

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING
ENGINEERS, INC.

180 Technology Parkway NW,
Peachtree Corners, GA 30092
404-636-8400

TC Meeting Minutes COVER SHEET

TC/TG/TRG NO _____ TC 5.2 _____ DATE February 3, 2026

TC/TG/TRG TITLE Duct Design

DATE OF MEETING February 3rd, 2026, 3:30 PM PST

Hybrid

- In Person: Caesars Palace, Palermo (P)
- Virtual: [Click here for Virtual Attendance](#)
 - Meeting ID: 244 617 304 693 5
 - Passcode: yp9it3mv

MEMBERS PRESENT	TERM TO	MEMBERS ABSENT	Y E A	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Akshay Bhargava, Chair (Voting)	6/30/27		X	Dr. Jamie Fine, Duct Fitting Database Subcommittee Chair
Steven Winstead, Secretary (CM, Non- Voting)	6/30/25		X	Matt O'Rourke, Handbook Subcommittee Chair
Christopher Ruch, Webmaster (Voting)	6/30/29			Jeremy Zeedyk, Membership
Ralph Koerber, Code Interaction (Voting)	6/30/27			Aakash Patel, Program Subcommittee Chair
Cindy Bittel (Voting)	06/30/26			Kevin Gebke, Research
Kent Anderson (Voting)	6/30/29			Dr. Stephen Idem, Endowment Subcommittee Chair
Jamie Fine (Voting)	6/30/27			Ruben Abreu, Standards Subcommittee Chair
Robert Reid, Historian (Voting)	6/30/28			

*** Member Non-Quorum**

CM = Corresponding Member

PCM = Provisional Corresponding Member

G = Guest

DISTRIBUTION

All Members of TC plus the following:	
TAC Section Head	Farzin Rad
TAC Chair	Satheesh Kulankara
2029 Handbook Liaison (Fundamentals)	
2028 Handbook Liaison (Systems & Equipment)	
Research Liaison	Douglas C Scott
Standards Liaison	William F Walter
Staff Liaison	Steven J Hammerling

**ASHRAE 2025 Annual Conference
ASHRAE TC 5.2 Duct Design
FULL COMMITTEE MEETING**

Meeting Minutes

Date: Tuesday, February 3, 2026

Time: 3:00 PM – 5:30 PM PST

Hybrid

- In Person: Caesars Palace, Palermo (P)
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1) Call to Order 3:10

2) ASHRAE Code of Ethics Commitment – Akshay Bhargava

- a) *ASHRAE Value Statement – 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.*
- b) ASHRAE Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>
- c) ASHRAE Core Values: <https://www.ashrae.org/about/ashrae-s-core-values>
- d) **ASHRAE Artificial intelligence (AI) policy:** *ASHRAE prohibits the entry of content from any ASHRAE publication or related ASHRAE intellectual property (IP) into any AI tool, including but not limited to ChatGPT. Additionally, creating derivative works of ASHRAE IP using AI is also prohibited without express written permission from ASHRAE.*

3) Introductions and Attendance

- a) Recognize attendees
- b) Quorum reached? **5** out of 7 voting members attending (Requires _ present)
- c) Corrections/additions and approve agenda

4) 2025 Phoenix Meeting Minutes

- a) The DRAFT minutes have been posted to on the [TC 5.2 Webpage](#) and [Basecamp](#) in the Files > Minutes folder for Voting Members to review.
- b) Approval of Minutes
 - i) **Chris Ruch motioned to approve, seconded Robert Reid. voted to approve 5-0-0**

5) Section 5 Report – Farzin Rad

- a) Update

6) Herman and Dorothy Behls Endowment – Dr. Stephen Idem

- a) Travel Scholarship - was awarded to Ms. Cuicheng Zhang for 2026 Winter Conference
 - i) 17 applicants, Ms. Cuicheng Zhang winner, PHD undergrad out of Cambridge University

7) Subcommittee Reports

a) Membership – Cindy Bittle

- i) Recognize new Provisional Corresponding Members (PCMs) since June 2025.
 - a) No update
 - b) 1 new member at meeting attended
- ii) Interested New members can join via the ASHRAE TC 5.2 website, then request to be added to Basecamp.
 - a) No update

b) Handbook – Matt Orourke

- i) Update on Handbook chapters: Both Duct Construction and Duct Design will now be part of 2028 Systems and Equipment Handbook.
- ii) Deadlines –
 - a) Duct Construction – due 4/2/2027
 - b) Duct Design – due 4/2/2027
- iii) Motion: *Change the title of the Chapter Duct Construction to Duct Systems, revise the chapter to add the contents of the chapter Duct Design, and eliminate Duct Design as a separate chapter.*
 - a) Chapter numbers are still being worked on.
- iv) Vote: Akshay motion, Chris Second- Motion retracted. Akshay motion changes to duct design and construction, Motion Passing 5-0-0-2, Chair voting

c) Programs – Aakash Patel

- i) Status Report
- ii) Aim for Strategic Plan goal of having at least one (1) ASHRAE Chapter seminar every six (6) months addressing a topic within the scope of TC 5.2.
 - a) Action Items Identified in Tampa 2023
 - i. **Action Item** – Jamie Fine can provide tutorial of DFDB and resulting energy consumption reductions. Separate programs meeting to discuss. Vikram Murthy offered to assist and look at it from an IAQ perspective
 - ii. **Action Item** – Aakash Patel (Program Chair) to run interim Programs meeting and work on a presentation to submit. Focus on whether it should be DFDB alone or linked to decarb/IAQ/Energy Efficiency
- iii) Bob Reid brought up a duct insulation presentation he is involved in and contributing with 1.8
 - a) Bob and Brandon to meet to get items together for Austin meeting

d) Duct Design Guide (DDG) – Larry Smith

- i) Project status report
- ii) Ralph Koerber and Craig Wray assisting
- iii) SI units have been done.

- e) This work needs to be complete, need more time Larry Smoth
- f) **Duct Fitting Database**** (DFDB) – Jamie Fine
 - i) Subcommittee Report
 - ii) Ongoing Maintenance and Updates
 - a) Action Item Identified in Tampa 2023
 - i. **Action Item** – Bob and Kevin Gebke reviewed previous/historical CFD research study (RP1493, 1682) and provided summary on Basecamp. Dr. Fine will follow up with TC 4.10 about CFD modelling. Dr. Idem, Steve Rogers, Kevin Gebke, Bob Reid and Dr. Fine will define scope for new project and develop and RTAR. Jamie Fine determined the task can be done from a technical perspective and plans to research and complete. Report also shared with Steve Rogers.
 - ii. Previous Update: Stay in touch with TC 5.10, but for now this has been tabled, Kevin Gebke to reach out to TC 5.10
 - iii) Create a user guide assisting practitioners with utilizing the Duct Fitting Database, with a timeline for publication of the user guide. *** -Guide is in progress. Steve Idem and Fabricio Correa are working on it. I'm hoping to hear from them before our meeting.*
 - iv) *Inquiries are fielded on Duct fitting database by Dr. Idem and Jamie Fine. Proposed to revise finite plenum to a round duct, this would also include the infinite plenum. Reaching out to get updated, What is the financial component. Does not require research project.*
- g) **Research – Kevin Gebke**
 - i) Status of WS 1941 “Experimental Program to update the DFDB” – (Stephen Idem)
 - a) 1941-WS has been approved to potentially be released for bid during the next bid cycle (spring 2026).
 - b) *Dr. Idem has not heard back on WS 1941, Kevin Gebke-information needs to be resubmitted- info received sometime in December 2025, Conditionally approved*
 - ii) Status of RTAR -1974 The Effect of Tap Shape on Air Device Performance for Exposed Duct-Mounted Diffusers (Kevin Gebke, ~~Randy Young~~ and Bob Reid) status update
 - a) Email Vote completed in September 2025
 - b) *Robert Reid resubmitted in December, They have yet to hear anything back.*
 - iii) *Update given on Research project 1919 at TC meeting.*
- h) **Codes & Standards Interaction** - Ralph Koerber
 - i) **See Addendum A**
 - ii) Standard 126 Update - (Kevin Gebke & Ralph Kober) will do the comparison to 181 and see the purpose of both documents- Due Winter Meeting
 - iii) *Ralph gave his report. See Attachment Addendum #1*
- i) **Webmaster** – Christopher Ruch
 - j) TC 5.2 Website: <https://TC0502.ashraetcs.org/>
 - ii) Talk to Chris about joining TC 5.2 Basecamp.
- i) **Historian** - Bob Reid

- i) Herman Behls Library.
 - a) Hard Copy library available to be checked out by contacting Bob Reid. Review document titles posted on Basecamp. List of Documents on Basecamp. Reach out to Bob if you need to check out
 - ii) **Bob Reid is gathering relevant documents. Please reach out if you have anything, please reach out.**
- k) **YEA** – Ian Cavanaugh
 - i) Number of YEA members present at meeting 6
- l) Membership Engagement Committee** (Kevin Gebke and Larry Smith)
 - i) Joined by Bob Reid, Craig Wray, Kevin Marple, Vikram Murthy
 - ii) Update and discussion
 - a) Meet & Greet breakfast Monday 8-9am with Presentation by TC 5.2 associated vendor/manufacturer/others. Need volunteer presenter Duct design guide presentation for Las Vegas.
 - i. **Need to plan a social for Austin**
 - b) Proposed addition of “Duct Design Tour Groups” for Conferences (Chris Ruch/Cindy Bittel/Abdur-rahman/Bob Reid): Schedule shadow program for YEAs (Bob Reid) Summer 2026
 - iii) **Roll into membership committee**

8) Old Business

- a) Craig Wray – Reviewed current status of publication *Dampers and Airflow Control* – Cindy Michaels in Publications wants to know if it is A) Still relevant, B) Needs Revision
 - i) Current recommendation appears to be to continue to publish as-is without revisions. Stephen Idem/Bob Reid/Kevin Gebke
 - ii) Previous Vote: Still relevant and to keep publication. No need to update or revise. Motion to keep publication. Motion Passed
- b) **Still relevant with possibility to have revisions in the future.**
 - i) **Bob Reid, made motion to submit form for SPC 5.2, to keep published. Chris Ruch seconded vote 5-0-0-2 motion passed, Chair not voting**
- c) Bob Reid – Propose a program for orientation to TC 5.2 for new members and existing members. Cindy Bittel, Ralph Koerber, Ian Cavanaugh
 - i) Proposed Restructure of TC 5.2 Meetings
 - 1. Pull subcommittee discussions to a virtual meeting prior to the conference
 - ii) Proposed addition of practical training related to TC 5.2 OUTSIDE of meetings – between meetings, advertise and promote TC meetings
 - iii) Introduction to the new ASHRAE TC 5.2 LinkedIn site
- d) Review of Publications:
 - i) ASHRAE Standard 215-2018 (RA2021), Method of Test to Determine Leakage of Operating HVAC Air Distribution systems (3-year date: 9/30/2024)
 - ii) ASHRAE Standard 120-2022, Method of Testing to Determine Flow Resistance of HVAC Ducts and Fittings (3 year date: 2/28/2025) Bob Reid, Ralph Koerber and Kevin Gebke to review
- e) **215 was voted on for reaffirmation and approved, form has been submitted. ASHRAE staff has documents. Projected to be done by end of the year**

- f) 120 group has not met, will meet in Austin
- g) Work statement 1974 reaffirming date December 15th, 2025, 5-0-2-7 chair voting

9) New Business

- a) Handbook Motion
 - i) *Motion: Change the title of the Chapter Duct Construction to Duct Systems, revise the chapter to add the contents of the chapter Duct Design, and eliminate Duct Design as a separate chapter.*
- b) Akshay Bhargava – Potential program submission for Austin
 - i) Mike Bilderbeck, CEC is chairing “Workforce Development” track for Austin Meeting.
 - 1. 90-minute session on the basics of fans, duct design, and air distribution
 - 2. **Deadline the 25th of February**

Work statement 1974 reaffirming date December 15th 2025 5-0-2-7 chair voting

10) Deadlines

- a) **Special Publications**
 - i) *Duct Systems Design Guide* (RP1180) – review for 2026, last done in 2023
- b) **Handbook**
 - i) Duct Construction – due 4/2/2027
 - ii) Duct Design – due 4/2/2027
 - a) **Handbook Design and Construction**
- c) **Roster Updates** – Review and submit any changes
- d) **Meeting Requests for Winter Conference in Austin** – April
- e) **Seminar and Forum Proposals for Annual Conference in Austin** –
 - i) Please visit the annual conference website to submit your proposal:
- f) **Awards and Honors**
 - ASHRAE Honors and Awards - <https://www.ashrae.org/membership/honors-and-awards>
- g) **Upcoming Retirements?**

11) Adjournment

Upcoming ASHRAE Conference Meetings information:
<https://www.ashrae.org/conferences/ashrae-conferences>.

Next Meeting: 2026 Annual Conference - June 27-July 1, 2026 – Austin, TX

