

ASHRAE Technical Committee (TC) 5.5 Air-to-Air Energy Recovery
ASHRAE 2021 Winter Conference, Virtual
 January 26, 2021, 2:30 to 5:30 pm Eastern Time

APPROVED MINUTES

These are draft minutes and are not considered final until approved by vote of TC5.5

1. Call to Order / Welcome
 Called to order 2:34 by chair Adam Fecteau
2. Introductions/ Attendees (guests sign in sheet is attached to these minutes – Exhibit 2)

Adam Fecteau	Present	Voting (6/30/2023)	Chair (6/30/2022) 90.1 Liaison
Mo Afshin	Present	Voting (6/30/2022)	Vice Chair (6/30/2022) 62.1 Liaison
Kristin Sullivan	Present	Voting (6/30/2022)	Secretary (6/30/2022) SPC205 Liaison
Prakash Dhamshala	Present	Voting (6/30/2022)	Handbook Subcommittee Chair
John Dieckmann	Present	Voting (6/30/2022)	Research Subcommittee Chair
Ronnie Moffitt	Present	Non-voting	Program Subcommittee Chair
Matthew Friedlander	Present	Non-voting	Standards Subcommittee Chair
Paul Pieper	Present	Non-voting	Ali Coordinator
Drake Erbe	Present	Voting (6/30/2021)	Member
James Piscopo	Present	Voting (6/30/2022)	Member
John Bade	Present	Voting (6/30/2023)	Member
Carey Simonson	Present	Voting (6/30/2023)	Member
Marc Tardif	Present	Voting (6/30/2023)	Member
Brandon Damas	Present	Non-voting	Webmaster
GD Mathur	Present	Non-Voting	Handbook Subcommittee Chair

3. Roll Call of Voting Members
 10 voting members are present. Quorum is established.
4. Agenda Review and Adoption
 Adopted unanimously by TC, chair not voting
5. Approval of Minutes
 The minutes from the Annual Meeting on June 18th, 2020 were unanimously approved by the TC,
 chair not voting.

Subcommittee Reports

6. Handbook (G.D. Mathur, Prakash Dhamshala)

- a. Major revision was published in 2020. Next revision will be 2024.
- b. Idea to split the chapter into two
 - i. Need approval from TC chair responsible for fundamentals to add a chapter to that handbook
 - ii. Goal is to provide exposure to energy recovery to students who might only purchase the Fundamentals handbook
 - iii. Proposed content was too much. Needs to be very brief to be included in the Fundamentals handbook. No additional action has been taken
 - iv. There is also an idea to split the chapter into two chapters in the current handbook, one on Technology and one on Controls
- c. Knowing market shares of different technologies would help to ensure fair coverage
 - i. Adam can provide this
- d. ACTION -> All members should review the chapter and bring suggestions to GD and Prakash
- e. ACTION-> GD and the Handbook Subcommittee will work on a proposal for how to shorten the chapter

7. Chair Report

- a. TAC Subcommittee is making recommendations for TC mergers. Many TC mergers are already approved
- b. Annual reaffirmation is being enforced
- c. Recommendation to keep TC 5.5 alive has been well-received. TC 5.5 will not be merged any time soon
- d. Drake Erbe moved to continue the recommendation to keep TC 5.5 as a stand-alone TC. Motion passed unanimously, chair not voting.
- e. Proposal of executive committee (Ex-Comm)
 - i. Reviewed charter drafted by committee leadership
 - ii. Current members are Adam, Mo, Kristin, Matthew, and Drake
 - iii. Mo Afshin moved to create the committee in the last meeting as a way to maintain our strategic plan and recruit members for the future
 - iv. Mo Afshin moved to approve the charter for the executive committee, and after discussion, withdrew the motion. There was not vote
 1. Feedback from TC was mixed
 2. Most recognize the need for continuity and a subgroup to have deeper conversations about how to keep the TC relevant
 3. Dislike the appearance of an exclusive ERV cabal that would be running the show and violating ASHRAE's goals of inclusivity
 4. Would like to see the membership specified as needing to be a member of TC 5.5
 5. The scope of the executive committee is work that the leaders should be doing anyway, so we need to evaluate if there is a need for a new committee or not

- 6. The purpose is largely around membership development and ensuring that TC leadership meets to discuss who will fill open roles in the committee as members retire or move on to other ASHRAE pursuits
- 7. There is some precedence for establishing an executive committee in other ASHRAE committees with success
- v. ACTION-> The current members will meet again to redraft a charter addressing concerns brought up at this meeting.
- f. Strategic plan was distributed to the roster
 - i. Mo moved to adopt the strategic plan as distributed
 - ii. Comments that the plan is very well written
 - iii. Only the first three pages are meant to be normative
 - iv. Motion passed unanimously, chair not voting
- 8. TAC Liason Report
 - a. Kevin Marple introduced himself as the new Section 5 head
 - b. Good work on strategic work; the committee is on a good trajectory
 - c. Functional Group Evaluation Form
 - i. Reach out to Kevin if we need help
 - ii. Try to complete as soon as possible after the TC meeting

Liaison Reports

- 9. ASHRAE Learning Institute (Paul Pieper)
 - a. "Best Practices" course was offered 3x in 2020 with high ratings and good interactions
 - b. "Fundamentals" course will be in the spring online, with some revisions, less than 30% to avoid having approval for the minor updates
 - c. Planned major update for the summer
 - i. Revision will come to the committee in June
 - d. COVID-19 is coming up during the courses and it would be a good idea to have a presentation related to healthier environments related to ERV
 - e. Paul will share a presentation on COVID that he is giving to his local chapter with the TC
- 10. SSPC 901.1 (Adam Fecteau/John Bade)
 - a. Adam could not attend the fall meeting due to injuries and surgeries and requested the help of John Bade and Brandon Damas to update the chapter
 - b. Addendum requiring bypass was published
 - c. There's a general belief that the ERV requirements should be reexamined to account for changes in the industry and in recovery capability
 - d. The tables aren't very aggressive for requiring energy recovery
 - e. Could be worth considering having someone do analysis (modeling) to show the value of increase ERV usage in commercial buildings. May be an issue to find funding for this.
- 11. SSPC 62.1 (Mo Afshin)
 - a. Two proposed addenda that affected energy recovery were discussed regarding reducing the recirculation limits of Class 2 and Class 3 air

- b. Further study required due to lack of evidence to back these addenda
 - c. Also discussion on minimum distance between supply intake and exhaust, which requires further study
12. SPC 205 (Kristin Sullivan)
- a. Completed PPR2 in 2020
 - b. PPR3 planned for 2021
 - c. ERV working group met in December and will meet again to continue work on ERV Rep Spec
13. Program (Ronnie Moffit) –
- a. 2 submitted for 2020 and not accepted
 - b. None for winter meeting
 - c. Website is open for proposals for summer
 - d. Prakash might do a paper
 - e. Alkis T. volunteered to do a presentation, either in person or virtually
 - f. Matthew volunteered to do one but not in time for Phoenix
 - g. Adam will reconvene a meeting in a week to discuss program options.
14. Research (John Dieckmann)
- a. 1799-TRP Validation of Extrapolation of Performance Rating Test Results for Small Energy Exchangers to. Large Exchangers:
Contract awarded to a team of ITS and the University of North Carolina-Charlotte. Underway since April. Currently in testing task. Should be complete sometime in the fall. Initial results can be shared in the Annual Meeting. Should result in a technical paper and some info for the handbook. Covid related research has been discussed. No action, but there are some ideas.
 - b. Discussed COVID-19 related research
15. Standards (Matthew Friedlander)
- a. SPC 84 was dissolved upon publication in 2020
 - b. There was an error in one formula and Matthew will take on figuring out how to issue an erratum to fix it
 - c. The standards committee has a few recommendations, such as considering a test and rating method related to frosting
 - d. After 5 years, standard will be revised, reaffirmed or withdrawn
 - e. Global standard with similar scope
 - i. ISO 21773 - patterned on ASHRAE 84
 - ii. prEN308 (draft) - Global standard with virtually identical scope to Std 84. Scope includes testing exchangers in the lab, testing exchangers in units, and testing exchangers in the field. Only partially aligns with ASHRAE 84 and ISO 21773. Justin Berquist volunteered to help with frosting effort. John Bade mentioned that effort in bullet #2 on runaround loops is good. Mohammad from Core Energy shared a link to his research on frosting
16. Website (Brandon Damas)
- a. Considering adding a social media presence
 - b. Reach out to brandon.damas@hts.com

17. Membership (Matthew Friedlander)

- a. Not much change, nothing to report

Next Meeting

The TC5.5 main meeting will be at the Annual Meeting Phoenix, Arizona, or virtually, stay posted for details.

- Kristin Sullivan, Secretary TC 5.5, February 3, 2020