

**ASHRAE TC 01.8
Mechanical Systems Insulations
Main and Subcommittee DRAFT Minutes**

**2024 ASHRAE Winter Meeting
Chicago**

Monday 1/22/2024, 4:15 - 6:30 PM CDT
Marriott Marquis, Chicago, Poetry (3)

1. Call to order

Diana Fisler

Meeting called to order at 4:20 PM

Attendance: A. Neeley, H. Shariff. C. Petty, P. Noonan, K. Patel, A. Cusick, D. Fisler, S. Sanders, R. Koerber, W. Robison, Jason Atkison, B. Reid, J. Atkison, S. Katipamula ONLINE: G. Hart, Z. Schoener, B. Brayman

2. Review Scope

TC 1.8 is concerned with the application and performance of thermal and acoustical insulation systems used on pipes, tanks, equipment and ducts.

3. ASHRAE Code of Ethics Commitment

“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 – **QUORUM IN ATTENDANCE**

Darrell Peil

VOTING MEMBERS FOR THIS MEETING (Need (7) or ½+1 for a Quorum)

Diana Fisler (Chair)	6/30/2026	Pat Noonan	6/30/2024
Heather Sharif (Vice Chair)	6/30/2025	Andre Desjarlais	6/30/2024
Kartik Patel (Handbook and Web)	6/30/2024	Art Geisler	6/30/2024
Alan Neely (Program)	6/30/2024	Charlie Petty	6/30/2026
Gordon Hart (Research)	6/30/2026	Bill Brayman	6/30/2026
Steve Sanders	6/30/2026		

Discussion over the heavy number of voting members rolling off voting status as of June meeting. Peil will fill Pat Noonan’s spot. Alec Cusick will take Alan Neely’s spot. Need to fill other spots. A minimum of 6 voting members is required by ASHRAE. Please contact chair if you’d like voting status.

5. Agenda additions

All

No agenda additions

6. Chair’s Report

Diana Fisler

a. Chair’s Goals

b. Announcements and Highlights from TC Chairs Breakfast Meeting

The chair reviewed the presentation briefly, alerting TC members to training opportunities regarding Programs and Roster Updates, activities of the Task Force for Building Decarbonization, and the Section Head jumped in to emphasize how much important work the Government Affairs Office is doing. The presentation is available on Basecamp, one level up under Section Head / TAC resources.

7. Liaison reports

Liaisons

a) Section Head

Jason Atkison, Section Head:

- New global technical harmonization committee
- Task for building decarbonization going – Net Zero Greenhouse Gas Emissions for new buildings by 2050.
- Working on definition of Net Zero with White House to agree.
- MEP2030 – define how much embodied carbon in HVAC equipment. IRA funding to the millions of dollars.
- Much interaction with legislative bodies.
- Program training – Resources to help develop programs. Tips for successful attendance.
- There are term limits on officer positions for Committees – typical is 2 terms
- Name of publication Manual of Procedures (MOP) for Technical Committees (TC's) will be called Reference Manuals.
- Strategic plan is being formulated now. Input via form on website. TAC is interested in new ideas and input.
- Generative AI is being covered

Consultants to manufacturing companies will need to recognize they are working for manufacturer.

b) RAC

S. Katipamula, RAC Liason:

- Research has openings for projects. Any openings, time is good to submit them now. Funding is back to normal.
- RAC has expanded budget authority to \$350,000 per project.
- TC's are encouraged to submit nominees to the research activities award
- RP1703 No-cost extension – The next actions are that the PMS approves the no-cost extension desired, then sends note to RAC liaison notifying of this action.
- RTAR due dates to RAC for research project submissions is March, May, August, December, 15th of each month.
- Membership roster – To be updated on July 1, 2024

8. Approval of minutes from Summer Meeting

Diana Fisler

- S. Sanders made the motion to accept minutes with the correction of the spelling of A. Neely's name, A. Neely seconded the motion. Motion passed.

9. Membership/Roster

Darrell Peil

Starting August 1st: (All voting members and/or subcommittee chairs). 7 voting members vs minimum of 6. Rolling off: Pat Noonan, Andre Desjarlais, Art Geisler, Kartik Patel, Alan Neely. Rolling on: Alec Cusick, Darrell Peil.

Name	Role	Voting	End Date
Diana Fisler	Chair	Yes	6/30/24*
Heather Sharif	Vice Chair	Yes	6/30/25
Darrell Peil	Secretary	Yes	6/30/26
Alec Cusick	Research Chair	Yes	6/30/26
Kartik Patel	Handbook Chair	No	
Alan Neely	Program Chair	No	
Kartik Patel	Webmaster	No	

Name	Role	Voting	End Date
Gordon Hart	Member	Yes	6/30/26
Charlie Petty	Member	Yes	6/30/26
Bill Brayman	Member	Yes	6/30/26

***Chair retains vote**

10. Subcommittee reports

a. Programs

Alan Neely

– Submit a proposal for Indianapolis Annual Meeting, June 2024 Symposium on Hydronic Insulation Systems. Submit the proposed topic for the HVAC & R Systems Track. Participants are D.Peil, K. Patel, A. Neely. A. Neely is to talk to TC6.1, Hydronic and Steam Equipment Systems for co-sponsorship. Significant discussion on format – settled on Symposium, especially if a member of TC

- Other prospective program topics discussed for future meeting programs

Wrap-up of RP1703 results. No papers can be submitted for Orlando meeting in February 2024, we may need to submit this topic for Phoenix, Winter 2025. Final report probably will not be ready for Orlando 2024 anyway.

Pat Noonan – Suggested he could put together a paper related to UL PCR’s, Part B. Conduct a a symposium on elements of PCR to create an LCA. Embodied v. operational carbon?

b. Research

Gordon Hart

- 13 members attended
- RP1703 – 80% of project budget is used, progress report given. Results complete by end of June. No-cost extension has been given to the end of 2024, this extension being required to complete formalized report. Extension approval by PMS has been submitted to RAC for notice.
- RTAR 1871 – Very old. On hold until RP1703 affords meaningful data. It was decided to start moving forward with the resubmission since data to support this RTAR has been developed through RP1703.
- Future Potential Projects Subjects
 - o Acoustics in mechanical systems
 - o Operating Carbon v. Embodied Carbon, Insulation’s Impact.
- Alec Cusick volunteered to be Research Chair. Roster update up July 1.

- c. Handbook Kartik Patel
 - Update uploaded chapter.
This update needs to be Done by the end of June, complete submission to ASHRAE for inclusion in the 2025 print publication by July 31. Stephanie Magis carried the message up the ladder regarding getting our 2022 revision posted and included in the current online version. Major additions to the Handbook Chapter -- Revisions and additions to pipe acoustical control, added R-Value, materials submitted related to carbon and environmental impacts.

 - Future updates will be mostly around the information obtained from RP1703 once the final report has been created and approved.

- d. Web site and Basecamp Kartik Patel
 - i. Web site minutes have been harmonized
 - ii. TC members appear to be using Basecamp well.

11. Old Business

- a. Meeting time review
All attendees like the complete Monday schedule. Splitting the schedule, morning and afternoon, allows a bit of a break for subcommittee chairs to prepare for main committee meeting and allows for the need to work around other meetings for Monday afternoon. Move Handbook or Research to last on the agenda to accommodate other commitments?

12. New Business

RTAR 1871 – Will the project team be the same? Should the resubmission be treated as a new project? Should TC10.1, Custom Engineered Refrigeration Systems, be a co-sponsor? Steve Sanders, Chair of TC 10.1 indicated that 10.1 would be willing to co-sponsor. The thought is that this should be a new project submission. Project team will likely change.

13. Adjourn

Motion to Adjourn, 5:23PM – B. Brayman

Subcommittee Meetings:
Monday 1/22/2024, 8:00 AM - 12:00 PM CDT
Marriott Marquis, Chicago, Poetry (3)

Call to order – 8:08 AM

Diana Fisler

Attendees: K. Patel, D. Fisler, A Neeley, H. Shariff, P. Noonan, C. Petty, A. Desjarlais, A. Cusick, D. Peil. ONLINE: S. Spence, G. Hart, B. Brayman, M. Joyce

a. Programs Alan Neely

- Alan presented past topics considered by the committee.
- District Energy has tours planned for Indy in June at the Annual meeting.
- Seminar to be submitted. Hydronic insulation systems. Lessons learned. Joe Chow? Revisit project from minutes of June 2023. Will move this program forward to an Indy presentation/seminar. Decided that this proposal will be submitted for the HVAC & R track. Indy deadline is February 26 for submissions.

- Tracks for Technical Sessions – Annual Meeting, June 22-26 – Indianapolis, IN
 - Fundamentals
 - HVAC/R Systems
 - Research Summit
 - Professional Development
 - Electrification Possibilities/Pitfalls
 - AI
 - Built Env.
 - Building Life Cycle Assessment
 - Legislation, Stds.. Codes, Guidelines

- ASHRAE Decarbonization Seminar in Spain, April 17.

- PCR's for Building Life Cycle Assessment? Mechanical Systems? Pat Noonan volunteered to review PCR's and have draft for symposium paper.

- What about presenting the work and results from RP1703? Report required for RP's. Primary researcher presents the work.

b. Research Gordon Hart

- Research Subcommittee Chair position is open.
- RP1703 is ongoing, Michael Joyce, C. Petty reported. Just over 80% of budget is used. Project costs – last 15% is for the reporting time. When remaining tests are conducted, project will be on track. June 30 is targeted finishing date, with testing completed by end of March. Ask for R&D to have final report ready for June meeting. R&D Services expects to have draft by June and will need a no-cost extension to complete the report. Need to vote on extension at main committee meeting? D. Fisler to find out mechanics of obtaining the extension. PMS members visited R&D site twice in 2023. All dry cup tests, with high humidity. 90°F/90%RH conditions for testing do not represent a standard E96 condition. Items 1 & 2 of the test samples table need to be retested with virgin material. No material at contractor yet. Items 7 & 8 of the test samples table are duplicates. Cell glass sample – can't have negative test result. The variance is possibly considered insignificant. Much discussion had over individual results and the impacts of testing variances that could impact results. Heavy discussion of cellular glass tube installation considering fastening with tape, banding, or tape and banding. Need to help to get SS banding. Heather will get SS band from jacketing plant. Asked to approve no-cost extension, move to have a no-cost extension. Extend to December 31, 2024. Motion supported, 8-1-0.

- RP 1871 is next subject for Research to consider. Additional RTAR is pending for Hygrothermal Modeling for Pipe Insulation. Approval was conditional on completion of RP1703. A. Dejarlais recommended moving forward with this RTAR to gain acceptance of this project now.

Any new research projects

- Possibly a sound attenuation project? Acoustic testing on refrigerant lines.
- Operational/Embodied Carbon, Duct Losses? Summary: Opportunity for RP to redevelop

recommendations wrapped around carbon sequestration instead of just energy savings for commercial or industrial facilities.

Alex Cusick volunteered to serve as Research Chair.

- c. **Handbook** **Kartik Patel**
- Added Pipe Insulation Thickness R-values, Updated Acoustical Data, Vapor Retarder Data
 - K. Patel adding updates to Basecamp.
 - K. Patel can now use Authoring Portal
 - Maintain single access to Authoring Portal
 - K. Patel reviewed schedule for submission to ASHRAE for final submittal of changes for 2025 print edition of Handbook.
 - Proposed next meeting dates to finalize submission of chapter: March 5, April 16, May 28, June 24, July 9, July 23. K. Patel will send Teams meeting invites for these dates.
 - Major Activities to consider for additional edits – RP1703, Decarbonization, Other Topics
 - Discussion regarding Carbon Contribution, Decarbonization Additions, Use Pat's information, add footnote to recognize NAIMA document. Add list of EPD contents, add methods available to determine carbon contributions – ISO and ASTM
 - Where should this information go in the Chapter?
 - Add stronger statement about positive impacts of insulation on Environment Impacts
 - RP1703 – Charlie does not feel like there will be anything solid to include by July
 - Building XV Conference – Diana suggested that we consider including proceedings in chapter. Is there any appropriate content for mechanical insulation?
 - Articles in market? Insulation Outlook, ??
 - D. Peil to check information on duct liner from ASHRAE RP's on duct liner
 - Alex to update his article