

ASHRAE TC 8.11
Unitary and Room Air Conditioners and Heat Pumps
Full Committee Agenda

2021 ASHRAE Winter Meeting
Virtual Conference

Thursday 1/21/2021, 3:00 - 5:00 PM EDT
<https://ashrae-org.zoom.us/j/aejqCLdAHt>

Subcommittee Meeting:
Wednesday 1/20/2021, 2:00 - 5:00 PM EDT
<https://ashrae-org.zoom.us/j/aditYrDDx1>

1. Call to order

Kirkwood

Meeting called to order 1/21 @ 2:06PM CST

2. Review Scope

Technical Committee 8.11 is concerned with products for use in comfort cooling and/or heating systems. The factory engineered vapor compression systems include: (1) unitary equipment which generally requires the field engineering of the product mounting and ducting, piping and electrical connections, (2) room air conditioners such as window mounted units and ductless split systems and (3) packaged terminal equipment. Specifically excluded are unitary combustion-engine driven systems.

3. ASHRAE Code of Ethics Commitment

Kirkwood

"In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests." See full ASHRAE Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>

4. Introductions

All

a. Determination of a quorum

Creamer

VOTING MEMBERS FOR THIS MEETING (Need 7 for a Quorum)

x	Eric Berg	(6/2024)
x	Chad Bowers	(6/2022)
x	Craig Bradshaw	(6/2024)
	Henry 'Skip' Ernst	(6/2021)
x	Chad Kirkwood	(6/2022)
x	Darin Nutter	(6/2021)

x	Kishan Padakannaya	(6/2021)
x	Bo Shen	(6/2021)
x	Kirk Stifle	(6/2023)
x	Chris Stone	(6/2022)
x	Jon Winkler	(6/2024)
	Kasey Worthington	(6/2022)

Quorum established 10 or 12 voting members present

5. Agenda additions

All

No additions to report

6. Chair's Report

Kirkwood

a. Chair's Goals

- Everybody's voice must be heard, don't hesitate to voice concerns
- General test procedures/method of test such as SPC 37
- New efficiency levels that are on the horizon
- Focus on the future of the test procedure particularly load based test procedures such as CSA EXP07

- Proper mapping of the operation envelope of the systems in terms of systems performance
- b. Announcements and Highlights from TC Chairs Breakfast Meeting
- TC Re-Org Update
- ASHRAE face to face meeting Phoenix, AZ
- Hightower award nominations due September 1

7. Liaison reports (as they arrive)

Liaisons

- a. MTG – Low GWP Refrigerants
Siva G
Conflict with ASHRAE 15
- b. Refrigeration Technology
Hwang
- c. RAC
Seeton
- Current projects underway that ASHRAE is able to fund. No other research project have been funded for 2021. Without the show in Chicago, research funds are down. There is a contribute to ASHRAE button on the website. Don't hesitate to continue to submit project ideas due to the funding short fall. If you need help in justification, need research for low GWP and cite regulation.
- d. Section 8
Mercer
- TAC is trying to do a better job of evaluating the value of any particular TC. TC8.11 is a very value-added TC and should be used as an example. Kevin will work with Scott Creamer to help resolve roster corrections.

8. Approval of minutes from Virtual Summer Meeting

Kirkwood

Eric Berg makes motion to approve meeting minutes from June 20, 2020 meeting
Craig Bradshaw 2nd
9-0-0 2 absent / chair not voting

Darin Nutter makes motion to approve meeting minutes from Orlando Meeting
Kishan Padakannava 2nd
9-0-0 / 2 absent / chair not voting

9. Membership/Roster

Creamer

Starting August 1st:

Name	Role	Voting
Chad Kirkwood	Chair	Yes
Kasey Worthington	Vice Chair	Yes
Scott Creamer	Secretary	
Eric Berg	Research Chair	Yes
Chris Stone	Standards Chair	Yes
Robert Berry	Handbook Chair	
Grant Wheeler	Program Chair	
Darin Nutter	Webmaster	Yes

Name	Role	Voting
Henry Ernst		Yes
Kirk Stifle		Yes
Kishan Padakannaya		Yes
Bo Shen		Yes
Chad Bowers		Yes
Craig Bradshaw		Yes
Jon Winkler		Yes

New voting members starting 7/1/2021: Andrew Hjortland, Scott Creamer, Khaled Saleh, Davide Ziviani

There are issues with ASHRAE dropping off TC roster. We will investigate. Please send either Scott Creamer or Chad Kirkwood an email if you have dropped off the roster in error.

10. Subcommittee reports

- a. Programs
Grant Wheeler

3 seminars are schedule for the winter meeting

- Airborne Pathogens
- Idle Buildings are the Devils Playground
- What makes a compressor a heat pump compressor

New ideas for Phoenix

- Seminar - Dual fuel control responsiveness – Bo Shen
- Seminar Validation work that is going on for load based – David Ziviani – Chair
- Seminar - interested in HVAC for indoor plants and animals – Grant Wheeler
- Rooftop economizer requirements, evaluating diagnostics to test economizer function, economizers with load-based testing. – Andy to potentially Chair but may not be able to make {in time for} Phoenix
- Khaled Saleh - Load based testing and measurement uncertainty.
- Khaled Saleh - Role of simulation for load-based testing, can we duplicate this type of testing with simulation work.

b. Research

Eric Berg

5 active research projects:

1721 – Oil return and retention

Chad Bowers: Motion to approve cost extension to extend 3/31/2022

Eric Berg 2nd

Motion carries 9-0-0 /2 absent / chair not voting

1733 – Criteria for Psychometric Air Sampler for ASHRAE Standards

Eric Berg: Motion cost to approve no cost extension until 2/28/2022

Chad Bowers 2nd

Motion carries 9-0-0 /2 absent / chair not voting

Highlight is where the holes should be located relative to airflow

1743 - Effect of Inlet Duct and Damper Design

Almost complete

1785 – Refrigerant Charge Modeling in Coils for Residential Splits

Kirk Stiffle: Motion to approve no cost extension until 1/31/2022

Chris Stone 2nd

Motion carries 8-0-1 /2 absent / chair not voting

1824 – Impacts of Barometric Performance on Testing Unitary Product

On track

PMS meeting will be scheduled in 2 weeks

Ideas:

- Room Stratification Project will be sent out to members of SPC 37 for comments in March 2021

- Tolerances for measurements of load-based testing, CSA is moving forward with EXP 07 and this TC need to decide what role ASHRAE would play. Consensus is to form a MTG to discuss load based testing and spur some research on the subject. Chad will talk with Kevin Mercer to get started.
- RTAR idea Christian Bach: Shift from hygrometers to dew point measurements and dynamic measurement of humidity, temperature, and airflow. Goal would be to determine the different methodologies that could be used with dynamic control and measurement. Grant Wheeler may be potentially interested in leading this RTAR
- Simulation based rating methodology for seasonal rating of system performance of unitary products. This would be using load-based testing to generate a map of data used in simulations.

c. Handbook

Bob Berry

Looking for reviewers for Systems and Equipment Chapter in the handbook.

d. Standards

Chris Stone

SPC 37 highest priority. Next meeting is 2/17/21

ASHRAE 16 was voted to be revised, try to get a membership application out if you are interested

SSPC meeting to be held 1/26/21

e. Web site

Darin Nutter

No update

11. Old Business

None

12. New Business

None

13. Adjourn

Adjourned 1/21/21 @ 3:58PM CST