

TC 4.5-Research Subcommittee Meeting - Agenda

Sunday, January x, 2014

3:15 – 4:00 p.m.

Location??

1. Review of and additions to agenda
2. Announcements
3. Proposal Evaluating Subcommittee (PES) Reports on Research Projects
 - a. Work Statement 1415-*Thermal and Optical Analysis of Tubular Daylighting Devices*. Aziz Laouadi reporting
4. Overview of current TC 4.5 Research Topic Acceptance Report (RTAR) and Work Statements (WS)
 - a. WS 1414 *Update of U-factors, Solar Heat Gain Coefficients and Visible Transmittances of Standard Fenestration Units made from Representative Fenestration Frame and Glazing Systems to in the Fenestration Chapter of Handbook of Fundamentals*. Charlie Curcija, Bipin Shah, Willie du Pont reporting
 1. This was returned by the RAC for further work
 - b. **TC 4.7**, *Procedure to create hypothetical layer-by-layer fenestration descriptions when only the bulk properties such as U-factor and SHGC have been defined*” Joe Huang.
 1. This is an ongoing project now with TC 4.7. Ray McGowan is on teh PES.
 - c. RTAR 1701-Quantifying daylighting impacts due to automated shading devices-Thanos Tzempelikos reporting
5. Long-Range Research Plan
 - a. Follow up progress on RTAR ideas:
 1. Conditionally accepted by the RAC, needs further revision Develop Convective Heat Transfer Coefficient for Indoor and Outdoor Shading Devices: Reporting John Wright, Charlie Curcija and Thanos Tzempelikos reporting
 2. Characterizing Thermal and Optical Properties of PV film coated Glazing Systems: Lead Anil Parekh , Aziz Laouadi reporting
 3. Improved SHGC calculation with better spectral data information-Chris Gueymard reporting

4. Net-zero fenestration systems for different climate zones, balancing solar gains and heat losses with visual performance... more!
5. Fixed or Solar Tracking Solar Collectors-Gueymard paper.

6. New Business

7. Adjourn

Research Summary			
Topic	Comments	Principal author	status
WS 1414 Update of U-factors, Solar Heat Gain Coefficients and Visible Transmittances of Standard Fenestration Units made from Representative Fenestration Frame and Glazing Systems to in the Fenestration Chapter of Handbook of Fundamentals.		Charlie Curcija, Bipin Shah, and Willie du Pont	On Nove 18 2014 RAC returned this for further work; on 6/11/13 Srinivas stated he would review as research liaison and Mike will consider at the September 2013 RAC; Submitted to Mike V and Srinivas on 2/13/13
TC 4.7, Procedure to create hypothetical layer-by-layer fenestration descriptions when only the bulk properties such as U-factor and SHGC have been defined"	Joe Huang not present, did not report. TC4.5 will cosponsor the project, but does not fully support. This project is thought to be at the RAC for final approval, but unconfirmed.	Joe Huang	Huang awarded bid, work underway; Received bid, will evaluate at this June 2013 meeting
Develop Convective Heat Transfer Coefficient for Indoor and Outdoor Shading Devices	Thanos Tzempelilas to follow up with Mike Collins to purse the RTAR with a goal of a January 2013 completion date.	John Wright, Charlie and Thanos	6/12/13-emailed John, Charlie, and Thanos for status
RTAR 1710-Quantifying daylighting impacts due to automated shading devices.	The lead Thanos Tzempelilas provided a draft on 12/18/12 to Ray; Christian Kohler may add some items	Thanos Tzempelilas	On Nov 18, 2014, RAC conditionally approved this WS6/12/13-this is RTAR 1710 and will be considered at September 2013 RAC meeting and will also be reviewed prior to this meeting by Research liaison to ensure completeness; Submitted to ASHRAE

			1/29/13; First draft received 12/18/12, may have more materials added prior to submission
Characterizing Thermal and Optical Properties of PV film coated Glazing Systems	Aziz will pursue continuing to write an RTAR on this subject.	Lead Anil, Aziz, Brian	12/10/12-Emailed for status
Improved SHGC calculation with better spectral data information	TC 6.7 –Solar Utilization may support this activity and developers will pursue their support	Willie du Pont and Chris Gueymard, Charlie Curcija, Bipin Shah and Willie du Pont.	Chris reported work on this is paused, limited input from Willie/Bipin