

**ASHRAE TC 9.7
Educational Facilities
Full Committee Agenda**

2026 ASHRAE Winter Conference Minutes

Saturday January 31st, 1:00 - 3:00 PM PT
Location: Las Vegas, Caesars Palace, Venice (E)

1. Call to order: 1pm (PT) **Setty**

2. Review Scope
TC 9.7 is concerned with the application of heating, ventilating, air-conditioning, refrigeration, life safety, and energy conservation systems for educational facilities, including early childhood education through higher education facilities.

3. ASHRAE Code of Ethics Commitment **Setty**

- a. *"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."*

See full ASHRAE Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>

4. Introductions (1:02 PT) **All**

- a. Determination of a quorum- quorum established SECRETARY
VOTING MEMBERS FOR THIS MEETING (Need (4) or ½+1 for a Quorum)

Raj Setty (Chair)		Steven Winstead	
Itzhak Maor (Handbook)	6/30/2027	Heather Schopplein	6/30/2028
Bruce Lindsay	6/30/2026		
Chris Ruch (Webmaster)	6/30/2027		
Mark Long (Secretary)	11/20/2025		
Jacob Edmondson		6 of 8 voting members present	In bold

5. Agenda additions - None **All**

6. Knowledge Share **Open Forum**

7. Chair's Report **Setty**

- a. Chair's Goals

- i. Welcome to Guests

1. Sign in (*Physical Sign In Sheet and Record of online attendance*)

8. Liaison reports **Liaisons**

- a. Section Head Altweis

9. Approval of prior minutes**Motion to approve minutes - Chris Ruch****2nd - Bruce Lindsey****10. Motion Passed 6-0 (Chair Voting)****Setty****11. Membership/Roster****Long**

Name	Role	Voting	Name	Role	Voting
Raj Setty	Chair	Yes	Bruce Lindsey	Member	Yes
Catherine Tinkler	Vice Chair	No	Heather Schopplein	Member	Yes
Mark Long	Secretary	No	Jacob Edmondson	MNQ	Yes
Tom Jacknisky	Co-Research Chair	Yes	Chris Ruch	Webmaster	Yes
Tony Colaneri	Co-Research Chair	No			
David Handwork	Standards Chair	No			
Itzhak Maor	Handbook Chair	Yes			
Catherine Tinkler	Program Chair	No			

12. Subcommittee reports**a. Programs (1:30pm PT)****Tinkler**

- i. Overview of Program Subcommittee Discussion (1/15/26)
- ii. Review of submissions/accepted programs for current conference
- iii. Review tracks and potential programs for next conference
 1. Bruce Lindsay will be submitting two proposed sessions for TC 6.9 Thermal Storage. One session will have U of Texas Austin talk about their chilled water system. 66,000 tons with one big tank. Also invited Austin Energy to talk about their ice storage system. Third presentation is still up in the air. Would TC 9.7 be interested in cosponsoring?
 2. Catherine – See attached Subcommittee Minutes (01/15/26)
 - Recently Submitted Accepted Sessions:
 - i. Seminar 5: AI and Campus Energy Optimization (Sunday session)
 - ii. Seminar 36: Indoor Environmental Quality in Early Childhood Facilities (reflecting expanded TC 9.7 scope)
 - iii. Seminar 21 (Bruce Lindsay): Decarbonizing Buildings in Cold Climates
 - iv. Forum: Bridging the Gap between Deferred Maintenance and Carbon Goals (Monday session)—inputs sought for real-world examples, challenges for educational facilities' deferred maintenance and carbon mandates.
 - Austin Conference:
 - i. Call for program ideas and speakers. Tracks include: AI in building design, decarbonization, fundamentals/applications, ground source heat pumps,

hot climate system design, HVAC & refrigeration equipment, workforce development.

ii. Specific interest in sessions on:

1. AI applications for school planning, design, construction, and O&M (including digital twins).
2. Energy (tax) credits for schools—addressing misconceptions about eligibility.
3. Lessons from facility condition assessments (FCAs) and infrastructure planning.
4. UVC/UVGI in early childhood settings (case study interest and current lack of published studies).
5. Biosensors, air quality sensor debates—value, application, limitations, and sustainability (with reference to recent hands-on experiences in DC and Maryland schools; need for realistic guidance).
6. Predictive maintenance/fault diagnostics—potential for crossover session with TC 7.5.
7. Geothermal system sizing benchmarks (square feet per well), controls, and case studies.

iii. Emphasis: Sessions with real end-users/owners, field case studies, and actionable guidance highly encouraged.

- Submission Deadlines: Contract/proposals for Austin due February 25, 2026.
- Procedural Notes:
 - i. Members urged not to let submission process impede participation.
 - ii. Call for co-sponsorship and better networking with related TCs.

3. Ruch to write initial 5 minute presentation on What TC 9.7 Does.

b. Research (1:49pm PT)

Jacknisky & Colaneri

i. Review of potential research projects

1. IAQ in Makerspaces: Focus on ventilation and off-gassing from activities (e.g., 3D printers, welding, plasma cutters, other specialty CTE (Career Technical Education) spaces).
 - Current lack of formalized standards—interest in compiling data, case studies, and cross-referencing industrial/lab ventilation guidance.
 - References to recent journal article (Kelly Cram) and ongoing discussions in related technical committees.
2. Noise/Acoustic Guidance: Identified gap in best-practice noise guidance for portable air cleaners and general classroom environments.
 - Collaboration opportunities with relevant TCs (e.g., noise and vibration, TC 2.6).
3. Potential Research/RTARs:
 - Need for more engagement and input from practitioners, owners, and industry to identify pressing community research needs (members encouraged to initiate based on field observations).
4. Health Outcomes Research: Presentation by Dr. John McEl on research linking cleaning/maintenance practices (duct cleaning, filter upgrades) to energy consumption and asthma/health outcomes in schools (projects in Colorado).

- Noted interest in funding by Asthma Allergy Foundation (AAFA), Brown University, and KNOFF.
 - Exploration of machine learning/AI in building management — limitations if sensor deployment is flawed.
 - ii. Development of potential RTARs
 - 1. Plan to turn ideas into RTARs
 - 2. Outreach to experts (e.g., Keith H., Kelly C.) for handbook integration.
 - 3. Future meetings to further flesh out research topics and RTAR development.
 - iii. Research to Support Version 4.0 of the Design Guidance for Education Facilities
 - 1. Build on ASHRAE acoustic guidance - in-room air cleaner
 - 2. Compile, evaluate, and summarize available IAQ research for actionable guidance.
- c. Handbook **Maor**
 - i. Discuss handbook chapter update process and schedule
 - 1. Childcare section completed December 2025; to be incorporated into next revision.
 - 2. Shelter section nearing completion; comprehensive referencing and linkage underway.
 - 3. Target delivery for group review: May 2026; scheduled approval by June 2026.
 - ii. Succession Planning:
 - 1. Succession/support for handbook lead requested (transition post-July 1, 2026; volunteers solicited).
 - 2. Cory M. to support
 - iii. Acknowledge:
 - 1. Significant contribution from Itzhak Maor over 15 years; need for shared institutional memory.
- d. Web site **Ruch**
 - i. Update
 - 1. Website (TC 9.7): Main resource for committee activities, meeting dates/links, member status, and relevant documents.
 - 2. Members encouraged to request postings/updates, Basecamp access, and subcommittee involvement.
 - 3. Plan to include references/links to new initiatives (e.g., ASHRAE IEQ microsite, Center of Excellence).
 - 4. Noted “inspirational quotes” section and proposal to adopt daily updates for engagement.

13. Old Business

- a. **Design Guidance for Education Facilities** **Metzger & Setty**
 - i. Version 3.0 of the Design Guidance for Education Facilities: Prioritization for Advanced Indoor Air Quality Document
 - ii. Purpose: Bridge between ASHRAE standards and non-technical field staff (school superintendents, facility staff); practical decision tool referencing relevant standards.
 - iii. Plan for Version 4 development - This will start with the current status of V3
 - 1. Chris to send out survey of members for topics to be included in Version 4 (including model language as sample).
 - iv. Emphasis on actionable content for varying budgets and needs.
 - v. Ongoing; progress updates planned for each meeting.

14. New Business – Working Groups

a. IAQ Control Strategy – **Steven Winstead**

- i. The group has not met since late October; a meeting is planned for early Q1 to re-engage participants. Planned meeting for February, invitations open to interested members.
- ii. Focus on control sequences and strategies for infant and early childhood educational care settings
- iii. Winter Meeting discussion items:
 1. Coordinate with 62.1 and TC 1.4 (G36) to determine whether infant/early-childhood care IAQ control sequences have been addressed and assess interest in collaboration with TC 9.7. Meeting with Guideline 36 committee on 2/2 to discuss. SSPC 62.1 has rates for Daycare through age 4.
 2. Confirm whether the committee wishes to integrate Guideline 44 and/or Standard 241 into this effort. Need to work with committees to see if this is something that interests them.
 3. Meeting invite to be sent out
- iv. Recommendation: continue the working group. A meeting invite will be issued early in the year; the primary challenge has been scheduling. Planning to meet in February to communicate other groups' interest in supporting 9.7 on these efforts.

1. Consider what should be proposed to Guideline 36

b. Model Language and Assessments for Legislation – **Tony & JuNelle**

- i. Provide a brief status update and overview of the working group's efforts to date.
Summary:
 1. Purpose: Addressed the disconnect between legislative IAQ requirements/policies and real-world implementation in educational facilities.
 2. Scope: Focus on policies referencing MERV 13 filtration standards for pre-K to grade 12.
 3. Process:
 - Phase 1: Comprehensive survey/mapping of existing MERV 13 legal provisions across the U.S. (building codes, labor regulations, education codes, etc.).
 - i. Mapping contrasts between existing design vs. operation and maintenance (O&M) requirements, new vs. existing buildings, and inclusion of MERV 13, MERV 13A, and ISO standards.
 - ii. Catalogued decision points (e.g., applicability to design/O&M, feasibility exceptions in existing buildings, enforcement mechanisms).
 - Output: Developed a finalized "legal mapping document" summarizing and contextualizing legal landscape nationwide; included lessons learned from both successful and failed legislative efforts.
 4. Next Steps:
 - Phase 2: Begin drafting recommended model policy language at the group's next meeting in February.
 - Recruitment: Ongoing invitation for new working group participants, especially those with legal, policy, or field experience.
 5. Committee Discussion:
 - Importance emphasized for lawyers' involvement—unique skillset for preventive legal frameworks.
 - Proposal that such frameworks might evolve into audit protocols analogous to ASHRAE Levels 1, 2, and 3.
 - Adoption Process: Motion made and passed (see Action Items) to advance the mapping document for committee and TAC

- (Technical Activities Committee) consideration, pending broader review and summary documentation.
- ii. TC review of the MERV 13 legal mapping document (Phase 1).
 - 1. **(Vote)** MERV 13 Phase 1 Document Adoption
 - Vote Internally within TC 9.7
 - Send to TAC - Section 9 Head - Kevin Maldune
 - i. Summary of what it is, why we are doing it, what we are asking
- iii. Identify and confirm an appropriate ASHRAE pathway for public dissemination (e.g., committee endorsement, guidance document, or other ASHRAE channel).
- iv. Include GAC (Alice Yates), Environmental Health (Lisa Ng and Max Sherman), IAQ Center Of Excellence -(Wade)
- v. Any outreach, commentary, or collaboration with outside organizations (e.g., Brown University, Center for Green Schools, CAUSE/CADRE) should be communicated to these groups to avoid confusion and maintain consistent messaging.
- vi. Discussion of the "Healthy Schools" guide and the importance of ASHRAE's branding and endorsement in external publications.
- c. Early Childhood Handbook Addition – **Itzhak Mahor**
 - i. Childcare Section addition
 - ii. Progress report of the entire chapter revision.
- d. Assessments - **Catherine Tinkler**
 - i. Updates
 - 1. CADRE
 - 2. Catherine to take the CADRE document to GAC
- e. Children's Book per publications request – Setty
 - i. Proposal for a series of children's books (e.g., "The Clean Air Crew of Room 2B") to educate children on indoor air quality and building science basics.
 - 1. Pilot story drafted; plans to partner with ASHRAE publications and possibly external organizations (e.g., AAFA).
 - 2. Small working group to be formed; goal to submit a draft for the Austin meeting.
 - ii. Develop additional versions
 - 1. Allergies
 - iii. Frank Mills with Publications
- f. AI Tools & Remote Operations:
 - i. Demonstration and endorsement of tools like NoCodeLLM (used to generate TC presentations) and AI-driven troubleshooting for school O&M (e.g., connecting complaint triage, knowledge database, and CMS/work orders for efficiency).
 - ii. Note on newly released open-source LLMs (Kimi 2.5) and their applicability to committee work.
- g. Maintenance Guidance Reference:
 - i. Reference to new or soon-to-be-published Chapter 8 in ASHRAE 62.1–2025 (ventilation system basic maintenance)—noted as a resource for field technicians.
 - ii. Addendum H to 2022 includes the relevant minimum maintenance table (available free online).

15. Next Interim Meeting

16. Adjourn 2:59pm (PT)