

ASHRAE Technical Committee 4.3: Ventilation Requirements & Infiltration
2003 WINTER MEETING MINUTES

Monday, January 27, 2003, 4:15-6:30 pm
Palmer House Hilton (PHH) Burnham 4 (7th floor)

1. Self Introductions

Craig Wray, TC 4.3 Chair, called the meeting to order at 4:16 p.m.

The following were in attendance:

Name	E-mail address
Craig Wray	cpwray@lbl.gov
Jim Reardon	james.reardon@nrc.ca
Steve Taylor	staylor@taylor-engineering.com
Ron Petersen	rpetersen@cppwind.com
Art McIvor	Artmcivor2@aol.com
Brian Rock	barock@ku.edu
Theresa Weston	theresa.a.weston@usa.dupont.com
Steve Emmerich	steven.emmerich@nist.gov
Iain Walker	iswalker@lbl.gov
Xudong Yang	xudongy@miami.edu
Jan Kosny	kvo@ornl.gov
Burt Phillips	phillips@unies.mb.ca
Dianne Griffiths	dgrif@swinter.com
Mario Medina	mmedina@ku.edu
Joe Lstiburek	joe@buildingsscience.com
Anil Parekh	aparekh@nrcan.gc.ca
Bernardo Cardenal	rocamar@gate.net
Martin Liddament	mliddament@veetech.co.uk
John Diekmann	Diekmann.j@tiax.biz
Bill Fleming	flemg@aol.com
Joe Derringer	jderinger@deringergroup.com
Darren Sheehan	sheehads@utrc.utc.com
Wei Sun	wei.sun@akahn.com
Jeff Christian	christianje@ornl.com
Max Sherman	mhsherman@lbl.gov
Larry Schoen	larry@schoenengineering.com
Jensen Zhang	jszhang@spr.edu

2. Attendance & Quorum Check

Voting members for this meeting: *Boome, Emmerich, Lstiburek, McIvor, Petersen, Rateliff, Reardon, Rock, Taylor, Weston, Wray, Zhang, Feustel (IM), Olesen*

10 Voting Members were present; quorum was established.

3. Approval of Honolulu Meeting Minutes (posted on TC web pages)

Minutes from the last meeting were distributed and reviewed.

The minutes were approved: 7-0-0 CNV (Weston, Zhang not present at vote)

4. Announcements & Liaisons

- Society liaisons (TAC, RAC, Handbook, etc.)

- Handbook liaison met 1/26/03 with Handbook Subcommittee. Ratcliff not present for winter meetings. Walker (vice-chair) will run winter meetings. Deadlines for out of sequence updates to Handbook:
 - April for this year
 - February for next year
- Sheila Hayter met with research subcommittee earlier. See research subcommittee meeting notes.
- Section 4 Meeting announcements
 - Presentations on website. Several hundred hits for last meeting's presentations. Brian Rock will contact Tony Giometti to get link. Presentations on website must be:
 - voted on and approved by TC
 - must be as presented
 - authorized by author
 - Predictions for attendance at seminars and symposiums must be as accurate as possible so ASHRAE can book proper room size.
 - Commercialism policy discussed at last meeting is not yet in effect. Theresa Weston stated effective date will be June meeting.
- ASHRAE Learning Institute (*Boome*)
 - Boome not present.
- EHC: Environmental Health Committee (*Cardenal*)
 - No news.
- ARTI: Air-Conditioning & Refrigeration Technology Institute (*Emmerich*)
 - Steve Emmerich will be new liaison.
 - 21CR program might have only a few moiré years of existence. Initiated with 7 year funding window and 4 to 5 have been completed.

5. Subcommittee Reports

- Research (*Reardon*):
 - See Research meeting notes.
 - Ventilation requirement and infiltration issues in hot/humid climates (*Zhang*)
 - No progress.
 - Zhang has pending project with Florida Solar Energy Center (FSEC) small office buildings in hot/humid climates. Syracuse, FSEC, CDH, DOE are cosponsors. Will report update next meeting.
 - Lstiburek involved in research on 30 homes in Houston, part of Building America work with NREL, DOE, and FSEC. Five year project on standalone dehumidifiers and supply ventilation; does not address envelope. Twenty houses instrumented. Report due at end of year.
 - Florida has ΔP requirements for inside rooms of +0.01" (2.5 Pa) but no envelope criteria with respect to moisture control. Exhaust-only ventilation may work but need a forgiving envelope.
 - TC met in executive session to discuss Multiple Space Effects on Ventilation System Efficiency in Standard 62" 1276-WS. Only one proposal was received.
 - PES (*Taylor/Wray/Reardon*) moved that the TC reject the proposal as non-responsive. Approved 9-0-0 CNV.
 - Rebid: Possible test buildings: John House suggested that the Energy Center at Iowa could be used. The EPA building in Sacramento was also possible. NIST and LBNL can be subcontractors. Wray suggested that

bidders must list building and document that they have permission to perform study there. Work Statement to be updated by May 15 by PES.

- New research ideas to the Subcommittee's Chair
- Program (*Weston*):
 - No TC programs in Chicago
 - Current program status:

Program	Title	Chair	(Rank) Status	Due Date
Symposium	Ventilation and Infiltration in Mid and High Rise Residential Buildings (1)	Jim Reardon	Discontinued - Two papers were withdrawn.	N/A
Seminar	Exhaust and Intake Design Issues	Ron Petersen	(3) co-sponsor with 5.6 and 9.10?	2/7/2003
Seminar	How much outdoor air do you need and why?	Larry Shoen	(4) co-sponsor with 62	2/7/2003
Forum	How much outdoor air do you need and why?	Larry Shoen	(5) co-sponsor with 62	2/7/2003
Forum	What's Needed in an ASHRAE ETS Design Guide	Brian Rock	(2)	2/7/2003
Forum	What Should be in the 62.2P Companion Guideline?	Steve Emmerich	(1)	2/7/2003
Symposium	Airflow Around Buildings	Glenn Schuyler	Proposed	8/6/2003
Seminar	Chapter 43	John Carter	Proposed	8/6/2003
Forum	62.1 Issues	?		8/6/2003
Seminar	What Should be in the 62.2P Companion Guideline?	Steve Emmerich	Proposed	8/6/2003
Symposium	Air Leakage performance for non-Residential Buildings	Steve Emmerich	Co-sponsor with 90.1	8/6/2003
Symposium	Infiltration Heat Recovery	Craig Wray	Proposed	
Seminar	Evaluation of CFD for modeling external and internal flows	Ron Petersen	co-sponsor 9.10? / 5.6?	
Seminar / Symposium	Residential Ventilation Design	Dianne Griffith	proposed	

- New program ideas to the Subcommittee's Chair
- Handbook (*Ratcliff/Walker*):
 - Last revision for 2003 Applications was extensive. 2005 Fundamentals chapter needs only minor revisions (typo's). Need to vote to reaffirm even if nothing is changed.
 - McIvor noted that ASHRAE has received some complaints about information dropped from Handbook chapters. Walker stated that we have not done that; we have added info without deleting past info.
 - Bill Fleming noted that 2004 Handbook will be on CD only so there are no space limits. Should be targeted at education and engineers, contractors, etc. Can be dynamic, e.g. motion pictures or simulations.
- Standards (*Emmerich*):

- 62-2001/SSPC 62.1, Ventilation for Acceptable Indoor Air Quality (in Commercial, Institutional, and High-Rise Residential Buildings). Four addenda approved for publication by StdC. Will go to BoD Thursday. Seventeen total have been approved for publication, 7 more in progress. Three were recommended for ISC PR. Three others in progress of responding to commenters. Andy Persily's term over in June. New chair will be Butler and Stanke will be vice chair.
- SPC 62.2P, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings. 4th ISC PR completed. Response approved here. No substantive changes. Will be voted for publication this spring and hopefully by BoD in June. Companion Guideline 24P TPS was approved.
- 119-1988 (RA94), Air Leakage Performance for Detached Single-Family Residential Buildings. Joe Lstiburek has proposed a slate for approval by Standards Committee (SPLS): Joe Lstiburek (chair), Theresa Weston, Stan Gatlan, Brad Townsend, Randy Foltz, Mike Humphrey, Randy Luther, Pat Huelman, John Tooley, Steve Emmerich, Craig Wray.
- 136-1993 (RA01), A Method of Determining Air Change Rates in Detached Dwellings. Reaffirmed with edits in past year.
- SPC 161P (CoC, TC 9.3 is Lead), Air Quality within Commercial Aircraft. Still deadlocked on ventilation rates. Lawsuit was dismissed and moving forward.

Others of interest:

- 129-1997 (TC 5.3), Measuring Air Change Effectiveness. Reaffirmed by StdC with minor changes. Now titled Standard 129-1997 (RA 2002).
- SPC 152P (TC 6.3), MOT Residential Thermal Distribution Systems. No comments on last PR. SPC voting for publication this meeting.
- 170P Health Care. Per Rick Hermans (chair):
 - SPC has an approved and publicly reviewed TPS.
 - Text for the draft is generally coming from the recently approved HVAC Design Manual for Health Care Facilities.
 - SPC continues to accept new issues for our debate but will probably cut off new issues after Anaheim so the first draft can be finalized.
 - Work plan calls for a vote for first public review in Nashville, June 2004.

Future standards:

- Standard on air leakage performance for commercial buildings. UK has one. SSPC 90.1 has suggestion code change for air barriers. Possibly expand the scope of 119. Research will be brought up at Seminar.
- Possible guideline on designing buildings to mitigate terrorist attacks.
- Honors (*Cardenal*):
 - No new issues.

6. Old Business

- Frequently asked questions. Art reviewed TC 4.3 responses to ensure there are no errors. Comments from Persily and Rock. Will get Bruce Hunn to provide Word file so that original response can be seen together with changes.

7. New Business

- Proposed Professional Development Seminar (PDS) (*Peterson*)
 - Reviewed proposal outline (attached to agenda).

- Motion (Rock/McIvor): TC 4.3 agrees to sponsor “Evaluating and Designing Exhaust Systems to Avoid Fume Reentry and Adverse Health Effects”. Approved 8-0-1 CNV
- ETS Design Guide. Came out of Board Policy Committee to limit 62.1 to non-smoking spaces. This Design Guide is to provide that guidance. Will be developed through Special Pubs. PMC will review and TC 4.3 will approve prior to publication. PMC will be: Persily, Hoy Bohanon, Coggins, Don Koch, Larry Schoen, Steve Taylor, Nick Agopian, Alan Veeck. Brian Rock is in negotiation for the contract.
- Subcommittee structure. Communications subcommittee to replace Handbook and Program. To address at next meeting.

8. Adjourned. 6:40 .pm.

9. Next meeting

- June 30, 2003, ASHRAE Annual Meeting, Kansas City, MO
Westin/Washington 3 (LL)