Residential Building Committee Fall Web Meeting Monday, November 2, 2020

ATTENDANCE

Voting Members:		Ex-Officio Members:	
Pat Graef – Chair (2021)	X Adrienne Thomle – Board Ex-O		Х
Rick Karg – Vice-Chair (2021)	Χ	Bill McQuade – CO	Χ
Steve Baden (2022)	Χ	Lilas Pratt – Staff Liaison	
Mike Blanford (2021)	Χ		
Roy Crawford (2022)			
Bill Healy (2022)	Χ		
Glenn Hourahan (2021)	Х		
Mark Lawrence (2023)	Х		
Bjarne Olesen (2023)	Х		
Steve Saunders (2023)	Х		
Eric Werling (2021)			
Jon Winkler (2021)			

PRINCIPAL MOTIONS¹

Motion #1: Rick Karg moved, and Glenn Hourahan seconded that the meeting minutes from the June 25, 2020 Virtual Annual Meeting be approved.

Vote: Motion passed by unanimous voice vote, 7-0-0, CNV

NEW AND OPEN ACTION ITEMS

November 2, 2020 Web Winter Meeting				
1	RBC Leadership	p Identify someone to report on Standard 90.2 moving forward.		
2	Lilas Pratt	Remind Paul Francisco about his offer to share outside residential resources that he had previously assembled (see also 6/25/2020 AI #3)	New	
3	Bjarne Olesen	Circulate the first draft of the Research Strategic Plan (as developed by the RAP) to RBC for feedback when it is available.	New	

¹ All votes are recorded as yes-no-abstain.

October 22, 2020 Communications Subcommittee Meeting				
2	RBC Members	Suggest topics for potential position documents	On-going	
4	Lilas Pratt	Determine if anyone is signed up for RBC listserve	On-going	

Jun	June 25, 2020 Virtual Annual Meeting				
3	Paul Francisco	Share information on outside residential resources that he had put together previously with Internal Activities Subcommittee.	??		
4	Internal Activities Subcommittee	Work with Bjarne Olesen to provide input to the Research Advisory Panel (RAP) on the Research Strategic Plan	On-going		

MEETING NOTES

- 1. Call to Order Meeting Convened at 11:03am EST; Quorum was established
 - a. Reference Information (RBC Scope & Purpose, Acronyms)
- 2. Review of Agenda
 - An update on Guideline 24 was added to Agenda Item 8.
- 3. Review of <u>Action Items</u>
 - Regarding 6/25/2020 AI #4: Bjarne Olesen has participated in the Research Advisory Panel (RAP) meetings on the Research Strategic Plan. The first draft will be available soon. Bjarne Olesen will plan to circulate the draft to RBC for feedback.
- 4. Report from BOD Ex-Officio
 - Adrienne Thomle had nothing specific to report at this time but wanted to applaud the work that the committee has done on the MBOs to date.
- 5. Approval of meeting minutes
 June 25, 2020 Virtual Annual Meeting (File: 06-24-20 CC_RBC_MeetingMinutes_Draft.pdf)

Motion #1: Rick Karg moved and Glenn Hourahan seconded that the meeting minutes from the June 25, 2020 Virtual Annual Meeting be approved.

Vote: Motion passed by unanimous voice vote, 7-0-0, CNV

- 6. Process Subcommittee Update
 - Glenn Hourahan reviewed the activities of the Process Subcommittee so far this year as reported in the attached Subcommittee Report (<u>Attachment A</u>).
 - MBO 1.1 Determine RBC's role with the Buildings Conference
 - Bjarne Olesen has the lead on this initiative and has been in contact with Tony Giometti from Conferences and Expositions Committee (CEC).

- This MBO was identified as an immediate priority. The work is fairly far along and a process for moving forward should be close to completion by the Winter Meeting.
- MBO 1.2 Initiate the process for a new residential guideline
 - Steve Saunders has the lead on this initiative.
 - This MBO was identified as a medium priority, but an initial proposal for a Guideline Title/Purpose/Scope is fairly far along in the development process.
 - The topic being consider is on the management of humidity in residential spaces.
 - The focus has been narrowed and may be finalized at the next SubC meeting.
 - The proposal is expected to be brought to the full committee for a vote at the virtual Winter Meeting in January.
- MBO 1.3 Develop a process to collaborate with TCs to help with research RTARs and Work Statements
 - Eric Werling has the lead on this initiative.
 - The MBO is been identified as an immediate priority.
 - The intent is to determine what is the best way to make RBC available to assist the TC's in doing their work.
 - One of the crucial first steps is to define what this interaction/liaison role looks like, and to define what the expectations are for that liaison (would apply to interactions from RBC to the TCs as well as interactions from the TCs to RBC).
- MBO 1.4 Update residential information in existing ASHRAE documents
 - Jon Winkler has the lead on this initiative.
 - The MBO is considered a medium priority with a goal of developing a process that can be added to the Reference Manual.
 - An initial step is to identify which ASHRAE documents have residential content which ties this MBO to MBO 1.5.
- MBO 1.5 Develop guidance document for ASHRAE residential building science guide
 - Mark Lawrence has the lead on this initiative.
 - This MBO is recognized as a long-term priority that will document identify existing residential content available from ASHRAE and to use that information. It has been noted that an electronic application in the Technology Portal might be a good approach to this information.
 - An initial step is to identify which ASHRAE documents have residential content which ties this into MBO 1.4.
- 7. Communications Subcommittee Update (Healy)
 - Bill Healy reviewed the activities of the Process Subcommittee so far this year.
 - MBO 2.1 Identify major trends and put out to membership and leadership
 - Bill Healy has the lead on this initiative.
 - This MBO essentially encompasses all the other MBOs that follow.
 - The most immediate avenue for disseminating information has been the ASHRAE
 Journal Residential Applications Column and other ASHRAE Journal Articles.
 - A list of proposed topics in process is shown in <u>Attachment B</u>. The Subcommittee would like to have several columns/articles ready and in the queue in order to maintain momentum on this initiative.

- Additional suggestions for residential topics and authors that can be used for the column or an article are always welcome. The committee is asked to review the list in Attachment B and provide input.
- MBO 2.2 Develop position documents, emerging issues briefs, and/or public policy issue briefs
 - Pat Graef is taking the lead on this initiative.
 - The initial work has been to create a process for how these types of documents will be proposed and/or developed moving forward.
 - The committee has put together a number of potential topics to pursue and they are also looking into topics that are being heard out in the marketplace for which ASHRAE has relevant knowledge.
- MBO 2.3 Propose and sponsor Seminar, Distinguished Lecturer, and/or Training opportunities for residential within ASHRAE
 - Mark Lawrence has taken the lead on these initiatives.
 - The initial focus has been on the Distinguished Lecturer (DL) program as the deadline to nominate a new DL is December 1, 2020.
 - The subcommittee identified two relevant topics that do not currently have DLs and looked for people who could speak on those topics.
 - Theresa Weston has agreed to speak on Standard 90.2. The nomination application for that is in process.
 - The subcommittee has also reached out to Paul Francisco regarding Standard 62.2, but still waiting to hear back. If Paul is not available, there are others on SSPC 62.2 that might be willing to serve.
 - The other focus is on creating a residential presentation template that could be used by any DL that wanted to add that topic to their list. The plan is to update a presentation originally created by Chris Mathis when he was chair of this committee. The deadline for this is March 2021.
- MBO 2.4 Improve and increase residential information on ASHRAE website
 - Steve Saunders has taken the lead on this initiative.
 - The initial step has been completed and that was to make some quick changes to the website to eliminate the outdated information and to update information like meeting notes and committee documents.
 - The next steps will do a deeper dive within the subcommittee to decide what sort of information makes sense for the website. A series of discussion questions have been created to help with making those decisions.
 - One goal is to use the website to publicize the efforts of the RBC.
- MBO 2.5 Develop a residential award
 - Mike Blanford has taken the lead on this on this initiative.
 - He has scanned through what other committees and developed a list of awards that other committees have developed.
 - His initial suggestions for a residential award include a best societal residential effort and/or a residential paper award.

- This would not necessarily be a Plenary presented award, but rather just a committee award that is reported back to Tech Council (which makes it a "passthrough" award.)
- This is also a time sensitive issue in order to make sure that the committee can send a proposal to Honors and Awards (H&A) committee for consideration in January.
 This would allow the award procedure to be finalized and codified in the Reference Manual by the end of this Society Year.

8. RBC Liaison/Related Committee Updates

- a. Epidemic Task Force (Karg)
 - Rick Karg is a member of the Residential Team on the Epidemic Task Force.
 - The work has slowed somewhat as the epidemic has gone on, but the website is very well established with an abundance of information organized by buildings.
 - The ETF is also looking at developing videos to demonstrate concepts. These are still in process.
 - Residential information is available under the Buildings tab.
 - The residential and commercial teams are jointly working on a communities of faith document for the ETF. Rick Karg is heavily involved in this development effort.
 - Rick Karg will request suggestions for emerging issues briefs at the next meeting of the ETF Residential Team.
 - An effort to create Epidemic Preparedness documents originated with ETF residential team and then expanded to include commercial buildings once DOE agreed to fund the effort. Staff is working with DOE/PNNL on the funding contracts and work will be initiated once the funding is finalized.

b. GAC Liaison Assignment

- This role is mostly intended to be a communications link between the two committees because GAC works to promote residential resources from ASHRAE and it is helpful for RBC to know what is happening legislatively regarding residential.
- Pat Graef will take on this role for now.

c. Residential Standards and Technical Committees

- SSPC 62.2:
 - Rick Karg reported that the committee is having trouble keeping up with the workload virtually and they have some big issues to address moving forward.
 - The standard currently addresses ventilation for all residential regardless of building height. Adapting the standard for large multifamily is one issue.
 - Unvented combustion sources are also a work in process. The original addendum was developed over a long period time but was ultimately rejected.
 - A compromise proposal on unvented combustion sources was written and went out for public review. But the compromise proposal has now been tabled.
 - The 2019 User's Manual has been approved by the SSPC and has now moved to ASHRAE Publications. No publication date has been noted at this time.

• SSPC 90.2:

No report at this time.

• Guideline 24

- Rick Karg noted that this Guideline was maintained by SSPC 62.2 but had not been updated since 2015.
- Because the information in the guideline was covered in other ASHRAE documents, a proposal to withdraw went through public review in September (see below). The Guideline has now been withdrawn.

45-day Public Review from August 28, 2020 to October 12, 2020

1st Withdrawal Public Review of ASHRAE Guideline 24-2015W, Ventilation and Indoor Air Quality In Low-Rise Residential Buildings

Much of the content of Guideline 24 is covered by another ASHRAE publication: ASHRAE's Residential Indoor Air Quality Guide. The committee thinks that to justify publication of the guideline would require extensive editing and additions. The required revisions to Guideline 24, such as including multifamily buildings, would be extensive and beyond the capability of volunteers. Without ASHRAE funding to update the guide and no volunteers to do so, the guide should be withdrawn.

9. New Business

No new business at this time.

10. Upcoming Meetings (TBD)

- Communications SubC: November 17 (2pm), January 14 (2pm)
- Process SubC: December 3 (11am), January 7 (11am)
- RBC: A doodle poll will be sent out to schedule the virtual Winter Meeting in January.

11. Adjourn - Meeting adjourned at 12:30pm EST

ATTACHMENT A – Process Subcommittee Report

Monday, 2 November 2020

Subcommittee Members: Glenn Hourahan (chair), Jon Winkler, Roy Crawford, Eric Werling, Bjarne Olesen,

Rick Karg

Subcommittee Adhoc Participants: Mark Lawrence, Steve Saunders

Immediately Past Subcommittee web meeting: 17 Sep 2020 and 15 October 2020.

Upcoming Subcommittee web meeting: 3 December 2020

Update on RBC-assigned MBOs:

#	Issue	Р	Lead	Significant Activities
1.1	Determine RBC's role with the Buildings Conference	i	Bjarne Olesen	 Goal is to create a replicable process for RBC involvement in this conference that can be added to the Reference Manual. Bjarne Olesen has reached out to Tony Giometti about RBC involvement. Bjarne reported that Tony again noted that a meeting between RBC and CEC was appropriate, but that same has not yet been scheduled. Bjarne Olesen has also requested a copy of the program from the last conference. Note: Conference Scheduled for December 5-8, 2022. ASHRAE CEC is ready to select Conference Project Committee (PC).
1.2	Initiate the process for a new residential guideline	M	Steve Saunders	A draft Title / Purpose /Scope for a proposed guideline on management of humidity is under development. The intended emphasis is on the design and construction of new residential buildings rather than existing buildings. Retrofitting / remediation of existing (occupied) buildings would not be covered in this guideline. The main audience is the homebuilding community (large-tract builders, small custom builders, and the 1-to-3 homes/yr builders); what issues are of concern and then points the user to suitable references / documents / citations for more information.
1.3	Develop a process to collaborate with TCs	I	Eric Werling with assist from Roy	Eric Werling to reach out to the chairs of RAC and TAC about the best ways for RBC to
	to help with research		Crawford and	interact/liaise with the TCs.
	RTARs and Work		interactions with	The message is how can RBC be of help to
	Statements		Jon Winkler	those TCs that have some residential focus in
				fulfilling their mission.

#	Issue	Р	Lead	Significant Activities
				 An important precursor step is to define what this interaction/liaison role looks like, and to define what the expectations are for that liaison (would apply to interactions from RBC to the TCs as well as interactions from the TCs to RBC). This MBO activity can also support MBO 1.4. Eric will interact with Jon Winkler in moving forward.
1.4	Update residential information in existing ASHRAE documents	M	Jon Winkler and interactions with Eric Werling and with Mark Lawrence	 The goal is to develop replicable processes that can be added to the Reference Manual. An initial step is to identify which ASHRAE documents have residential content, which also ties this to MBO 1.5; Jon will interact with Mark Lawrence in moving forward. As noted, this MBO has synergy with MBO 1.3 and can benefit from a TC interaction/liaison process; Jon will interact
1.5	Develop guidance document for ASHRAE residential building science guide	L	Mark Lawrence with assist from Eric Werling and interactions with Jon Winkler	with Eric Werling in moving forward. Document how to identify and use existing residential content available from ASHRAE. • An initial step is to identify which ASHRAE documents have residential content which ties this into MBO 1.4; Mark will interact with Jon Winkler in moving forward. • An electronic application in the Technology Portal might be a good approach to this information

ATTACHMENT B - Journal Column Guidelines and Topic List

ASHRAE Journal – Guidelines for Columns/Articles

The purposes of these writeups is to (a) educate ASHRAE members on key issues involving the arts and sciences of heating, ventilation, air conditioning, refrigeration, and their allied fields as they pertain to the residential sector, and (b) inform ASHRAE members of the role that ASHRAE and its members play in advancing the state of the residential building industry.

Types of Manuscripts:

- 1) Column:
 - a. Length: 1,500-2,000 words.
 - b. Review: Columns are reviewed by the Residential Building Committee. There is no further peer review.
- 2) Article:
 - a. Length: 3000 words.
 - b. Review: Articles are reviewed by the Residential Building Committee and are sent for a peer review before publication.

Process:

- Residential Building Committee (RBC) identifies topics of interest. The Journal Coordinator reaches out to potential authors.
- Authors submit initial draft. A Word version of manuscript is submitted to the RBC through the Journal Coordinator. Graphics, if any, should be included with the manuscript. However, there is no specific graphic format requirement for this draft.
- Residential Building Committee draft review. The Journal coordinator circulates the manuscript to Residential Building Committee members requesting comment and asking whether there would be any objections to publication in ASHRAE Journal. Any Committee comments are provided to the author by the Journal Coordinator.
- Authors submit final draft. If necessary, the author will make changes to the article based on comments received from the Journal Coordinator and resubmit draft.
- Upon approval of RBC, the Journal Coordinator sends message to ASHRAE Journal editor indicating approval of manuscript and asking editor to coordinate with author. For submittal, ASHRAE Journal requests a Word version of the text. Graphics shall be sent as separate files. ASHRAE prefers 300 dpi.jpg or .tif files on photos, or original Excel files if graphics were created in Excel.

Timing:

The finished column is due to ASHRAE during the last week of the 2nd month prior to the issue being published. For example, to be published in the March issue, the finished column would be due to ASHRAE by the last week of January. This column should have cleared all reviews from RBC.

For adequate time for RBC review, it is suggested that authors get draft manuscripts to the Journal Coordinator by the start of the month. The manuscript is sent to RBC members with a request for review by the middle of the month.

Articles will require a longer lead time due to the need for peer review. Plan on 6 months.

ASHRAE Journal – Potential Residential-focused Columns/Articles

Topic	Potential Authors	Follow-up Action
Multifamily Design Guide	Sean Denniston et al.	Pat Graef: Coordinate with potential author
Smart Technologies for Residential Buildings	Bethany Sparn, Eric Werling	Eric: Coordinate authorship with Bethany
Water Heating and Water Use in Residential Buildings	Bill Healy, Jim Lutz, Carl Hiller	Bill: Lead authorship
Ventilation and IAQ	Mark Lawrence	Mark: draft manuscript
Heating and Cooling Challenges in Low Load Homes	Glenn Hourahan	Glenn: Begin drafting column
Advanced Energy Design Guide for Multifamily Buildings (when available)	Paul Torcellini	Bill: Check with Paul T. when AEDG is finalized.
Electrification in the Residential Sector	Sean Armstrong	Bill: Keep pinging Sean
What does resilience mean in terms of residential building (energy and IEQ) performance?		Mike: Coordinate with HIRL researchers
Ventilation and IAQ in Multifamily Buildings		
Air Filtration Approaches for Residential Dwellings	Barney Burroughs, Jeff Siegel, Brent Stephens	
Envelope Advances to meet more stringent IECC requirements		

Goal: Inform members of role that ASHRAE and its members play in advancing the state of the residential building industry.

<u>Timing:</u> Target is for a column every 3 months starting in March 2020

Residential Building Committee (RBC) Scope and Purpose from the Rules of the Board (ROB)

2.423.001 SCOPE AND PURPOSE

This committee shall be responsible for identifying major residential trends impacting the practice of HVAC&R, informing the ASHRAE leadership and membership of these trends and their potential impacts, and making recommendations on new activities and policies in response to these trends. In addition, this committee shall serve as a resource to the Society on activities and issues that relate to residential impacts of building technologies including but not limited to ventilation, and thermal organizations that focus on residential buildings. The committee will be responsible for implementation of the residential aspects of the Strategic Plan.

Acronym List

AHRI – Air-conditioning, Heating and Refrigeration Institute

AIA - American Institute of Architects

BPI - Building Performance Institute

CEC - Conferences and Exhibitions Committee

CEE – Consortium for Energy Efficiency

CM – Corresponding Member of TC

CTTC - Chapter Technology Transfer Committee

DOE – US Department of Energy

ETF - Epidemic Task Force

H&A – Honors and Awards Committee

HUD – US Department of Housing and Urban Development

ICC - International Code Council

MBO – Management by Objective

MTG - Multi-disciplinary Task Group

NAHB - National Association of Home Builders

NARI – National Association of the Remodeling Industry

PCM - Provisional Corresponding Member of TC

PNNL - Pacific Northwest National Lab

RAP - Research Advisory Board

RESNET – Residential Energy Services Network

RBC – Residential Building Committee

RP - Research Project

RTAR – Research Topic Acceptance Request

SSPC – Standing Standard Project Committee

TC – Technical Committee

TPS – Title, Purpose, Scope (also T/P/S)

VM – Voting Member