ASHRAE TC 9.7 – Educational Facilities

Virtual Full Committee Interim Meeting – Notes
Monday, May 4th, 2026| 3:00 – 4:00 PM EST
Zoom Available

Attendees:

Chris Ruch
Bruce Lindsey
Raj Setty
Raj Kapoor
Jon Rajala
Austin Reth
Calvon Timmons
Corey Metzger
Carl Bengston
Keith H
Grady Henrichs
Martin Stangl
JuNelle Harris
Filza Walters
Jordan Boothby
Eunice Salcedo
Sudesh Saraf
Calvin Timmons

1. Call to Order **12:01 PM**
Chair: Raj Setty

2. Review of Scope (Raj Setty)
"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 (Raj Setty)
ASHRAE Code of Ethics Commitment

"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. Chair's Report (Raj Setty)

5. Knowledge Share (Open Forum) **Time allotted to discuss current events and recent research relevant to TC 9.7.**

- Isoloation Rooms - Nurse suite is covered in the Handbook Chapter
- CalSHAPE Updates – See Below
- Model language for the Filter docs will be limited to US. Will not include ISO- Jon Rajala
- 2030 Code Cycle is underway. Be thinking of any issues that you would like to resolve in the model codes – Chris R
- Standard 241 Update - Standard 241 is now required in Canada, New Brunswick, on New Public Buildings.
- Clean Air Symposium – May 5, 2025 - https://action.lung.org/site/TR?fr_id=29191&pg=entry
- Standard 235P is the new IEQ standard in development.- RFP coming out - Corey M.
- USGBC and Center for Green Schools focused on HVAC - Corey M.https://www.usgbc.org/articles/advancing-healthier-schools-through-hvac-change-lab - Corey M.
- Resources for Outdoor Air Quality
    - Purple Air - https://www2.purpleair.com/?srsltid=AfmBOorkcUi08x9ah93kAygzzxnLknUzrLlDkWyIxW8V84JL6uDTI6xu
    - Air Now - https://www.airnow.gov/?
    - Weather Undersgrouns

6. Old Business

Design Guidance for Educational Facilities – 4.0

- Survey – Chris R. to develop survey based on Raj S initial concepts

7. Project Status Report

- **IAQ Control Strategy** – Steven Winstead
    - Putting together control sequences and sharing with ASHRAE 36
- **Model Language and Assessments for Legislation** – Tony & JuNelle
    - Survey of Educational Facilities Stakeholders (status)
        - Survey is being distributed and takes a short time to complete

- Next Steps
  - Survey – Ends on May 18th, no plans to extend, review results, share the findings, develop FAQ, and use to improve adoption.
  - Next Meeting is Thursday, 5/21, 10-11am PT
- CalSHAPE - Advocating for the program to continue. Currently the funding is cut back. It should be noted that programs like this and code improvements in general are under threat. – JuNelle H.

- **Early Childhood Handbook Addition** – Itzhak Mahor
  - Recommended Systems to be used
    - Handbook subcommittee to convene write up language
    - Updates
      - Nurse suite is covered in the chapter
      - Research ongoing with limitations of VAV and VRF that will be added to the chapter
        - Report on VRF can be submitted on TC for comments
      - Adding digital twin to the chapter
      - Plan to have complete for June Meeting and then can submit
      - MERV A is covered in the chapter. Added 2 inch minimum but 4" best for MERV 13 – Itzhak Maor
        -
      - Additional items for consideration
        - Ground Source Heat Pumps
          - Good FAQ deign guides
            - Sizing varies depending on many factors. TC should stat that the field must accommodate expected heat transfer need over the next 25 years – Keith H.
            - Ground source is currently in the chapter along with case studies references to other handbooks – Itzhak Maor
            - Ground source heat pumps can be even used for pool heating – Raj Kapoor
            - How do you energy model ground source? Raj S.
              - Use modeling software Corey M.
              - Use an Energy Modeling group – Keith H
            - TC 6.8 should be consulted – Corey M.
            - Questions from Outside Groups

1. What is the difference between ground-source heat pumps, geothermal heat pumps, and geothermal energy?
2. Are ground source heat pumps a proven HVAC solution for schools? climates do ground-source heat pumps work well?
3. Can school buildings with limited access to open space install ground-source heat pumps?
4. How do ground source heat pumps compare to other HVAC systems in terms of the skills and training required for maintenance?
5. How do ground-source heat pumps affect local water resources?
6. Can ground source heat pumps be incorporated into existing buildings or is this technology only feasible in new construction?
7. My architect engineer says that ground-source heat pumps aren't viable. Are they right?
8. How can school districts explore whether their school buildings are suitable for ground-source heat pumps
9. Are ground-source heat pumps cost-competitive with other HVAC options?

- Heat Pumps
  - Is language about heat pumps in handbook? – Yes - Itzhak Maor
    - DX issues in getting all the moisture out? - New units can handle it.

- Life cycle is reduced on DX – Raj K.
- Use use chilled water for DOAS, not DX – Corey Metzger
- Heat Pipe is ideal but can use electric re-heat (if allowed). Recovery for – Raj K.

9. Next Interim Meeting: Next Meeting Date is Austin at the 2026 ASHRAE Annual Conference

10. Adjournment: 1:01 PM