



**TECHNOLOGY
COUNCIL
Las Vegas Winter Conference
February 2, 2022**

NOTE: These are not official minutes until approved by Technology Council.

MOTIONS

Technology Council Las Vegas Conference Motions February 2, 2022

Motion Number	Motion
<u>1</u>	The minutes of Tech Councils' Fall Virtual Meeting held November 4, 2021, be approved as distributed.
<u>2</u>	that Technology recommend to the Board of Directors that Rule of the Board 2.406.001 Scope and Purpose, be revised as shown.
<u>3</u>	that Technology Council to recommend to the Board of Directors that changes to PASA Section 7.2.4, Voting Requirements for Standards Actions, and Definitions, be approved as shown.
<u>4</u>	that Technology Council direct the Director of Technology to move \$25,000 from the Technology Council Travel Budget to fund the Technical Activities Committee Roster Automation Project. (TACRAP)
<u>5</u>	that Technology Council recommend to BOD to approve the Indoor Carbon Dioxide position document (PD) as shown in Attachment 04C-A.
<u>6</u>	that Tech Council appoint Luca Fortana to the Infectious Aerosols position document (PD) committee.
<u>7</u>	that Technology Council recommend to the Board of Directors that ASHRAE jointly sponsor ASHRAE Standard 209, Energy Simulation Aided Design for Buildings except Low-Rise Residential Buildings, with IBPSA (International Building Performance Simulation Association), with ASHRAE as the lead cosponsor following ASHRAE's ANSI development procedures.
<u>8</u>	that Technology Council recommend to the Board of Directors that PASA Annex A Definitions, Abbreviations and Acronyms and Classifications be revised as shown.
<u>9</u>	that proposed changes to the TPS for Standard 90.2, <i>Energy Efficient Design of Low-Rise Residential Buildings</i> , be approved as shown in Standards Committee Report Attachment A.

ACTION ITEMS

Tech Council Las Vegas Conference

February 2, 2022

AI#	Responsibility	Status	Description
1	Mike Pouchak	New	Set up an informational meeting to demonstrate the new use of Basecamp by RAC to those interested on Tech Council.
2	Staff	Open	Post the presentation on Basecamp for all Tech Council Members.
3	Staff	Open	Post the Task Force on Building Decarbonization Report to the Board along with the presentation given to OPS by Kent Peterson on Basecamp.

Action Items

Technology Council Fall Virtual Meeting
November 4, 2021

AI#	Responsibility	Status	Description
1	Hammerling	Closed	Editorial Change to be made to PD Limiting Indoor Mold Growth and Dampness in Building Systems from 15 C to 15.6 C. <i>Secretary's Note: This was discussed after the meeting, and it was determined that it needed to remain the same as the Standard 62.1 values (60-degree F and 15-degree C.)</i>
2	DRSC	Open	Work with GAC to finalize potential new PD format and send to OPS.
3	RAC	Ongoing	Develop and present to Tech Council an implementation and monitoring plan for the new Research Strategic Plan for review at the Spring Tech Council Meeting.
4	RAC	Complete	Provide a review and summary of the progress made on the current Research Strategic Plan for review at the Annual Meeting.
5	McGinn	Complete	Ask the Board Excom to officially review Victor Goldschmidt's Leadership videos- for consideration of promotion and working with the Professional Development Committee to add to ASHRAE course offerings.

			<i>Secretary's Note: Tech Council refers this to CTTC (via Members Council) to consider. The videos are already on the website.</i>
6	McGinn, Glesne, Conlan	Complete	REF-CPCC committee leadership to meet with Tim McGinn, Tyler Glesne, Wade Conlan and staff to figure out path forward for the committee.

Action Items

Technology Council Summer Virtual Meeting
Wednesday, June 23, 2021

AI#	Responsibility	Status	Description
1	Staff	Complete	Distribute suggested streamlining ideas written by Tim McGinn to facilitate ideas for consideration by the Standing Committees
2	Wilkins	Ongoing	Provide a list of project amounts that may be ready for bid to Staff for distribution.
3	EHC	Complete	Determine how ASHRAE and IEQ-GA engage each other including the bylaws.

Action Items

Technology Council Winter Virtual meeting
Tuesday, February 2, 2021

AI#	Responsibility	Status	Description
1	DRSC	Ongoing-waiting ROB changes	DRSC to do a short training on how PDs travel through the ASHRAE process and provide to cognizant committees.
2	Staff	Ongoing – waiting ROB changes	Staff to request training for DRSC and any member of Tech Council on the PPIB Process from GAC.

Minutes
Technology Council

<p><u>Voting Members Present:</u> Sarah Maston, Acting Chair Tim McGinn, Acting Vice Chair* Wade Conlan Jaap Hogeling* Adrienne Thomle Tyler Glesne Rick Hermans Billy Austin David Yashar Paul Francisco Krishnan Gowri* Wei Sun* Heather Platt Gulledge</p> <p><u>Non-voting Present:</u> Rick Heiden, StdC Larry Smith TAC Michael Pouchak, RAC* Luke Leung, EHC* Richard Karg, RBC* Susanna Hanson StdC Omar Abdelaziz, RAC Nicholas Clements, EHC* Dustin Lilya, REF-CPPC William Healy, RBC*</p>	<p><u>Staff</u> Stephanie Reiniche, DOT Lilas Pratt, MOSP Steve Hammerling, AMORTS Connor Barbaree, Sr. MOS Jeff Littleton, EVP Alice Yates Emily Pocari Donna Daniels</p> <p><u>Guests</u> Tom Lawrence</p> <p><u>TechC Absent:</u></p> <p>*Indicates Virtual Attendee</p>
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1. CALL TO ORDER/OPENING COMMENTS

Sarah Maston, acting Chair, called the meeting to order at 9:00 a.m. PST. Ms. Maston reported that the Chair, Tim McGinn, was participating remotely and that she would be running the meeting in his absence. For the votes Ms. Maston will be listed as the Chair Not Voting and Mr. McGinn will be recorded as voting. Staff was assigned to track the action items for the meeting. The agenda was accepted with the addition of the Report of the Task Force for Building Decarbonization (TFBD).

The commitment to Care, the commitment to the Code of Ethics and the ASHRAE Core Values were shared during the meeting.

Secretary's Note: Quorum was met with 13 voting members including the Chair. All reports -referenced in the minutes are on Basecamp in the folder "Meeting 2021-2022 2022-02-02 Las Vegas Winter Conference."

2. MINUTES/ACTION ITEMS

A. Minutes

It was moved by Wei Sun and seconded by Adrienne Thomle that:

- M1** The minutes of Tech Councils' Fall Virtual Meeting held November 4, 2021, be approved as distributed.

TechC Vote: 12-0-0, CNV

B. Action Items

The action items were updated as shown in the tables listed above.

3. SUBCOMMITTEE REPORTS

A. Operations (OPS)

Rick Hermans, OPS Chair, presented the report. The report is included on Basecamp as O4A OPS Report To Tech Council Rev1.

It was moved by Rick Hermans that:

- M2** that Technology Council recommend to the Board of Directors that Rule of the Board 2.406.001 Scope and Purpose, be revised as shown:

2.406.001 Scope and Purpose

This committee shall be responsible for identifying major environmental health trends impacting the practice of HVAC&R, informing the ASHRAE leadership and membership of these trends and their potential impacts, and making recommendations on new activities and policies in response to these trends. In addition, this committee shall serve as a resource to the Society on activities and issues that relate to environmental health impacts of building environmental control technologies (ROB2.406.001).

BACKGROUND: The Environmental Health Committee (EHC) preference was to not to try and list each of the building environmental control technologies or to imply others should not be included (acoustic, visual, airborne infectious agents) and preferred to keep the reference as general and inclusive as possible with the change made. Additionally, the technologies previously listed are not necessarily controls so changing the wording is appropriate. This section of the ROB is repeated in the EHC MOP so it is assumed changes approved here would be implemented in the MOP automatically. This was sent to Society Rules Committee for feedback and no changes were suggested.

Tech C Vote: 12-0-0, CNV

It was moved by Rick Hermans that:

M3

that Technology Council recommend to the Board of Directors that changes to PASA Section 7.2.4, Voting Requirements for Standards Actions, and Definitions, be approved as shown below:

PASA 7.2.4 Voting Requirements for Standards Actions

When a PC considers a vote to recommend publication/public review or publication with knowledge of unresolved objections of a new, revised, reaffirmed standard, or withdrawal of a standard or reaffirming a prior standards action vote, the PC shall comply with Sections 7.2.4.1-7.2.4.6.

PASA Definitions:

standards action vote: an action recommending or approving publication or publication public review of a new, revised, or reaffirmed Standard, Guideline, or portion thereof or withdrawal of a published Standard, Guideline or portion thereof. Also includes an action reaffirming a prior publication or publication public review vote.

BACKGROUND: These changes stem from an interpretation request to PPIS regarding needed changes to PASA and the PC Guide to PASA. A project committee took a vote to reaffirm a prior standards action decision (motion for publication) that had been rejected by the Board of Directors. This action was subsequently appealed. The Appeals Panel asked Standards Committee to determine whether a reaffirmation of a previous Standards Action vote requires a simple majority of those at a meeting with quorum or does it require more stringent rules of a standards action vote. A standards action vote requires a continuation letter ballot for all those not in attendance and 2/3rds of those voting must be in the affirmative. An interpretation request to PASA and the PC Guide to PASA was submitted and PPIS agreed that the responses to both interpretation requests are correct, and the changes reflected in the motion should be approved.

Tech C Vote: 12-0-0, CNV

It was moved by Rick Hermans that:

M4

that Technology Council direct the Director of Technology to move \$25,000 from the Technology Council Travel Budget to fund the Technical Activities Committee Roster Automation Project. (TACRAP)

BACKGROUND: OPS reviewed the current budget along with the proposed budgets for the next two society years. Upon review it was determined that due to limits in the travel this year that there was money available in this Society Year budget that could be transferred to pay for this project. This has been confirmed by the Finance Director. The Rules of the Board allow movement of funds (up to 10%) from one Council budget line to another Council budget line without Board approval if funds are available.

Tech C Vote: 12-0-0, CNV

Mr. Hermans highlighted the following information items:

1. OPS heard a presentation on the efforts of the Task Force for Building Decarbonization from Kent Peterson (TFBD member). The standing committee chairs were asked to start thinking about what the roles of TCs, PCs, and others should be to be on the same trajectory moving forward. The need for coordination of common terms and definitions was also highlighted.
2. OPS reviewed the referrals, and an updated version is available for review on Basecamp as 04A3 Tech Council Referrals.

B. Special Projects

David Yashar, Chair of Special Projects presented the report. There were no motions presented to Technology Council. The report can be found on Basecamp as 04B_SpcProj_Report_to_TechC_2022_02_02. The following information item was highlighted:

Special Projects Subcommittee discussed collaboration with RAC and Publications Committee on the PTAR process. It was agreed that having all three committees review potential PTARS would improve the process and final product of these projects. A meeting with Special Projects Subcommittee Chair, RAC Chair and Vice-chair, and Publications Committee Chair and/or Vice-chair will be scheduled for February 2022 to further discuss the topic and to clarify any remaining ambiguity on roles and responsibilities between the three committees.

C. Document Review Subcommittee (DRSC)

Sarah Maston, Chair of DRSC, presented the report. The full report can be found on Basecamp as 04C_DRSC Rprt to TechC.22W.docx. The motions were presented as shown below.

It was moved by Sarah Maston that:

M5

Technology Council recommend to BOD to approve the Indoor Carbon Dioxide position document (PD) as shown in Attachment 04C-A.

BACKGROUND: The cognizant committee, EHC reviewed in November with comments addressed by the PD committee. A draft was distributed to DRSC, Tech Council and the BOD in late December with comments returned to the PD committee. The *Indoor Carbon Dioxide* PD committee made some changes based on comments from Tech Council/BOD members. **Attachment 04C-A** shows markups.

TechC Vote: 12-0-0, CNV

It was moved by Sarah Maston that:

M6

Tech Council appoint Luca Fortana to the Infectious Aerosols position document (PD) committee.

BACKGROUND: The Infectious Aerosols PD committee was appointed earlier with the understanding that someone from the WHO would be identified and appointed. Mr. Fortana was identified and has been working with the PD committee and contributing for some time already. EHC confirmed balance requirements were still met motion.

TechC Vote: 12-0-0, CNV

Ms. Maston noted that she had provided a timeline to the Decarbonization Position Document Committee that would allow for final approval of the position document at the Summer Meeting in Toronto. She noted that the timeline allowed for two simultaneous reviews by DRSC, Tech Council and the Board of Directors. A request was made for all members to watch for the notification of when the draft is available.

4. **STANDING COMMITTEE REPORTS**

A. Standards Committee (StdC)

Rick Heiden, Chair of StdC, presented the report. The full report can be found on Basecamp as 05A-StdC Report to TCWinter Mtgs 2.2.2022.docx. The motions were presented as shown below.

It was moved by Jaap Hogeling and seconded by Wade Conlan that:

M7

that Technology Council recommend to the Board of Directors that ASHRAE jointly sponsor ASHRAE Standard 209, Energy Simulation Aided Design for Buildings except Low-Rise Residential Buildings, with IBPSA (International Building Performance Simulation Association), with ASHRAE as the lead cosponsor following ASHRAE's ANSI development procedures.

TechC Vote: 12-0-0, CV

It was moved by Jaap Hogeling and seconded by Wade Conlan that:

M8

that Technology Council recommend to the Board of Directors that PASA Annex A Definitions, Abbreviations and Acronyms and Classifications be revised as shown:

annex: material or attachment of a nonmandatory nature that is supplemental to a standard or guideline and that is not also classified as an appendix. Inclusion of annexes must be preapproved by ASHRAE staff. Changes to annexes are not considered substantive. Annexes can be changed or deleted without requiring public review. See **informative appendix** and **normative appendix**.

appendix: see **informative appendix** and **normative appendix**.

informative appendix: additional information of a nonmandatory nature that is specific to a standard or guideline. Changes to informative appendices are not considered substantive. Informative appendices can be changed or deleted without requiring public review. See **normative appendix**.

normative appendix: additional information of a mandatory nature that is specific to a standard or guideline and which, for reasons of convenience, is placed after the main

body of the document. See **informative appendix**.

TechC Vote: 11-0-1¹, CNV

It was moved by Jaap Hogeling and Heather Platt-Gulledge that

M9

that proposed changes to the TPS for Standard 90.2, *Energy Efficient Design of Low-Rise Residential Buildings*, be approved as shown in Standards Committee Report Attachment A.

TechC Vote: 10-2²-1³, CNV

Secretary's Note: Tech Council members were reminded to also review and submit comments on the public review draft of the standard. Public review drafts are found here: <https://osr.ashrae.org/>

Mr. Heiden highlighted the following information items:

1. StdC approved a new TPS and formation of an SPC on Evaluating Greenhouse Gas (GHG) and Carbon Emissions in Building, Design, Construction and Operation.
Secretary's Note: This new TPS was approved by the Board of Directors on February 2, 2022.
2. StdC formed a digital Ad hoc aimed at improving the user experience while interfacing with ASHRAE Standards documents, training materials and procedures. A work plan has been developed with action steps included in the StdC MBOs.
3. StdC sent its recommendations on the addition of decarbonization content in our current standards to the Task Force for Building Decarbonization (TFBD). This was well received, and the TFBD has distributed information to one or more project committees about a potential path forward for this content.

B. Research Administration Committee (RAC)

Mike Pouchak, Chair of RAC, presented the RAC report. The RAC report is posted on Basecamp at 05B_Rac-Exec.Session.W2.Draft MAP.docx. The research motions included in the report were not moved because the motions were within the budget limits of RAC. The following information items were highlighted:

1. Significant progress was made with training Research Liaisons for a Basecamp based folder system organized by TCs. There were over 10 sessions of 60 plus minutes scheduled with each of the 10 RLs in the Month of December.

¹ Rick Hermans abstained because this had not been reviewed by OPS prior to submitting this to Technology Council.

² Rick Hermans voted no on this TPS because the new title does not reflect the changes to the scope and purpose and the title, as presented, appears to overlap with Standard 90.1. Krishnan Gowri voted no because the proposed revisions to the purpose and scope of 90.2 identify and include greenhouse gas emissions as a key performance criteria for design of residential buildings. This is in addition to the original scope of energy efficient design. However, the title does not reflect the additional scope. If the intent is to pivot this standard towards "stretch codes", I recommend the committee consider including reference to sustainability, high performance or decarbonization in the title as appropriate.

³ Tyler Glesne abstained because he wasn't in the room for the discussion of the motion.

AI1

An Action item was assigned to Mike Vaughn to set up an informational meeting to demonstrate the new use of Basecamp by RAC to those interested on Tech Council.

2. Training at the Research Subcommittee Chair included updates on the Research Budget, new Research Strategic plan, and the Research Implementation Plan.

C. Technical Activities Committee (TAC)

Larry Smith, the Chair of TAC, presented the report that is on Basecamp as 05C-TAC Rprt to Tech.22W.docx. There were no motions presented. The following information items were highlighted:

1. TAC continues to use and promote a new email (asktac@ashrae.net) intended to give everyone a direct contact to TAC to respond to all needs and questions. Members of TAC are now sporting fashionable "Ask TAC" hats to promote this new email.
2. TAC developed a finalized a series of ASHRAE Leadership Development Auto-Tutorials. These videos are available at www.ashrae.org/tac. Developed for use by TC leadership, they are a great resource for all ASHRAE. TAC is working with ASHRAE to make PDH credits available for those who participate

D. Environmental Health Committee (EHC)

Luke Leung, the Chair of EHC, presented the report that is on Basecamp as 05D-EHC Rprt to TechC.22W.docx. No motions were presented. The following information items were highlighted:

1. The IAQ 2020 Conference, IEQ Performance Approaches, Transitioning from IAQ to IEQ, will be take place May 4-6, 2022. The conference will take place in Athens, Greece as a hybrid meeting. Chair's Bill Bahnfleth and Max Sherman are chairing the event which will be co-organized by ASHRAE, AIVC and the IEQ-GA. Details on the conference can be found at www.ashrae.org/iaq2020.
2. The ASHRAE Epidemic Task Force (ETF) held their 28th meeting and their 1st face to face meeting at the Winter Meeting in Las Vegas. Their current task is to write a final report and coordinate transitioning guidance with various ASHRAE TCs, PCs, and other relevant committees.

E. Refrigeration/CPCC (REF-CPCC)

Dustin Lily, the Chair of REF-CPCC, presented the report that is on Basecamp as 05E REF-CPCC Rprt to TechC.W22.Release 1.docx. There were no motions presented. The following information items were highlighted:

1. World Refrigeration Day for 2021 was a big success this past year under a new format that allowed many other organizations from around the world to participate in the event. Building off that success the organizers of the event held a World Refrigeration Day (WRD) seminar at the AHR Expo. event for Tuesday February 1st

starting at 11 am PST in room N238.

2. The committee also discussed changing up some of the subcommittee leadership to allow for new ideas and approaches to develop and outreach efforts to TCs for potential new Subcommittee members.

F. Residential Building Committee (RBC)

Rick Karg, Chair of RBC, presented the report that is on Basecamp as 05F_RBC_Report_to_TechC_2020-02-02.docx. No motions were presented. The following information items were highlighted:

1. RBC is continuing the work on the *Ventilation and IAQ in Bedrooms Residential Issue Brief*. The brief will outline why the topic is important and how ASHRAE might address the issue. Publication is targeted for April 2022.
2. RBC has initiated work on a new Residential Issue Brief covering working from home. The working group for this brief is being assembled now.
3. RBC reviewed Google Analytics data for their web page to improve the information presented. The information suggests that improvements to the web page are needed to increase traffic to that page. The committee is looking at adding some short videos and or podcasts along with a feedback form for visitors to the page. Improvements to the search engine optimization are also being explored by the committee.
4. RBC continues to work with EHC on the plans for transitioning and maintaining the residential content from the Epidemic Task Force (ETF) to the larger ASHRAE structure once the ETF is dissolved.

5. SPECIAL COMMITTEE/LIAISON REPORTS

A. GAC Liaison Report

Billy Austin, GAC Liaison, presented an updated on the activities in Government Affairs. The full update can be found on Basecamp as 06A-GAC Tech Council Report – Winter 2022.docx. Mr. Austin highlighted the government outreach days, the work of the Epidemic Task Force, and decarbonization issues.

B. Finance Liaison Report

Mr. McGinn presented updates on the status of the Society's finances. He also reminded members that the Board of Directors will approve next Society year's budget at the May Board meeting.

C. Society Planning Liaison Report

Heather Platt-Gulledge presented a power point on the activities of the Society Planning Committee specifically noting the results of the member satisfaction survey.

AI2

An action item was assigned to Staff to post the presentation on Basecamp for all Tech Council Members.

6. DOT Report

Stephanie Reiniche, the Director of Technology, provided the following information:

- a. Pub and Ed Council accepted the referral from Technology Council to move development of all User's Manuals to their Council
- b. It was also announced that Lilas Pratt was retiring effective March 4, 2022. Lilas received a standing ovation.

7. NEW BUSINESS

A. Task Force for Building Decarbonization (TFBD) Report

Ms. Maston reported that the TFBD reported to the Board of Directors of Directors and provided a list of recommendations. Council members should review this report so action can begin this Spring. Several of the recommendations relate to SSPCs and Standards Committee.

AI3

An action item was assigned to Staff to post the Task Force on Building Decarbonization Report to the Board along with the presentation given to OPS by Kent Peterson on Basecamp.

8. EXECUTIVE SESSION

No Executive Session was needed.

9. NEXT MEETING

- A. TechC Spring meeting – a date will be set after the conference.
- B. TechC Summer Meeting will be in Toronto on Wednesday, June 29, 2022.

10. ADJOURN

The meeting was adjourned at 11:50 am PDT.