



**TC 8.10 - Mechanical and Desiccant Dehumidification
Equipment, Heat Pipes and Components
Sub-Committee Meeting Agenda for ASHRAE
Annual Conference Meeting 2022
Virtual**

WELCOME!

No need to say hello.
We will begin at 3:00 pm EST

HOUSEKEEPING

Audio

- **PLEASE** mute yourself upon entry.
- Only Un-mute your line when you need to speak
- If you are joining via computer and phone line, ensure BOTH are muted

Video

- You are welcome and encouraged to share your webcam.
- To save internet bandwidth, keep your webcam off by default unless presenting.
- Be mindful that you are on display! Turn off your video when needed.

Agenda

- Facilitator this virtual meeting: TC 8.10 Chair, David Baird
- Draft Agenda was posted on TC 8.10 Website.
- Introduction
- Presentation
- Concluding Remarks



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Date: Tuesday – June 21, 2022

Place: Webex:

<https://ashrae.webex.com/ashrae/j.php?MTID=mc0edcc16e584c02985b6dd1d3aac440f>

Meeting number: 2330 370 6301

Password: TC8.10

Time: TC 8.10 Sub-Committee Meetings – Tuesday, June 21, 2022 3:00 – 5:00 PM EST

Note: TC 8.10 Main Committee Meetings – Tuesday, June 28, 2022 1:00 – 3:00 PM EST
Sheraton, Davenport (4) and Virtual

Items: Related to TC 8.10:

SPC 198 Method of Test for Rating DX-Dedicated Outdoor Air Systems for Moisture Removal Capacity and Moisture Removal Efficiency, Monday, June 27th 2:30 to 4:30 PM EST Sheraton – Forest Hill (4) and Virtual

Note: Within TC 8.10, we discuss research, handbook, and program activities during one combined subcommittee meeting. Voting members are strongly encouraged to attend the subcommittee meeting. Corresponding members and guests are welcome.

Scope of TC 8.10: is principally concerned with mechanical and solid/liquid desiccant dehumidification equipment and heat pipes and their design performance, applications engineering, related load calculations, commissioning, operation, and maintenance.

Call to order & Introductions: Chair, David Baird

1. Meeting called to order at
2. Brief introductions

ASHRAE Code of Ethics, Chair, David Baird

“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”.

Determination of Quorum - Chair, David Baird

1. Majority of voting members must be present (of 11 present)

Membership/Roster: Webmaster/Membership Subcommittee Chair, Gayle Davis

1. Leadership: 11 voting (2 non-quorum)
 - a. 3 voting ends 6/30/22
2. 104 total members, 83 corresponding (14 provisional), Miscellaneous Others: 6
 - a. To become a provisional corresponding member - please sign-up online



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- b. Chair has discretion to convert a provisional corresponding member to a corresponding member before 2 years

Liaisons

- 1. xx

Subcommittee Reports:

Programs – Program Sub-Committee Chair, Onieluan (Tam) Tamunobere

- 1. Summarize and update TC on seminar / program proposals
 - a. Proposal for Atlanta (Winter 2023) Seminar: “High Performing Heating, Ventilation and Air-Conditioning (HVAC) Systems and Equipment for Controlled Environmental Agriculture”
 - 1) Plants are not People – Introduction to Controlled Environmental Agriculture: Eric Sturm
 - 2) Pros and Cons of DX vs Chilled water System: Craig Burg
 - 3) Standalone Dehumidification Equipment in Controlled Environment Agriculture: Josh Spalding
 - 4) Latent Enhancement Devices for Energy Efficiency: Darrell Sandlin
- 2. Review proposals for future meetings
 - a. Atlanta (Winter 2023)
 - 1) Fundamentals and Applications
 - 2) HVAC&R Systems and Equipment
 - 3) Refrigerants and Refrigeration
 - 4) Grid Resilience and Thermal Storage
 - 5) Pathways to Zero Energy Emissions and Decarbonization
 - 6) Multifamily and Residential Buildings
 - 7) Operations and Maintenance
 - 8) Building Simulations and Virtual Design in Construction
 - 9) Mini Track – Innovative responses to supply chain challenges
 - b. Last program was Chicago 2020 for this committee

Handbook - Handbook Sub-Committee Chair, Ralph Kittler

- 1. Handbook Chapters responsible for:
 - a. HVAC Systems & Equipment (2020):
 - 1) Desiccant Dehumidification and Pressure-Drying Equipment (Chapter 24)
 - 2) Mechanical Dehumidifiers and Related Equipment (Chapter 25)
 - 3) Dedicated Outdoor Air Systems (Chapter 51)
 - b. Fundamentals (2021):
 - 1) Sorbents and Desiccants (Chapter 32)
- 2. Design Guide responsible for:
 - a. Dedicated Outdoor Air Design Guide

Research - Research Sub-Committee Chair, Alois Malik



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1. New Updated RTAR 1566 - "Equations to Estimate Evaporation Rates from Wetted Surfaces"
2. Co-sponsorship with TC 2.2 on Determination of Latent Loads for Crops
3. Test standards for liquid desiccants proposed at summer meeting
4. Benefits of pressurizing residential homes discussed at summer meeting
5. Impact of variable loads for full dehumidification equipment potential RTAR – Peter Luttkick & Craig Burg

Standards - Standards Sub-Committee Chair, Craig Burg

1. ASHRAE Standard 198-2013, Method of Test for Rating DX-Dedicated Outdoor Air Systems for Moisture Removal Capacity and Moisture Removal Efficiency
2. ASHRAE Standard 174-2018, Method of Test for Rating Desiccant-Based Dehumidification Equipment
3. ASHRAE Standard 139-2019, Method of Testing for Rating Desiccant Dehumidifiers Utilizing Heat for the Regeneration Process
4. ASHRAE Standard 190-2020, Method of test for Rating Indoor Pool Dehumidifiers
5. AHRI performance standard for wrap-around heat pipes

TC Web Site – TC Webmaster, Gayle Davis

1. Content is current

Other Business

1. BaseCamp
2. Goals and Objectives

Motion to Adjourn