TC5.5 Webmeeting
Date: May 11, 2020

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

1. Called to order by Matthew Friedlander, Chair TC5.5, 12:05 pm

2. TC Scope

TC 5.5 is concerned with air-to-air heat exchangers, their application and cost benefit relationship. It includes consideration of the needs and procedures for standardization and testing, rating and terminology applicable to air-to-air energy recovery.

3. Introductions
Adam Fecteau agreed to take notes pending arrival in meeting of Secretary Mo Afshin.
It was agreed at the beginning of the meeting that instead of doing the traditional introduction of each participant, everyone who spoke would identify themselves.

4. Roll Call of Voting Members (exhibit 2)
With 12 of 12 voting members present, quorum was achieved.

5. Agenda Review and Adoption
MOTION 1: A. Fecteau moved to approve the agenda, seconded by M. D’Arcy.
Motion Passed: 11 yes, 0 no, 0 abstention, CNV

6. Approval of Draft Minutes

   a. TC5.5 Annual Meeting, Orlando, February 4, 2019
      MOTION 2: D. Erbe moved to approve the minutes of the Orlando, Feb. 4, seconded by M. D’Arcy.
      Motion Passed: 9 yes, 0 no, 2 abstention (J. Piscopo and M. D’Arcys), CNV

   b. TC5.5 Epidemic ad hoc Working Group Webmeeting, April 9, 2020
      Since this was a meeting of an ad hoc group not formally constituted by the TC, it was suggested that the TC review and vote on the draft minutes.
      MOTION 3: D. Erbe moved to approve the minutes of the April 9th meeting, seconded by M. D’Arcy. Vote: 9 yes, 0 no, 2 abstention (J. Piscopo and M. D’Arcys), CNV

   c. TC5.5 Research SC Webmeeting, April 20, 2020 (available on TC5.5 website)
      It was noted that the full TC would not normally vote to approve SC meetings. No vote was held.

7. TC5.5 activities to support the ASHRAE Epidemic Task Force

   The April 4 and April 20 minutes outline activities that TC5.5 has undertaken in an ad hoc fashion in support of the ASHRAE Epidemic Task Force (TF). These activities need to be formalized by the TC as a whole. The Chair will provide an update of activities and following discussion/action should be taken on the following:
a. **TC5.5 Covid-19 Guidance document.** An initial draft was forwarded to the TF on April 14.

A detailed response was received on April 23. Work has gone forward since then to advance the guidance document. The latest version will be presented for discussion and possible action, such as endorsement, withdrawal, amendment, etc..

Chair went through the document during the meeting. He expressed that the document was not complete and was subject to revision by the ASHRAE Epidemic Task Force. He asked for input and at various points were discussed:

a. Is leakage between ducts and compartments, separate from the exchanger, addressed in the draft? ACTION Chair add mention of this.

b. The example section would benefit from showing fan locations, and perhaps by showing examples of two-fan and three-fan systems. ACTION: John D., Ronnie M. Drake E. to revise the examples section and include fan locations in the drawing

c. Is there any specific discussion of systems with clearly separated ducts? Chair: there is mention of such systems in the draft.

d. It was observed that installation of high-performance filters downstream of the ERV makes a big difference in presence of aerosol fomites in the supply air. It was then discussed that filtration strategies in context of pandemic are discussed elsewhere and that the TC needs to avoid expression of opinion outside of its area of expertise. ACTION: Chair will draft mention of ASHRAE recommendation to upgrade filters to MERV 14, with brief discussion of how this would affect the operation of existing ERV systems.

c. **TC5.5 Working Group.** Discuss whether to formally constitute a WG including TC5.5 and TF members to provide on-going support to the ASHRAE Epidemic TF.

After discussion it was agreed not to formally constitute a working group or subcommittee at this time, but to continue the current informal process. Marcus D’Arcy volunteered to participate in the process.

d. **TC5.5 Research SC activities in regards to pandemics.** Discussion to provide guidance and identify resources and volunteers. Possible topics were briefly discussed. Chair reported that a new TC member has expressed interest in serving on the Research SC. John Bade, Marc Tardiff and Kristen Sullivan also are interested.

8. **New Business**

No new business was proposed for discussion.

9. **Next Meeting**
All foreseeable meetings will be virtual. Expected meetings include:

TC5.5 SC Chair and Liaison Meeting

TC5.5 Full Membership Meeting, currently expected to be the afternoon of June 18 or June 19.

Meeting adjourned at 1:30 pm central time.

Minutes prepared by Matthew Friedlander with assistance from Adam Fecteau and Mo Afshin

Exhibit 1 - ASHRAE Code Of Ethics
(Approved by ASHRAE Board of Directors January 30, 2013)

1.140.001.1 As members of ASHRAE or participants in ASHRAE committees, we pledge to act with honesty, fairness, courtesy, competence, integrity and respect for others in our conduct.

A. Efforts of the Society, its members, and its bodies shall be directed at all times to enhancing the public health, safety and welfare.

B. Members and organized bodies of the Society shall be good stewards of the world’s resources including energy, natural, human and financial resources.

C. Our products and services shall be offered only in areas where our competence and expertise can satisfy the public need.

D. We shall act with care and competence in all activities, using and developing up-to-date knowledge and skills.

E. We shall avoid real or perceived conflicts of interest whenever possible, and disclose them to affected parties when they do exist.

F. The confidentiality of business affairs, proprietary information, intellectual property, procedures, and restricted Society discussions and materials shall be respected.

G. Each member is expected and encouraged to be committed to the code of ethics of his or her own professional or trade association in their nation and area of work.

H. Activities crossing national and cultural boundaries shall respect the ethical codes of the seat of the principal activity.
Exhibit 2 - List of Attendees

Matthew Friedlander (Chair VM)
Adam Fecteau (Vice-Chair VM)
Mo Asfin (Secretary VM)
John Dieckman (VM)
Carey Simonson (VM)
Drake Erbe (VM)
James Piscopo (VM)
John Bade (VM)
Kristen Sullivan (VM)
Marc Tardif (VM)
Marcus D’Arcys (VM)
Prakash Damshala (VM)
Andy Kebernik
Byron Horak
Ganeson Kandasamy
GD Mathur
Kevin Peck
Larry Smith (TAC)
Paul Piper (ALI Liaison)
Peter Grinbergs
Richard Taft
Brina Splingaire
Yteng Ma
Brandon Damas (Webmaster)
Ronnie Moffitt
Anmol Prabhu.