



ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers Inc.

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**ASHRAE TC 5.3 Air Curtain Subcommittee Meeting Minutes
2016 Winter Meeting**

Lake Highland A (L), Orlando Hilton, Orlando, FL

Sunday, January 24, 2016 from 10:00 am – 10:45 am

1. Call to Order Chair – Frank R. Cuaderno
 - Introduction of Members and Guests
 - Recording of Attendance Attendee List Created
 - Announcements Ed Koop has withdrawn from the committee
2. Agenda Adoption Approved by consensus
3. Approval of Previous Meeting Minutes Motion to Approved - Krishnan V
Seconded – David Johnson
4. Discussion Topics
 - 4.1 Systems and Equipment Handbook 2016
 - 4.1.a Final document sent and approved by the Handbook committee at the Chicago, IL 2015
 - i. The new document content was not sent to ASHRAE for next publication cycle
 - ii. The new document content is in on-line version
 - 4.2 Fundamentals 2017
 - 4.2.a Content will be submitted to Handbook Committee for review and approval
 - i. The new Fundamentals content was added to current content with note of applications
 - ii. Contents approved by sub-committee and simulations and other artwork will be provided to Handbook sub-committee chair Curtis Peters
 - 4.3 Other Meetings that include Air Curtains
 - 4.3.a AMCA (Air Movement and Control Association)
 - i. Air Curtain Engineering Committee
 - a)ASHRAE Technical Seminar for Las Vegas 2017
 - Seminar content submitted to Research/Handbook/Program Chair Andre Livchak
 - a. Content to be submitted to ASHRAE by August 2016 (Andre Livchak to provide actual date)
 - i. Track 8 recommended by Jerry Sipes
 - ii. AMCARC (Air Movement Code Action Review Committee)
 - a)AMCA Air Curtain committee working with AMCARC to manage Concordia studies
 - AMCARC partly funded the management of the Concordia Study for Air Curtain Effectiveness
 - iii. DOE
 - a)Air Curtains are part of the list of exceptions
 - NOPR (Notice of Proposed Regulation) to be released for public review by April
 - b)Final regulation list waiting approval
 - a. Proposed negotiated exception (Partial List)
 - i. Air Curtains
 - ii. Crossflow wheels
 - iv. ISO meeting from March in Lyon, FR
 - a)New CFD results by Berner, Frico and Mars had similar results
 - Detailed boundary conditions to re-run simulations to determine if we can come closer to the results from the TNO test
 - b)Frico's climate chamber will soon be completed
 - Additional test may be conducted at Frico's facility
 - a. The Frico lab is almost complete
 - b. Setup TBD
 - c. A Frico visit is on the table for 2016
 - c)ISO/TC 117 WG 09 meeting to be held in conjunction with the annual China Refrigeration Show to be held in Beijing, China in April 2016

Mars Engineering Meeting Minutes – Friday February 8, 2013

- White Paper Assignments
 - a. ISO/TC117 WG09 will hold meetings in conference call in February and face-to-face in Beijing to discuss paper format and assign duties and/or sections
 - d) Jerry Sipes recommended that we get involved in AHRI meetings regarding ISO topics since David and I already are part of the ISO/TC 117 WGs
 - The idea is to have open dialogue between the US and European delegations
5. New Business
- 5.1 RTAR for future air curtains studies
 - 5.1.a The committee will wait to get the results of the Concordia University study before applying for an RTAR
 - TC4.7 to get assistance for future validation
 - IAST (Dan Pettway) – Global Input of ASHRAE Standards
6. Next Meeting St. Louis, MO June 2016
7. Adjournment

FRC 1-4-16 ASHRAE TC 5.3 Air Curtain Subcommittee Meeting Minutes 1-24-16

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2016 Winter Meeting**

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Name	Company	e-mail
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