



**1791 Tullie Circle, N.E./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 Friday July 10, 2020

TC/TG/MTG/TRG TITLE Evaporative Cooling

DATE OF MEETING Friday July 10, 2020 LOCATION Virtual Meeting

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Steve Slayzak	2016	Vishnu Sreeram	2017	Larry Smith
William Truong	2017	Mike Scofield	2016	David Baird
G.D. Mathur	2017			Galen Gerig
Sukru Erisgen	2017			Mark Miller
Richie Mittal	2016			Robert Davis
				Andrew ?
				Chris Habets
				Jian Xu
				Andy Cochrane

**DISTRIBUTION: All Members of TC/TG/MTG/TRG plus the following:**

TAC Section Head:	SHx@ashrae.net Where x is the section number
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)	See ASHRAE email alias list for needed addresses.

Mike Vaughn, Manager Of Research & Technical Services	MORTS@ashrae.net
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Note: These draft minutes have not been approved and not the official, approved record until approved by the TC.

## MEETING MINUTES

ASHRAE TC-5.07 Evaporative Cooling  
Friday July 10, 2020  
1:00-2:30PM EST  
Virtual Zoom Meeting

### **I. CALL TO ORDER**

Steven Slayzak called the meeting to order at approximately 1:02 pm.

Sukru Erisgen took the attendance based on Zoom login

A roll call was held, five (5) of the seven (7) voting members were present to start the meeting, establishing that a quorum was available to conduct business.

The minutes from the Atlanta ASHRAE TC- 5.7 meeting approved by a unanimous vote of the voting members.

### **II. APPROVAL OF PREVIOUS MINUTES**

A motion was made by Steve to approve the minutes (2<sup>nd</sup> G.D. Mathur). The motion was carried.

(5) Approved (0) not approved (2) Not attending, (0) Abstentions

### **III. Chairs Report**

- TC 5.07 Basecamp website now setup and active. In order to receive updates, users need to setup their notifications
- Larry will be rolling off as Section 5 head but will stay involved
- Members can send emails to anyone in the organization using following emails
  - [reorg@ashrae.net](mailto:reorg@ashrae.net)
  - [astac@ashrae.net](mailto:astac@ashrae.net)
- Larry suggested having 4 conferences a year vs. 2. Out of these 4 meetings 3 may be virtual and winter meeting maybe face-to-face.
- TC 5.11 organized an overnight meeting to publish a COVID-19 white paper.
- ASHRAE COVID-19 task force is working on number of research topics. ASHRAE research can be found:
  - <https://www.ashrae.org/technical-resources/research>
- Steve mentioned. Many people are not aware of this or don't know how to find.
- Mentioned about Hightower, Technical Achievement Awards. In addition to technical achievement, ASHRAE looks at leadership of award recipient.
- TC 5.2 had a great success having YEA members attend their meetings. We need to look into inviting YEA members to our TC. This TC needs to track and attract YEA members

- Sukru suggested TC 5.7 get involved in actual COVID-19 research and have a meaningful contribution. TC to avoid boiler plate statements
- There is no requirements for TC 5.7 to merge with other TC's. TC size is not a critical requirement, as long as TC is active.
- Mark Miller said this committee is necessary. Larry agreed.

#### IV. Handbook (Mathur)

- Published Chapter 41 in the new 2020 handbook
- We need to review Chapters 52 from the 2019 handbook
  - **Action:** G.D. to send to Steve to distribute to members/upload on basecamp
    - Need approval by 2022
- Any new technologies can be included in the chapter
  - Including publications
- GD is going to share COVID-19 related research info to Sukru to see if it can be added.

#### V. Membership (Slayzak)

- Chair, Vice Chair, and Secretary will roll over after this meeting.
  - i. Sukru will roll on to Chair
  - ii. William will roll on to Vice Chair
  - iii. Richie Mittal will be the secretary
  - iv. Mark Miller will become web manager

#### VI. Programs (Slayzak)

- No programs proposed at the moment
- ASHRAE will be in Las Vegas in 2022 – ideal location for evaporative cooling
  - i. Need to get a program for that meeting
    1. Possibly something on Energy Plus
  - ii. Richie mentioned possible presentation on desiccant dehumidification and evaporative cooling
    1. **Action:** Richie to send a write up to Steve
  - iii. Possible presentation on unique applications for evaporative cooling
    1. ASHRAE Learning Institute (ALI) or ASHRAE
  - iv. TC 5.11 (Humidifying Equipment) is proposing a program for Chicago on Humidification and IAQ
    1. Dr. Stephanie Taylor will present on her findings supportive of mid-range humidity levels
    2. Presentation on steam system design
    3. Presentation on adiabatic system design
    4. Presentation on hygienic norms for ventilation systems with reference to the German norm VDI 6022 with focus on humidification systems

#### VII. Research (Mittal)

- We need to make all the efforts to be relevant in 2022 Las Vegas meeting

- Condair (Nick Lea), DriSteem (Duncan Curd), and Carel (Raul Simonetti) will present at the next conference. Topic is going to be COVID-19 and humidification equipment.
- Stephanie Tayler is also going to have a presentation in virus spread.
- Sukru suggested submitting an RTAR. Topic is, “Does evaporative media capture airborne COVID-19 and act as an air scrubber. How to kill COVID-19 in water returning from evaporative media.
- TC approved to proceed with this RTAR.
- Chris is going to help with RTAR documentation and will help Sukru
  - If we have an RTAR that needs review send to Dennis Loveday
    - i. [D.I.loveday@lboro.ac.uk](mailto:D.I.loveday@lboro.ac.uk)
- Richie was supposed to send out information a project but lock down prevented access to the office
  - i. Cooling using dehumidification (3 stage process)
  - ii. Richie will try and send that out when possible
- Sukru would like to propose an RTAR on COVID for indoor/outdoor
  - i. Direct or indirect – sizing of UV lights or other technologies to prevent COVID from passing through
  - ii. What is the effectiveness of media in catching or spreading the virus
  - iii. When the air hits the wet surface of the media will the virus attach to the water or media and pull out potential virus particles (would be drained down with the water)
- Should we consider writing a white paper on how evaporative coolers can be installed (new or retrofit) with minimal impact on building efficiency
  - i. Steve S., Chris H., David Baird to work on this

#### **VIII. Standard 133,134, and 212 (Graef/Modera)**

- Standards meeting is on July 27<sup>th</sup>, therefor there is no update

#### **IX. Website (Miller)**

- Mark Miller has volunteered to become web manager

#### **X. Liason Reports**

- No liaison attended this meeting

#### **XI. Old Business/ New Business**

- SPC 205 is working on building efficiency standard.
- Chris, Steve and David will write a white paper on how evaporative units can help.

#### **XII. Closing Remarks (Slayzak 2018-2020 Chair)**

#### **XIII. Next Meeting**

- Chicago. IL: Date TBD, 4:15 pm - 6:00 pm, Room: TBD

#### **XIV. Adjournment**

A motion to adjourn the meeting was made by Steve and properly supported by Richie. All members were in favor; none opposed.

(5) Approved (0) not approved (2) Not attending, (0) Abstentions

Meeting adjourned at 2:45 pm. EST