

**ASHRAE Technical Committee (TC) 5.5 Air-to-Air Energy Recovery
Sub-Committee Chair and Liaison Webmeeting
December 12, 2019, noon to 2:00 pm Eastern Time**

MEETING MINUTES

These Minutes were approved by a voice vote of TC5.5 on 2020/02/04 at the Orlando Winter Meeting.

1. Call to Order / Welcome

Reminder: this Webmeeting is intended to serve the function of the in-person Subcommittee Chair (S/C) meeting that traditionally has been held the day before the main TC meeting at the Winter and Summer meetings. There will be no S/C meeting for TC 5.5 in Orlando.

2. Introductions/ Attendees

Toshio Murata	John Deickmann
Mo Afshin	Marcus D'Arcy
Marc Tardif	Carey Simonson
James Piscopo	Mike Scofield
Ganeson Kandasamy	Marc Poirier
Adam Fecteau	Ronnie Moffitt
Kristin Sullivan	Boualem Ouazia
TJ Farrell	GD Mathur
Andy Kebernik	Birol Yavuz
Matthew Friedlander (Chair)	Yiteng Ma

Chair noted that several members including our ASHRAE Learning Institute (ALI) liaison had indicated conflicts might prevent them from participating. He stated that holding this meeting as a Webmeeting, rather than face-to-face at the annual meeting, is an experiment.

3. Agenda Review

The Chair reported that TC5.5 held a productive strategic planning work session on December 6 to brainstorm future directions and activities for the TC. Among topics discussed were membership development, outreach to chapters, use of Journal articles to discuss emerging technologies and applications, and development of ready-for-use Energy-Recovery Ventilation (ERV) technology presentations. Standards, handbook, use of social media for outreach, research, and protocols for interaction with other committees were also discussed. Chair explained that assignments have been made to various members to coalesce segments of the brainstorming into strategic proposals, and that these will be distilled into a strategic plan for presentation at the general meeting in Orlando.

Subcommittee Reports

4. Handbook (G.D. Mathur, Prakash Dhamshala) – Prakash reported that the final draft is to be filed Dec 16. Copies will be made available at Orlando meeting.

ACTION → Mathur and Dhamshala prepare a proposal for schedule and scope of work for the next chapter by mid-January.

5. Program (Ronnie Moffit) –

- a. Orlando: a 90-minute seminar on ERV-related standards is scheduled. Presenters are Fecteau, Afshin and Friedlander. Fecteau speaking on 90.1 thinks he has about 20-25 minutes of material, Afshin speaking on 62.1 needs 30 minutes, Friedlander speaking on Std 84 can add material about similar

International Standards Organization and European Community standards if necessary to for a 25-30 minute presentation.

- b. Austin: The due date for papers has passed. Seminars are still possible, and Ronnie identified four tracks of possible interest:
 - i. Zero Energy Buildings and Communities: Opportunities and Challenges
 - ii. Resilient Buildings and Communities
 - iii. Grid-Interactive Efficient Built Environment
 - iv. Building Myths and Failures
 - v. (Chair's note: Track 1 Fundamentals and Applications is also offered)
 - c. Discussion followed:
 - i. Mike Scofield has a Journal article in peer review. Ronnie notes Journal articles are easy to turn into seminars.
 - ii. Prakash has a paper on ERV in zero-energy buildings
 - iii. IT was noted that the technical tracks for the winter 2021 conference are not yet published. The Chair wondered how far ahead the tracks were planned.
ACTION → Chair ask this question of Technical Activities Committee liaison Larry Smith.
 - iv. It was suggested that the TC generate basic seminars / training courses for use in educating the public and Chapters. It was noted that seminars are typically 20-30 minutes, Chapter presentations are 40-60 minutes, and ALI courses are 3-4 hours in length.
 - d. ACTION → Moffitt to bring a report and recommendations to the annual meeting, draft to the Chair by mid-January.
6. Research (John Dieckmann) – in John's absence Chair reported that one research Project is out to bid and that a few other topics had been identified in the strategic planning sessions. He said that John has been doing a good job as Research SC chair, and asked if anyone would be interested in working with John to support him.
ACTION → Dieckman to bring a report on current and future project to the annual meeting, draft to the Chair by mid-January.
7. Standards (Matthew Friedlander) – the Chair reported that the Publication draft of Standard 84 Method of Test for Air-to-Air Heat/Energy Exchangers had received no comments during its PPR and therefore is expected to be published early in 2020. The SPC will be meeting in Orlando and will make recommendations with regards to possible future revisions to the Standard. The Chair asked whether participants in the call had suggestions for new Standards that the TC should develop. He opined that while there is great interest in methods to characterize and predict the behavior of ERV components in HVAC systems, work on this topic in the ASHRAE community is focused on Standard 205.
ACTION → Chair to bring a report to the annual meeting.
8. Website (Brandon Damas) – in Brandon's absence the Chair noted that Brandon has been designated as the TC webmaster but ASHRAE staff has not yet provided him with the required access.
ACTION → Chair to follow up and support.
9. Membership (Matthew Friedlander) – Chair reported that he may propose the TC adopt some sort of nominating/leadership development/membership development committee. The mandate could include officer training, succession planning, and attracting new members. Adam Fecteau observed that TC5.3 Room Air Distribution has a nominating committee, Chair will reach out to them for feedback.

Liaison Reports

10. ASHRAE Learning Institute (Paul Pieper) – As our ALI liaison was not able to attend this topic was not discussed.

11. Standing Standard Project Committee (SSPC) 90.1 Activities – (Adam Fecteau)
 - a. Included in Standard 90.1-2019 are Addendums h, an, ay, dn. Adam will report on these in the Orlando seminar.
 - b. Addendum cd relating to pressure drop in bypass dampers was not incorporated into the 2019 edition, due to a commenter who refused to resolve his comment even though it was on a completely different topic, but will likely be published fairly soon as an addendum.
 - c. Another addendum a is proposed and would prescribe a minimum fan efficacy of 1.2 CFM/W for residential ERVs (this is an initiative from HVI). Adam will report to meeting.
 - d. Another portion of addendum a, relating to energy modeling methods, while it would be supportive to use of ERVs in dwelling units in scope of 90.1, has encountered significant opposition.
 - e. ACTION → Adam Fecteau: bring a report on these addenda to the General Meeting, with details available for “cd” and “a” (the seminar provides information on the others). As always, both background and the latest breaking news should be reported.

12. HVI/TC5.5 Working Group (Mo Afshin) – this group was created to support the adoption of addendum ay. This was successful, but it is important that the 90.1 User Guide treat the topic well, and User Guide draft process is underway. Due to restrictive drafting rules, the HVI/TC5.5 WG will not have access as a body to that process. (However, several 90.1 members who are TC5.5 members will have access.)
 ACTION → Mo Afshin: bring a recommendation to the General meeting to continue or dissolve the HVI/TC5.5 WG.

13. SSPC 62.1 (Mo Afshin) – There were no major changes in the 2019 edition of this standard with impact on ERV. However, several addendum with impacts are currently in play:
 - a. Add p – would add clarifying language to the maximum EATR limits for transfer from Class 2 or Class 3 air to Class 1 the words “at the design static pressure differential”. Purpose was to clarify that the designer must use the EATR rating applicable to the design conditions. There had been general support for addendum p but adrafting error prevented it from being incorporated into the 2019 edition.
 - b. Add ak – would reduce the maximum allowable EATR for transfer from Class 2 air to Class 1 from 10% to 5%. This has been a very contentious process. It has been through 2 PPR and Mo expects it to be published with unresolved comments.
 - c. Add ag – relates to minimum separation distances for outside air intakes, based on ASHRAE research work. It is in process, not yet ready for next PPR
 - d. A proposal to which no letter has been assigned is in the 90.1 research and education sub-committee, and would change the maximum permissible EATR for transfer of Class 3 air to Class 1 air from 5% to 0%. As with addendum ak, this has been contentious in the past. Mo expects it to enter for PPR in 2020.
 - e. ACTION → Mo Afshin: bring a report on these topics to the General Meeting. As always, both background and the latest breaking news should be reported.

Discussion of Meeting Format

The Chair requested feedback on the “experimental” meeting format. It was suggested that the Webmeeting approach gives more time for preparation for the general meeting.

Also, since it eliminates one meeting room at the annual meeting, it saves ASHRAE money, and it gives attendees more time to attend other sessions.

New Business

There was no new business.

Next Meeting

The TC5.5 main meeting will be at the Winter Meeting in Orlando, FL, Tuesday, February 4, 3:30-6:30 pm, 2020

- Matthew Friedlander, Chair TC 5.5