



Atlanta, GA 30329

404-636-8400

TC/TG/MTG/TRG MINUTES COVER SHEET

(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/MTG/TRG No. TC 5.07 DATE February 10, 2025

TC/TG/MTG/TRG TITLE Evaporative Cooling

DATE OF MEETING February 10, 2025 LOCATION Orlando, FL

| MEMBERS PRESENT | YEAR APPTD | MEMBERS ABSENT | YEAR APPTD | EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE |
|--------------------------|------------|----------------|------------|--|
| William Troung | 2022 | | | Peter Makris |
| Mark Miller | 2022 | | | Andrei Pal Caginesw |
| Annette Dwyer | 2022 | | | John Hochne |
| Pat Graef | 2022 | | | David Bard |
| Gursaran Mathur | 2023 | | | Sehaveh Heidar |
| Richie Mittal | 2022 | | | Robert Tucker |
| Steve Slayzak | 2023 | | | Mark Pavol |
| Alkis Triantafyllopoulos | 2023 | | | Dan Holley |
| Galen Gerig | 2023 | | | Nicholas Lea |
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DISTRIBUTION: All Members of TC/TG/MTG/TRG plus the following:

| | |
|---|---|
| TAC Section Head: | SH5@ashrae.net |
| All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.) | See ASHRAE email alias list for needed addresses. |

Meeting Minutes

ASHRAE TC-5.07 Evaporative Cooling
Monday June 24th, 2024
5:00-7:00 PM EST
JW Marriott: 312 (3)

1. Call To Order (Miller)

Meeting called to order by Miller at 4:00 EST

2. Review Scope (Miller)

TC 5.7 is concerned with contact type heat transfer surfaces and equipment for evaporative air-cooling. It includes application to residential, commercial, and industrial cooling requirements.

3. ASHRAE Value Statement (Miller) -> Now changed to ASHRAE Value Statement

- a. In this and all other 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 we shall avoid all real or perceived conflicts of interests. (See full Code of Ethics here: [Code of Ethics](#))
- b. ASHRAE Commitment to Care: The health and safety of all ASHRAE conference attendees is a top priority. Out of respect for our fellow attendees, we commit to monitor our health, seek medical attention if symptoms develop and adhere to all ASHRAE Commitment to Care protocols. We are committed to the well-being of one another.
- c. [Anti-Trust Guidelines](#)
- d. Recording (Audio, Video, Screenshots) of ASHRAE meetings, including online meetings, is strictly prohibited

4. Introductions (All)

5. Agenda Additions (All)

No changes to the agenda

6. Chair Report

- Strategic plan has been put together and website is up
 - i. Will be voted on in the summer meeting
- Center of excellence for building decarbonization is now active
 - i. More information available on the website
- 113 paper sessions this conference
- Group of Government Affairs has grown
 - i. 136 GOEs is SY23-24
 - ii. Key topics
 1. Building code updates
 2. IAQ (Schools)

- 3. Data Centers
- iii. Outlooks and opportunities
 - 1. Threats
 - Climate, building decarbonization, energy efficiency regulations and tax incentives are under attack by some interest
 - 2. ASHRAE may need to pivot
- Next conferences Phoenix, Las Vegas, and Austin
 - i. Would be ideal locations for TC5.7 to put forth proposal for programs
 - 1. Maybe to late for Phoenix

7. Liaison Report

- a. **RAC** (Jin Wen) – Not present
- b. **TAC Section 5 Head** – Not Present

8. Approval Of Summer Minutes

- a. Motion to approve previous minutes made by Annette, seconded by Mark. Motion carried unanimously.

9. Membership Roster

- a. William is a non-voting member.
- b. Cheng-Min is secretary
- c. Annette is Vice Chair
- d. **ACTION: Roster changed per the above roles.**

10. Subcommittee Reports

- a. Handbook (**Mathur**)
 - i. We have 2 chapters 53 (2023) and 41
 - 1. Applications: Chapter 23 - 4/12/2026 for next revisions
 - After Las Vegas meeting
 - i. By Phoenix meeting we need to determine what we want to update
 - ii. Provide any feedback to GD
 - 2. Systems and Equipment - Chapter 41 - 4/11/2027 for next revisions
- b. Programs (**Slayzak**)
 - i. AHRI branch in MENA reached out and started a working group to establish certification standards for evaporative cooling
 - 1. Steve suggests having a forum on the AHRI working group
 - They create the rules but reference ASHRAE for standards
 - Steve is happy to lead that forum
 - i. Could expand it to a panel if needed
 - ii. Due on February 26th
 - 2. Too late for any seminars for Phoenix
 - We should propose something for Las Vegas or Austin
 - i. We need a topic for Las Vegas
 - 1. Water efficiency related - Steve to reach out separately
 - a. Condair/Munters/Seeley
 - 2. Practical example?

- c. Research (**Mittal**)
 - i. TC5.11 is looking at moisture in buildings (optimal RH to maintain) from a health aspect (instead of comfort)
 - 1. Looking for support
 - 8.10 (dehumidifiers) is supporting
 - No official request
 - i. 5.11 research chair will reach out to 5.7 for review and request for support
- d. Website (**Miller**)
 - i. Needs a few docs from 24/25 but otherwise up to date
- e. Standards (**Graef**)
 - i. Standard 212
 - 1. Mark Modera has taken over leadership of that and putting together a committee
 - If you'd like to support go to the standards page on ASHRAE website (need a balanced committee)
 - This will be the main focus for standards
 - ii. Standard 133/143 are available in the bookstore now
 - Cleaned up and references to 41 series of standards

11. Old Business

- a. How can TC5.7 help to address the growing concerns over water usage in evaporative cooling solutions?
 - i. Gas turbine pre-cooling has some calculations (basically rules of thumb) for cooling towers and evaporative coolers for design conditions and water consumption
 - 1. Pat provided a spreadsheet for calculations
 - Calculates based on 1 hour of time
 - Annette to find the chapter and also check the online version to see if the calculator is available
 - Could be added to our hand book if it's been removed (or could be archived if we request to ASHRAE)

12. New Business

- a. DOE Energy plus doesn't include evaporative cooling (does include Celdek)
 - i. It's basic (you have to build the system)
 - ii. Might be worth looking at a research project to help get evaporative cooling integrated
 - 1. Nick could take lead on this
- b. Website shows this meeting as 5-7PM (actual meeting time is 4-7PM)
 - i. What would be the meeting time for Phoenix
 - 1. Cheng-Min would prefer 5-7 for conflict with another TC
 - ii. Check that the roster is updated

13. Adjournment

- a. Annett motion to adjourn at 5:19PM , Richie seconded
 - i. Approved

DRAFT