Workshop content would be handled by others, but those assembled did mention several possible topics for consideration:
   a. ICC 700
   b. Building America Lessons Learned
   c. Standard 62.2
   d. Standard 55 in Homes
4. We discussed that piggy-backing on existing scheduled ASHRAE events may be helpful – specifically the IAQ conference in September. After some discussion we asked staff (Tony) to look at possible logistics and cost savings we might realize by scheduling the Workshop either two days before or two days after the IAQ conference
   a. September 8-9
   b. September 15-16
5. These ideas would be forwarded to the Stakeholders subcommittee.

The meeting adjourned at 9:30 am.
Respectfully,
Chris Mathis
January 24, 2016 RBC Stakeholders Subcommittee notes:

Attending: Dan Pettway, Roger Grochemal, Charlie Culp

Stakeholders List distributed to Stakeholders Subcommittee Members last week showing those invited to first workshop and those attended. Stakeholders list to be distributed to full committee for review and for adding any suggested new stakeholders

Workshop

Reviewed items from September Conference Call

Subcommittee decide on second workshop theme: Partners for an evolving housing market
3 goals -What have we done, what have other’s done, and ask more of what we need to do.

What have we done see website – duration one hour
ICC NAHB 700
AEDV for Residential
Discussions for an energy standard for multi family res
RES Building Committee
Strategic Plan

What others are doing – speakers from Stakeholders - duration half day
DOE Build America Program - 3 roadmaps managing high R enclosures, optimal comfort systems for low e homes, indoor air quality
DOE Building Science Education ACCA only provides a small part of that
ASHRAE is best to provide it
Potential speakers:
DOE, LBA, ACCA, AHRI, Home Innovation Research Lab, Building Forensics Community

Input from the stakeholders 1/2 day input
Research inquires – what should we researching?
Standards inquiries – are the existing standards adequate?

Wrap Up ¼ Day

Return to Minutes
RBC Technical Subcommittee Meeting  
ASHRAE Winter Meeting  
Orlando Hilton – Lake Nona A, Lobby Level  
January 24, 2016  
10:30 am – 11:30 am

Annotated Agenda

1. Call to Order
2. Approval of Agenda
3. Discussion Items
   - ICC 700
     □ Approved by Standards on Saturday. Goes to Board on Wednesday.
     □ Accepting continuous comments – should submit comments relative to 62.2-2016.
     □ Individual from 62.2 should be on 700 consensus committee – recommendations should go to Stephanie Reiniche
   - Multi-family IECC (NBI initiative)
     □ NBI has proposed strawman code change. SSPC 90.1 has not had discussion or taken any action on NBI strawman proposal.
   - Thermal Comfort Ratings (IBACOS initiative)
     □ Presentation by Tim Beggs of IBACOS – See IBACOS Slide Below
   - Water Efficiency Rating Index (RESNET initiative)
     □ P. Fairey provided update on RESNET actions and status
   - DOE Residential Energy Code Field Study Data (NASEO initiative)
     □ P. Fairey to send DOE presentation to SC
4. New Business
   - SSPC 62.2 Unvented Combustion Device RTAR
     □ Motion to cosponsor (Walker/Bean) passed unanimously on voice vote.
5. Adjourn
Thermal Comfort-Based Asset Rating for Homes

• As an innovation partner in the U.S. DOE’s Building America program, IBACOS has been looking at capturing the comfort performance of homes in a rating for some 10 years and is presently funded to develop and promote the concept of a thermal comfort-based asset rating for homes to work alongside residential energy ratings such as the HERS Index, and report on the need and readiness of the industry to use such a metric.
• The rating is presently dubbed the Thermal Comfort Rating Metric (TCRM).
• As envisioned, it would:
  – Rate the ability of a home and its systems to deliver thermal comfort to the occupants. arguably one of the primary purposes of shelter.
  – Consider comfort not just as something to be achieved at the thermostat at design conditions, but as a product of the home that exists in varying degrees across spaces and throughout the day and year, taking into account variables and system dynamics that homes have.
  – Give stakeholders (builders, home buyers, real-estate agents among others) a simple and consistent language to have conversations about comfort and to be able to place value upon a home's ability to deliver it. It will help them make value-based decisions, for example when comparing homes or builders.
  – Incorporate and expand the application of existing comfort criteria such as those found in Standard 55, in a way that is less unwieldy for the residential audience.
  – Exist initially as a design metric, with the possibility to be used in other ways, perhaps for existing homes and in performance assessments.
• Our aim is to justify that this is a worthy endeavor for the industry. At ASHRAE this week to promote the concept, generate interest, receive feedback, and seek industry collaboration on next steps to enhance the concept and develop a functional metric. White Paper Q1 2016.
## RBC Committee Budget Planning - FY 2016-17

**PROPOSAL UPDATE 1/11/2015**

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