



May 8, 2013: Vol. 55, No. 09

Produced by: Tony Finch
Chapter Newsletter Editor/ Chairman

The Therm, is a monthly Newsletter for chapter members and HVAC&R professionals alike, that provides information about the Fort Worth Chapter of ASHRAE.

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President's Message

Hi, I'm Dan Merkel, President of Fort Worth ASHRAE.

Thanks to everyone who made last month's golf tournament a great success! We had a great turnout and we could not have done it with all of their support and with the support of our sponsors!

We are very fortunate to welcome another fantastic speaker to our chapter next week! Jack Geortner is an expert in Underfloor Air Distribution and will be lending us his expertise. Among many topics Jack will talk about new updates to the **NEW ASHRAE STANDARDS being published in June 2013.**

As always, please see the rest of the Therm for more information.

Take care,

Dan

Next Chapter Meeting

May 15, 2013

11:30am

"Lessons learned: Underfloor Air Distribution:"

11:30am

"What a (room) Load"

777 Main Plaza
777 Main St.
40th Floor
Fort Worth, TX

April Program – May 15, 2013

Luncheon Meeting

- Date:** May 15, 2013
Time: 11:30 a.m. – 1:00 p.m.
Location: 777 Main Plaza Petroleum Club – 40th Floor
Downtown Fort Worth, 777 Main St., Fort Worth, TX 76102
Topic: **NEW UnderFloor Air Distribution (UFAD) Design Guide Overview and ASHRAE Standards: Publication Date June 2013**
Cost: \$25 which includes lunch and dessert.

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Meeting Outline:

Lessons learned with Underfloor Air Distribution: The view from 30,000,000 feet!

Industry drivers-- Operating benefits, LEED impact, trends
UFAD fundamentals/compare and contrast with OH design, DV design
Design Considerations-- overview of interior and perimeter options
Underfloor distribution, temp and pressure dynamics/system integration/RA rules of thumb
options/pluses and minuses/
Throttling vs time modulation technology
Integration with other trades, esp RAF/ construction best practices

New ASHRAE standards and UFAD Design Guide Overview: Publication Date June 2013

Speaker Info:

Jack Geortner, LEED AP
General Manager
FlexSys Underfloor Air Product Group at Johnson Controls

Speaker Bio:

Jack Geortner is the General Manager for the FlexSys Underfloor Air Product Group at Johnson Controls. Based in Los Angeles, CA, he has over 20 years experience with the AE community in both domestic and international markets. Prior to joining York International, now a part of Johnson Controls, in 2001, he held executive positions with major suppliers in the building products industry, including the C/S Group, Forms and Surfaces and Steelcase. He was Global Accounts Director at Tate Access Floors prior to joining York/Johnson Controls. He is a LEED Accredited Professional."



March Meeting Minutes – Board of Governors

BOG Meeting – April 17, 2013

Call to Order by Dan Merkel at 10:38 am

Members in attendance – Tony Finch, Jay Sullivan, Sean Rath, Clif Upham, Dan Merkel, Richard Long, Nick Schroeder, David Muzzy, Cody Pace

President

- The April 18th Webcast will be hosted at the Texas AirSystems office. Entry will be \$20, but members can get their own log-in info directly from Society
- CRC will be held in Austin starting on April 18th.
- Upcoming Schedule of Events
 - April 18th – Webcast – Assessing Building Energy Performance
 - April 18-20th – ASHRAE CRC – Austin, TX
 - July 29th – CRC Golf Tournament – Waterchase Golf Club, 8:00 am shotgun
- The nominations for next year will be announced at the general business meeting. Recommendations include:
 - President – Tony Finch
 - President-Elect – Jay Sullivan
 - Secretary – Clif Upham
 - Treasurer – Nick Schroeder
 - BOG – Dan Merkel, Larry Akers, Cody Pace, Ian Bost

Officer Reports

President-Elect (Finch)

- CRC starts this Thursday, April 18th at the Hyatt Regency in Austin
- Everyone attending should attend a training session for PAOE points
- Everyone is also asked to bring back ideas about what the Austin Chapter does well/poorly to adjust our CRC accordingly

Secretary (Sullivan)

- Roster will be presented with the Golden Gavel Awards Packet

Treasurer (Upham)

- ~\$23,000 has been donated to RP as of 4/12
- We are at approximately 75% of our goal
- \$4,000 in scholarships have been given out to students this year

BOG At-Large (Watters, Maryak, Muzzy, Long)

- Nothing to report

Committee Chairman Reports

CTTC (Schroeder)

- The chapter needs a speaker for the May meeting, contact Nick Schroeder (nschroeder@uta.edu), if you have any suggested speakers

Historian (Brunkenhoefer)

- Nothing to report

Honors & Awards (Akers)

- Nothing to report

Membership Promotion (Woodlee)

- The AEEE meeting on the 3rd Thursday of March will be the membership promotion lunch. Those bringing a guest will receive free entrance.

Research Promotion (Watters)

- ~\$23,000 donated, so far, to RP
- 75% of goal for 12-13 year

Special Events (Rath)

- The chapter is considering a happy hour in July in lieu of the normal meeting
- The Past President's Night will be held at the same location (Times Ten Cellar) as previous events

Student Activities (Bost)

- Nothing to report

Webmaster (Pace)

- Nothing to report.

Government (Long)

- Nothing to report

Old Business

- Past President's Night will be held in June. The location will remain the same as previous events.

New Business

- See everyone at CRC
- Closing @ 11:07

March Meeting Minutes – General Business

General Business Meeting – April 17, 2013

Call to Order – Self introductions

- 51 members in attendance

Old Business

- CRC is being held in Austin, starting Thursday, April 18th.
- The BOG recommendations were brought up in the February meeting and will be voted on in the April meeting.

New Business

- Elections for officers were held. Motion to elect via straight-slate acclimation made by DW Gipson, seconded by Don Hardin.
 - President – Tony Finch
 - President-Elect – Jay Sullivan
 - Secretary – Clif Upham
 - Treasurer – Nick Schroeder
 - BOG – Dan Merkel, Larry Akers, Cody Pace, Ian Bost
- All elections were approved as recommended.
- The Chapter will host a golf tournament to raise funds for the 2015 CRC that will be held in Fort Worth. The golf tournament will be on July 29th, at 8:00 am at Waterchase Golf Club in Fort Worth. Further announcements will come at the following meetings.

Program

- Nick Schroeder introduces the speaker

Speaker Info:

DAN INT-HOUT III, Fellow, ASHRAE
Chief Engineer
Krueger
Richardson, Tx.

Speaker Bio:

Dan Int-Hout, Chief Engineer, Krueger, is responsible for the presentation of technical data and advanced application engineering for the Grilles, Registers and Diffusers, as well as the VAV air terminals, produced by Krueger.

Dan has been in the Air Distribution research and design business since 1973, and has a Masters in Business Management from Central Michigan Univ., and a Bachelor in Biology & Physics from Denison University.

Dan originally joined Krueger in 1981, but has had several other jobs in the industry, including Owens Corning Fiberglas, Carrier, Titus and Environmental Technologies, in engineering, marketing and product research roles.

Dan has written over 40 technical papers and articles on VAV system performance, acoustics, air diffusion, controls and occupant comfort. He was recently Chairman of both ASHRAE Technical and Standards Committees on Thermal Comfort, is a past Chairman of several other related ASHRAE Technical and Standards Committees, as well as ASHRAE Standards, Technical Activities Committee (TAC). & Environmental Health Committees. He received the ASHRAE Distinguished Service Award in 1993 and the Exceptional Service award in 2007. Dan is currently the

Chairman of the ARI committee on Applied Acoustics (885) and Mbr of ISO 205 US Panel on Thermal Comfort and a member of the USGBC TAG on Indoor Environmental Quality. Dan was installed as an ASHRAE Fellow at the Long Beach meeting in 2007, and is an ASHRAE Distinguished Lecturer and a Life Member. Dan was nominated to Chair the TRG7 Committee to rewrite the Underfloor Air Distribution Guide, at the Chicago ASHRAE meeting in 2009, which was in final review in 2012, and voted for publication at the Dallas, 2013 meeting. Dan joined the ASHRAE TAC (again) in June 2012, managing the new Multi-discipline Task Groups.

Topic: "What a (room) Load"
Cost: \$25 which includes lunch and dessert.

Meeting Outline:

“What a (room) Load”

Building loads, especially in the interior, are steadily dropping while at the same time, ventilation rates are both increasing and need to be verified. In many spaces, the ventilation air is quite able to handle all the interior load if dry and cold. In fact, the ventilation airflow rate may exceed the load requirements, causing systems to go into reheat, even in summer. We will be discussing a number of the issues as well as a number of possible solutions, especially the opportunities for variable volume series flow fan terminals with sensible cooling coils.

“Methods of Effective Room Air Distribution”

In order to meet the increased expectations of building occupants, designers must be aware of the conflicts between first cost economics, occupant productivity and life cycle costs. Buildings that do not meet the needs of the occupants often result in expensive redesign or worse, result in lawsuits against all parties involved. First, we need to understand the rules, which will be discussed.

Then, we need to discuss a serious problem facing design engineers. With the goal of saving energy over the 90.1 baseline (Overhead VAV), many architects are challenging the mechanical engineer to come up with alternate systems that will meet this goal. Displacement Ventilation (DV), Underfloor Air Distribution (UFAD) and Chilled Beams all have a potential to save energy, and meet these needs. I will briefly cover pros and cons of the four most popular methods of air delivery.

Closing 12:57:

Treasurer’s Report – Clif Upham

STARTING BALANCE DATE 4/1/2013
 NEW BALANCE DATE 4/30/2013

Treasurer's Report

Clif Upham

Financial Data:

| | |
|--|---------------------|
| Starting Balance (4/1/13): | \$ 6,597.09 |
| Deposits: | |
| 4/4/2013 - February Chapter Dues | \$ 770.00 |
| 4/4/2013 - Eventbrite funds for March Luncheon | \$ 325.00 |
| 4/4/2013 - Roster Sponsorship Funds | \$ 500.00 |
| 4/4/2013 - Golf Tournament Funds Collected | \$6,615.00 |
| 4/4/2013 - Golf Tournament Funds Collected | \$ 650.00 |
| 4/9/2013 - Deposit Spring Golf Tournament Funds | \$ 650.00 |
| 4/13/2013 - Deposit Spring Golf Tournament Funds | \$ 1,150.00 |
| 4/1/2013 - Square Register AC Supply Team Payment | \$ 486.25 |
| 4/1/2013 - Square Register Individual Payment for Jomar | \$ 121.56 |
| 4/16/2013 - Deposit check from Eventbrite for Spring Golf Classic | \$ 8,200.00 |
| 4/17/2013 - Deposit funds from April Luncheon and Golf Tourney Funds from MJEC | \$ 1,655.00 |
| 4/24/2013 - Deposit Check from TAS for Golf Tournament and March Chaper Dues | \$ 3,810.00 |
| Subtotal: | \$ 24,932.81 |

Payments:

| | |
|---|---------------------|
| 4/4/2013 - Check #5326 to TCU for food and drink at March Luncheon Meeting | \$ 1,146.33 |
| 4/4/2013 - Check #5327 to David Muzzy for Spring Golf Tournament Expenses | \$ 767.53 |
| 4/4/2013 - Check #5353 to Sean Rath for Spring Golf Tournament Expenses | \$ 205.21 |
| 4/10/2013 - Check #5354 to Dan Merkel for TCU SuperFrog | \$ 487.50 |
| 4/11/2013 - Check #5355 Voided Check | \$ - |
| 4/11/2013 - Check #5356 to Waterchase Golf Club for Summer CRC Tournament | \$ 500.00 |
| 4/24/2013 - Check #5355 to Timarron for Spring Golf Tournament Players and Food | \$ 11,735.60 |
| 4/18/2013 - Check #5359 to ASHRAE Research | \$ 8,826.97 |
| Subtotal: | \$ 23,669.14 |
| New Balance as of 4/30/13: | \$ 7,860.76 |

Research Promotion Fund Raising – Richard J. Watters, P.E.

| | |
|------------------------|-------------|
| Updated: 5-2-13 | \$1,600.00 |
| Direct Donations | |
| Fall Golf Tournament | \$7,309.46 |
| Spring Golf Tournament | \$8,826.97 |
| Online Donations | \$8,125.90 |
| | |
| GRAND TOTAL | \$25,862.33 |
| | |
| GOAL (\$) | \$32,000.00 |
| PERCENT OF GOAL | 80.8% |
| AMOUNT NEEDED | \$6,137.67 |

Region VIII CRC 2015 Fundraiser

2015 CRC Fund Raiser Golf Event at Waterchase, July 29: the 2015 Region VIII CRC will be hosted by our Ft. Worth Chapter. This event is to raise funds to use towards making this a memorable experience for all participants. Cost is \$125 per player, \$500 for a team, \$150 for a hole sponsor, \$250 for a table sponsor and \$500 for a trailer sponsor. Tee off is at 8 am with breakfast and lunch provided. We are looking for a sponsor to put up \$500 for the breakfast and another sponsor to put up \$1,000 for lunch.



Proposed Systems Manual Guideline Open for Public Review

Proposed Systems Manual Guideline Open for Public Review

ATLANTA – A proposed guideline that will establish a uniform procedure for transmitting design, construction, testing and operational information to building owners and operators is open for public comment.

Guideline 1.4P, The Systems Manual for Facilities, provides procedures for producing a systems manual as a resource for training, operations, maintenance and upgrading of facilities. The guideline applies to information from planning, commissioning process, design, construction, testing and training activities and operations planning for new, renovated and existing facilities, equipment and assemblies.

The proposed guideline is open for an advisory public review until June 2, 2013. To read the draft guideline or to submit comments, visit www.ashrae.org/publicreviews.

ASHRAE Standard 202P, Commissioning Process for Buildings and Systems and other ASHRAE guidelines on commissioning require development of a systems manual, as do several other standards and energy- and sustainability-related codes. However, no document or guideline outlines how to assemble a systems manual to current requirements. Guideline 1.4P provides these procedures, according to Gerald Kettler, chair of the Guideline 1.4P committee.

“Establishing a uniform procedure for transmitting the design, construction, testing and operational information to building owners and operators is critical to the proper and efficient operation of facilities,” Kettler said. “Guideline 1.4P provides the structure and procedures for the transfer and maintenance of that information. It also is intended for use as operator and occupant training information.”

Other commissioning guidance from ASHRAE includes Guideline 0-2005, The Commissioning Process; Guideline 1.1-2007, HVAC&R Technical Requirements for the Commissioning Process; and Guideline 1.5-2012, The Commissioning Process for Smoke Control Systems.

ASHRAE also is working on several other guidelines and a standard related to commissioning: Guideline 0.2P, The Commissioning Process for Existing Systems and Assemblies; Guideline 1.2P, The Commissioning Process for Existing HVAC&R Systems; Guideline 1.3P, Building Operation and Maintenance Training for the HVAC&R Commissioning Process; and Standard 202P.

ASHRAE, founded in 1894, is a building technology society with more than 50,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow’s built environment today.

Carbon Monoxide Alarms Required, Default Leakage Rate Removed in New ASHRAE Residential IAQ Standard

Carbon Monoxide Alarms Required, Default Leakage Rate Removed in New ASHRAE Residential IAQ Standard

ATLANTA – The newly published 2013 version of ASHRAE’s residential indoor air quality standard removes the default leakage rate assumption and also requires carbon monoxide alarms.

ANSI/ASHRAE Standard 62.2-2013, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, is the only nationally recognized indoor air quality standard developed solely for residences. It defines the roles of and minimum requirements for mechanical and natural ventilation systems and the building envelope intended to provide acceptable indoor air quality in low-rise

residential buildings.

One of the biggest changes in the standard over the 2010 version was an increase in mechanical ventilation rates to 7.5 cfm per person plus 3 cfm per 100 square feet. This is due to the earlier removal of the earlier default assumption regarding natural infiltration.

The Standard 62.2 Committee had previously assumed homes got a minimum of 2 cfm, per 100 square feet, according to Don Stevens, committee chair.

“Because research shows houses have gotten tighter and apartments have always been tight, the 2013 edition drops this default assumption and calls for the entire amount to be provided mechanically,” he said. “The only exception is when single family homes have a blower door test – then the predicted average annual leakage rate can be deducted.”

Another major change is a requirement for carbon monoxide (CO) alarms in all dwelling units. CO poisoning leads to hundreds of deaths and thousands of injuries each year in homes, resulting from automobiles left running in attached garages as well as from portable generators, power tools and heaters, according to Paul Francisco, committee vice chair. A small fraction of poisonings also result from failed central heating combustion appliances.

“Residents have very little ability to sense the presence of CO without detectors, unlike many other indoor polluting events,” he said.

Whether to include CO alarms as a requirement in the standard had been discussed since the standard was first proposed with debate focused on the unreliability and cost of alarms.

Francisco said the committee believes the time has come to make this change, noting that it brings the standard into closer alignment with the International Residential Code, which requires alarms if the house has combustion appliances or attached garages, and with many states that have passed laws requiring CO alarms.

The requirement goes a step further, expanding the protection to all homes, regardless of fuel type or garage configuration, reflecting the fact that many CO exposures occur due to causes completely independent of these factors, he said. It also requires that alarms be hard-wired with battery backup to address an increased likelihood of high CO exposure events during power outages.

Other significant new changes include the removal of the climate limitations on pressurization and depressurization; specifications related specifically to multifamily buildings; and new calculations and weather data for estimating annual leakage based on a blower door test.

The cost of Standard 62.2-2013, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, is \$58 (\$48, ASHRAE members).

To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 678-539-2129, or visit www.ashrae.org/bookstore.

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Chapter Officers and Committee Chairs

OFFICERS

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