

Minutes
TC 9.12 TALL BUILDINGS
Location: Las Vegas Hybrid Meeting
Sunday January 30, 2022, 3:30 to 5:30 PST
---- Approved June 26, 2022 ----

- 1. CALL TO ORDER AND TC 9.12 SCOPE (Phillips)**
 - a. The meeting was called to order by Chair Phillips at 4:00pm PST following technical difficulties with the meeting invites.
- 2. INTRODUCTIONS (Phillips)**
 - a. Chair Phillips asked attendees. There were 12 attendees at the time with 6 of 9 voting members present. Quorum was established. This meeting was conducted in a hybrid fashion with about half of the participants in person.
- 3. CHAIR'S COMMENTS AND CODE OF ETHICS COMMITMENT (Phillips)**
 - a. "Commitment to the ASHRAE Code of Ethics – 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>)
 - b. Chair Phillips called for volunteers for the Vice chair role. Scott Peach volunteered and Chair Phillips agreed. Emergency roster changes were discussed to realign as the roster errantly has Lindsay King as chair.
 - c. What can TAC do to help this TC?
 - o Chair's breakfast comments: TAC suggestions on TC operations included "getting on the ladder" i.e. start as handbook chair, and move up the subcommittee chair rungs towards higher level positions. 9.10 and 5.3 are examples of such a structure and are effective.
 - d. What meeting time works best? Some conflicts exist and Chair Phillips decided that the best approach was to poll voting members for ideal days/times.
- 4. APPROVAL OF LAST MEETING MINUTES**
 - a. Motion by Mark Fly and Seconded by Frank Kohout to approve the June 9, 2021 meeting minutes. Friendly amendments were made to correct member name spelling. Vote 6-0-0 CV (yes-no-abstain)
 - b. Motion by Mark Fly and Seconded by Scott Peach to approve the January 28, 2021 meeting minutes. Friendly amendments were made to correct member name spelling and next meeting date. Vote 6-0-0 CV (yes-no-abstain)
- 5. LIAISON REPORTS (Phillips)**

a. TAC Liaison Brad Cochran

- Roster system still needs hand-holding and Brad and Duncan are working on improvements
- MTG.RES [Multidisciplinary Task Group on Resiliency] formed, this does not include pandemic events but recommends sending a liaison to gain better understanding.
- TFBF [Task Force on Building Decarbonization] formed
- TG.RAST [Task Group on Reactive and Surface Treatment] – This has to do with proposed air cleaning technologies beyond filtration.
- TC 9.8 was approved for a name change to Specialized Building System Applications

6. SUBCOMMITTEE REPORTS

a. Program Chair (Frank Kohout)

- Toronto seminar submission
 - a) Whole Life Carbon for Tall Buildings, Scott Peach chair; Speakers: Leung, Integral Engineers, and Buro Happold.
 - b) Effect of Wind on Building Pressurization in Tall Buildings. There is enough material. Suzan Sun-Yuan chair: Mehdi, Duncan and Leung present.
- Frank intends to poll the committee to develop a backlog of ideas

b. Handbook (Jalerarian)

- Updates moving along, need content from Duncan and comments from Kim
- Ron George offered comments and would be solicited for additional content.

c. Research (Peach)

- RTAR Pressure relationships in Mega Tall Bldgs Rev1 no action planned
- RTAR new Benefits and Detriment to Using Ventilation Openings in the Tall Shafts of Tall Buildings. Should this be moved forward as an RTAR? Scott, Suzan, Dennis and Duncan spoke in support of this. Rick asked if a code change proposal method was investigated as a lower cost path. Committee discussion including that given the multi-jurisdictional variation and the broad segments where these requirements reside would make it very difficult to make individual code change proposals expecting a waterfall effect amongst international codes. Duncan suggests a mix of measured data and simulation will be used. Requirements were developed when buildings were not that tall and that included windows in such shafts. Yoon Ko requested that TC 5.6 Control of Fire and Smoke be provided a copy of the proposal for review (DONE). Duncan also anticipated sharing with 4.3 – Ventilation and Infiltration (discussed at their meeting), 4.10 - Indoor Environmental Modeling (discussed at their meeting) and 9.8 Specialized Building Applications

d. Webmaster (Lisa Ng, Travis Potter)

- Noted 2021 January meeting were not approved, committee reviewed and approved
- Showed FAQ and asked for reviewers, Dennis

e. Action Items

- FAQ – Lisa post
- RTAR socialization – Duncan and Scott.
- Program submissions by chairs – Frank mentor Suzan, Scott submit
- Handbook – engage Ron George in potential new sections, Duncan complete submissions and review
- Meeting times – Heiden poll group for best times

7. **MEMBERSHIP** (Phillips)

- a. Roster attached, need a vice chair
- b. Scott Peach volunteered for vice chair
- c. Two are rolling off probably in 2024, Suzan and Scott as members, Dennis the following year
 - Dennis Wessels is willing to roll back on, Suzan is willing to roll on

8. **NEW BUSINESS** (Phillips)

- a. Lisa Ng, Proposed FAQ for our website (see attached), discussed. Dennis Wessel volunteered to review and once he agrees, committee agreed that Lisa should go ahead and post to the website.
- b. Luke Leung, ETF discussion placeholder. The ETF wants to sunset itself and move its guidance and science role to the TCs. TC's 9.8 and 9.12 are being approached to become repository for commercial and retail content. Heiden asked if the ETF considered publishing a Pandemic Operations Guide. Luke said that would be a question for Bill Bahnflesh
- c. Outbreaks occur in tall buildings, should there be committee activity along these lines as it seems these are not isolated events.

9. **ADJOURN** (Phillips)

- a. Next meeting is in Toronto in June
- b. Motion to adjourn by Dennis Wessel
- c. Adjourned 6.00pm PST

MEETING ATTENDANCE

Full Name	Position	Email	Present	Voting
Ms Lindsey King		lindsey.claire.89@gmail.com		x
Dr Duncan A Phillips	Chair	duncan.a.phillips@gmail.com	xv	x
tbd	Vice-chair			
Mr Rick M Heiden	Secretary	rheiden@trane.com	x	
Mr Mehdi K Jalayerian	Hndbk Subcom Chair	mjalayerian@esdglobal.com	xv	x
Mr Francis J Kohout	Program Subcom Chair	frank.kohout@outlook.com	x	x
Mr Scott B Peach, PE	Resrch Subcom Chair	sp@sp.engineering	x	
Mr Travis Potter	Webmaster	travis.s.potter@gmail.com		
Mr John J Carter	Member	jcarter@cppwind.com		x
Mr Mark W Fly, PE	Member	markwfly@gmail.com	x	x
Mr Luke C H Leung, PE	Member	luke.leung@som.com	x	x
Dr Lisa Chen Ng	Member/Webmaster	lisa.ng@nist.gov	xv	x
Mr William A Webb, PE	Member	webbfpc@gmail.com		x
Mr Iurii Avakian	Pro CM	avakian001@gmail.com		
Mr Kevin Edstrom	Pro CM	kevin.edstrom@hines.com		
Ee Seong Eng	Pro CM	eeeseong_93@hotmail.com		
Mr Tejas Kishor Gawde	Pro CM	tejas61191@gmail.com		
Andrea Hellerman	Pro CM	ahellerman@wje.com		
Mr Money Khanna	Pro CM	khannamoney@gmail.com		
Yahaya Hassan Labaran	Pro CM	2019008636.yahaya@pg.sharda.ac.in		
Mr Felix Mendez	Pro CM	Fmendez@3fmengineering.com		
Mr Husam M Mohammed	Pro CM	husam.mohammed@gmail.com		
Mr Miguel Angel Ruiz Tataje	Pro CM	mruiztataje@gmail.com		
Miss Kaiyu Sun	Pro CM	ksun@lbl.gov		
Mrs Suzan Sun-Yuan, PE	Pro CM	ssunyuan@esdglobal.com	xv	
Mr Devin A Abellon, PE	Corresponding Member	devin.abellon@uponor.com		
Prof William P Bahnfleth, PE	Corresponding Member	wbahnfleth@psu.edu		
Mr Oliver Baumann	Corresponding Member	o.baumann@baumann-us.com		
Mr Jeffrey P Blaevoet	Corresponding Member	jblaevoet@gb-eng.com		
Mr Erik Andre Chisholm	Corresponding Member	erik.chisholm@protonmail.com		
Mr Kim Clawson	Corresponding Member	mr.kim.clawson@gmail.com	xv	
Mr Matthew Davy, PE	Corresponding Member	matt.davy@arup.com		

Full Name	Position	Email	Present	Voting
Mr Pankaj R Dharkar	Corresponding Member	dharkarpda@gmail.com		
Mr Peter G Ellis	Corresponding Member	peter.ellis@bigladdersoftware.com		
Mr Ronald George	Corresponding Member	Ron@Plumb-TechLLC.com	x	
Mr Kenneth E Gill, PE	Corresponding Member	ken.gill@jacobs.com		
Mr Anuj Gupta	Corresponding Member	anuj@design2occupancy.com		
Mr Robert Alexander Henderson	Corresponding Member	robahenderson33@gmail.com		
Mr Jose V Herrera	Corresponding Member	jherrera@syska.com		
Mr Tyler Jensen	Corresponding Member	tjensen@esdglobal.com		
Dr John H Klote, PhD	Corresponding Member	johnhklote@gmail.com		
Ms Yoon J. Ko, PhD	Corresponding Member	Yoon.Ko@nrc-cnrc.gc.ca	xv	
Christopher Krieps	Corresponding Member	ckrieps@utexas.edu		
Mr Rodney H Lewis	Corresponding Member	rhla@sbcglobal.net		
Mr Nemat Lotfi	Corresponding Member	service@pennhvac.com		
Mr Michael J McDermott	Corresponding Member	mmcdermott@grummanbutkus.com		
Dr Atila Novoselac	Corresponding Member	atila@mail.utexas.edu		
Mr Paul E Petrilli, PE	Corresponding Member	ppetrilli@hflenz.com		
Mr John W Pulley LEED AP BD+C, PE	Corresponding Member	jwpulley@outlook.com		
Mr Eddy Santosa	Corresponding Member	mceddysantosa@gmail.com		
Mr Peter Simmonds	Corresponding Member	psimmonds11@gmail.com		
Mr Jeremy T Smith, LEED AP, PE	Corresponding Member	jeremysmith@eeace.com		
Mr Yuri A Tabunschikov	Corresponding Member	tab@abok.ru		
Mr Cedric S Trueman, P.Eng	Corresponding Member	ctrueman@telus.net		
Mr Jeffrey S Tubbs, PE	Corresponding Member	jeff.tubbs@arup.com		
Mr Lynn F Werman, PE	Corresponding Member	lynnwerman@yahoo.com		
Mr Dennis J Wessel, PE	Corresponding Member	dwessel49@gmail.com	x	
Mr Larry A Smith, PE	TAC Chairman	larrys@li-hvac.com		
Mr Roland Charneux	Research Liaison	rcharneux@pageaumorel.com	xv	
Mr Steven J Hammerling	Staff Liaison	shammerling@ashrae.org		

Full Name	Position	Email	Present	Voting
Brad Cochran	TAC Liaison		x	
Jeffrey Eng	Guest		xv	
		Note: x = in person, xv = virtual		