

ASHRAE Technical Committee 5.12: Ventilation Requirements & Infiltration
2005 WINTER MEETING AGENDA

Monday, February 7, 2005, 4:15-6:30 pm
Wyndham Hotel, Salon IX

Subcommittee Meetings:

Handbook: Sunday, February 6, 2005, 5:00-6:00 pm, Wyndham Hotel, Captain (L)
Program: Sunday, February 6, 2005, 6:00-7:00 pm, Wyndham Hotel, Captain
Research: Monday, February 7, 2005, 2:15-4:15 pm, Wyndham Hotel, Salon IX (G)
PMS for 1167-RP, Sunday, February 6, 2005, 4:00-5:00 pm, Wyndham Hotel, Captain
PMS for 1169-RP, Monday, February 7, 2005, 1:00-2:15 pm, Wyndham Hotel, Salon IX

Scope: *TC 5.12 is concerned with ventilation, infiltration, airflow around buildings, and the reentry of exhausts, including their interactions with indoor air quality, HVAC system performance, and energy consumption.*

1. Welcome & Introductions

- Voting members sit at the table; all please sign the attendance list and include contact data
- TC web site: <http://hvac.arce.ukans.edu/ashrae/tc4.03/main.htm> (migration to NIST at URL: <http://tc512.ashraetcs.org/> thanks to Brian Polidoro and Steve Emmerich, possibly later to ASHRAE's server)
- Distribution of agenda & minutes package

2. Attendance & Quorum Check

Voting members for this meeting: *Carter, Emmerich, Griffiths, Medina, Modera, Reardon, Stathopoulos, Taylor, Walker, Liddament (IM), Olesen (IM) (scheduled to roll-off after 2005 Annual Meeting)*

(quorum > 1/2 all VM, excl. IM; super maj. $\geq 2/3$ VM present; simple maj. > 1/2 VM present)

3. Approval of Nashville Meeting Minutes (distributed at this meeting)

4. Announcements & Liaisons

- Society liaisons (TAC *Int-Hout*, RAC *Kohloss*, Handbook 2005-*Conway/2007-Rock*, Standards *Hogan*, Program *Brambley*, Education *Hydeman*, CTTC *Circosta*, Spec.Pubs *Ferguson*, etc.)
- Section 5 meeting announcements (*Reardon*)
 - Regina Stafford retired from ASHRAE, Asst. to MORTS on Dec 10, 2004.
- ALI: ASHRAE Learning Institute (*Boome*)
- EHC: Environmental Health Committee (*Cardenal*)
- ARTI: Air-Conditioning & Refrigeration Technology Institute (*Emmerich*)

5. Subcommittee Reports

a. Research (*Walker*):

- Active Research:
 - "The Effect of Ganging on Pollutant Dispersion from Building Exhaust Stacks"
1167-WS (PMS: *Chen/Kato/Ratcliff*). PMS report.
 - "Heat Transfer During Residential Infiltration/Exfiltration"
1169-RP (PMS: *Reardon/Griffiths/Medina*) Additional no-cost extension to June 30, 2004 moved in Anaheim. Revised final draft submitted June 2004. PMS report.
Technical paper status.

- “Indoor Environmental Effects on the Performance of School Work by Children”, 1257-TRP (PMS: *Sipes/Reardon/Federspiel*) PMS report at TC2.1 Research Subcommittee Meeting Sunday, 6 February 2005, 3:00-5:00PM.
- “Multiple Space Effects on Ventilation System Efficiency in Standard 62” 1276-WS (PMS: *Taylor/Wray/Reardon/Emmerich*) Contractor commenced late autumn 2004. PMS report.
- Long-Range Research Plan (LRRP) submitted August 01, 2004:
 - 1) “Minimum Acceptable Dilution of Commercial Kitchen Exhaust” with TC 5.10 (*Carter/Cardenal/Ratcliff/Wyon*) RTAR revision. WS status update. (*RTAR was revised as requested and was resubmitted with this Long Range Research Plan as TC 5.12’s 1st priority (RTAR 2005-40) – returned by RAC RTAR-04-0512-01377 in October 2004.*)
 - 2) “Dilution and Normalized Concentration Design Criteria for Laboratory Exhaust” (*Petersen/Carter*) RTAR update. (*RTAR submitted with the 2003-2004 Long Range Research Plan August 1 2002, approved by RAC in October 2002.*)
 - 3) “Simplified Procedure for Calculating Exhaust/Intake Separation Distances” (*Wilson/Taylor/Carter/Petersen*) RTAR and WS status update. (*RTAR approved and assigned Priority status by RAC in October 2001.*)
 - 4) “Characterization of Infiltration and Ventilation in Mid- and High-Rise Multifamily Buildings” (*Emmerich/Reardon/Hill*) RTAR and WS status update.
- Other research ideas (Dale, UoAlberta; others)
 - Work Statements are requested from TCs 2.4, 5.12, 9.6 & 9.12 by Tech Council’s Ad Hoc committee of Hermans, Halstrom, Persily on SARS
 - Tech Council has referred to TC 5.12 the Regions Council motion that ASHRAE contract for research on effectiveness of reduced classroom ventilation rates based on the North Carolina Building Code’s claimed lack of problems at 7.5 cfm per person.
 - The California Air Resources Board (ARB) announced Nov 10, 2004 the release of RFP 04-310, titled "Ventilation and Indoor Air Quality in New Homes", Bob Aldrich.
- Relevant research of other TCs:
 - TC 1.2, RTAR-04-0102-01350 “Measurements of Air Change Rates in Occupied Homes” – accepted by RAC, Oct 2004.
 - TC 5.2, RTAR-04-0502-01369 “Snow Penetration at Louvers” – returned by RAC, Oct 2004.
 - TC 5.3, RTAR-04-0503-01373 “Air-change Effectiveness with Stratified Air Distribution Systems” – accepted by RAC, Oct 2004.
 - TC 2.2 , Jianshun Zhang, CM serving as TC 5.12 liaison and representative on PES/PME for 1301-TRP “Quantification of Ventilation Effectiveness for Air Quality Control in Plant and Animal Environment“
- b. Program (Griffiths):
 - Orlando, Seminar 3 “*Design and Constructing Buildings in Hot and Humid Climates*” Sunday 6 February 2005 8:00-10:00 AM (*Cardenal*)
 - Orlando, Seminar 19 “*What’s New With Standard 62.2?*” Sunday 6 February 2005 1:00-3:00 AM (*Emmerich*)
 - Orlando, Seminar 54 (SSPC62.1 co-sponsor) “*How to comply with ASHRAE 62.1-2004*”, Wednesday 9 February 2005 10:15-12:15 PM (*Howard*)

- Proposed or planned program elements for:
 - Denver – June 2005: two bumped forums, originally proposed/submitted for Orlando:
 - Forum “Can You Design an Exhaust Stack Using the Building Air Intake and Exhaust Design Chapter of the HVAC Applications Handbook?” (Carter)
 - Forum “Should Standards 119,136 and 129 Be Adopted into Codes?” (Blatt)
 - Chicago – January 2006:
 - Quebec City – June 2006:
 - Symposium “Design for ETS in Hospitality Facilities” (*Wray*)
 - Symposium “Innovation and Advances in Integrated Building Design” (*Haghighat*)
 - Other:
 - Symposia: “Airflow Around Buildings”, “Air Leakage Performance for Non-Residential Buildings”, “Infiltration Heat Recovery”, “Ventilation in Hot and Humid Climates” (*Lstiburek*)
 - Seminars: “Chapter 43”, “What Should be in the 62.2P Companion Guideline?”, “Evaluation of CFD for Modeling External and Internal Flows”, “Residential Ventilation Design”
 - Forums: “62.1 Issues”, “62.2 Issues”, “What should be in 62.2 Users Guide?”
 - Additional program ideas:
- c. Handbook (*Carter*):
- Society-wide Handbook series rewrite - update
 - 2005 Fundamentals Special Review - update
 - Building Air Intake and Exhaust Design (AHRN-43), 2007 Applications (*Carter*) status.
 - Airflow Around Buildings (AHRN-70) , 2005 Fundamentals (*Petersen/Wilson*) status.
 - Ventilation and Infiltration (AHRN-80), 2005 Fundamentals (*Walker*) status.
- d. Standards (*Emmerich*):
- TC 5.12 is the cognizant TC for:
 - 62.1-2004/SSPC 62.1, Ventilation for/and Acceptable IAQ, published (in Commercial, Institutional, and High-Rise Residential Buildings)
 - 62.2-2004/SSPC 62.2, Ventilation and Acceptable IAQ in Low-Rise Residential Buildings, published
 - 119-1988 (RA94), Air Leakage Performance for Detached Single-Family Residential Buildings – recently released for Public Review – Reaffirm with updates
 - 136-1993 (RA01), A Method of Determining Air Change Rates in Detached Dwellings Requires action at this meeting: Reaffirm, Revise, Reject
 - SPC 161P (CoC, TC 9.3 is Lead), Air Quality Within Commercial Aircraft
 - Others of interest:
 - 129-1997 (TC 5.3), Measuring Air Change Effectiveness
 - SPC 152P (TC 6.3), MOT ... Residential Thermal Distribution Systems
 - ETS Design Guide – update (*Persily PMS Chair/Rock PI*)
 - New standards ideas:
 - ASHRAE Standard on Evaluating Energy Efficient Buildings – inaugural mtg. Monday 7 Feb 10:00-noon, Westminster Room in the Wyndham Hotel, chaired by Gerald Kettler (Chair TC 7.9).
 - Proposed new standards policy being deliberated in SAC involves Stds 62 explicitly.

e. Honors (*Cardenal*):

- Membership upgrades (associate member to member, fellow, life, etc.)
- Distinguished Service Award (15 pts.), Exceptional Service Award (45 pts.)
TC members recently recognized: Rock, Taylor, Wray – 2004 Annual Mtg.
- Other honors & awards

6. Old Business

- Technical Bulletins/FAQs (*Reardon*)
- other

7. New Business

- 2005-2006 Roster Changes: rollovers, new members, subcommittee assignments, etc.
(*due to TAC Section 5.0 Head by end of February*).
- other

8. Adjourn

- Next meeting: June 27, 2005, ASHRAE Annual Meeting, Denver, CO