

AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS, INC.
1791 Tullie Circle, NE / Atlanta, GA 30329
(404) 636-8400

TC/TG/TRG MINUTES COVER SHEET

(Minutes of all TC/TG/TRG Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

| | | | |
|------------------|---------------------|------------------|---------------------------|
| TC/TG/TRG NO.: | 4.5 | TC/TG/TRG TITLE: | Fenestration |
| DATE OF MEETING: | Jan 23, 2018 | LOCATION: | Chicago, IL |
| DATE ISSUED: | Jan 25, 2018 | RECORDED BY: | Thanos Tzempelikos |

| Name | Affiliation | E-Mail | Member (VM, CM, Guest) | Present |
|---|----------------------------|--|------------------------|--------------|
| <i>Charlie Curcija</i> (Chair/Calculation Methods) | LBNL | dccurcija@lbl.gov | VM | Y |
| <i>Anil Parekh</i> (Vice Chair) | Natural Resources Canada | Anil.Parekh@NRCan.gc.ca | VM | N |
| <i>Sagar Rao</i> (Research) | AEI | sagar.rao@outlook.com | VM | Y |
| <i>John Hogan</i> (Standards) | Consultant | John.hogan@igc.org | VM | Y |
| <i>Roger LeBrun</i> | Velux America | roger.lebrun@velux.com | VM | Y |
| <i>Mahabir Bhandari</i> | ORNL | bhandarims@ornl.com | VM | N |
| <i>Joe Hetzel</i> | DASMA | jhetzel@thomasamc.com | VM | Y |
| <i>Peter Lyons</i> (Handbook) | Peter Lyons and Associates | peter.lyons@fenestralia.com | VM-NQ | Y/ Remote |
| <i>Thanos Tzempelikos</i> (Secretary) | Purdue University | ttzempel@purdue.edu | CM | Y |
| <i>Bipin Shah</i> | WinBuild | bvshah@verizon.net | CM | N |
| <i>Aziz Laouadi</i> | NRC Canada | jhetzel@thomasamc.com | CM | N |
| <i>Robert Hart</i> | LBNL | jkohler@lbl.gov | CM | Y |
| <i>William Du Pont</i> | | waupi@msn.com | CM | Y |
| <i>Iason Konstantzos</i> | Purdue University | ikonsta@purdue.edu | CM | Y |
| <i>Jie Xiong</i> | Purdue University | xiong29@purdue.edu | CM | Y |
| Dennis Wessel (TAC Liaison) | | Dwessel49@gmail.com | Guest | Y (part) |
| Total voting members: 7 Voting members present: 5 | | | | |

SCOPE:

TC 4.5 is concerned with the identification and evaluation of all physical properties of (1) glasses and other glazing materials, (2) shading and shielding materials and devices, and (3) control devices and strategies which influence the radiant, conduction, and convection transfer of both heat and light through fenestration systems. It is also concerned with the development of procedures for calculating and measuring solar heat gain, daylight admission, and heat transfer through fenestration systems.

COMMITTEE AND MEETING INFORMATION

Subcommittee Meetings:

| | |
|---------------------|-----------------|
| Handbook: | Monday, Jan 22 |
| Research: | Monday, Jan 22 |
| Program: | Monday, Jan 22 |
| Calculation Methods | Tuesday, Jan 23 |

TC Web Site: <http://tc0405.ashraetcs.org>

INTRODUCTIONS AND ROSTER CHECK

Meeting started at 2:00pm. Voting 7, present 5.

APPROVE AGENDA

John Hogan moved; Sagar Rao second; Agenda was approved unanimously (5-0-0).

APPROVE MINUTES FROM PREVIOUS MEETING

John Hogan moved; Sagar Rao second; Agenda was approved unanimously (5-0-0).

ANNOUNCEMENTS (TC Chair)

- Roster changes: The roster was reviewed by the TC and changes are submitted to TAC.
- TC/TG/TRG Chairs announcements

TC LEADERSHIP

- Thanos is secretary, ~~and~~ Willie is program subcommittee chair, and Chris Mathis is standards subcommittee chair starting July 2018.
John's term as 90.1 liaison ends in June 2018. John moved that Charlie is the new TC 4.5 liaison to 90.1. Roger second. Approved unanimously (5-0-0). Charlie will send e-mail to Drake Erbe, Chair of SSPC 90.1 informing him of the change.

Voting membership reviewed

LIAISON REPORTS

Technical Activities Committee (TAC)

TAC liaison present and discussed programs for next meetings and roster reports.

Standards

No record in minutes

Research Administration Council (RAC)

RAC liaison present and briefly discussed research projects updates.

Conferences and Expositions Committee (CEC)

No liaison present

Handbook Committee

No liaison present

Chapter Technology Transfer Committee

No liaison present

ASHRAE Learning Institute (ALI) / Professional Development Committee (PDC) –

No liaison present

Special Publications

No liaison present

Standards (John Hogan)

No update

SUBCOMMITTEE REPORTS

Calculation Methods (Charlie Curcija)

Handbook (Peter Lyons)

Peter Lyons presented potential chapter updates.

Research (Sagar Rao)

- RP- 1710 - the project monitoring subcommittee met and there was a presentation by the contractors. The project is generally on track. However, the PMS needs to see (i) detailed results for all types of sky conditions (representative days) with reported work plane and vertical illuminance, lighting energy use, etc, for each type of shading and control used. Also, the modeling part is under development with no solid results. Use of Daysim or Radiance with small time steps is recommended. Finally, the A/C energy savings can be reported as well. The PMS will propose a call before the next quarterly report to discuss the above.
- RP-1414- The PMS proposed that the project is terminated since no updates have been delivered for a long time, despite the extensions provided. Sagar moved to terminate; John second; approved unanimously (5-0-0). RP-1414 is terminated. The PMS needs to provide a statement with explanation to RAC. Also the TC would like to rebid and will ask RAC for options.
- WS 1789- RAC has reviewed and conditionally accepted the WS. Comments were sent to Charlie but they were from a previous version; also Aziz did not receive the comments. Charlie and Sagar to get correct comments from RAC and provide to Aziz asap so a reply to comments can be sent quickly.

Standards (John Hogan)

John provided a brief update on 90.1. There is a will to update fenestration criteria (recommended U-values factors and SHGC values), but changes will be small.

Programs (Thanos Tzempelikos chaired)

There are no seminars for the summer meeting in Houston (Feb 9 is the deadline). For the next winter meeting in Atlanta, the deadline for conf. abstracts and technical papers is March 8.

TC 4.5 Website (Sagar Rao)

Sagar R. - Will upload minutes and materials to ASHRAE website.

OLD BUSINESS

None.

NEW BUSINESS

None.

ADJOURN

Approximately 4:00 pm

*Respectfully submitted by Thanos Tzempelikos (secretary)
January 26, 2018*