



Shaping Tomorrow's
Built Environment Today

ASHRAE TC 9.2 – Industrial Air Conditioning and Ventilation Committee

**DRAFT Meeting Minutes June 25, 2024 ASHRAE Summer Meeting
Indianapolis, Indiana**

- 1) Call to Order and Opening Remarks Phyfe

Meeting was called to order at 1:00pm by Duncan Phyfe.

- 2) ASHRAE Code of Ethic’s ASHRAE Value Statement Jensen

In ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and shall avoid all real or perceived conflicts of interest. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We celebrate diverse and inclusive communities, understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and the communities our Society serves. We respect and welcome all.

- 3) Hybrid Meeting: All

Hybrid Meeting	Meeting Sign-in Sheet
Click here to join the meeting Meeting ID: 296 062 061 644 Passcode: AYJ4kP	https://forms.office.com/r/eghkaJDDQb 

- 4) Review of Agenda Phyfe

- 5) Self-Introduction of Members and Guests All

Duncan Phyfe

Erich Binder

Ravi Ganta

Mark Miller



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- Joshua Muller
- Fraser Campbell
- Bill Lampkin
- Eileen Jensen
- Shaun Nienhueser
- Walt Schwarz
- Scott McMurray
- Erik Ostberg
- Evan Reese
- Jason Davis – ASHRAE staff
- Ravi Ganta
- Kevin Marple
- Justin Barham – Bechtel
- Erich Binder – Three
- John
- Duane Hammond
- Joy Altwies
- Brad Cochran

6) Quorum Status Determination of Meeting Quorum

Phyfe

TC Voting Member	SC 23 / Attendance
Duncan Phyfe	Yes
Duane Hammond	Yes
Ghosh, Deep	No



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TC Voting Member	SC 23 / Attendance
Steven C Sill	No
Evan Reese	Yes
Kevin Marple	Yes
Ostberg, Erik	Yes
Kampen, Mak A	No

- 7) Approval Winter Meeting Minutes for Summer Meeting Phyfe

Kevin made a motion and Eric second and all members unanimously agreed to approve the meeting minutes from the Winter Chicago 2024 ASHRAE meeting.

- 8) Membership Marple/Phyfe

Roster Upgrades:

- Voting members rolling off in 2024: Duncan rolling off as chair, Eileen will be chair, Duane will be vice chair, Mark Miller as secretary, Shawn will take over as webmaster. Steve Sill, Mak Kampen, and Deep Ghosh are rolling off as voting members.
- Provisional Member Status upgraded to corresponding members
- Corresponding members upgraded to voting members: Eileen will roll on as a member.

YEA members outreach: No YEA outreach this meeting

- 9) TC Chair Breakfast Meeting Phyfe

Joy gave us the bulk of it. One area would be on the research side to make it easier to get a work statement in place without doing an RTAR. They are doing a whole new workstation process that will be 100% online soon. PTAR might be helpful in getting the heat and energy calculations that Deep mentioned last meeting that needs to be published.

- 10) Section Head Report Cochran/Altwies

Updates and reminders from TAC (Joy): Updated reference manual for the TCs. Reminder to send Joy the activity form by 9pm tonight. TAC is requesting feedback on our roster updating process that happened in the spring. There is a box at the bottom of the activity form where that information can



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be put in. The roster updates that happened in the spring take effect on July 1st. Govt affairs office is looking for SMEs that might be looking to testify to govt entities on ASHRAE issues, reach out to govt affairs office if you are interested. Duncan was presented with an award as chair of TC 9.2. Congratulations to Duncan for his leadership of our TC.

Brad Cochran stopped by just to say that he wishes our committee the best of luck and to say that it has been great working with us. The TC9.2 members thanked Brad for all of his support.

11) Status of TC 9.2 Events & Activities

- ASME CONAGT Design Guide and NHUG Ghosh

August 7-9 in Washington DC this NHUB is a nuclear utility group and had lots of young people. About 20 or so young people joined and Deep pitched for ASHRAE and benefits of joining ASHRAE because if you are new to the industry there are all of these handbooks and Deep gave them an update on the activities on the things that we have in the nuclear chapter.

- Industrial Presentation to Students Binder

Erich went to student activities on Saturday and they do a monthly lunch and learn over the web. Erich mentioned to them that he is a distinguished lecturer. Erich also mentioned that we have the 101 course that is available and if there is anything special that they would like, they could put together something as well. New ASHRAE president wants to get more people involved in ASHRAE so the student activities is a great opportunity to get some of the guys from the commercial side.

- 14th Industrial Ventilation conference Binder

Need to look and see if anyone wants to get involved with any of those presentations. Deadline will likely be January. Want to do something fairly quickly and one of the thoughts was to do something more internationally. Spain, Taiwan, or perhaps the southern hemisphere like Chile or Argentina so there are still some options there. We could have a full industrial one in the summer here in the US. Someone suggested Austin in summer 2026. Wherever they have it there needs to be a strong local chapter to back it because we need strong local support. Erich was just at one in Spain and they had record sponsorship. Erich said we could always go to Greece. We want to make sure that wherever we select internationally that it is fairly easy to get to so we can encourage people in North America to attend. It is an expansion of what we had in Toronto. Targeting 2026 or 2027 to do this.

- Basecamp – no notes, delete?

12) ASHRAE Handbook – Applications

Reese/Sill

- Recap responsible chapters: 15, 18, 21, 22, 26-33 are all the responsibility of 9.2.



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- Looking forward to additions

Handbook update – Provide Evan’s email of handbook chair to Phil Naughten. Identify who your reviewers are going to be. ASHRAE is making a push to increase the online content. Author portal is the primary means for updating. OneHUB is being rolled out by Standards but it will take into account that BaseCamp isn’t a secure enough site for copyright materials.

Evan: Society has asked that the authors responsible for each chapter, take a run back through on what was published in the most recent handbook and if there is anything that needs edited, go ahead and do so. Keep a look out for an e-mail from Evan to reach out to all authors with the chapters to do a read through. Drafts are due Summer of 2026. Plan on also hearing e-mails from Evan for people who have been authors or reviewers continue to do so. Eileen asked if Evan has a spreadsheet or quick list that could be added to the minutes. Evan agreed to send the list.

13) Research Projects

Binder

- Outside air intake study: issues with freeze up in cold climates and sand intake in desert climates etc. Erich asked if there was any interest from TC. Garrett offered to help with research on sand infiltration.
- TC 5.4: Rating on Filter Banks: They are in the process of updating and put in an RTAR for media testing. Kevin Marple said he will get the three of us talking.
- MTG.ACR / CO-RP-8: They have been working mostly on the laboratory side of things. Phil mentioned they finished up the one research project on the scientific basis of ACH in healthcare and labs. They have 1936 on ventilation effectiveness and are trying to get the work statement finished on that. If they get 1936, the one insight is that it has co-funding which helps with its ability to get approved by the society. What they did is reach out to one of the big HVAC equipment suppliers, they don’t get advertising, but they get to help move things along regarding ventilation effectiveness. Let the research chair know if there are companies interested in co-funding.
- TC 5.6: lithium-ion batteries: Been working with IEEE with one of the standards on battery storage facilities with input on the Lithium battery. Big fire in South Korea in a battery facility. Starting to work on the standard. One of the big risk areas is parking garages. Up to 70% of the spaces in the garage in some localities have to be battery vehicle charging capable. Another TC and 5.6 are working on that. From the TC9.2 industrial side it has been mostly large facilities. Lots of opportunities and Erich to follow up with Deep on that.
- Erik brought up a new topic of hydrolysis or making hydrogen. Erich Binder said he will set up a meeting and see who is interested.



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- 14) Standards Ghosh
- Update on Standard 128 Committee
Trying to get started on 128. The committee has been trying to get approval and after this summer meeting Deep thinks they will notify him that it is ready to go. Then they will look at what to do to get it ready.
 - IEEE 1635/ASHRAE Guideline 21 Update: No plans for a revision but some discussion of a new battery technology if the people come up with a new technology to address then we will look for what we need to do.
 - ISO 15138: update from Erik Ostberg, it is HVAC in off shore oil and gas facilities. It is being revised to include off and on-shore oil and gas and low carbon energy (i.e. hydrogen). They are updating the standard separate from what ASHRAE is doing but the tie in is that ASHRAE feeds into ANSI. Work is ongoing and early stages of re-writing chapters and is a three year process where there will be opportunity for comment and input. Erik mentioned in the January meeting about doing a more formal presentation about what is in there. The second piece is that they have twice a year in person meetings and are targeting 2025 to meet in the US with ISO people from France, Brazil, UK, etc and would like to tie that in with the ASHRAE meetings and there was some talk about the industrial ventilation conference 2025 and Erik needs some help and is asking for a request for a two day working session or conference room where the ISO committee could meet and interface with one of the two ASHRAE meetings. Kevin Marple mentioned that industrial ventilation will be a track in the ASHRAE conference. Erik is asking who to reach out to for help with that. Targeting 2025 so February or June. Best resource is to talk to Kevin Marple or Erich Binder and they will talk to the group and staff to see what they can work out. Erich mentioned that they could get a meeting room and get people from TC9.2 involved as well.

- 15) Program Sub Committee Foster
- Vent 2022 Special Publication Industrial HVAC

16) New Business

Erich got the comment about the possible chapters on air curtains. One of the ASHRAE members wrote a guide on air curtain design and they updated it and the applications.

- 17) Honors & Awards Jensen
Ravi Ganta & Erich Binder, 50 Year Anniversary with ASHRAE

- 18) Webmaster *Nienhueser/Miller*



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19) Liaisons Reports

MTG Hot Climate	Duane Hammond
TC 2.10 Resilience	Steven Still
MTG Cold Climate	Erich Binder
MTG ACR	Erich Binder
CTTC	Erich Binder
MTG-UNEP - RAC	Erich Binder
Standard 90.1	Mike Baucom
Decarbonization Task Force	Need to establish liaisons
MTG.GAI / AI Focused	<i>Open position</i>
MTG OBB	<i>Open position</i>
MTG Cyber Security	<i>Open position</i>
MTG Effective Building Operation	<i>Open position</i>
MTG for Infection Control	<i>Open position</i>
Journal/Insights Liaison	<i>Open position</i>

Binder - MTG for the cold climate update are going to save a lot of hassle by being a subcommittee. Also from the cold climate side they are going to have a cold climate conference.

Chapter technology transfer is that they are always looking for good distinguished lecturers. Erich didn't get into the details but contact Erich, Kevin, or Eileen if you want to know more about that.

Book for the UN about servicing equipment in developing economies. Not too many refrigeration mechanic and HVAC courses in some of the emerging economies including tools and training for these guys as well. We can close out the cold climate MTG.

20) Next Meeting – 2025 Winter Meeting in Orlando, FL, February, 2025

21) Adjournment – Erich Binder made a motion to adjourn. Meeting adjourned at 2:19.