

AMERICAN SOCIETY OF HEATING, REFRIGERATING
AND AIR-CONDITIONING ENGINEERS, INC.
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Technical Committee 4.4
Building Materials and Building Envelope Performance

Meeting Minutes
January 21, 2008

ASHRAE TC 4.4 MINUTES
New York City
January 21, 2008
Building Materials and Building Envelope Performance

1.0 Introduction and Attendance

The Chair, Mr. Andre Desjarlais, called the meeting to order at 2:15 with 39 members and guests present. A quorum was present.

Voting Members Present:

Andre Desjarlais (Chair)	ORNL
Paul Shipp (Vice-Chair)	USG
Anton Ten Wolde (Research)	Forest Products
William B. Rose (Handbook)	Building Research Council
Robert Bombino	RDH Building Sciences
Sean O'Brien (Program)	SGH
Marcus Bianchi	Johns Manville
Wahid Maref	National Research Council
Patrick Noonan	Knauf Insulation
Stan Gatland	CertainTeed
Andreas Holm	IBP
Rick Peters	TBS Engineering
Lixing Gu	Florida Solar Energy Center
David Roodvoets	DLR Consultants
Mikael Salonvaara	Huber Engineering
Raoul Webb	

Voting Members Absent:

Alex McGowan	Levelton Consultants
Joseph Lstiburek	Building Science Corp
Doug Bibee	Dow

Corresponding Members Present:

Theresa Weston	Dupont
Larry Elkin (ALI/Honors & Awards)	Applied Building Sciences
Garth Hall (Secretary)	Raths, Raths & Johnson
Wagdy Anis	WJE
Peter Adams	Morrison Hershfield
Charles Cottrell	NAIMA
Chris Crall	CCrall Consulting
Sam Glass	Forest Products
Hugo Hens	K.U. Leuven
Achilles Karagiozis	ORNL

Hartwig Kuenzel
Jan Kosny
Marc LaFrance
Shirley Muns
David Ober

IBP
ORNL
DOE
US Green Fiber LLC
US Green Fiber LLC

Visitors Present:

Michael Coulton
Eric Yang
Abdi Zaltash
Jim Bowman
Jeff Smith
Imad Abou-falah
Robin Craig
Chris Kasprzak

Benjamin Obdyke, Inc.
Smithgroup, Inc.
ORNL
AF&PA
Georgia Paver Company
National Research Council
National Research Council
Owens Corning

2.0 Approval of the Long Beach Minutes

- Paul Shipp presented meeting minutes from the Long Beach meeting.
- There was no discussion regarding the minutes.

Motion 1: Anton Ten Wolde moved to approve Long Beach minutes.
2nd: Stan Gatland
Vote: Approved

3.0 Report from the Chair

TC 4.4 Chair, Andre Desjarlais presented the following:

- Roster changes. Several voting members are rolling off and need to be replaced. New voting members to replace those rolling off are Theresa Weston, Larry Elkin, Garth Hall, Sam Glass.
- 15 programs in Salt Lake will be approved by New York for PDH units.
- Upcoming meetings:
 - Salt Lake City – Benchmarking
 - Chicago – Sustainable Design
 - Louisville – Optimal Air Quality Management
- Presentations and Programs.
 - Will require early uploading to ASHRAE. TC will be penalized if presenters do not follow through.
 - All presentations will be recorded. Consent form must be signed by all presenters. You may choose not to be recorded, however,

ASHRAE will not pay for presenters admittance if they do not agree.

4.0 Research Subcommittee

Research Subcommittee chair, Anton Ten Wolde, presented the following items from the Subcommittee meeting held on Sunday. Additional details are available in the Research Subcommittee meeting notes appended to these minutes.

- Money available next year will be similar to 2007. John Andrews won an award for developing a group of “Residential and Small Commercial Research Coordination Group.”
- New manual being developed, including the conflict of interest portion. Work Statement authors are no longer discouraged from bidding on their own work statements.
 - However, TC must include at least 3 qualified bidders.
 - Bidders can not be on PES/PMS.
 - Proposals are reviewed by PES and 2 members of RAC.
 - PES needs to reserve a room to discuss proposals.
- Ongoing Research
 - 235-RP Nature and significance of solar driven moisture.
 - Project is on schedule. Two-hour progress report at subcommittee meeting.
 - Computer modeling portion has just begun.
 - No action needed by committee at this time.
 - 1325-RP Environmental weather loads.
 - One-hour update Sunday.
 - Needs a no-cost time extension. Currently scheduled to end February 28, 2008. Anton recommends an extension to January 31, 2009.

Motion 2: Anton Ten Wolde moved to extend the deadline for the RP.

2nd: Rick Peters

Vote: Approved. 14 voted for. Salonvaara abstained. Chair not voting.

- RTAR approval
 - Last meeting, the low temperature was approved by committee.
 - Was sent to ASHRAE, who approved the RTAR with some conditions.
 - PMS, Marcus Bianchi, Andreas Holm, Theresa Weston, Wahid Maref, and William Rose.

- RTAR - Investigation of long-term performance of sheathing membranes.
 - Needs to be revised, and will be developed by Garth Hall and Theresa Weston.
 - Scope should include development of test protocols.
- RTAR.- Moisture storage in typical office buildings.
 - Hugo and Carsten Rode working with TC 5.5 to help develop the RTAR. IEA Annex 41 similar work, TC4.4 will help the committee.
- RTAR -Benchmarking Whole Building Performance.
 - Re-written by Wahid Maref.
 - Subcommittee meeting, decision was made that this needs to be reviewed based on the Annex 41 results. Will be developed further by Wahid.
- RTAR - Attic Thermal and Moisture Performance.
 - Being revised by David and Andre to further develop RTAR.
- RTAR - Developing a model to size HVAC for temporary membrane structures.
 - At the subcommittee meeting a consensus was reached that we should not be involved because the RTAR was outside the scope of this committee.
- RTAR - Characterization of Climate Conditions in Near Ocean Environments.
 - Anton and Larry discussed the RTAR with TC 4.2 (weather data) and found similar thoughts and projects were being considered there. TC 4.4 is not going to pursue this RTAR further at this time.

5.0 Liaison Report

- One Hightower research award is being given this year, and the new deadline is coming up for next year. Get information in if you want to nominate someone.
- All rosters are available on site, and you can access all rosters for committees of which you are a member.
- Membership roster needs to be added to website. Overall TC4.4 website is well done.

6.0 Handbook Subcommittee

Handbook Subcommittee Chair, Bill Rose, presented the following from the subcommittee meeting held on Sunday. Additional details are available in the Handbook Subcommittee meeting minutes appended to these minutes.

- Bill Rose will be reducing responsibility as Chair. Hartwig will be working with Bill Rose to begin taking over. There were no comments or discussion regarding this transition plan.
- Applications Chapter 43 will need a principal reviewer. Spring 2010 final version will be due. Peter will be the principal reviser.
 - Assistants will be Sean O'Brien, Garth Hall, Hartwig Kuenzel, Wagdy Anis, Mikael Salonvaara, and Alex McGowan.
- Handbook of Fundamentals
 - Thanks to Hugo Hens for his review of all three Chapters since they went by e-mail.
 - All three Chapters were reviewed.
 - Substantially complete of substantive material.
 - Committee and editors responsible to do the editing of the Chapter. Committee members must go through for proofreading and accuracy.
 - Within 2 weeks, versions of the Chapter including the items discussed in the subcommittee meeting included.
 - March 4, 2008 - Final version of Chapters will go out. One month or so to review and vote.
- Due Dates.
 - April 4th – Fundamentals Chapter.
 - April 26th - Material Properties.
 - May 5th - Examples Chapter.
- Summary of discussions in Subcommittee.
 - Chapter 23.
 - Surface Condensation will be added back in. It mistakenly got moved to 25.
 - Diffusion issues modified.
 - Stressing Air Transport.
 - Chapter 24.
 - Questionable data in tables. Data will need to be reviewed and verified.
 - Anton will review 1018 data and determine if data is appropriate and to be included.

- Verify units.
 - Check translation between SI and IP.
 - Committee welcomed to review data and provide input based on their experience and knowledge of the values.
- Chapter 25.
 - Principal change is related to text discussing cautions and use of such examples.
- Final voting for all chapters will be on electronic ballot by e-mail.

7.0 Program Subcommittee

Program Subcommittee chair Sean O'Brien presented the following: Additional details are available in the Subcommittee meeting minutes appended to these minutes.

- All submissions for New York were rejected.
- Salt Lake.
 - Benchmarking attic performance (1st and 2nd priority).
 - Benchmarking hygrothermal modeling tools.

Motion 3: Sean O'Brien motions to approve this priority.
 2nd: Marcus Bianchi.
 Vote: Approved. 12 approved. 0 opposed. 0 abstained. Chair not voting.

- Symposium on hygrothermal modeling discussed as a follow up to seminar in Salt Lake City.
- Discussed potential outside class or short course or day seminar
 - Chris Crall discussed how mechanical insulation committee performed oversight on a short course. 3 or 4 sessions outside of the normal committee. Professional Development Committee (PDC) started the work.
 - ASHRAE learning committee.
- Provide any new program ideas to Sean.

8.0 Standards Subcommittee

Standards Subcommittee Chair, Theresa Weston presented the following report. Additional details are available in the Subcommittee meeting minutes appended to these minutes.

- 90-1.
 - Currently under continuous maintenance.
 - Addendum Z. Air barrier requirements. Through public comment. Needs to go through technical and board committees for final approval.
 - Addendum F. Cool roofs. Zone 1-5 on EEC map. Steep slope requirements. Ballasted roofs are included as an alternative to vegetative roof.
 - It is going out for full public review, and all commentators can submit new comments.

- 90-2.
 - Also under continuous maintenance. Not much going on. Did request new members in October.

- GPC 15 – Guideline on air barrier details. Standards committee has killed the group and can no longer be resurrected without starting over.

- Will not reserve time for Standards Subcommittee meeting.
 - No one rejected proposal to not have a subcommittee meeting.

- Advanced Energy Design Guidelines available online.

9.0 Honors Subcommittee

Honors Subcommittee chair, Larry Elkin, presented the following items:

- Update bios.
- Professor Hens has been named an ASHRAE fellow.

10.0 Old Business

No old business.

11.0 New Business

No new business.

Motion 5: Rick Peters moved to adjourn.
 2nd: Anton Ten Wolde.
 Vote: Approved.

Meeting was adjourned at 3:45 pm.