



Shaping Tomorrow's
Built Environment Today

1791 Tullie Circle NE ▪ Atlanta, Georgia 30329-2305 ▪ Tel 404-636-8400 ▪ Fax 404-321-5478 ▪ <http://www.ashrae.org>

DRAFT Minutes

ASHRAE Technical Committee 4.3: Ventilation Requirements & Infiltration

2020 Annual Meeting

Tuesday June 9, 2020, 2:30 pm-5:00 pm EST

<https://zoom.us/j/92373435839?pwd=Q1N1aVBJVXdjem9nb2lRMW9jK1UvUT09>

1. INTRODUCTION

1.1. Call To Order

1.2. Online Meeting Etiquette

1.3. Committee and Meeting Information

Scope of TC 4.3

TC 4.3 is concerned with ventilation requirements and the analysis of infiltration, airflow around buildings, and exhaust re-entry, including their integration with indoor air quality and energy calculations for building and HVAC system design and operation.

ASHRAE Code of Ethics

Commitment to the ASHRAE Code of Ethics – (TC Chair): 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. (See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>.)”

Subcommittee and Research Meetings

Research: During Main Meeting

Program: During Main Meeting

Handbook: During Main Meeting

Website

TC4.3 Homepage: <https://tc0403.ashraetcs.org/>

TC4.3 Basecamp: <https://3.basecamp.com/3106353/projects/10524322>



1791 Tullie Circle, N.E./Atlanta, GA 30329
404-636-8400

DRAFT

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 4.03 DATE June 26, 2020

TC/TG/MTG/TRG TITLE Ventilation Requirements & Infiltration

DATE OF MEETING June 9, 2020 LOCATION Virtual Online

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Martin Stangl	2018			David Claridge (Research Liaison)
Nathan Ho	2018			Stephen Duda (Honors)
John Carter	2019			James Bennett (S.04 Head)
Jordan Clark	2019			
Steven Emmerich	2019			
Steve Taylor	2019			
Brian Rock	2018			

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

TAC Section Head: Jamie Bennett	SHx@shrae.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

Note: These draft minutes have not been approved and not the official, approved record until approved by the TC.



1.3. Introductions

1.4. Attendance + Quorum

Voting Members					
	Name	Position	Company	Roll Off (June 30)	Present?
1	Martin Stangl	Chair	RWDI	2020	X
2	Nathan Ho	Vice-chair	P2S Engineering	2020	X
3	John Carter	Secretary	CPP	2023	X
4	Jordan Clark	Research	Ohio State University	2021	X
5	Steven Emmerich	Standards	NIST	2023	X
6	Steve Taylor	Member	Taylor Engineering	2021	X
7	Brian Rock	Handbook	University of Kansas	2022	X
Non-Voting Officers					
	Josephine Lau	Program	University of Nebraska	-	X
	Stephen Duda	Honors	Ross & Baruzzini, Inc.	-	X

Note: Quorum > 1/2 all VM, excluding NQM; super majority >= 2/3 VM present; simple majority > 1/2 VM present

1.5. Approve Agenda (Rock/Carter 6-0-0 CNV)

1.6. Approve Minutes of Past Meeting (Orlando 2020) (Rock/Carter 6-0-0 CNV)

1.7. Review of Committee Existence

- a) Continue as a TC, TG, MTG, or TRG
- b) Convert from a TG to a TC
- c) Convert from a TRG to a TG or TC
- d) Merge with a TC/TG/TRG and submit a revised scope for the merged committee
- e) Dissolve the TC, TG, MTG, or TRG.

Minutes:

Some broad/general discussion ensured.

Motion to Carry On As Currently Organized (Rock/Emmerich 6-0-0 CNV)



1.8. Section Head Report (Jamie Bennet)

Minutes:

Suggestion on how to handle voting

Roster Change occurs August 1st

Thanks to Martin for serving as Chair

Suggest to develop 5 word vision for TC with no verbs (from TC Breakfast meeting leadership lecture)

1.9. Liaison Reports

1.9.1. Conferences and Expositions Committee (CEC) - None

1.9.2. Handbook Committee - Guy Frankenfield (not present)

1.9.3. Professional Development Committee (PDC) – Donald Brandt (not present)

1.9.4. Technical Activities Committee (TAC) - ~~Dennis Wessel~~ Jamie Bennet-see 1.8

1.9.5. Special Publications - Francis Mills (not present)

1.9.6. Environmental Health Committee - Josephine Lau (had to step out - no report)

1.9.7. Research (RAC) – David Claridge (not present)

1.9.8. Standards – ~~Steve Emmerich~~ ?

1.9.9. MTG.OBB – Mini Malhotra (See attachment)

Minutes:

MTG.OBB meeting is scheduled on Tuesday, July 21, 1:00 PM – 3:00 PM EDT.

MTG.OBB is co-sponsoring Seminar 49 - Occupant-Centric Building Design and Operation:

Implementation Case Studies, which is scheduled on Monday, June 22, 8 am – 9 am EDT. The seminar will showcase subtask 4 of IEA-EBC Annex 79, i.e., case studies and real world implementation of occupant-centric control.

A new section on Occupant Modeling is added to Chapter 19 (Energy Estimating and Modeling Methods) of 2021 Handbook Fundamentals.

As of the last ASHRAE meeting, two work statements and an RTAR were to be revised and resubmitted. Updates will be available after the MTG.OBB meeting on July 21.

A new ASHRAE project, co-sponsored by DOE, to develop a Global Occupant Database has been started. As a first step, inputs are solicited in a survey form to identify potential partners who may have data and have interest in sharing the data, as well as to understand the characteristics of the data.

2. MTG.OBB is considering converting to TC. The TC proposal is yet to be submitted.

2.3.1. Discussion of Other Liaisons Needed for TC

Minutes:

Epidemic Task Force (Max Sherman)

General overview, formed to respond to Covid-19, very busy



Shaping Tomorrow's
Built Environment Today

1791 Tullie Circle NE ▪ Atlanta, Georgia 30329-2305 ▪ Tel 404-636-8400 ▪ Fax 404-321-5478 ▪ <http://www.ashrae.org>

<https://www.ashrae.org/about/news/2020/ashrae-epidemic-task-force-established>
<https://www.ashrae.org/technical-resources/resources>

4.3 members involved

Max Sherman, Iain Walker, Steven Emmerich, Duncan Philips, Brad Cochran, Mike Craig

2. Subcommittee Reports Research (Jordan Clark) Active Research Project Status

2.1.1.1. RP-1819: CO₂ Demand Controlled Ventilation in Multiple Zone VAV Systems with Multiple Recirculation Paths

- TC4.3 PMS is Steve Taylor, Josephine Lau
- TC4.3 Leadership voted 6-0-0-CNV in favour of approving a 6-month no-cost extension on February 7, 2020.

Minutes:

Final Report Received to be distributed to the full committee.

2.1.1.2. RP-1823: Improved Exhaust-to-Intake Dilution (Concentration) Calculations

- TC 4.3 PMS is Steve Taylor, Iain Walker, Brian Rock
- TC4.3 Leadership voted 5-0-1-CNV in favour of approving the final report on March 5, 2020.

Minutes:

Final Report Received and approved. Next step to update handbook chapters with relevant info.

Being Presented at this conference Seminar ?.

2.1.1.3. RP-1835: Characterization of Induced Flow Fans

- TC 4.3 is cosponsoring TC 9.10
- PES Chair is Brad Cochran

Minutes:

RFP Went out early March. 2 Proposals received. Pending review comments issued to bidders. Depending on answers might need to revise the WS and rebid.

2.1.2. Work Statements (WS)

None active

2.1.3. Research Topic Acceptance Request (RTAR)



2.1.3.1. RTAR-1878: Outdoor particulate matter penetration and indoor PM removal rates in naturally ventilated commercial buildings

- TC4.3 (Jordan Clark)

working on Work Statement.

2.1.3.2. RTAR-IAQ Development of the First Global Indoor Air Quality Database

- TC4.3 is Co-sponsor for TC2.1 (Dusan Licina)
- TC4.3 Leadership voted 6-0-0-CNV in favour of co-sponsoring on April 24, 2020.

Minutes:

Dusan provided brief overview. Basically generate a database similar to existing Thermal Comfort Database but focused on Indoor Air Quality.

RTAR has been submitted.

Ed Light provided some comments regarding some of the metadata surrounding the data that is needed to make it relevant.

1.1.1.1. RTAR-??? “The Verification of openings, the limitations of openings, air distribution and humidity conditions in Naturally Ventilated spaces to compliment Section 6.4 of ASHRAE Standard 62.1”

- Peter Simmons, PhD is the lead and he presented this topic at the Subcommittee meeting in Houston.
- The Subcommittee identified potential benefits of this research and voted to recommend sponsorship of this WS to the full Committee.
- The full Committee approved sponsorship by 62.1.
- Dr. Thomann has worked with Dr. Simmonds on completing the WS paperwork for ASHRAE. Peter Simmonds presented topic at Houston Meeting to 62.2 Natural Ventilation Subcommittee
- TC4.3 role TBD

1.1.2. On Hold or Inactive

1.1.3. New Ideas

Name	Champions	Status/Actions
Infiltration vs. Pressurization impact with ERVs	Josephine Lau	



Shaping Tomorrow's Built Environment Today

1791 Tullie Circle NE ▪ Atlanta, Georgia 30329-2305 ▪ Tel 404-636-8400 ▪ Fax 404-321-5478 ▪ <http://www.ashrae.org>

Electric Vehicle effects on Garage Exhaust Requirements	Steve Taylor	Jordan Clark will work on this with Steve over the summer.
Comparison Between Wind Tunnel and CFD for Different Applications	Duncan Philips/John Carter	
Interaction of Air Tightening and Gas Appliance Venting	Craig Wray (?) + Iain Walker	Craig would like to pursue but does not have the time, Iain not sure what the research should be - he will follow up with others at the lab suggested by Craig.
Transfer Air, etc. in multi-family Buildings	Iain Walker, Craig Wray	Iain provided long summary. Max Sherman provided some 62.1 / 62.2 context. Looking for lead author. Craig & Iain will put RTAR together but not likely to write the WS. Ed Light will contribute. Also Duncan Philips, Marianne Touchie
RTAR from 62.2 went through TC2.3 Ask 62.2 to bring it to TC4.3 for co-sponsorship	Walker	Happened already
UNSOLICITED RESEACH PROPOSAL about testing a "representative" sample of buildings for leakage		
TC2.6 Sound & Vibration as proxy for air leakage	Marianne Touchie	Not much progress yet. Has a student coming on in September to do some initial work to scope the research
Enhance the current Stack Height Reduction Factor Methodology for Plume Dispersion Calculations for stacks from screen height to 2.5 x screen height	Carter/Parker	RTAR targeting next meeting or the one after.
Evaluate effect of screenwalls or other large roof objects on previously evaluated plume rise enhancement of stack ganging	Carter/Parker	RTAR targeting next meeting or the one after.
Multi-family residential 10 ft separation distance requirement question should there be better guidance	Iain Walker/John Carter	



Shaping Tomorrow's
Built Environment Today

1791 Tullie Circle NE ▪ Atlanta, Georgia 30329-2305 ▪ Tel 404-636-8400 ▪ Fax 404-321-5478 ▪ <http://www.ashrae.org>

COVID	Ed Light	
-------	----------	--

1.1.4. Deadlines

- March 1 (for spring RAC meeting)
- May 15 (for June meeting)
- August 15 (for fall RAC meeting)
- December 15 (for January meeting)

1.1.5. Special Topics

n/a over time

1.2. Program (Josephine Lau)

1.2.1. Evaluation of Orlando 2020 Program (Winter Meeting 2020)

No feedback yet

1.2.2. Virtual Conference 2020 (Annual Meeting 2020)

1.2.3. Chicago, IL (Winter Meeting 2021)

Track

``1 HVAC&R Fundamentals and Applications:

2 Systems and Equipment: HVAC&R Systems and Equipment are constantly evolving to address the changing requirements of the built environment. Papers and programs in this track will focus on the development of new systems and equipment, improvements to existing systems and equipment and the proper application and operation of systems and equipment. (Dr. Marianna Vallejo: marianna.vallejo@jacobs.com)

3 Refrigeration and Refrigerants.

4 Environmental Health Through IEQ: HVAC&R systems play a significant role in maintaining indoor environmental conditions. As people spend increasingly more time in the built environment, health concerns are becoming paramount to design. This track will seek papers and programs on developing, evaluating and predicting optimal indoor environmental conditions, especially as they pertain to environmental health. (Stephen Idem sidem@ntech.edu)

5 Building Performance and Commissioning for Operation and Management: Modern HVAC&R systems are complicated and designed for high efficiencies. In order to optimize their use and provide proper operation, commissioning is recommended. This track provides an opportunity to provide papers and presentations



surrounding building operation and commissioning practices as well as case studies in performance and commissioning. (Lee Ribbeck lee.ribback@gmail.com)

6 Energy Conservation:

7 International Design:

8 Standards, Guidelines and Codes: ASHRAE is known for its standards and design guidelines – and they are constantly evolving with the intent on improving the built environment and its systems. Designers, Contractors, Architects and Owners must be able to keep up with the continuing changes in the current cycle but to also be prepared for the future changes. In addition, there is a large interaction of ASHRAE with the code authorities and government to incorporate these standards and guidelines. The series of sessions in this track highlight the changes to the standards and guidelines, their projected path and optimum design techniques to meet or exceed the standards. (Kyle Inge kinge@burns-group.com)

9 (Mini-Track – TDB based on Chuck Gulledge's Presidential Theme)

1.2.4. Future Program/New Ideas

City	Title	Type	Chair/Speakers
Chicago	Smart Residential Ventilation	Seminar	Emmerich/Walker
Chicago (?)	Comparison Between Wind Tunnel and CFD for Different Applications	Done	
Chicago	Where has my air been?	Seminar	John Carter/Martin Stangl/Ryan Parker Tentative for Chicago, only if in-person
Chicago (?)	62.2 update	Seminar	Iain Walker
Chicago?	Easier Said Than Done: Controlling Air Movement in High-Rise Multifamily Buildings	Seminar	Touchie/Wray/Philips/Dols
Austin	Sensors for control of ventilation and air cleaning	Seminar	Jordan Clark
??	Assessment of VOC mixtures	Workshop	Ed Light (with MTG)
??	Computational modeling of airflow around buildings	Seminar	John Carter, Ted Stathopoulos, Brad Cochran/Philipps
??	Computational modeling of airflow around buildings	Seminar	John Carter, Duncan Philips, Ted Stathopoulos, Brad Cochran Tentative for Chicago, only if in-person



City	Title	Type	Chair/Speakers
??	Burning Questions around Wildfires and ventilation/IAQ	Forum	Isaac Simpson

1.2.5. Deadlines

- **Monday, August 3, 2020:** Website Closes for Seminar, Workshop, Forum, Debate, and Panel Proposals.
- **Monday, October 5, 2020:** Seminar, Workshop, Forum, Debate, and Panel Accept/Reject Notifications

1.3. Handbook (Brian Rock)

1.3.1. Chapter Status

Volume	Chapter	Lead	Status
2021 Fundamentals	Chapter 16 Ventilation and Infiltration	Jordan Clark	Submitted.
2021 Fundamentals	Chapter 24 Airflow Around Buildings	Ted Stathopoulos Neetha	Due July 21 st . Requires Vote. Ted?
2023 Applications	Chapter 45 Building Air Intake and Exhaust Design	Ryan Parker	Needs Lead Revisor

1.3.2. Revisor Information

Access files, for revision, via <https://authoring.ashrae.org/> (Internet Explorer use req'd)

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/

The website for our revisors is <https://www.ashrae.org/technical-resources/ashrae-handbook/ashrae-handbook-central>

1.3.3. Deadlines

- *The deadline for submitting your chapter revisions for first review are; **April 05th** for Chapter 16, Ventilation, and **July 21st** for Chapter 24, Airflow Around Buildings*



Shaping Tomorrow's
Built Environment Today

1791 Tullie Circle NE ▪ Atlanta, Georgia 30329-2305 ▪ Tel 404-636-8400 ▪ Fax 404-321-5478 ▪ <http://www.ashrae.org>

1.4. Standards (Steven Emmerich)

1.4.1. TC 4.3 Cognizant

1.4.1.1. 62.1 Ventilation for Acceptable Indoor Air Quality (Nathan Ho)

1.4.1.2. 62.2 Ventilation for Acceptable IAQ in Low-Rise Residential Buildings
(Iain Walker)

1.4.2. Other Standards of Interest TC 4.3 Cognizant

1.4.2.1. 90.1 (Steve Emmerich)

1.4.2.2. 170-2013: TC 9.6: Ventilation of Healthcare Facilities (Rick Hermans)

1.5. Honors (Stephen Duda)

1.6. WebMaster (Martin Stangl)

1.7. Membership (Martin Stangl)

- **Welcome to YEAs**
- **Welcome to New Provisional Corresponding Members**
- **Welcome to New Corresponding Members**
 - Trevor Zeller of P2S Engineering
 - Colin Welburn of Welburn Consulting
 - Meghan McNulty of Servidyne
 - Paul Grahovac of Prosoco
 - Zheng O'Neill of The University of Alabama
 - Michael Craig of RWDI
 - Duncan Phillips of Rowan Williams Davies & Irwin
 - Ryan Parker of CPP Wind Engineering
 - Matt Mason of MAXAIR Mechanical, Inc
 - Christopher Ruch of National Energy Management Institute (NEMI)
 - Yang-Seon Kim of Wichita State University
 - Jason DeGraw of ORNL
- **Welcome to New Voting Members**
 - Isaac Simpson of DMG North, Inc.
 - Iain Walker of Lawrence Berkeley Laboratory
- **Welcome to New Leadership**



Shaping Tomorrow's
Built Environment Today

1791 Tullie Circle NE ▪ Atlanta, Georgia 30329-2305 ▪ Tel 404-636-8400 ▪ Fax 404-321-5478 ▪ <http://www.ashrae.org>

- John Carter rolling on as TC Chair and Membership SC Chair
- Vice-Chair Position is Open
- Isaac Simpson rolling on as Secretary
- Jordan Clark remains as Research SC Chair
- Brian Rock remains as Handbook SC Chair
- Josephine Lau remains as Program SC Chair
- Steven Emmerich remains as Standards SC Chair
- Ryan Parker rolling on as Webmaster

2. Other Business

2.1. MTG.OBD (Occupant Behaviours) (Mini Malhotra)

2.2. Future Meetings

- January 23 – 27, 2021 – Chicago, IL
- June 26-30, 2021 – Phoenix, AZ
- January 29 – February 2, 2022 – Las Vegas, NV
- June 25-29, 2022 – Toronto, ON

3. Adjourn (Rock/Ho 5-0-0 CNV)

Time: 5:02 eastern

Appendix A: Attendance Form

6/9/2020 Attendee	Lastname	Mid Name	Firstname	Full Name	Company	Record ID	Address Line1	Address Line2	Address Line3	City State Zip	Phone	Fax	Position	Email	Committee	Committee Code	Committee Description	CTPCCode	Start Date	End Date	Status	Status	Term	Print On Roster	Term Start	Term End	Primary Chapter Code	Primary Chapter Name	YEA	
1	Ho	L	Nathan	Mr Nathan L Ho	P2S Inc.	8121818	5000 E Spring St Ste 8			Long Beach, CA 90815-5218	(562)497-2999		Vice Chair	nathan.ho@p2s-inc.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2018	06/30/2020	Active	Active			07/01/2016	06/30/2020	105	ORANGE EMPIRE	YEA	
1	Lau		Josephine	Dr Josephine Lau, PhD	Univ of Nebraska-Lincoln	8071140	1110 South 67th Street	Pki 105d		Omaha, NE 68182-1100	(402)554-2079		Program Subcommittee Chair	jlau3@unl.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019		Active	Active			02/02/2010	06/30/2018	075	NEBRASKA		
1	Clark	D.	Jordan	Dr Jordan D. Clark	The Ohio State University	8347433	544 S Front St Apt 109			Columbus, OH 43215-7611	(512)585-4096		Research Subcommittee Chair	clark.1217@osu.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019	06/30/2021	Active	Active			06/25/2016	06/30/2021	073	ROCKY MOUNTAIN		
1	Emmerich	J	Steven	Mr Steven J Emmerich	NIST	5057464	100 Bureau Dr # Ms8633			Gaithersburg, MD 20899-8633	(301) 524-1022	(301)975-4409	Standards Subcommittee Chair	steven.emmerich@nist.gov	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019	06/30/2023	Active	Active			07/01/2001	06/30/2023	025	BALTIMORE		
1	Stangl		Martin	Mr Martin Stangl	RWDI	8084972	600 Southgate DR			Guelph, ON N1G 4P6 CANADA	5198231311	5198231316	Webmaster	Martin.Stangl@rwdi.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019		Active	Active			07/29/2014	06/30/2020	037	HAMILTON		
1	Carter	J	John	Mr John J Carter	CPP	5185848	7365 Greendale RD			Windsor, CO 80550-8015	(970)221-3371	(970)221-3124	Member	jcarter@cppwind.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019	06/30/2023	Active	Active	4 years		07/01/2000	06/30/2023	073	ROCKY MOUNTAIN		
1	Rock	A	Brian	Mr Brian A Rock, FASHRAE, PE	The University of Kansas	2026715	1143 E 1264 Rd			Lawrence, KS 66047-9300	(785)864-3603	(785)864-5631	Member	hvacman@ku.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2018	06/30/2022	Active	Active	4 years		07/01/1993	06/30/2022	053	KANSAS CITY		
1	Taylor	T	Steven	Mr Steven T Taylor, PE	Taylor Engineering LLC	733117	1080 Marina Vlg Pkwy Ste 501			Alameda, CA 94501-1142	(510)749-9135	(510)749-9136	Member	staylor@taylor-engineering.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019	06/30/2021	Active	Active	4 years		07/01/2001	06/30/2021	082	GOLDEN GATE		
1	Abate	M	Anthony	Mr Anthony M Abate	Clean Air Group	8095353	418 Meadow St Ste 204			Fairfield, CT 06824-5365	203-335-3700	(203)335-1075	Provisional Corresponding Member	tabate@atmosair.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	02/05/2020	02/05/2022	Active	Active	2 years		02/05/2020	02/05/2022	004	CONNECTICUT		
1	Carson	Michael	Christopher	Mr Christopher Michael Carson	Carson Solutions	8371004	105 Fern Park Dr			Dawsonville, GA 30534-8405	706-525-1516		Provisional Corresponding Member	chris.carson@carsonolutions.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	03/06/2019	03/06/2021	Active	Active	2 years		03/06/2019	03/06/2021	032	ATLANTA		
1	Craig		Michael	Mr Michael Craig	RWDI	8138285	600 Southgate Dr			Guelph, ON N1G 4P6 CANADA	(519) 823-1311	5198231316	Provisional Corresponding Member	mike.craig@rwdi.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	08/06/2019	08/06/2021	Active	Active	2 years		08/06/2019	08/06/2021	037	HAMILTON		
1	Kim		Yang-Seon	Dr Yang-Seon Kim	Wichita State University	8222906	9911 E 21st St N Apt 108			Wichita, KS 67206-3521			Provisional Corresponding Member	seonkim1221@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	02/03/2020	02/03/2022	Active	Active	2 years		02/03/2020	02/03/2022	022	CENTRAL PENNSYLVANIA	YEA	
1	Kuntz	W	Kenneth	Mr Kenneth W Kuntz	Greenheck Fan Corp	8227696	PO Box 410			Schofield, WI 54478-0410	715 355-2517	715 355-6564	Provisional Corresponding Member	kenneth.kuntz@greenheck.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	02/27/2020	02/27/2022	Active	Active	2 years		02/27/2020	02/27/2022	107	NORTHEAST WISCONSIN		
1	McNulty	Kara	Meghan	Ms Meghan Kara McNulty	Servidyne	8226513	148 Waverly Way NE Apt 10			Atlanta, GA 30307-2562	(551)265-7520		Provisional Corresponding Member	meghan.mcnulty@servidyne.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	02/03/2020	02/03/2022	Active	Active	2 years		02/03/2020	02/03/2022	032	ATLANTA	YEA	
1	O'Neill		Zheng	Dr Zheng O'Neill	The University Of Alabama	5224176	4500 Royale Dr			Tuscaloosa, AL 35406-4410	(205)348-6982		Provisional Corresponding Member	zhengoneill@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	08/15/2018	08/15/2020	Active	Active	2 years		08/15/2018	08/15/2020	057	BIRMINGHAM		
1	Phillips	A	Duncan	Mr Duncan A Phillips	Rowan Williams Davies & Irwin	5101310	600 Southgate Dr			Guelph, ON N1G 4P6 CANADA	5198231311 (2409)	5198231316	Provisional Corresponding Member	dap@rwdi.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	02/04/2020	02/04/2022	Active	Active	2 years		02/04/2020	02/04/2022	037	HAMILTON		
1	Ruch	Paul	Christopher	Mr Christopher Paul Ruch	National Energy Management Institute (NEMI)	8357685	8403 Arlington Blvd	Ste 100		Fairfax, VA 22031-4662	(916)280-6281		Provisional Corresponding Member	cruch@nemionline.org	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	12/21/2018	12/21/2020	Active	Active	2 years		12/21/2018	12/21/2020	081	SACRAMENTO VALLEY		
1	Simpson		Isaac	Mr Isaac Simpson	DMG North, Inc.	8355055	4795 Heyer Ave			Castro Valley, CA 94546-3610	(415)859-8345		Provisional Corresponding Member	isaac.simpson@dmgn.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	11/16/2018	11/16/2020	Active	Active	2 years		11/16/2018	11/16/2020	082	GOLDEN GATE		
1	Cochran	C	Brad	Mr Brad C Cochran	C P P Inc	5182029	7365 Greendale RD			Windsor, CO 80550-8015	(970)221-3371	(970)221-3124	Corresponding Member	bcochran@cppwind.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2016		Active	Active			06/29/2015	06/30/2016	073	ROCKY MOUNTAIN		
1	Davidovic		Danko	Dr Danko Davidovic	Huber Engineered Woods LLC	8225389	1446 Highway 334			Commerce, GA 30530-5941	706-621-0795		Corresponding Member	danko.davidovic@huber.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2017		Active	Active			07/26/2016	06/30/2017	032	ATLANTA		
1	Dols	S	William	Mr William S Dols	Natl Inst Of Standards & Technology	5200188	100 Bureau Dr Stop 8633			Gaithersburg, MD 20899-8633	(301)975-5860	(301)975-4409	Corresponding Member	william.dols@nist.gov	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2012		Active	Active			07/01/2007	06/30/2012	026	NATIONAL CAPITAL		
1	Duda	W	Stephen	Mr Stephen W Duda	Ross & Baruzzini Inc	5070363	6 S Old Orchard Ave			Saint Louis, MO 63119-3203	(314)918-8383	(314)918-1786	Corresponding Member	sduda@rossbar.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2017		Active	Active			07/01/2007	06/30/2017	054	ST LOUIS		
1	Light		Ed	Mr Ed Light	Building Dynamics, LLC	8223536	1216 Ashton Rd			Ashton, MD 20861-3324	(703)538-2752		Corresponding Member	eligh@building-dynamics.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019		Active	Active			04/01/2014	06/30/2019	026	NATIONAL CAPITAL		
1	Maihotra	Mini	Dr Mini Maihotra	Oak Ridge National Lab		8029136	PO Box 2008 MS 6070			Oak Ridge, TN 37831-2008	(865)574-4317	(865)574-9338	Corresponding Member	maihotram@ornl.gov	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019		Active	Active			03/01/2012	06/30/2019	099	EAST TENNESSEE		
1	Modera	P	Mark	Prof Mark P Modera, PhD, PE	UC Davis	508538	215 Sage St Ste 100			Davis, CA 95616-7379	(530)754-7671	(530)754-7672	Corresponding Member	mmodera@ucdavis.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2008		Active	Active			07/01/2003	06/30/2008	082	GOLDEN GATE		
1	Sherman		Max	Dr Max Sherman		1074412	5 El Paraiso Ct			Moraga, CA 94556-1311	(925) 917-0267	925 247 0004	Corresponding Member	mhsherman@epbgroup.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/1993		Active	Active			07/01/1993	06/30/2001	082	GOLDEN GATE		
1	Stathopoulos		Theodore	Mr Theodore Stathopoulos	Concordia University	5140055	1455 De Maisonneuve Blvd W			Montreal, QC H3G 1M8 CANADA	5148482424 (3186)	5148487965	Corresponding Member	statho@boecoconcordia.ca	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2008		Active	Active			07/01/2001	06/30/2008				
1	Touchie		Marianne	Dr Marianne Touchie	University of Toronto	8258937	35 St George St			Toronto, ON M5S 1A4 CANADA	416-668-6408		Corresponding Member	marianne.touchie@utoronto.ca	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2017		Active	Active			11/03/2016	06/30/2017	016	TORONTO		
1	Walker	S	Iain	Dr Iain S Walker	Lawrence Berkeley Laboratory	5128655	1 Cyclotron Rd Bldg 90-3074			Berkeley, CA 94720-8099	(510)486-4692	(510)486-6658	Corresponding Member	iswalker@lbl.gov	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2013		Active	Active			07/01/1998	06/30/2013	082	GOLDEN GATE		
1	Wray	P	Craig	Mr Craig P Wray, P.Eng	Consulting Engineer	2034107	94 Beaudry Bay			Winnipeg, MB R3X 1Y6 CANADA	204 2547766		Corresponding Member	pharmeng@shaw.ca	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2003		Active	Active			07/01/2007	06/30/2008	082	GOLDEN GATE		
1	Bennett	S	James	James S Bennett	NIOSH	8017516	4215 Virginia Ave			Cincinnati, OH 45223-1913	(513)841-4311		Section Head	jbennett@cdc.gov	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019	06/30/2023	Active	Active			07/01/2019	06/30/2023	040	CINCINNATI		
1	Licina		Dusan		EPFL									dusan.licina@epfl.ch																
1	Ivankovic		Hanna		RWDI																									
1	Beardy-Sing		Jordan		RWDI																									
1	Ivester		Gwenn		Cushman Wakefield									givester@live.com																
1	Vasan		Neetha		RWDI																									
1	Rocheffort		Anastasia		RWDI																									
1	Stangl		Martin	Mr Martin Stangl	RWDI	8084972	600 Southgate DR			Guelph, ON N1G 4P6 CANADA	5198231311	5198231316	Chair	Martin.Stangl@rwdi.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2018	06/30/2020	Active	Active	2 years		07/29/2014	06/30/2020	037	HAMILTON		
1	Carter	J	John	Mr John J Carter	CPP	5185848	7365 Greendale RD			Windsor, CO 80550-8015	(970)221-3371	(970)221-3124	Secretary	jcarter@cppwind.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019		Active	Active			07/01/2000	06/30/2023	073	ROCKY MOUNTAIN		
1	Berquist	David	Justin	Mr Justin David Berquist	National Research Council	8275912	56 Montana Way			Ne																				

	Grahovac	Paul	Mr Paul Grahovac		8112848	3741 Greenway Cir			Lawrence, KS 66046-5441	785-830-7355	(888)376-3741	Provisional Corresponding Member	paul.grahovac@prosooco.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	08/14/2019	08/14/2021	Active	Active	2 years		08/14/2019	08/14/2021	053	KANSAS CITY	
	Hassaan	Abdelkader	Hossam	Mr Hossam Abdelkader Hassaan, Eng	Delta Construction & Manufacturing Co. (DCM)	8257049	2B, Masr Elgededa Liliskan Walaamir	Beside Gate#3 Eishams Club	Heliopolis, Cairo 11757 EGYPT	+20114887130	+20221800212	Provisional Corresponding Member	hossam.kader@dcmegypt.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	01/17/2019	01/17/2021	Active	Active	2 years		01/17/2019	01/17/2021	161	CAIRO	
	Joseph	Darryl	Mr Darryl Joseph	Welch Morris + Associates	8236335	19 Seepaul Blvd	Pond Street	La Romaine, TRINIDAD AND TOBAGO	8687233536			Provisional Corresponding Member	darryl.joseph21@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/29/2019	07/29/2021	Active	Active	2 years		07/29/2019	07/29/2021	612	UNASSIGNED REGION XII	YEA
	Kalra	Tushar	Mr Tushar Kalra	Camfil Air Filtration India Pvt. Ltd.	8358795	62, IDC	Mehrauli Road	Gurgaon, Haryana 122001 INDIA	(852) 750-1119			Provisional Corresponding Member	tushar.kalra@camfil.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	09/06/2018	09/06/2020	Active	Active	2 years		09/06/2018	09/06/2020	215	EAST INDIA	YEA
	Lan	Li	Prof Li Lan	Department of Architecture	8233521	Department Of Architecture	800 Dongchuan Road Minhang District	Shanghai, 200240 CHINA	13801648399			Provisional Corresponding Member	lanli2006@sjtu.edu.cn	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	04/07/2020	04/07/2022	Active	Active	2 years		04/07/2020	04/07/2022	201	CAR ASHRAE Shanghai Group	
	Mason	D	Matt	Mr Matt D Mason PE	MAXAIR Mechanical, Inc	8355717	811 Woodmont Dr		Marietta, GA 30062-3817	423-838-4176		Provisional Corresponding Member	mattmason777@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	10/17/2018	10/17/2020	Active	Active	2 years		10/17/2018	10/17/2020	032	ATLANTA	YEA
	O Donovan	Adam	Mr Adam O Donovan	Cork Institute of Technology	8262961	6 Courtlands	Mayfield	Cork, IRELAND	(87) 766-2967			Provisional Corresponding Member	adam.odonovan@cit.ie	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	04/23/2020	04/23/2022	Active	Active	2 years		04/23/2020	04/23/2022	503	REGION XIV - OTHER	YEA
	Parker	Ryan	Dr Ryan Parker	CPP Wind Engineering	8356821	7365 Greendale Rd		Windsor, CO 80550-8015	970-233-5000			Provisional Corresponding Member	ryan.parker@cppwind.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	01/13/2019	01/13/2021	Active	Active	2 years		01/13/2019	01/13/2021	073	ROCKY MOUNTAIN	YEA
	Perez	Fernando	Mr Fernando Perez	Command Commissioning	8278396	201 W 5th ST Ste 1100		Austin, TX 78701-0060	(512)294-6740			Provisional Corresponding Member	Panamfern@hotmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	01/03/2019	01/03/2021	Active	Active	2 years		01/03/2019	01/03/2021	066	AUSTIN	
	Schaeffer	David	Mr David Schaeffer		8134247	1108 Kennedy Trl		Chesapeake, VA 23322-6947	757-639-6924			Provisional Corresponding Member	david.a.schaeffer@navy.mil	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	01/09/2019	01/09/2021	Active	Active	2 years		01/09/2019	01/09/2021			
	Shamroukh	Mohammed	Mr Mohammed Shamroukh	Taqeef Refrigeration & Air Conditioning L.L.C	8351001	Taqeef Sales Office	Al Garhoud UB Building	Dubai, P.O. Box 125329 UNITED ARAB EMIRATES	+971502528942			Provisional Corresponding Member	mohammedshamroukh@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	03/07/2020	03/07/2022	Active	Active	2 years		03/07/2020	03/07/2022	175	ASHRAE FALCON	YEA
	Sirdeshpande	Gourish	Dr Gourish Sirdeshpande	Armstrong World Industries Inc.	8347552	853 Westminster Dr		Lancaster, PA 17601-1453	(717)917-5949			Provisional Corresponding Member	gsirdeshpande@armstrongceilings.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	01/14/2019	01/14/2021	Active	Active	2 years		01/14/2019	01/14/2021	022	CENTRAL PENNSYLVANIA	
	Svtak	Michael	Brandon	Mr Brandon Michael Svtak	Systemair	8264518	10048 Industrial Blvd	Lenexa, KS 66215-1219	913-752-6317			Provisional Corresponding Member	brandon.svtak@systemair.net	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	01/02/2020	01/02/2022	Active	Active	2 years		01/02/2020	01/02/2022	053	KANSAS CITY	YEA
	Swamidas	Deepak	Mr Deepak Swamidas	AECOM NZ Limited	8107606	121, Rostrevor Street		Hamilton, 3204 NEW ZEALAND	+64 7 8571822	6478348980		Provisional Corresponding Member	deepak.swamidas@aecom.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	04/22/2019	04/22/2021	Active	Active	2 years		04/22/2019	04/22/2021	037	HAMILTON	
	VENUGOPAL	VINOD	Mr VINOD VENUGOPAL	MSCEB	8179976	Flat-23,Building-988,Road-5121,	Al Burhama, Block 351,	Manama, 1166 BAHRAIN	33121201	33121201		Provisional Corresponding Member	vinodvgopal@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	04/20/2019	04/20/2021	Active	Active	2 years		04/20/2019	04/20/2021	181	BAHRAIN	YEA
	Vijayakumar	R	Mr R Vijayakumar, PhD	Aerfil,LLC	5225059	300 Cypress St Unit 41		Liverpool, NY 13088-8802	(315)506-6883			Provisional Corresponding Member	vijay@aerfil.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	01/09/2019	01/09/2021	Active	Active	2 years		01/09/2019	01/09/2021	010	CENTRAL NEW YORK	
	Weerasinghe	Kankanamage	Mulkingala	Mr Mulkingala Kankanamage Weerasinghe	Singo Engineering (Pvt) Ltd	8072905	590/2, 10th Mile Post.	Malabe, 0001 SRI LANKA	+94776844480	+94112744714		Provisional Corresponding Member	lal@singcolk.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	12/27/2019	12/27/2021	Active	Active	2 years		12/27/2019	12/27/2021	999	DefaultChapter	
	Welburn	Colin	Mr Colin Welburn	Welburn Consulting	8295372	143 Sunnyside Ave		Ottawa, ON K1S 0R2 CANADA	(613)852-6003			Provisional Corresponding Member	colin@welburnconsulting.ca	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	08/08/2018	08/08/2020	Active	Active	2 years		08/08/2018	08/08/2020	015	OTTAWA VALLEY	
	YUAN	YU	Ms YU YUAN	3M Innovation Singapore Pte Ltd	8358347	2 Tuas Link 4		Singapore, 637321 SINGAPORE				Provisional Corresponding Member	eyyuan@mmm.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	04/12/2019	04/12/2021	Active	Active	2 years		04/12/2019	04/12/2021	142	SINGAPORE	
	zay	zay	Mr zay zay	AA. Medical	8242323	85 Camaveron Drive		Lincoln, 7608 NEW ZEALAND	+64 211742332			Provisional Corresponding Member	zayzay681@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	01/18/2020	01/18/2022	Active	Active	2 years		01/18/2020	01/18/2022	506	REGION XIII - OTHER	
	Zeller	Brink	Trevor	Mr Trevor Brink Zeller	P2S Engineering	8226304	1126 W Sierra Dr	Santa Ana, CA 92707	(310)647-7432			Provisional Corresponding Member	trevor.zeller@p2sinc.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	06/18/2019	06/18/2021	Active	Active	2 years		06/18/2019	06/18/2021	105	ORANGE EMPIRE	YEA
	Balke	Christine	Elizabeth	Ms Elizabeth Christine Balke	Taylor Engineering	8312844	1080 Marina Vlg Pkwy Ste 501	Alameda, CA 94501-1142	(218) 780-8065			Corresponding Member	ebalke@taylor-engineering.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/07/2018		Active	Active					082	GOLDEN GATE	YEA
	Barley	C	Dennis	Mr Dennis C Barley	NREL	7982656	15013 Denver West Pkwy	Lakewood, CO 80401-3111				Corresponding Member		T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2002		Active	Active							
	Blanford	D	Michael	Mr Michael D Blanford	U.S Dept. Of Housing & Urban Development	5138006	Office Policy Development & Researc	Washington, DC 20410-0001	(202) 402-5728	(202)708-5873		Corresponding Member	michael.d.blanford@hud.gov	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2015		Active	Active			07/01/2010	06/30/2015	025	BALTIMORE	
	Boome	Alexander	Mr Alexander Boome, IV, P.Eng, PE	NDY-TETRA Tech Co.	74721	1625 Homby ST Apt 702		Vancouver, BC V6Z 2M2 CANADA	604 290-6194			Corresponding Member	aboome@abcelfd.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2006		Active	Active			07/01/2004	06/30/2006	020	BRITISH COLUMBIA	
	Brown	R	Lance	Lance R Brown	Google	8138982	3607 La Mirada Dr	Concord, CA 94519-1413	(801)309-1175			Corresponding Member	lancebrowncustoms@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2016		Active	Active			02/12/2015	06/30/2016	999	DefaultChapter	YEA
	Camden	L	Heather	Ms Heather L Camden	E&C Engineers And Consultants Inc	5116450	1010 Lamar St Ste 650	Houston, TX 77002-6324	713-580-8800	(713)580-8888		Corresponding Member	camden@ecen.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2005		Active	Active					064	HOUSTON	
	Cardenal	Bernardo	Mr Bernardo Cardenal, PE	Rocamar Engineering Services Inc	113108	6401 Congress Ave Ste 230		Boca Raton, FL 33487-2842	(561)276-9898	(561) 276-9898		Corresponding Member	Bernardoc@rocamareng.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2006		Active	Active			07/01/1996	06/30/2006	104	GOLD COAST	
	Chen	(Yan)	Qingyan	Dr Qingyan (Yan) Chen	Purdue University	5013789	585 Purdue Mall	West Lafayette, IN 47907-2088	(765)496-7562	(765)496-7534		Corresponding Member	yanchen@purdue.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/1997		Active	Active					999	DefaultChapter	
	Damiano	A	Leonard	Mr Leonard A Damiano	Retired	5018335	104 Creek Valley Ter	Smithville, MO 64089-9258	(843) 655-0037	843 6550037		Corresponding Member	damiano.len@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2004		Active	Active					113	CHARLESTON	
	DeAngelis	W	Darryl	Mr Darryl W DeAngelis	EBTRON	5203312	149 Burbank Rd	Longmeadow, MA 01106-1503	(203) 617-9235	(203)749-3829		Corresponding Member	darryld@ebtron.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2007		Active	Active					004	CONNECTICUT	
	DeGraw	W	Jason	Dr Jason W DeGraw	ORNL	8103496	6319 Iris Way	Arvada, CO 80004-5157	(814)321-8051			Corresponding Member	jason.degraw@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	04/23/2017		Active	Active			04/23/2015	04/22/2017	022	CENTRAL PENNSYLVANIA	
	Dobbs	Gregory	Dr Gregory Dobbs, PhD, LEED AP BEMP HPDP BESA		5150823	4 Delmore Dr		Kendall Park, NJ 08824-7015	(732)419-3050	(815)301-3061		Corresponding Member	greg.dobbs@mail.ashrae.org	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2006		Active	Active					021	PHILADELPHIA	
	Esmaeelpanah	Javad	Dr Javad Esmaeelpanah	RWDI Inc.	8309320	101 Springhead Gdns		Richmond Hill, ON L4C 5C3 CANADA	(647) 830-8093			Corresponding Member	jen@rwdi.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019		Active	Active			02/21/2017	02/21/2019	016	TORONTO	YEA
	Fang	Xia	Ms Xia Fang	McKinstry	5219535	16025 Tbl Mtn Pkwy Ste 100		Golden, CO 80403-1694	(720)577-2002			Corresponding Member	fangxia@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019		Active	Active			04/01/2014	06/30/2019	073	ROCKY MOUNTAIN	
	Feustel	E	Helmut	Dr Helmut E Feustel	Kessler & Luch GmbH	2043198	Lahnstrasse 48	D-35435 Wettenberg, GERMANY	496418772012	11496418772137		Corresponding Member	hefeustel@ga-feustel.de	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2003		Active	Active			07/01/1986	06/30/2003			
	Friedman	D	Todd	Mr Todd D Friedman	Friedman Engineering, LLC	5171927	11709 Fulham St	Silver Spring, MD 20902-3015	(301) 298-5070			Corresponding Member	friedman@friedmaneng.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2010		Active	Active			07/01/2006	06/30/2010	026	NATIONAL CAPITAL	

Griffiths	M	Dianne	Ms Dianne M Griffiths, PE	Steven Winter Associates	2025694	61 Washington St Ste 1		Norwalk, CT 06854-2739	(203)857-0200 (274)	(203)852-0741	Corresponding Member	dgriffiths@swinter.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2016		Active	Active	07/01/2001	06/30/2016	146	BI-STATE	
Grot	A	Richard	Mr Richard A Grot	Lagus Applied Technology	2006379	674 Dayridge Dr		Dripping Springs, TX 78620-2127 Montreal, QC H5J3P1 CANADA	(301)529-3845	(760)480-1435	Corresponding Member	ragrot@tracergas.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/1997		Active	Active			030	SOUTHERN PIEDMONT	
Haghighat		Fariborz	Dr Fariborz Haghighat	Concordia Univ	2049280	17455 Marcel-Libersan			5148482424	5148487965	Corresponding Member	haghi@bcee.concordia.ca	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/1988		Active	Active	07/01/1996	06/30/2000	014	MONTREAL	
Kato		Shinsuke	Prof Shinsuke Kato, PhD	The University of Tokyo	5012232	Iwamoto-Cho 2-5-8-801	Chiyoda-ku	Tokyo, 101-0032 JAPAN	338610333	354526432	Corresponding Member	kato@iis.u-tokyo.ac.jp	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/1993		Active	Active			999	DefaultChapter	
Lau		Josephine	Dr Josephine Lau, PhD	Univ of Nebraska-Lincoln	8071140	1110 South 67th Street	Pki 105d	Omaha, NE 68182-1100	(402)554-2079		Corresponding Member	jlau3@unl.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2018		Active	Active	02/02/2010	06/30/2018	075	NEBRASKA	
Liddament	W	Martin	Dr Martin W Liddament	Veetech Corp	3034586	37 Carlton Road	Caversham Heights Berkshire	Reading, RG4 7NT UNITED KINGDOM	01189447220		Corresponding Member	mwiddament@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2011		Active	Active	07/01/1989	06/30/2011	206	UK LONDON and SOUTH-EAST	
Lindsay	B	Bruce	Mr Bruce B Lindsay	Brevard Public Schools	8312229	425 Birchington Ln		Melbourne, FL 32940-2113	(321) 423-3684		Corresponding Member	bruce.b.lindsay@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/12/2017		Active	Active			109	SPACECOAST	
Liu		Shichao	Dr Shichao Liu	Worcester Polytechnic Institute (WPI)	8185085	Civil and Environmental Engineering	Worcester Polytechnic Institute	Worcester, MA 01609	(512)965-0863		Corresponding Member	slu8@wpi.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	09/11/2017		Active	Active			001	BOSTON	YEA
Lstiburek	W	Joseph	Dr Joseph W Lstiburek	Building Science Corp	5074059	68 Main St		Westford, MA 01886-2507	(978)589-5100	(978)589-5103	Corresponding Member	joe@building-science.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2004		Active	Active	07/01/2000	06/30/2004	001	BOSTON	
MacDonald	A	Iain	Dr Iain A MacDonald	National Research Council Canada	8091166	1200 Montreal Road	Building M-24	Ottawa, ON K1A 0R6 CANADA	(613)993-9676	6139543733	Corresponding Member	iain.mcdonald@nrc-cnrc.gc.ca	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2013		Active	Active	07/01/2008	06/30/2013	015	OTTAWA VALLEY	
Mathes	W	Dennis	Mr Dennis W Mathes	Lomanco, Inc.	8217852	2101 W Main St		Jacksonville, AR 72076-4247	(501) 983-6162		Corresponding Member	dmathes@lomanco.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	09/13/2017		Active	Active			062	ARKANSAS	
Maurer	C	Christine	Miss Christine C Maurer	Advanced Energy	8095236	909 Capability Dr Ste 2100		Raleigh, NC 27606-4961	919-857-9044	(919)832-2696	Corresponding Member	cmaurer@advancedenergy.org	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2014		Active	Active	07/06/2012	06/30/2014	106	TRIANGLE	
Morris		Bryan	Mr Bryan Morris	McKinstry	8147850	7410 Douglas Ave SE		Snoqualmie, WA 98065-9727	(206)832-8109		Corresponding Member	bryanm@mcinstry.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2016		Active	Active	04/01/2014	03/31/2016	999	DefaultChapter	
Murakami		Shuzo	Mr Shuzo Murakami	Keio University	5012230	3-14-1 Hyoshi	Kohoku-ku	Yokohama, JAPAN 223-8522	81455661777	81455661770	Corresponding Member	murakami@sd.keio.ac.jp	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/1997		Active	Active			506	REGION XIII - OTHER	
Musser	B	Amy	Dr Amy B Musser	Vandemusser Design, LLC	5131200	26 Crabapple Ln		Asheville, NC 28804-1733	(828)337-2317		Corresponding Member	amy@vandemusser.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2003		Active	Active			097	GREENVILLE	
Neuman	A	Victor	Mr Victor A Neuman, PE		2001094	3437 E Winona St		Phoenix, AZ 85044-3634	(619)972-3345	(619)817-8311	Corresponding Member	victor@labexhaust.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/1999		Active	Active			049	ILLINOIS	
Novoselac		Atila	Dr Atila Novoselac	University Of Texas	5185948	Ecj 5.422 - Dept of Civil Arch Engr	301 E Dean Keeton St Stop C1752	Austin, TX 78712-1094	(512)475-8175		Corresponding Member	atila@mail.utexas.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2006		Active	Active			066	AUSTIN	
Olesen	Wilkens	Bjarne	Prof Bjarne Wilkens Olesen, PHD	ICIEE-DTU	549544	Nils Koppels Alle bldg 402 2 floor	Department of Civil Engineering	Kongens Lyngby, 02800 DENMARK	45254117	45932166	Corresponding Member	bwo@byg.dtu.dk	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2006		Active	Active	07/01/2002	06/30/2006	503	REGION XIV - OTHER	
Parekh		Anil	Mr Anil Parekh, M.A.Sc., P.Eng	Natural Resources Canada	2040270	1 Haanel Drive	Building 3 - 212B	Ottawa, ON K1A 1M1 CANADA	(613)947-1959	(613)996-9909	Corresponding Member	anil.parekh@canada.ca	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2017		Active	Active	07/01/2004	06/30/2017	015	OTTAWA VALLEY	
Petersen	L	Ronald	Dr Ronald L Petersen	Petersen Research and Consulting LLC	3001625	1003 Pinnacle Pl		Fort Collins, CO 80525-6720	(970) 690-1344	(970) 226-2245	Corresponding Member	rpetersen@petersenresearch.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2003		Active	Active	07/01/1997	06/30/2003	073	ROCKY MOUNTAIN	
Pinkston	S	Paul	Mr Paul S Pinkston		3026639	5004 Wheatridge Dr		Fuquay Varina, NC 27526-9069			Corresponding Member		T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2002		Active	Active			106	TRIANGLE	
Prather		Donald	Mr Donald Prather	FAZS (TM)	8099022	14106 Pelican St	Pelican St	Panama City Beach, FL 32413-2729	703-824-8867		Corresponding Member	FAZSDp@yahoo.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2009		Active	Active			026	NATIONAL CAPITAL	
Ratcliff	A	Michael	Mr Michael A Ratcliff	RWDI LLC	5045867	1516 N University St		Redlands, CA 92374-2606	(909)289-6057	(519)823-1316	Corresponding Member	mar@rwdi.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2015		Active	Active	07/01/2004	06/30/2015	155	TRI COUNTY	
Rosen	L	Steven	Mr Steven L Rosen		630787	1213 Lenox Park Pl		Gainesville, GA 30507-1729	(508)269-8952	(508)337-9291	Corresponding Member	srosen2004@comcast.net	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2004		Active	Active			001	BOSTON	
Ryan	A	William	Dr William A Ryan, PhD	University of Illinois at Chicago	2050731	400 N Walnut Ave		Wood Dale, IL 60191-1549	(630)561-4448	(312)996-5620	Corresponding Member	wryan@uic.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2007		Active	Active			049	ILLINOIS	
Saum	Wendell	David	Mr David Wendell Saum	Infiltec	5023687	PO Box 8007		Falls Church, VA 22041-8007	(703)820-7696	(703)671-9350	Corresponding Member		T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/1994		Active	Active	07/01/1990	06/30/1994			
Schopplein	R	Heather	Mrs Heather R Schopplein PE	UMEC	8102505	8837 Carmir Dr		Santee, CA 92071-3903	(707)318-4307	Not applicable	Corresponding Member	hschopplein@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2015		Active	Active	04/01/2014	06/30/2015	085	SAN DIEGO	
Schuyler	D	Glenn	Mr Glenn D Schuyler	RWDI	2043954	RWDI	650 Woodlawn Rd W	Guelph, ON N1K 1B8 CANADA	5198231311	5198231316	Corresponding Member	gds@rwdi.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/1997		Active	Active			037	HAMILTON	
Sekhar		Chandra	Prof Chandra Sekhar, PHD	National University of Singapore	2053704	Department of Building	4 Architecture Drive	Singapore, SINGAPORE 117566	6565163479	6567755502	Corresponding Member	bdgscs@nus.edu.sg	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2010		Active	Active	07/01/2004	06/30/2010	142	SINGAPORE	
Shrestha	S	Som	Dr Som S Shrestha	Oak Ridge National Laboratory	8049255	109 Tiffany Pl		Oak Ridge, TN 37830-6699	(515)509-4646		Corresponding Member	shresthass@ornl.gov	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2010		Active	Active	08/17/2009	06/30/2010	114	TENNESSEE VALLEY	
Snell	B	Donald	Mr Donald B Snell	Liberty Building Forensics Group	5122944	515 Stanton Pl		Longwood, FL 32779-3359	(407)463-0068	(407)814-0452	Corresponding Member	d.snell@libertybuilding.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2010		Active	Active			094	CENTRAL FLORIDA	
Stephens		Brent	Dr Brent Stephens	Illinois Institute of Technology CAEE De	8111547	Alumni Memorial Hall 212	3201 S Dearborn St	Chicago, IL 60616-3099	(312)567-3356		Corresponding Member	brent@iit.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2013		Active	Active			049	ILLINOIS	YEA
Talbot	M	John	Mr John M Talbot	Talbot Consulting	728474	502 Overbrook Rd		Baltimore, MD 21212-2101	(410)377-0637		Corresponding Member	jtalbot@comcast.net	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2014		Active	Active	07/01/2008	06/30/2014	025	BALTIMORE	
Thrift	A.R.	Rae	Mrs Rae A.R. Thrift		8075107	15916 Dolphin Dr		Montclair, VA 22025-1631			Corresponding Member	rathoder@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	08/11/2017		Active	Active			026	NATIONAL CAPITAL	
Traboulsi	R	Samir	Dr Samir R Traboulsi PH.D., P. Eng. PE	Thermotrade/Ranec	5056023	City Stadium Blvd/Salame Center	3rd Floor	Beirut, 155156 LEBANON	961-3382960	961-1841060	Corresponding Member	traboulsi.samir@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	02/01/2011		Active	Active			162	LEBANESE	
Urso	R	Jason	Mr Jason R Urso, PE	Tighe & Bond	8085671	53 Southampton Rd Ste 3		Westfield, MA 01085-5308	(415)572-3226		Corresponding Member	jurso@tighebond.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2017		Active	Active	07/09/2015	06/30/2017	004	CONNECTICUT	
Wang		Jingjing	Jingjing Wang	Taylor Engineering	8184543	1080 Marina Village Pkwy Ste 501		Alameda, CA 94501-1142	(315)439-3889		Corresponding Member	jwang@taylor-engineering.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2016		Active	Active	08/06/2014	06/30/2016	082	GOLDEN GATE	
Werling	D	Eric	Mr Eric D Werling	DOE	5110399	420 W H St		Purcellville, VA 20132-3214	(202) 604-8874	(202)586-4617	Corresponding Member	eric.werling@ee.doe.gov	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2009		Active	Active			026	NATIONAL CAPITAL	
Weston	A	Theresa	Dr Theresa A Weston	Dupont	5133650	2015 Westover His Blvd		Richmond, VA 23225-3121	(804)241-6246	(804)230-0899	Corresponding Member	Theresa.A.Weston@dupont.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2000		Active	Active	07/01/1998	06/30/2004	028	RICHMOND	

Wilcox	A	Bruce	Mr Bruce A Wilcox		2016759	1110 Monterey Ave		Berkeley, CA 94707-2725	(510)528-4406	(510)588-4678	Corresponding Member	bwilcox@lmi.net	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2003		Active	Active				082	GOLDEN GATE
Wilson	J	David	Dr David J Wilson	Univ Of Alberta	804039	11415 37 Ave NW		Edmonton, AB T6J 0H8 CANADA	(780)492-5467	(403)492-2200	Corresponding Member	david.wilson@univofalberta.ca	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/1984		Active	Active				019	NORTHERN ALBERTA
Wisner	E	Chester	Mr Chester E Wisner	Ambient Air Technologies LLC	8050643	2506 Zurich Dr Unit 3		Fort Collins, CO 80524-1474	(970)482-4748		Corresponding Member	cwisner@ambientairtech.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2005		Active	Active				073	ROCKY MOUNTAIN
Yang		Xudong	Prof Xudong Yang	Tsinghua University	5153038	Dept of Building Science		Beijing, 100084 CHINA	861062788845	861062773461	Corresponding Member	xyang@tsinghua.edu.cn	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2009		Active	Active	07/01/2013	06/30/2017		506	REGION XIII - OTHER
Yu		Yuebin	Yuebin Yu, PhD		8185037	905 S 188th Ter		Elkhorn, NE 68022-5617	(402)554-2082	(402)554-2080	Corresponding Member	yuebinyu@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/11/2016		Active	Active				075	NEBRASKA
Yull	P	David	Dr David P Yull, PE	University of Nebraska	5187953	1110 S 67th St		Omaha, NE 68182-1100	(402)556-3382		Corresponding Member	dyull@unl.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2008		Active	Active				075	NEBRASKA
Yull	K	Grenville	Dr Grenville K Yull		823932	162 Camino Barranca		Placitas, NM 87043-9334	(505)404-8566		Corresponding Member	gren.yull@gmail.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2013		Active	Active	07/01/1995	06/30/2013		077	NEW MEXICO
Zhang	S	Jianshun	Dr Jianshun S Zhang, PhD	Syracuse University	5030638	Dept of Mechanical and Aerospace Enginnee 263 Link Hall		Syracuse, NY 13244-1240	(315)443-1366	(315)443-9099	Corresponding Member	jszhang@syr.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2008		Active	Active	07/01/1996	06/30/2008		010	CENTRAL NEW YORK
Kohler	A	Jay	Mr Jay A Kohler	Engineering Consultant	5085383	1125 Pinehurst Pl		York, PA 17408-9469	(717) 792-5266	(717)771-7297	TAC Chairman	jkohler9@comcast.net	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019	06/30/2020	Active	Active	07/01/2019	06/30/2020		999	DefaultChapter
Adams	A	Christopher	Mr Christopher A Adams	Insight Partners	8059457	424 Oak Tree Rd		Moorestville, NC 28117-5920	(704)634-2806	(704)664-0846	Chapter Technology Transfer Chair	cadams@pace-adams.com	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2017	06/30/2020	Active	Active	07/01/2017	06/30/2020		097	GREENVILLE
Mumma	A	Stanley	Dr Stanley A Mumma, PE	Pennsylvania State Univ	523314	131 Grove Ln		Bellefonte, PA 16823-9308	814-355-1504	(814)863-4789	Special Pubs	sam11@psu.edu	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2009	06/30/2020	Active	Active	07/01/2009	06/30/2020		022	CENTRAL PENNSYLVANIA
Hammerling	J	Steven	Mr Steven J Hammerling	ASHRAE	8001543	1791 Tullie Cir NE		Atlanta, GA 30329-2398	(404)636-8400	(404)321-5478	Staff Liaison	shammerling@ashrae.org	T-TAC-TC04.03	TC04.03	VENTILATION REQUIREMENTS & INFILTRATION	TC/TG/TRG	07/01/2019		Active	Active				650	STAFF (MEMBER)