

AGENDA

ASHRAE TECHNICAL COMMITTEE 6.3 RESIDENTIAL AND LIGHT COMMERCIAL CENTRAL FORCED AIR HEATING AND COOLING SYSTEMS

Tuesday, February 7, 2023

1:00 p.m. – 3:00 p.m. EDT

Omni CNN Center Atlanta, Sycamore (M2-North)
Hybrid Meeting

Meeting Details: <https://events.rdmobile.com/Sessions/Details/1612506>

1. Call to Order and Introductions – Review Scope and Purpose of TC 6.3

TC 6.3 is concerned with those central forced air systems used for residential and light commercial building comfort heating and cooling. Responsibility covers the design and performance of the entire system, including equipment, controls, ducts and the interactions of the system with building heating and cooling loads.

2. ASHRAE Code of Ethics Commitment – Chair

In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and we shall avoid all real or perceived conflicts of interests. (See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>.)

3. ASHRAE Commitment to Care

The health and safety of all ASHRAE conference attendees is a top priority. Out of respect for our fellow attendees, we commit to wear masks indoors, monitor our health, seek medical attention if symptoms develop and adhere to all ASHRAE Commitment to Care protocols. We are committed to the well-being of one another.

4. Review Agenda

A. Introductions

B. Called in - Jeff Munk (NREL), Stephen Kowalski (ORNL), took picture of sign-in sheets (4 total pics)

5. Establish Quorum

10 Total voting members, 6 needed for quorum

- 7 Members present (Eric B not present)

Online participants, please indicate your presence in the chat.

6. Approval of previous minutes from Toronto meeting (1:07)

- Motion (Motion - Kevin M, 2nd - Larry B), Passes 6-0-0 Chair not voting
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7. Announcements

Updates from TC Chairs Breakfast and Meeting, if any.

- Request input to strategic plan
- Research funding back up to pre-pandemic level; research queue is started to be reduced.

8. Subcommittee Reports

A. Handbook (Randy Palm)

- Due for 2024 Systems and Equipment
 - Chapter 10 – Small Forced Air H & C Systems
 - Due to ASHRAE by June 13, 2023
 - S Kowalski, E Berg
 - Chapter 33 – Furnace
 - Due to ASHRAE by July 11, 2023
 - P Haydock, S Kowalski
- Randy will provide materials for chapters to volunteers
- Shoot for early June committee vote

B. Program (Scott Creamer)

Seminar 59: New Ways of Thinking on Heating and Cooling Low-Load Homes
Wednesday, February 8 9:45 AM – 10:45 AM EST

- Dual Fuel applications program for Chicago 2024
- (See also New Business for possible Forum)

Tracks for Tampa: Deadline for submission - 27 Feb 2023

- HVAC&R Equipment
- Fundamentals and Applications
- Research Summit
- Pathways to Net Zero Energy and Decarbonization
- Future-Proofing the Built Environment
- IAQ, Building Automation and Control Systems
- Professional Development and Education

C. Research (Nicolas Aouad)

- WS-1910 - Evaluation of Standard 103 Transient Components and Thermostat Cycle Times on the Resulting AFUE
 - Additional information was provided to ASHRAE (4Q-2022)
 - No word on funding or bidding on the WS
- Research topic brainstorm and ideas discussion
 - Idea: How does the blending of Hydrogen affect AFUE? (C. Grider)
 - Larry Brand volunteered to investigate and write an RTAR
 - Larry B, Paul H, C Grider
 - Program on air-handers; effect with 2023
 - Dual fuel applications

D. Standards (Kevin Mercer)

- SPC 103 - Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers – Published 01/01/2022, no action needed until 2025
- Published 2022; next action in 2025
 - SPC 152 - Method of Test for Determining the Design and Seasonal Efficiencies of

Residential Thermal Distribution Systems – Published 01/01/2014

- Need to form a committee to revise standard
- Background: Received a request for mandatory language updates in 2016. Revisions were made to make the minimum changes for approval. (reaffirmed by Jim Lutz on virtually)
- Seeking a Chair for SPC152
 - Mike Lubliner – Pending approval from his employer (ORNL).
 - Need a waiver to balance so that existing votes are relevant. Will go to Public Review. If no substantive comments come back, then with no substantive changes, it will go forward.
 - SPC 193 - Method of Test for Determining the Airtightness of HVAC Equipment - Published 01/01/2014
 - Need new Chair for committee
- Mark Olsen is former chair. This has been out for Public Review and comments returned. Need to have a Chair.
 - Scott Creamer (Rheem) volunteered to finish out review and response of public comments.
 - Motion made to install Scott Creamer as Chair (Haydock), 2nd (Yaeger), Pass 6-0-0 Chair not voting
 - Codes reference that standard.
 - Informative to TC: PR comment that there is conflict between 193 and 130 in VAV boxes.

Standard 15 (R Crawford) –

- Safety standard for refrigerants (i.e. effects of A2L refrigerants). Standard will split into separate Comm and Res versions, with residential being SSPC15.2. RBC was asked to send a letter of support to Standards Committee to approve creating the new standard. Requested TC6.3 to also send a letter to Standards reaffirming the same. Motion made (C. Grider)
 - **Motion to have the TC6.3 Chair send a letter to Standards requesting that they consider forming SSPC15.2 to take over the continuous maintenance of this standard with TC6.3 be a cognizant TC.**
- 2nd (G Yaeger). Passes 6-0-0 Chair not voting.
 - Timing of this standard needs to be coordinated with SSPC 15.
- E. Web Site (George Yaeger)
- Added materials to TC6.3 website. Including historical documents on ASHRAE Std 103.

9. Liaison Reports

- A. Section 6 Liaisons (Doug Reindl)
- B. Low GWP – MTG report (Roy Crawford)
 - (R Crawford) Research is tailing down on low GWP refrigerants. Bids out for research to determine suitable odorants for A2Ls. Also, RP 1555 (risk assessment) is in process.
- C. MTG.VIC (Kevin Mercer)
- (K Mercer) - Ventilation infection control – no update (no action to attend the MTG)
- D. TC 8.11 Load Based Testing subcommittee report (Eric Berg)
- (no report) –
 - E. Task Force on Building Decarbonization (Mercer)
- (K Mercer) – Final report sent last year. New Chair of TF. Divided TF into 6 working groups. Kevin will be on the HP task force for building decarbonization. HP working group formed. Kevin will be the liaison to TC6.3.

10. Review Voting Membership

Voting Members as of 7/1/22 (present at the meeting)

First Name	Last Name	Position	Start Date	End Date	Voting
Eric	Berg	Chair	07/01/2021	06/30/2023	Yes
Andrew	Hjortland	Vice Chair	07/01/2022		Yes
Paul	Haydock	Secretary	07/01/2019	06/30/2023	Yes
Randy	Palm	Handbook Subcommittee Chair	07/01/2018	06/30/2022	Yes
Michael	Creamer	Program Subcommittee Chair	07/01/2018		Yes
Kevin	Mercer	Standards Subcommittee Chair	07/01/2018		
George	Yaeger	Webmaster	07/01/2019	06/30/2023	Yes
Nicolas	Aouad	Research Subcommittee Chair	07/01/2021	06/30/2025	Yes
Lawrence	Brand	Member	07/01/2021	06/30/2025	Yes
Craig	Grider	Member	07/01/2021	06/30/2025	Yes
Jeffery	Munk	Member	07/01/2018		Yes

10 Voting Members, 6 needed for quorum

- Wayne Kraft (Trane) – volunteered to be TC6.3
- Steve Kowalski (ORNL) – volunteered to be on TC6.3
- Payam Delgoshaei (Lennox) – volunteered to be TC6.3

Balance as of 7/1/22

Category	Number of VM's	% of VM's
Users	3	30.0%
Contractors	1	10.0%
Product Manufacturers	5	50.0%
Academics		
Consulting Engineers		
Government Agencies		
Independent Sales Representatives		
Trade Organizations		
Research Organizations	1	10.0%

- Balance will be updated after the change in roster following the summer meeting.

11. Old Business

12. New Business

Should TC 6.3 support the formation of separate SSPC for ASHRAE 15.2? (Roy Crawford)

- A Forum program suggestion was made; there would need have a Chair and some speakers.
 - Topic:** Addressing complexity for installation setup and service of high efficiency AC/HP equipment especially inverter driven, with no standard interface.
 - o There is no standard interface or means for field technicians to operate varieties of equipment for setup and troubleshooting. In particular, it was mentioned how it is difficult for the field tech to drive the equipment to full capacity for setup and troubleshooting reasons.
 - o Other discussion
 - Suggestion was made to bring the topic to SPC 221
 - TC6.3 not appropriate; issue is software not a technical issue.

13. Adjourn

- Motion to adjourn

Appendix

TC Sign-in Sheet

Name	Affiliation	Email	Member (VM, CM, or guest)	YEA member? (Y/N)	Int'l Member? (Y/N)
Andrew Hjortland	JCI	Andrew.hjortland@jci.com	VM (vice chair)	Y	N
Bob Berry	Daikin	Robert.berry@dikincomfort.com	Guest	N	N
Ali Kazim	Guidehouse	akazmi@guidehouse.com	Guest	N	N
Roy Crawford	JCI	Roy.crasford@jci.com	CM	N	N
Scott Creamer	Rheem	Scott.creamer@rheem.com	VM (Prog Chr)	N	N
Randy Palm	Allied Air Enterprises	Randy.palm@alliedair.com	CM	N	N
Craig Grider	Intertek	Craig.grider@intertek.com	VM	N	N
Travis Lancaster	Intertek	Travis.lancaster@intertek.com	Guest	N	N
David Springer	Frontier Energy	dspringer@frontierenergy.com	Guest	N	N
David Williams	Trane	David.williams@tranetechnologies.com	Provisional	N	N
Wes Davis	ACCA	Wes.davis@acca.org	Guest	N	N
Jon Winkler	NREL	Jon.winkler@nrel.gov	CM	N	
Donald Prather	FA2S	Fa2sdp@yahoo.com	Provisional	N	
Antonio Romeo	AHRI	aromeo@ahrinet.org	CM	N	
Gary Nelson	Energy Conservatory	gnelson@energyconservatory.com	Guest	N	
Michael Lubliner	ORNL	lublimer@ornl.gov	Guest	N	
George Yaeger	Unaffiliated Consultant	George.yaeger@gmail.com	VM	N	
Larry Brand	Frontier Energy	lbrand@frontierenergy.com	VM	N	
Kevin Mercer	Rheem	Kevin.mercer@rheem.com	CM	N	
Paul Haydock	Carrier	Paul.haydock@carrier.com	VM	N	
Wayne Kraft	Trane	Wayne.kraft@trane.com	CM	N	N
Payam Delgoshai	Lennox	Payam.delgshai@lennoxind.com	Guest	N	
Chris Hughes	Energy Conservatory	chuges@energyconservatory.com	Guest	N	N
Junjie Luo	ORNL	luoji@ornl.gov	Provisional	N	N
Nicolas Aouad	XNRGY	n)aouad@hotmail.com	VM	N	Y
Hannah Hoffmann	Guidehouse	Hannah.hoffmann@guidehouse.com	Guest	N	N
Eric Dickson	Seal Bond	edickson@seal-bond.com	Guest	N	N
Will Kowald	Lennox	Will.kowald@lennoxind.com	Guest	N	N
Shawn Ohara	SMACNA	sohara@smacna.org	Guest	N	N
Collin Olson	Energy Conservatory	colson@energyconservatory.com	Guest	N	N
Jeff Munk	NREL		VM (remote)	N	N
Steve Kowalski	ORNL		CM	N	N