

ASHRAE TC 4.3
Ventilation Requirements & Infiltration
Draft Agenda
Spring 2024 Meeting (Virtual)

SIGN IN SHEET

<https://tinyurl.com/5abf46xh>

Wednesday, March 27, 2024, 1.5 hours starting at 8:30 AM Pacific, 11:30 AM Eastern, 5:30 PM Egypt, 9 PM India

Contact tc0403@ashrae.net for link to virtual meeting

1. Call to order

McNulty

2. Review Scope

TC 4.3 is concerned with ventilation requirements and the analysis of infiltration, airflow around buildings, exhaust, and the re-entry of exhaust, including their interactions with indoor air quality and energy calculations for buildings and HVAC system design and operation performance and energy consumption. <https://tc0403.ashraetcs.org/>

3. ASHRAE Code of Ethics Commitments

McNulty

Code of Ethics Commitment: *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. <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>*

Diversity Commitment: *ASHRAE is committed to providing a welcoming environment. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We proactively pursue and celebrate diverse and inclusive communities understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and for the communities our Society serves. We respect and welcome all people regardless of age, gender, ethnicity, physical appearance, thought styles, religion, nationality, socio-economic status, belief systems, sexual orientation or education.*

4. Introductions (10')

All

a. Determination of a quorum

Parker

VOTING MEMBERS FOR THIS MEETING (Need (4) or ½+1 for a Quorum)

	Name	Position	Company	Roll Off (June 30)	Present?
1	Meghan McNulty	Chair	Servidyne	2026	
2	Isaac Simpson	Vice Chair	DMG North	2024	
3	Iain Walker	Member	Lawrence Berkeley Natl Lab	2024	
4	Anthony Abate	Member	Clean Air Group	2025	

5	Duncan Philips	Member	RWDI	2025	
6	Marianne Touchie	Member	University of Toronto	2025	
Non-Voting Officers					
	Nitin Naik	Programs	Dewpoint		
	Jason Urso	Membership	Tighe & Bond		
	Ryan Parker	Secretary/ Co-webmaster	RWDI		
	Neetha Vasan	Handbook	RWDI		
	Jordan Clark	Research	Ohio State University		
	Steven Emmerich	Standards	NIST		
	Bryan Morris	Co-Webmaster	Sellen		
	Hossam Abdelkader	Honors & Awards	Delta for Construction and Manufacturing (DCM)		

b. Round of introductions All

5. Agenda additions All

6. Approval of minutes from 2024 Winter Meeting McNulty

7. Chair's Report (5') McNulty

a. Chair's Goals

- i. Welcome! Getting to know TC 4.3: Poll for specialties/interests; mentorship program
- ii. Access to Basecamp – request to be added: email ryan.parker@rwdi.com
- iii. Website & FAQ updates

b. Announcements

- i. [ASHRAE Simplified Rules of Order](#)
- ii. *ASHRAE strategic plan* comment period through May 31: <https://strategicplanfeedback.ashrae.org/>

8. Membership/Roster (5')

McNulty/Urso

- a. Regular attendance is expected, active participation encouraged.
 - i. Attendance record corrections
- b. Guests, consider joining as a Provisional Corresponding Member (PCM). This is the only way to officially join TC 4.3: https://eweb.ashrae.org/eweb/TS_ProvisionalSignup.html
- c. Roster update for SY24-25 after this meeting (starting July 1, 2024):
 - i. Secretary
 - ii. 3 new voting members
 - iii. Membership Chair
 - iv. Website

9. Subcommittee reports

a. Programs (10')

Naik

- i. Previous Programs – Chicago Winter Conference - 1 co-sponsored paper session
- ii. Current Programs – submissions planned for Indianapolis
- iii. Future Programs / New Ideas – “3 Strikes” rule- if idea has been on docket for three meetings with no forward movement, will be removed

Tracks for Indianapolis: <https://ashraem.confex.com/ashraem/s24/cfp.cgi>

City	Title	Type	Chair/Speakers
Indianapolis	Evaluating Natural Ventilation	Seminar	Matt Mason (Chair): Justin Berquist, James Lo, Duncan Philips, Will Lin
(on hold)	Burning Questions Around Wildfires and Ventilation/IAQ	Seminar	Isaac Simpson / Steve Emmerich. TC 7.3 co-sponsor, possibly GPC44P co-sponsor (will be published by then)
(Resubmit)	TC4.10: Modeling airflow around buildings and the impact on indoor conditions driving toward increasing building resiliency		TC4.10 – is co-sponsoring and it was submitted. Rejected for Tampa, resubmitting for Chicago.
	“How To” for 62.1 or 62.2	Workshop	[when new version / substantial change]
	Standard 241 Updates		Steve Emmerich / Iain Walker / Matt Mason
Indianapolis	OSHA IAQ Technical Manual Update		Mathew Meyer: New manual will be published by next summer. Radon will be added to the update

Indianapolis	Building Resiliencin the Face of Extreme Climate Events: A Focus on Indoor Air Quality and Thermal Conditions	Seminar	Chairs N�ria Casquero-Modrego, Jeetika Malik; Speakers: Chrissi Antonopoulos, N�ria Casquero-Modrego, Kaiyu Sun
Indianapolis	IAQ Sensors	Seminar	Jordan Clark, Co-sponsor with 62.1, EHC

iv. Deadlines & Tracks for Indianapolis 2025 Annual Conference <https://www.ashrae.org/conferences/2024-annual-conference-indianapolis/2024-annual-conference-technical-program>

1. Fundamentals and Applications
 2. HVAC&R Systems and Equipment
 3. Research Summit
 4. Professional Development
 5. Electrification: Possibilities and Pitfalls
 6. Artificial Intelligence and the Built Environment
 7. Building Life Cycle Assessment
 8. Legislation, Standards, Codes, and Guidelines
- **Monday, February 26, 2024** | Debate, Panel, Seminar, Forum, Workshop, and Debate Proposals Due
 - **Friday, March 15, 2024** | Extended Abstract Paper Due
 - **Friday, March 15, 2024** | Full Conference Papers Due; Request for Conference Paper Sessions Due
 - **Monday, April 1, 2024** | Conference Paper Accept/Revise/Reject Notifications
 - **Monday, April 1, 2024** | Extended Abstract Accept/Reject Notifications
 - **Wednesday, April 10, 2024** | Revised Conference Papers Due
 - **Friday, April 12, 2024** | Debate, Panel, Seminar, Forum, Workshop Scheduling Notifications
 - **Wednesday, April 24, 2024** | Conference Paper Final Accept/Reject Notifications

b. Research (20')

Clark

- i. 1918-RFP Feedback to RAC
- ii. Active Research Projects (RP)
 1. RP1835: Characterization of Induced Flow Fans
- iii. Work Statements (WS)
 1. 1950-RTAR: Effect of residential exhaust terminations on jet mechanics and resulting required intake separation
 2. WS-1961: Updating garage ventilation rates for current populations of vehicles (electric cars) – first draft
- iv. Research Topic Acceptance Request (RTAR)

1. 1962-RTAR: The Impact of Facade Penetrations (e.g. ERV / HRV, exhausts) on Residential Building Pressurization and Ventilation Air Distribution – Phillips – revised and ready for approval
2. New: Improving Zone Air Distribution Effectiveness (Ez Factor) Accuracy for Heating with Ceiling Supply and Return – Godbout
3. PTAR (Publication): Guide for successful simulation of outdoor airflow around the built environment *2 meetings

v. On Hold / Inactive

vi. New Ideas

Name	Champions	Status/Actions
RTAR/PTAR Combo: Infiltration vs. Pressurization impact with ERVs	Phillips and Wray to write PTAR	Sub Committee: “Developing guidance for ventilation design related to high buildings and pressurization.” Possible PTAR instead? **2 meetings
Enhance the current Stack Height Reduction Factor Methodology for Plume Dispersion Calculations for 1- 2.5 x screen height	Carter/Parker	**2 meetings Idea from Parker, will consider writing
Potential work following ETF transition	McNulty	Sample survey of existing building vent performance i.e. BASE study Crowd-sourced database? CO2 or CO levels
Adjustment of rates for density of air w/ altitude-do emissions change with altitude? How much do resulting rates change? Include perception changes	Phillips- framework, Taylor review	Phillips to provide framework and Taylor to review
Submitted via email: Exploring the Impact of IAQ on Human Physiological Signals	Joonho Choi	Choi to write RTAR

viii. Deadlines

1. March 15, 2024
2. May 15, 2024 for consideration at RAC Annual meeting
3. August 14, 2024 for consideration at RAC Fall meeting
4. December 15 for consideration at RAC Winter meeting

--- 5'-10' Break (est. 55' in) ---

c. Handbook (15')**Vasan****i. Chapter Status**

Volume	Chapter	Lead	Status
2025 Fundamentals	Chapter 16 Ventilation and Infiltration	Marianne Touchie, Cara Lozinsky, Justin Berquist	
2025 Fundamentals	Chapter 24 Airflow Around Buildings	Ted Stathopoulos	
2027 Applications	Chapter 46 Building Air Intake and Exhaust Design	Ryan Parker	2023 version is published

ii. Revision information

1. Access files, for revision, via <https://authoring.ashrae.org/>
2. **Chapter reviews:** If you have colleagues who are practicing in or otherwise interested in any of our topics, please ask them to review our as-published chapters. They can submit their reviews via http://xp20.ashrae.org/secure/handbook/chapter_review/
3. Website for our revisers: <https://www.ashrae.org/technical-resources/ashraehandbook/ashrae-handbook-central>

iii. Deadlines**d. Standards (5')****Emmerich**

- i. 62.1 Ventilation and Acceptable Indoor Air Quality
- ii. 62.2 Ventilation and Acceptable IAQ in Low-Rise Res Bldgs
- iii. 161 Air Quality Within Commercial Aircraft
- iv. Other Standards of interest
 1. 241 Control of Infectious Aerosols
 2. 90.1 Energy
 3. 170 Ventilation of Healthcare Facilities

e. Website/Basecamp (5')**Parker**

- i. Website & FAQ updates

f. Honors & Awards (5')**Abdelkader**

- i. May 1 deadline: ASHRAE Award for Distinguished Public Service; ASHRAE Hall of Fame; ASHRAE Pioneers of the Industry; Fellow; F. Paul Anderson Award; Honorary Member
- ii. December 1 deadline

11. Old Business (5')

- a. Proposed MTG on IAQ Sensors (Clark)
- b. Terminology issue: RP-1833 conflicting definitions (Rock) – doc on Basecamp
- c. [NRC survey](#) on energy modeling practices ([Berquist](#)): The National Research Council (NRC) Canada is leading a 3-year project to investigate the role of overall airtightness on the energy/carbon use in heritage buildings by completing a series of whole building airtightness tests on both pre- and post-retrofit heritage buildings.

12. New Business (5')

- a.

13. Next Meeting

- a. Subcommittee meetings prior to Annual Conference
- b. 2024 Annual Conference: June 22-26, Indianapolis, IN <https://www.ashrae.org/conferences/2024-annual-conference-indianapolis>
Full TC meeting 5p-7p Eastern Time (US/Can) on Monday June 24, Research SC 1 hour before. Hybrid meetings. Group dinner to follow TC meeting.
- c. ASHRAE Annual and Winter Conference dates

Future Winter Conferences	Future AHR Expos	Future Annual Conferences
Jan. 20-24, 2024 – Chicago, IL	Jan. 22-24, 2024 – Chicago, IL	June 22-26, 2024 – Indianapolis, IN
Feb. 8-12, 2025 – Orlando, FL	Feb. 10-12, 2025 – Orlando, FL	June 21-25, 2025 – Phoenix, AZ
Jan. 31-Feb. 4, 2026 – Las Vegas, NV	Feb. 2-4, 2026 – Las Vegas, NV	June 27-July 1, 2026 – Austin, TX
	AHR Mexico <i>Sep. 19-21, 2023 – Mexico City</i>	

14. Adjourn