



THIN-AIR BULLETIN

American Society of Heating, Refrigeration, and Air Conditioning Engineers NM Chapter Region IX Albuquerque, NM

November Meeting

Noise Control Applied Solutions

Interior Noise Control

- Portable Classroom – Bard Unit
- Interior Open Space – SIL-THROW
- HTL Casing
- Cleanable Silencer with access doors
- Transitional Offset
- Retrofit AHU – Church – Assemble Panels On Site

Exterior Noise Control

- Cleanable Stack Silencer
- Fan Stack Silencer
- Acoustic Dog House
- Acoustic Louvers
- Shaft Silencer – Generator
- Condenser Silencer
- Tunnel Ventilation
- Intake Silencers
- Discharge Silencers
- Silencers with Enclosure
- Barriers

Project Examples

- Lake Huron – Generator Set Noise Control
- Maple Leaf Gardens – Cooling Tower Silencers
- Amistad K-8 School – Chiller Enclosure
- Corning Stacks – Integral Silencers
- 640 Memorial Drive – Tri-Stack Type Fan Silencers
- National Institute of Health – Acoustical Plenum
- National Institute for Airborne and Infectious Diseases – Diffuser Silencers
- City Point, NY – Boiler Plant/Cooling Tower Silencers
- Weil Cornell Medical Center – Generator Intake & Discharge Silencers

Bio:

Greg Schmelig, LEED AP, has been in the Industrial Air Pollution, Bulk Material Handling, and Commercial HVAC systems marketplace for over 19 years. Beginning with the designing and sales of industrial air pollution and bulk material handling systems in 1992 after achieving his M.B.A. from Maryville University he is now concentrating on the acoustical as well as the energy concerns involved in providing sound controlled HVAC systems with Vibro-Acoustics. He is also able to provide consultation as to LEED point achievement within the commercial space via his achievement of LEED AP status in 2009 and is taking an active role in attempting to shape the LEED point system in so far as points being available for acoustical control systems.

President's Message

Dear ASHRAE Member,

The first chapter meeting of the year was well attended and I am confident that it is an indication of many more successful meetings to come. I hope to see an equally strong turnout for our November meeting on Noise Control, something important to all HVAC engineers. I would like to recognize Erin Coffman for her efforts to bring relevant presentations to the membership. I would also like to thank Michael Dexter for offering his valuable time to our chapter to present a topic that drew so much interest from the membership.

As we move through the beautiful transition into fall in New Mexico I invite the members to enjoy the colors of the changing leaves and to take time to enjoy the true New Mexican comfort food that warms the soul. May we be blessed with the continued moisture that we have been lacking during recent years so that we can break out of this drought.

I would like to thank the Board of Governors and Committee Chairs of the Chapter for their dedication and continued participated in Society and the Chapter as a whole. I encourage any and all members to get involved by contacting any of the Board or Committee Chairs listed on the chapter website. We offer leadership and networking opportunities that cannot be found in day to day business. Get involved!

Warmest Regards,

Morgan Royce President 2013-2014

From the History Books

March 1995

President:	Al Guerra
President-Elect:	Harold Trujillo
Secretary:	Steve Willard
Treasurer:	Don Schedlbauer



The speaker for the meeting was Ben Montoya, President/CEO of Public Service Company of New Mexico (PNM). He spoke on recent developments in the electric utility industry. Becky Kilbourne, Director-Marketing & Business Development of PNM was the speaker at the Santa Fe Luncheon meeting. As no surprise, the employer recognition for the month went to PNM.

WHEN: Tuesday November 19, 2013 at 11:45 am **COST:** \$20 Members, \$25 for Guests

WHERE: Pappadeaux Seafood Kitchen, 5011 Pan American West Fwy NE, Albuquerque, NM

RSVP to Erin Coffman by Friday November 15th. Email: Erin.M.Coffman@jci.com or Register Online at newmexicoashrae.org.



ASHRAE
New Mexico
Chapter

Young
Engineers in
ASHRAE

December 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2 YEA	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



Join Us for a Night of Football and Fun.
Monday Night Football December 2nd at the Fox and Hound.
Please RSVP Stephen Forner at Stephen.Forner@trane.com

Society News Release

October 31, 2013

ASHRAE, IAQA Sign Memorandum of Understanding

ATLANTA – Through a memorandum of understanding, ASHRAE and the Indoor Air Quality Association (IAQA) are working together to promote better indoor air quality in the built environment.

The agreement was signed on Oct. 15, 2013, during ASHRAE's IAQ 2013 Conference held in Vancouver, British Columbia, Canada.

The agreement commits ASHRAE and IAQA to working together in the areas of consistent leadership communication, chapter collaboration, advocacy, technical activities coordination and research.

"As professionals responsible for environmental control of buildings and transportation systems, our first priority must be making those environments safe, healthy, productive and comfortable," ASHRAE President William "Bill" Bahnfleth said. "This partnership between ASHRAE, a worldwide organization with a scope to broadly promote the arts and science of HVAC&R and allied arts and science for the benefit of the general public, and IAQA, an organization focused on services to ensure good indoor air quality, will enhance the ability of both to achieve their shared goals. We welcome the opportunity to combine the resources of ASHRAE with the expertise of IAQA to strengthen our effectiveness in this critical area."

"This agreement is a great step forward for IAQA and the indoor air quality field. ASHRAE and IAQA have agreed to work closely on issues that are of mutual interest," Donald M. Weekes, CIH, CSP, IAQA President, said. "I am personally looking forward to working with ASHRAE in the coming year."

Founded in 1998, the Indoor Air Quality Association (IAQA) is dedicated to bringing practitioners together to prevent and solve indoor environmental problems for the benefit of customers and the public.

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. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today.

Society News Release

October 9, 2013

ASHRAE/IES Publish 2013 Energy Standard: Changes for Envelope, Lighting, Mechanical Sections

ATLANTA – Major changes to requirements regarding building envelope, lighting, mechanical and the energy cost budget are contained in the newly published energy standard from ASHRAE and IES.

ANSI/ASHRAE/IES Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, incorporates 110 addenda, reflecting changes made through the public review process. Appendix F gives brief descriptions and publication dates of the addenda to 90.1-2010 reflected in this new edition.

"While many things have changed since the first version of Standard 90 was published in 1975, the need to reduce building energy use and cost has not," Steve Skalko, chair of the committee that wrote the 2013 standard, said. "This standard represents many advances over the 2010 standard, as we worked toward our goal of making the standard 40 to 50 percent more stringent than the 2004 standard."

"Achieving the stringency goals established for the 2013 standard presented a challenge in reducing the requirements for lighting," Rita Harrold, director of technology for the Illuminating Engineering Society of North America, said. "While interior lighting power densities (LPD) were re-evaluated and most lowered, there continues to be an ongoing concern about maintaining quality of lighting installations for occupant satisfaction and comfort while achieving energy savings. The focus in the 2013 standard, therefore, was not just on lowering LPDs but on finding ways to achieve savings by adding more controls and daylighting requirements as well as including lighting limits for exterior applications based on jurisdictional zoning."

The most significant changes are:

- **Building Envelope.** Opaque elements and fenestration requirements have been revised to increase stringency while maintaining a reasonable level of cost-effectiveness. Opaque and fenestration assemblies in Tables 5.5-1 through 5.5-8 are revised in most climates. These changes include:
 - Criteria requiring double glazed fenestration in many climates

- Minimum visible transmittance/solar heat gain coefficient (VT/SHGC) ratio to enable good daylighting with minimum solar gain, while not restricting triple- and quadruple-glazing.
- Simplification of the skylighting criteria.
- Lighting: These changes include improvements to daylighting and daylighting controls, space-by-space lighting power density limits, thresholds for toplighting and revised controls requirements and format.
- Mechanical: Equipment efficiencies are increased for heat pumps, packaged terminal air conditioners, single package vertical heat pumps and air conditioners evaporative condensers. Also, fan efficiency requirements are introduced for the first time. Additional provisions address commercial refrigeration equipment, improved controls on heat rejection and boiler equipment, requirements for expanded use of energy recovery, small motor efficiencies and fan power control and credits. Control revision requirements have been added to the standard such as direct digital controls in many applications. Finally, the 2013 edition completes the work that was begun on equipment efficiencies for chillers in the 2010 edition.
- Energy Cost Budget (ECB) & Modeling: Improvements were made to the ECB and Appendix G provisions to clarify the use of the prescriptive provisions when performing building energy use modeling. In addition, these sections were revised to enhance capturing daylighting when doing the modeling calculations.

Another important change for the 2013 standard is the first alternate compliance path in Chapter 6. Section 6.6 was added to the 2010 edition to provide a location for alternate methods of compliance with the standard. The first such alternate path has been developed for computer room systems and was formulated with the assistance of ASHRAE technical committee 9.9, Mission Critical Facilities, Data Centers, Technology Spaces and Electronic Equipment. This path uses the Power Usage Effectiveness (PUE) metric established by the datacom industry. This alternate efficiency path format provides a framework that could be considered for other energy using facets of buildings not easily covered in the prescriptive provisions of the standard.

Also new to the standard are requirements for operating escalators and moving walkways at minimum speed per ASME A17.1 when not conveying passengers.

The cost of ANSI/ASHRAE/IES Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, is 135 (\$115, 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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