



2016 Directory

conference information 5 | expo information 18 | maps 28



nfmt.com/highperformance



Continually Raising Building Standards

BACnet International is an industry association that facilitates the successful use of the BACnet protocol in building automation and control systems through interoperability testing, educational programs and promotional activities.



BACnet is leading the world in Building Protocol Standard: It plays a significant role in building automation projects worldwide.



Achieving the Mark of Distinction: The BACnet Testing Labs (BTL) Mark provides users with assurance that a product has passed the industry standard BACnet conformance tests conducted by a recognized, independent testing organization. The BTL Mark is a mark of distinction, achieved by more than 600 products, that many building owners and control system designers look for as a must-have in order to be eligible for a project.

► Discover More Today: www.bacnetinternational.org

Welcome HPB+W 2016



Table of Contents

Welcome to HPB+W	1
Show Highlights	2
Schedule & Sponsor Information	3
HPB+W Partners	4
Sessions by Track/CEU details	5
Conference Sessions	7
Exhibitors	18
Exhibitors by Category	26
HPB+W Expo Map	28
Upcoming Events	31
Show Extras	32
HPB+W Conference Rooms Map ..	33

WHEN THE LIGHTS WENT DOWN on the inaugural High-Performance Buildings Conference in Ft. Worth last year, we knew we were on to something. There was a serious buzz in the conference rooms and expo hall as our attendees, speakers and exhibitors talked about ways in which facilities—and the technologies that drive them—were changing, getting smarter, becoming connected, and offering occupants a more user-friendly experience. To continue the buzz and keep pace with a nimble, emerging movement on the fast track to energy efficiency, sustainability and comfort, we made a few updates to this conference and expo.

The first update: Our name. We added our own plus-one and retitled the event High-Performance Buildings + Workplaces in recognition of the growing landscape of commercial properties that are embracing the opportunity to drive value across a portfolio, as well as the network of schools, hospitals, offices and government buildings adopting high-performance practices.

Next up: Location. Texas is a great fit so we landed in Austin, which offers the best of all worlds: A highly engaged facilities community, a wealth of great entertainment options, and the support of an impressive slate of local, regional and state associations.

Finally, we arranged this year's conference and expo to reflect today's high-performance information needs, with 6 tracks that get you connected, compliant, efficient, sustainable, smart and comfortable. From cybersecurity to the Internet of Things to data analytics to managing the new millennial workforce, this year's agenda gives you the big picture of current trends as well as a deep dive into strategies to elevate building performance. You can make even stronger connections in the HPB+W expo, where nearly 100 specialized exhibitors can answer your questions, point to solutions, and offer insights into the technologies that can enhance efficiency and value.

The lights are going up on the 2nd annual HPB+W Conference and Expo, and I'm thrilled that you're here. I'm also honored to welcome our speakers, exhibitors and industry partners. It's going to be a busy few days, so please don't hesitate to let any of the HPB+W staff know what we can do to make our event the most valuable it can be.



Best regards,
Wendy Dietzler
 Vice President, Education
Wendy.dietzler@tradepress.com



Show Highlights

Networking Party - Tuesday, 2-3 P.M.

EXPO HALL

To celebrate the first day of **HPB+W**, we're hosting a networking party in the expo hall! Join your fellow industry experts for a chance to meet and connect, all while enjoying free appetizers and cocktails.



\$500 Cash Prize Drawing

EXPO HALL

On each day of HPB+W, we're awarding a \$500 cash prize to a lucky winner. Your enter-to-win form is found on the back of your attendee badge. Drop it off at the Main Stage booth #222, and come back to the stage to see if you're the lucky winner. You must be present to win!

Tuesday at 2:45 P.M.

Wednesday at 1:45 P.M.

VIP Pin Program

EXPO HALL

Sport your VIP Pin and connect with exhibitors on the expo floor for a chance to win \$50 on the spot! Make sure to pick up your VIP Pin at Registration. The undercover HPB+W Prize Team will randomly select 3 winners per hour on Tuesday and 5 winners per hour on Wednesday.



Lunch is on Us!

EXPO HALL

You don't have to go far to get a quick bite to eat at HPB+W. Redeem your complimentary \$5-off lunch coupon at the **HPB+W Café** in the expo hall.



Social Media

Use the hashtag **#HPBW16** to stay connected. We love seeing pictures, posts, feedback and aha moments from you!



HPB+W Feud

ROOM 9A - WEDNESDAY, 3:10 P.M.

Fill out a game survey in the expo hall at the **HPB+W booth #405**, then join us on Wednesday afternoon for HPB+W Feud! We'll use the answers you submitted to play our high-performance version of Family Feud at 3:10 P.M. in Room 9A. You won't want to miss this fun, interactive game and networking opportunity!



Schedule-at-a-glance

MONDAY

Rm	Course No.	1:00 – 5:00 P.M.
8	PC1	Property Assessed Clean Energy Workshop

TUESDAY

8:00 – 8:50 A.M.		
8	T1.8	High-Performance Buildings Today and Tomorrow
9A	T1.9A	Your Building Can Talk: How Building Internet of Things Will Revolutionize Your Business
9C	T1.9C	Meeting ASHRAE 90.1 While Accomplishing ASHRAE 62.1

9:00 – 9:50 A.M.		
6	T2.6	The Numbers Behind Sustainability
7	T2.7	Smart Buildings Promise a Lot: How Building Analytics Make Them Deliver
8	T2.8	Why CHP Is a Good Fit for Commercial Buildings and Workplaces
9A	T2.9A	Optimizing Existing Assets through the Cloud
9C	T2.9C	How bEQ Drive High-Performance and Cost Savings in Facilities
10	T2.10	Developing the Business Case and Roadmap to Building Intelligence

10:00 – 10:50 A.M.		
6	T3.6	Core Daylighting, The Imperative to Daylight Core Spaces
7	T3.7	Air Barriers & Vapor Retarders: Success is in the Details
8	T3.8	Energy Efficiency: High-Performance Financing & Savings
9A	T3.9A	IoT and the Workplace: A Case Study
9C	T3.9C	Property Assessed Clean Energy Financing: PACE has Arrived
10	T3.10	Advanced Visualization Technology in Today's Top Facilities

3:10 – 4:00 P.M.		
6	T4.6	Using Ice Storage to Enhance Solar Assets & Reduce Peak Demand
7	T4.7	Do Green Buildings Waste Energy Efficiently?
8	T4.8	LED Lighting in Hospitals and other HPBs
9A	T4.9A	High-Performance Data Center for High-Performance Building

9C	T4.9C	ISO14001: Impacting the Future of Facility Environmental, Social and Economic Operations
10	T4.10	IT, Data, Analytics and Emerging Technology

WEDNESDAY

8:00 – 8:50 A.M.		
8	W1.8	The 7 Deadly Sins of Facility Energy Management
9A	W1.9A	The Building Enclosure and BECx: Sustainability's Next Reality
9C	W1.9C	Energy Star Portfolio Manager: How – and Why
10	W1.10	Unify Your Building and Reduce Energy Consumption with BACnet

9:00 – 9:50 A.M.		
6	W2.6	Keep Austin Wet: Water Efficiency Initiatives in a Sustainable City
7	W2.7	Thompson Hall Recladding: Leveraging Efficiency Comfort & Image
8	W2.8	Microgrids: The Independence of Localized Power Grids
9C	W2.9C	Resolving Sustainability and Security Conflicts with the Whole Building Design Guide
10	W2.10	LEDs, Lighting Controls and the Economics of People

10:00 – 10:50 A.M.		
7	W3.7	Putting It All Together: Building Enclosure Considerations for High-Performance Buildings
8	W3.8	Applying Advanced Energy Management Strategies in Existing Facilities
9A	W3.9A	Cybersecuring High-Performance Buildings
9C	W3.9C	Emerging High Efficiency Water and Plumbing Codes and Standards

2:10 – 3:00 P.M.		
6	W4.6	Chilled Water Energy Savings Study
7	W4.7	The Changing Demographics in the High-Performance Buildings Workforce
8	W4.8	Energy Benchmarking: Right or Wrong?
9C	W4.9C	Austin Convention Center's LEED Gold Adventure
10	W4.10	Technology and Maintenance Planning

3:10 – 4:00 P.M.		
9A	W5.9A	HPB+W Feud



Thank You to Our 2016 Sponsor & Event Partners

Sponsor



Partners





Sessions by Track

HPB+W's conference sessions fall under 6 tracks, making it easy to identify your path to a higher understanding of today's high-performance concepts and strategies.



Get Smart

The concept of a smart building has evolved to define one that includes automation and improved control over various building systems. This track defines smart building concepts and offers examples of best practices in automation, data gathering, occupant behavior and monitoring.

- T2.7** Smart Buildings Promise a Lot: How Building Analytics Make Them Deliver
- T2.10** Developing the Business Case and Roadmap to Building Intelligence
- T3.10** Advanced Visualization Technology in Today's Top Facilities
- T4.10** IT, Data, Analytics and Emerging Technology
- W1.10** Unify Your Building and Reduce Energy Consumption with BACnet
- W2.10** LEDs, Lighting Controls and the Economics of People
- W4.6** Chilled Water Energy Savings Study
- W4.10** Technology and Maintenance Planning



Get Comfortable

One of the ultimate objectives of a high-performance building is to provide a safe, secure, and healthy environment for occupants—one that simultaneously promotes their well-being and performance. These sessions feature impactful discussions of technologies and strategies to create user-friendly facilities.

- T3.6** Core Daylighting, The Imperative to Daylight Core Space
- T3.7** Air Barriers & Vapor Retarders: Success is in the Details
- W1.9A** The Building Enclosure and BECx: Sustainability's Next Reality
- W2.7** Thompson Hall Recladding: Leveraging Efficiency Comfort & Image
- W3.7** Putting It All Together: Building Enclosure Considerations for High-Performance Buildings



Get Connected

Connected buildings continue to reflect the current state of IT, social media, mobile platforms, big data and cybersecurity. Sessions in this track address how high-

performance buildings make the most of today's and tomorrow's innovations.

- T1.9A** Your Building Can Talk: How Building Internet of Things Will Revolutionize Your Business
- T2.9A** Optimizing Existing Assets through the Cloud
- T3.9A** IoT and the Workplace: A Case Study
- W3.9A** Cybersecuring High-Performance Buildings
- W4.7** The Changing Demographics in the High-Performance Buildings Workforce



Get Sustainable

In recent years, the concept of sustainability has shifted from a choice to a responsibility. This track identifies advances in the production and availability of sustainable building materials, better and clearer documentation of certification programs, and the ongoing integration between sustainable, energy-efficient and occupant-friendly design.

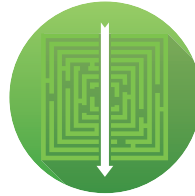
- T2.6** The Numbers Behind Sustainability
- T4.6** Using Ice Storage to Enhance Solar Assets & Reduce Peak Demand
- T4.7** Do Green Buildings Waste Energy Efficiently?
- W2.6** Keep Austin Wet: Water Efficiency Initiatives in a Sustainable City



Get Compliant

It's often said that codes and regulations set the floor and rating systems set the ceiling when it comes to language about high-performance buildings. This track dives into existing and emerging regulations, standards and certifications specific to high-performance buildings, and outlines key considerations when planning a project.

- PC1** Property Assessed Clean Energy Workshop
- T1.9C** Meeting ASHRAE 90.1 While Accomplishing ASHRAE 62.1
- T2.9C** How BEQ Drive High-Performance and Cost Savings in Facilities
- T3.9C** Property Assessed Clean Energy Financing: PACE has Arrived
- T4.9C** ISO14001: Impacting the Future of Facility Environmental, Social and Economic Operations
- W1.9C** Energy Star Portfolio Manager: How – and Why
- W2.9C** Resolving Sustainability and Security Conflicts with the Whole Building Design Guide
- W3.9C** Emerging High Efficiency Water and Plumbing Codes and Standards
- W4.9C** Austin Convention Center's LEED Gold Adventure



Get Efficient

Whether defined as a LEED-certified building that is energy and water efficient, or a people-friendly facility that earns high marks from occupants for creature comforts, a high-performance building requires specific technologies to operate optimally. This track highlights products and strategies and that enhance building systems and buildings alike.

- T1.8** High-Performance Buildings Today and Tomorrow
- T2.8** Why CHP Is a Good Fit for Commercial Buildings and Workplaces
- T3.8** Energy Efficiency: High-Performance Financing and Savings
- T4.8** LED Lighting in Hospitals and other HPBs
- T4.9A** High-Performance Data Center for High-Performance Building
- W1.8** The 7 Deadly Sins of Facility Energy Management
- W2.8** Microgrids: The Independence of Localized Power Grids
- W3.8** Applying Advanced Energy Management Strategies in Existing Facilities
- W4.8** Energy Benchmarking: Right or Wrong?

Continuing Education

Earn Continuing Education Units while attending HPB+W sessions...

Trade Press Media Group, Inc. (HPB+W) has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 1760 Old Meadow Road, Suite 500, McLean, VA 22102, (703) 506-3275.

HPB+W is authorized by IACET to offer 0.1 CEUs for each conference session.



To earn CEUs make sure to...

- Have your badge scanned as you enter each session.
- Attend the session in its entirety.
- Watch your email: 10 days following the conference you'll receive notification to login to your HPB+W attendee dashboard. You'll see the list of sessions you were scanned into.
- Click on each session title to access that session's specific 4-question learning outcome assessment. Score 70% or greater on each assessment to earn your CEU.
- Once you've completed the assessments for each session attended, you can download and print your CEU transcript for your files.
- Self-report to the appropriate professional organizations using your HPB+W CEU transcript.

Questions? Please stop by Room 10C of the Austin Convention Center or contact Wendy Dietzler at wendy.dietzler@tradepress.com.



Education Sessions

TUESDAY
8:00 A.M.

Get Connected

T1.8 | Room: 8

High-Performance Buildings Today and Tomorrow

*Presenter(s): Jonathan Kraatz, LEED Green Associate, Executive Director, USGBC Texas Chapter
Amanda Cambre, High Performance Buildings Program Manager, South-central Partnership for Energy Efficiency as a Resource
Heather Holdridge, EIT, Assoc. AIA, LEED AP BD+C
Sustainability Manager, LakeFlato*

Jonathon Blackburn, Managing Director, Texas PACE Authority
The term “high-performance” continues to infiltrate the facility management landscape, as the benefits of sustainable, smart, comfortable and connected buildings are increasingly understood, appreciated and valued. This panel discussion will take stock in where this game-changing movement has been--and where it is going. Hear from thought leaders on the technologies and strategies that are shaping today’s (and tomorrow’s) approach to increasing a facility’s efficiency, ROI, environmental benefits and user-friendly features. Attendees will gain current insights into what a high-performance building is, and describe some best practices for getting there.

Learning Objectives:

1. Define a high-performance building
2. Recognize the ways in which a high-performance building adds value to an organization
3. Discuss real-world examples of high performance buildings in use
4. Identify best practices for achieving a high-performance building, whether existing or new construction

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Connected

T1.9A | Room: 9A

Your Building Can Talk: How Building Internet of Things Will Revolutionize Your Business

Presenter(s): Jimmy Baynum, Marketing Director of Channel Development, SCA, Tork

Today’s building occupants have a different set of expectations than even a decade ago, and the Building Internet of Things (BIoT) mega trend brings a number of new technologies that put actionable

insights into building managers’ hands. In this expert-led workshop we’ll explore the fundamentals behind the Internet of Things and show how to use this technology to improve your building, business and bottom line. We’ll also share a sneak peek into what’s next in BIoT technology and how it will affect buildings of the future.

Learning Objectives:

1. Understand the Internet of Things (IoT) mega-trend and how it impacts your business
2. Identify customer benefits of IoT
3. Discuss how connectivity — through IoT — is changing the way you need to approach your business
4. Analyze companies leveraging IoT technology in innovative ways and understand what’s next in this trend

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Compliant

T1.9C | Room: 9C

Meeting ASHRAE 90.1 While Accomplishing ASHRAE 62.1

Presenter(s): Jerry Kelman, National Sales Manager, Rawal Devices
DX A/C equipment is the lowest, first cost option and often selected over more expensive AC solutions due to cost savings. The control limitations of DX equipment negatively impacts energy consumption and indoor air quality, which fails to meet ASHRAE standards. There are methods of control that allow a DX system to become variable capacity which will give you the ability to meet ASHRAE Standard 62.1, but they are limited by ASHRAE Standard 90.1. Find out how to control new and existing DX A/C equipment to achieve both ASHRAE Standards 90.1 and 62.1.

Learning Objectives:

1. Understand the Impact of ASHRAE 90.1
2. Discuss the function of ASHRAE 62.1
3. Learn how DX equipment can be optimized to achieve both ASHRAE 90.1 and 62.1
4. Analyze ways to enhance overall performance of DX equipment

AUDIENCE: INTERMEDIATE | CEU: 0.1

9:00 A.M.

Get Smart

T2.10 | Room: 10A

Developing the Business Case and Roadmap to Building Intelligence

Presenter(s): Kurt Karnatz, President, Environmental Systems Design

Technology is changing what is possible in the built environment

and how we think about and use space, place, and time in the workplace. The future-focused leader already understands the importance of integrating and effectively deploying trends — such as mobility, smart building systems, big data, analysis, and visualization — to maintain a competitive advantage and enhance asset value. This presentation will focus on how these leaders can build a business case for building intelligence that achieves C-suite buy in with ROI, as well as how to create an implementation roadmap to scalable success.

Learning Objectives:

1. Gain a deeper understanding of what is possible and practical for your facility through building intelligence
2. Learn how to quantify the economic, environmental, experiential, and social impacts and outcomes of intelligent building solutions
3. Understand how to achieve C-suite buy-in by developing a business case with ROI to justify building intelligence initiatives
4. Develop a roadmap to creating an intelligent building
5. Identify the short-term and long-term steps to implementing your building intelligence initiatives

AUDIENCE: ADVANCED | CEU: 0.1

Get Sustainable

T2.6 | Room: 6

The Numbers Behind Sustainability

Presenter(s): Stephen P. Ashkin, President, The Ashkin Group, LLC

For those with a strong green cleaning program, sustainability is the next business requirement. Tap into the enormous amount of research available in the United States and abroad to determine what sustainability information needs to be measured, tracked and reported. Attendees will learn specific opportunities and tools to help meet customer reporting needs, and find solutions to internally reduce environmental impact and save money.

Learning Objectives:

1. Analyze research on sustainability measuring, tracking and reporting
2. Learn specific opportunities and tools to help meet customer reporting needs
3. Identify solutions to internally reduce environmental impact
4. Understand how green and sustainable cleaning strategies can save operating costs

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Smart

T2.7 | Room: 7

Smart Buildings Promise a Lot: How Building Analytics Make Them Deliver

Presenter(s): Keith La Rose, Director of Business Development, CopperTree Analytics

Smart buildings have promised a lot: simplified management, energy efficiency, and maintenance savings; but often have failed to deliver; and that needs to change. Part of the answer to improved performance is already in buildings. The equipment and building automation systems generate masses of data, which can tell you what's wrong and how to fix it—if you can make sense of the volumes and volumes of it. Analytics transforms it into meaning. This session details how.

Learning Objectives:

1. Understand what building analytics are, and how they work from a high level
2. Discuss the role of fault detection and diagnostics in building systems and how it differs from a traditional Building Automation System (BAS) and alarms

3. Examine a real-world example of an implementation in a building
4. Learn building analytics rules of thumb for expected cost and possible return on investment

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Efficient

T2.8 | Room: 8

Why CHP Is a Good Fit for Commercial Buildings and Workplaces

Presenter(s): Charlie Goff, Senior Consultant, Eastern Research Group

Gary McNeil, Communications Director, Combined Heat and Power Partnership, U.S. Environmental Protection Agency

Doug Davis, Director, Broad U.S.A. Inc.

Diane Molokotos, Project Engineer

This session will describe why combined heat and power (CHP) is a good fit for commercial buildings and workplaces. Topics will include CHP basics, and innovations that simplify and enhance CHP project development and operation, including packaged CHP units, third-party ownership arrangements, and modern absorption chillers. The ability for CHP to earn projects a significant number of points under the LEED green building rating system will also be discussed.

Learning Objectives:

1. Understand key CHP components
2. Review packaged CHP and 3rd party ownership models
3. Learn how modern absorption chillers increase CHP efficiency in new building types
4. Determine ways of scoring LEED Points with CHP

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Connected

T2.9A | Room: 9A

Optimizing Existing Assets through the Cloud

Presenter(s): Eddie Barnes, Director of Sales, Southern US, BuildingIQ

Texas leads the nation in energy consumption, with buildings accounting for almost 40 percent of its total energy use. This represents a significant opportunity for savings, with heating and cooling operations being the low hanging fruit. Cloud-based energy management platforms offer a way to achieve savings without costly retrofits. Intelligent software, powered by predictive analytics, allows a building to foresee opportunities for energy savings and act upon them in real-time instead of reporting consumption after the fact. This session will use real-world examples to discuss how management platforms can add intelligence to buildings to optimize the performance of current assets.

Learning Objectives:

1. Gain an understanding of the Texas energy market and the factors influencing your energy usage
2. Understand what an energy management system is and its installation process
3. Learn best practices for setting energy goals and analyzing metrics
4. Learn from real world examples how these solutions are being used to improve performance in commercial buildings

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Compliant

T2.9C | Room: 9C

How bEQ Drives High Performance and Cost Savings in Facilities

Presenter(s): James L. Newman, CEM, LEED AP, ASHRAE OPMP & BEAP, Managing Partner, Newman Consulting Group, LLC
Energy benchmarking for high-performance buildings is gaining momentum, and dozens of cities and states already require that buildings publicly share Energy Use scores. In most cases, EPA's Energy Star Portfolio Manager or ASHRAE's bEQ label (Building Energy Quotient) will form the basis for these scores. In this presentation, stakeholders in the high-performance buildings market will learn what information is required to create a building's Energy Use Index (EUI) or report card, how that information is collected, what the results (good or bad) can mean, how improvements can be made, and which improvements don't cost a lot of money.

Learning Objectives:

1. Review the key elements of bEQ and Energy Star and their similarities and differences
2. Understand the Energy Use Index (EUI) and its background
3. Analyze different ways to improve the rating of an existing building
4. Learn how to use bEQ to your advantage, both from a functional and a marketing standpoint

AUDIENCE: INTERMEDIATE | CEU: 0.1

10:00 A.M.

Get Smart

T3.10 | Room: 10A

Advanced Visualization Technology in Today's Top Facilities

Presenter(s): Richard K. Warner, PE, CxA, DCEP, EBCP, President/CEO, OME

This session outlines first-hand the latest in advanced visualization technology used at the nation's top secure facilities and hear from the former government official who commissioned the Pentagon project. The project scope emphasizes how and why advanced visualization technology is being adopted by top federal agencies, and outlines the key benefits of advanced visualization technology as well as ways it can be leveraged and marketed on the commercial side to attract and retain quality tenants.

Learning Objectives:

1. Review the advanced visualization technology used at the nation's top secure facilities
2. Learn key strategies from the former government official who commissioned the Pentagon project
3. Understand why advanced visualization technology is being adopted by top federal agencies
4. Analyze benefits of advanced visualization technology and how it can be leveraged to attract and retain quality tenants

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Comfortable

T3.6 | Room: 6

Core Daylighting, The Imperative to Daylight Core Spaces

Presenter(s): Peter Novak, CEO, Sundolier

This lecture will cover lighting design with a purpose, focusing on the intended use of a building for enhanced business and operations performance. Daylighting and circadian rhythm and the impact of light on health will be covered in depth. Correlations to the science of health and light and the business impacts in different building types will be covered. Methods of quality core daylighting through illustrative pictures will also be covered.

Learning Objectives:

1. Review how to make the purpose of the building the central discussion theme to anchor design efforts and to achieve the highest levels of building performance for its intended purpose
2. Discuss why quality daylighting is vital to sustained business performance
3. Identify the business impacts of natural light in buildings with different purposes
4. Learn effective delivery methods of quality perimeter and core daylight

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Comfortable

T3.7 | Room: 7

Air Barriers & Vapor Retarders: Success is in the Details

Presenter(s): David Cook, AIA, Principal Architect, CTLGroup Elizabeth Rodenkirch, AIA, LEED AP BD+C, Architect, CTLGroup

What is the difference between an air barrier and a vapor retarder? This discussion will take a look at how air barriers and vapor retarders are defined by the building code and their proper use in the building envelope. Presenters will discuss how proper detailing and installation provides increased occupant comfort and improved energy savings for the building, and will look at how vapor and air movement occurs, focusing on best practices for a successful project.

Learning Objectives:

1. Discuss the different uses and purposes of air barriers and vapor retarders and code requirements for each
2. Identify common technical issues associated with specifying air barriers and vapor retarders
3. Understand the necessary level of detail required to design a successfully airtight building
4. Gain insights on how to control quality and prevent issues during construction

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Efficient

T3.8 | Room: 8

Energy Efficiency: High-Performance Financing & Savings

Presenter(s): Josh Heald, CEO and Founder, Pemco Holdings

High-performance energy efficiency can be achieved in any building. The challenge is how to do it while optimizing savings and minimizing capital outlay and the payback period. This lecture will cover how to optimize energy efficiency and cost savings in any building, the differences between energy investment models and

payback periods, and how to make the business case for investing in energy efficiency.

Learning Objectives:

1. Review opportunities to optimize energy efficiency in any building
2. Understand the differences between energy investment models
3. Learn how to make the business case for investing in energy efficiency
4. Identify ways to optimize energy cost savings and reduce the payback period

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Connected

T3.9A | Room: 9A

IoT and the Workplace: A Case Study

Presenter(s): Lawrence A. Melton, CEO and President, The Building People

GSA's Total Workplace initiative was established to help agencies make the most of their office space, in part via adoption of mobile, collaborative technologies and policies, such as wireless local area networks, cloud computing, virtual private networks, teleworking, and desk sharing and hoteling. The goal: Reduce the amount of real estate agencies need and, in turn, cut their office expenses and carbon footprints. How has the Internet of Things impacted the initiative? Attend this session for best practice examples from two executive change agents within GSA on how this transformation has worked well — and the challenges that lie ahead.

Learning Objectives:

1. Review GSA's "IT Workplace of the Future" concept
2. Analyze a GSA High-Performance and Workplace case study
3. Discuss key findings from GSA leadership regarding future benefits and challenges to IT adoption and expansion

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Compliant

T3.9C | Room: 9C

Property Assessed Clean Energy Financing: PACE has Arrived

Presenter(s): Charlene Vanlier Heydinger, Executive Director, Keeping PACE in Texas

The importance of energy efficiency and water conservation cannot be over emphasized, especially in states like Texas, where commercial and industrial buildings consume approximately 63 percent of all energy produced in the state. But market barriers—like extended payback periods and lack of access to capital—can discourage building owners from investing in retrofits. Join an informative panel discussion on a solution known as Property Assessed Clean Energy, or PACE, a new financing mechanism aimed at removing common barriers and encouraging economically viable investments. Hear from key constituents who have participated in PACE initiatives and learn how the program can be implemented in a variety of facilities.

Learning Objectives:

1. Review the development of PACE programs in Texas
2. Learn how a PACE program enables property owners to obtain low-cost, long-term loans for the design and installation of water conservation, energy efficiency, renewable and distributed generation retrofits
3. Analyze how a variety of improvements can be structured to generate positive cash flow

4. Discuss lessons learned from a recent PACE case study

AUDIENCE: INTERMEDIATE | CEU: 0.1

3:10 P.M.

Get Smart

T4.10 | Room: 10A

IT, Data, Analytics and Emerging Technology

Presenter(s): Jim Sinopoli, Managing Principal, Smart Buildings, LLC

Some of the major trends, opportunities and difficult issues for building owners and facility management are related to the penetration and use of information technology in buildings, the management of the massive data generated by the facility, the use of analytics to create information, and the pace of emerging technology.

Learning Objectives:

1. Identify how building owners should select and manage technology systems
2. Describe the components and processes in managing data and using analytics
3. Understand the potential advantages of emerging technology
4. Demonstrate and communicate the value of a smart building design to the building owner/operator and cost justify the approach

AUDIENCE: ADVANCED | CEU: 0.1

Get Sustainable

T4.6 | Room: 6

Using Ice Storage to Enhance Solar Assets & Reduce Peak Demand

Presenter(s): Paul Valenta, VP Sales and Marketing, CALMAC

Texas is among the top 10 states in solar capacity and leads in wind generation. With its renewable markets growing, now is the time for businesses to enhance these resources and address energy costs using energy storage. Solar offsets some energy costs but, due to intermittency issues, needs energy storage to reduce costly demand charges. Alamo Heights ISD is an example of one institution utilizing energy storage and solar to maximize savings. This presentation will detail how energy storage has helped the district reduce peak energy consumption by more than 20 percent and highlight factors driving adoption within the Texas market.

Learning Objectives:

1. Identify if your building can benefit from thermal energy storage
2. Gain a deeper understanding of the Texas energy market and how local businesses can benefit from energy storage
3. Apply information from the presentation to effectively identify the cost benefits of energy storage
4. Learn from a real world case study how facility managers are using permanent load shifting strategies in collaboration with renewables to lower energy bills

AUDIENCE: ADVANCED | CEU: 0.1

Get Sustainable

T4.7 | Room: 7

Do Green Buildings Waste Energy Efficiently?

Presenter(s): Lawrence G. Spielvogel, P.E., Consulting Engineers

This presentation will examine the reasons why green buildings do not always perform as expected, misconceptions about “high performance” green buildings, and risks for designers, contractors, and manufacturers. This presentation provides examples of publicized green and sustainable buildings with metered data proving they waste energy efficiently.

Learning Objectives:

1. Learn what and why there are differences between the energy models and the energy meters
2. Observe differences between the energy publicity and the actual data
3. Determine why most green buildings do not meet energy expectations
4. Identify why energy codes and standards create high energy consumption

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Efficient

T4.8 | Room: 8

LED Lighting in Hospitals and other HPBs

Presenter(s): E.W. Dovel, CEM, Vice President, Orion Engineered Solutions

LED lighting is the most disruptive lighting technology introduced in recent decades. It also comes with questions about performance, reliability and cost. This session will reveal the benefits and pitfalls surrounding the technology and provide insights into current and future applications.

Learning Objectives:

1. Review a case study featuring LED retrofits for hospitals that apply to other HPBs
2. Analyze potential cost and energy savings for LED retrofits
3. Discuss current and future performance for LED lighting technology

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Efficient

T4.9A | Room: 9A

High-Performance Data Center for High-Performance Building

Presenter(s): Ian Seaton, Global Technology Manager, Chatsworth Products, Inc.

A high-performance building with an afterthought data center is an oxymoron on the fast track to self-defeating irony. This presentation draws on ASHRAE guidelines and research studies for a data center design decision process resulting in lowest total cost of ownership and optimum energy efficiency.

Learning Objectives:

1. Articulate the differences between comfort cooling and data center cooling
2. Apply the different data center class temperature thresholds to the process of evaluating relative merits of competing design concepts
3. De-couple inherent power usage effectiveness (PUE) errors from total building energy use estimates

4. Calculate the impact on computer equipment reliability of specific building design strategies

AUDIENCE: ADVANCED | CEU: 0.1

Get Compliant

T4.9C | Room: 9C

ISO14001: Impacting the Future of Facility Environmental, Social and Economic Operations

Presenter(s): Larry Morgan, CFM, SFP, Head of Operational Excellence and Sustainability Initiatives for North and Latin America, SAP Global Facilities Management, Americas

It is increasingly important to demonstrate that an enterprise considers its wholistic impact. Enter ISO 14001, an environmental management system established to provide assurance to company management, employees and external stakeholders that environmental impact is being measured and improved. Beyond certification, additional benefits include lower operating costs and improved efficiency. This session addresses the key benefits of having an environmental management system in place, the practical steps in gaining support from organizational leadership, ISO 14001 implementation procedures and continual improvement benefits including what's in it for you professionally.

Learning Objectives:

1. Review short and long term benefits of having an environmental management system in place
2. Examine the practical steps in gaining support from organizational leadership
3. Analyze implementation procedures and continual improvement benefits
4. Understand what's in it for you professionally

AUDIENCE: INTERMEDIATE | CEU: 0.1

WEDNESDAY

8:00 A.M.

Get Smart

W1.10 | Room: 10A

Unify Your Building and Reduce Energy Consumption with BACnet

Presenter(s): Rocky Moore, Director of Business Development, Blue Ridge Technologies

Commercial and industrial buildings are responsible for more energy use and CO2 emissions than any other single source on the planet today. On average, HVAC and lighting represent approximately 68 percent of a building's energy consumption. As BACnet has become the predominate force in integration of automation systems, a new capability has arisen: the ability to unify the biggest energy consumers into one centralized system and thereby gain more control. This presentation will cover the current commercial and industrial building integration landscape and discuss how maximizing efficiency revolves around the unification of building systems under one BACnet umbrella.

Learning Objectives:

1. State the typical energy consumption of commercial and industrial buildings
2. Identify how BACnet is changing the automation landscape to give greater control

3. Understand how unifying systems can achieve greater energy savings

AUDIENCE: BEGINNER | CEU: 0.1

Get Efficient

W1.8 | Room: 8

The 7 Deadly Sins of Facility Energy Management

Presenter(s): David Doll, Industry Principal, Facilities and Energy Management, OSISOft

Building operators and corporate real estate managers are charged with moving their facilities toward “best practice” levels of energy management and occupant engagement. The journey begins with understanding measure before you manage, make the invisible obvious, and generally walk before you run. Impossible? No. We will discuss 7 modes of thinking and acting to avoid on your way to success. Avoiding bad behaviors like: wrongful accounting, fits and starts, flying blind, ripping and replacing, going into stealth mode, and more. We will cover the keys to creating a vision to find the path to successful energy management.

Learning Objectives:

1. Identify the 7 bad behaviors on the path of energy management
2. Review key facility issues to focus on immediately
3. Learn how to avoid short-term thinking
4. Understand keys to creating a vision for energy management

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Comfortable

W1.9A | Room: 9A

The Building Enclosure and BECx: Sustainability's Next Reality

Presenter(s): Christine M. Quigley, PE RRC LEED AP BD+C, Principal In Charge/Senior Project Manager, Terracon Consultants, Inc.

Through case studies of the East Carolina University (ECU) Heart Institute and Charleston, South Carolina Courthouse, this session will highlight what the A/E/C communities are now realizing about the need for building systems to be designed to work in conjunction with the building enclosure, and why the building enclosure—including the thermal, moisture and air barrier systems—are a fundamental piece of sustainability's next reality.

Learning Objectives:

1. Discuss the history of MEP Commissioning
2. Analyze the negative impacts to overall energy efficiency performance health welfare and safety of not performing Building Enclosure Commissioning (BECx) simultaneously
3. Distinguish the Building Enclosure Commissioning Process Approach vs. Technical Approach and the benefits of each
4. Develop an understanding of Hygrothermics (WUFI) and how this area of science can identify locations of possible condensation within a building's walls, roofs and flooring systems to result in a healthier, energy efficient and sustainable space for building occupants and owners

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Compliant

W1.9C | Room: 9C

Energy Star Portfolio Manager: How — and Why

Presenter(s): Richard G. Lubinski, CEM, CDSM, CSDP, CEMSC, BEP, President, Think Energy Management LLC

You've heard it before: you can't manage what you don't measure. That's why EPA created ENERGY STAR Portfolio Manager, an online tool that measures and tracks energy and water consumption, as well as greenhouse gas emissions. The program tracks the performance of one building or a whole portfolio of buildings; existing buildings or new construction; schools, office buildings or retail stores. This session will show you how—and why—Portfolio Manager can be implemented to help set energy use targets and establish a cohesive approach to energy efficiency.

Learning Objectives:

1. Review the ENERGY STAR Guidelines for Energy Management
2. Learn how to achieve buy-in from leadership and staff
3. Verify and document energy savings
4. Assess your facility's starting point for the program

AUDIENCE: BEGINNER | CEU: 0.1

9:00 A.M.

Get Smart

W2.10 | Room: 10A

LEDs, Lighting Controls and the Economics of People

Presenter(s): John Curran, President, LED Transformations, LLC

While the combination of LEDs and lighting control systems can save money, often missed in the ROI calculation is the building occupant component. What effect do these systems have on the folks that occupy the facility? The dollars saved by LED/control systems will typically pale in comparison to the economics represented by the building occupants. In addition, those occupants are directly affected by the lighting, in terms of performance, mood and even health. This presentation will examine the implications of people economics.

Learning Objectives:

1. Evaluate the full impact of LED product selection when calculating overall project savings, including effect on building occupants
2. Examine the implications to business as the ability of LEDs to provide almost unlimited color choices vastly expands the use of color to affect mood and health of building occupants
3. Explain what the new lighting paradigm of “personal lighting” controls will mean as controls and LEDs blend into one comprehensive offering
4. Determine how to support new lighting control architectures/methods, and what this implies to those responsible for facilities

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Sustainable

W2.6 | Room: 6

Keep Austin Wet: Water Efficiency Initiatives in a Sustainable City

Presenter(s): Mark Jordan, Water Conservation Program Coordinator, Austin Water

2016 has been a challenging year for water conservation – and not only for facility professionals in areas of the country where resources are scarce and utility prices high. Facility professionals from all types of facilities across the United States are working to minimize water use as a key component of broader sustainability initiatives, and this session will highlight innovations implemented in Austin that promote the effective measurement, use, reclamation and conservation of an increasingly precious resource.

Learning Objectives:

1. Learn about methods used by the Austin Water Utility to measure water use
2. Review primary water-using systems in commercial buildings
3. Understand the role of building and engineering staff in developing water-conservation initiatives in an organization
4. Analyze water conservation initiatives and requirements on the horizon

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Comfortable

W2.7 | Room: 7

Thompson Hall Recladding: Leveraging Efficiency Comfort & Image

Presenter(s): Frank Laux, Principal Structural Engineer, CTL Group

David Cook, AIA, Principal Architect, CTL Group

The key challenge for this project was to improve energy efficiency and rebrand the image of one of the tallest buildings on the Western Illinois University campus, a project that was completed on time with less than 0.79 percent in change orders. The improved aesthetics and interior environment enhance WIU's ability to attract and retain high quality students.

Learning Objectives:

1. Review exterior envelope strategies to improve energy efficiency and student comfort
2. Understand design and repair processes in order to reduce re-design efforts
3. Discuss the importance of communication and coordination of all team members and their necessity in the project schedule
4. Specify material, systems, and installation techniques that can enhance productivity and increase overall project quality

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Efficient

W2.8 | Room: 8

Microgrids: The Independence of Localized Power Grids

Presenter(s): Jim Sinopoli, Managing Principal, Smart Buildings, LLC

Microgrids are part of the modernization of the overall utility grids. They focus on designing and planning for local energy delivery. The benefits are both economic and environmental. Microgrids and distributed energy are very attractive because of the reliability, flexibility and profitability and will grow into an important role of providing reliable power at reasonable prices in a sustainable way.

Learning Objectives:

1. Understand the advantages of a microgrid
2. Identify the major components of a microgrid
3. Evaluate challenges in the design of the microgrid
4. Communicate the benefits of microgrids

AUDIENCE: ADVANCED | CEU: 0.1

Get Compliant

W2.9C | Room: 9C

Resolving Sustainability and Security Conflicts with the Whole Building Design Guide

Presenter(s): Richard Paradis, P.E., Director, Whole Building Design Guide

The design objectives of sustainability and security appear in virtually every building project to varying degrees. Areas of potential conflict exist between these design objectives which can lead to compromises and tradeoffs, producing less than desirable results. These design objectives must be addressed in concert with each other, along with other key design objectives to find synergies critical to achieve high-performance buildings. Therefore, it is critical to balance the security and sustainability objectives. Issues related to site, building envelope, power and lighting, and HVAC and IEQ will be discussed.

Learning Objectives:

1. Understand the key design objectives applicable to high-performance buildings
2. Describe the conflicts that can occur between the sustainable and secure design objectives
3. Resolve these conflicts by identifying synergies between design objectives
4. Explore the resources offered by the Whole Building Design Guide to achieve high-performance buildings

AUDIENCE: ADVANCED | CEU: 0.1

10:00 A.M.

Get Comfortable

W3.7 | Room: 7

Putting It All Together: Building Enclosure Considerations for High-Performance Buildings

Presenter(s): Philip K. Frederick, Senior Staff Engineer, Simpson Gumpertz & Heger Inc.

Nick T. Floyd, Senior Project Manager, Simpson Gumpertz & Heger, Inc.

High-performance buildings, such as healthcare facilities, medical offices, laboratories, museums, natatoriums, and their support spaces usually require specialized interior environments and tight control over interior environmental parameters to maintain conditions that are acceptable to medical professionals and researchers. The detailed coordination of these high-performance building enclosure designs and mechanical operating system parameters required to stand up and contain these conditions are complex and fickle, and frequently the source of building envelope performance problems. In addition, these requirements are not always well understood by design and construction professionals, and enclosure performance issues are a frequent and costly concern to designers, building owners, and facilities managers. This presentation will cover typical building enclosure parameters for medical buildings, common performance problems and their causes, and project delivery, design, and construction strategies to avoid them.

Learning Objectives:

1. Evaluate common building enclosures for high-performance facilities
2. Discuss what makes designing hospitals, healthcare facilities, and

- other high-performance buildings different from other buildings
3. Confirm the location and function of air, vapor and thermal barriers to achieve the desired result
 4. Understand viable solutions through case studies and repair techniques

AUDIENCE: ADVANCED | CEU: 0.1

Get Efficient

W3.8 | Room: 8

Applying Advanced Energy Management Strategies in Existing Facilities

Presenter(s): Tim Incerto, Senior General Manager, Lincoln Property Company

Ryan Tinus, Sustainability Manager, Tishman Speyer

Chris Wilson, Senior Associate, ESD

Kyle Hendricks, Senior Associate, ESD

Effectively managing the energy consumption of a facility is crucial for maintaining a competitive advantage in today's real estate environment. In this panel discussion, representatives from the property management, corporate sustainability, and engineering consulting industries will review best practices acquired from applying advanced energy management strategies such as monitoring-based commissioning and fault detection and diagnostics to an existing infrastructure. The panelists will summarize their unique approaches to successfully applying these strategies, lessons learned and associated performance results. This panel discussion is intended to teach the audience practical steps to take for applying these advanced energy management strategies in their unique facility.

Learning Objectives:

1. Learn how to successfully implement an advanced energy management program for an existing facility
2. Identify a building's existing infrastructure and value-add opportunities
3. Approach building technology upgrades with a limited capital budget and still achieve desired outcomes and long term goals
4. Effectively leverage building data to improve overall building performance
5. Balance energy efficiency with building comfort

AUDIENCE: ADVANCED | CEU: 0.1

Get Connected

W3.9A | Room: 9A

Cybersecuring High-Performance Buildings

Presenter(s): Fred Gordy, Director of Cyber Security, Intelligent Buildings

A primary asset of any facility is its network infrastructure, but today's move toward cloud-based data and systems management poses a significant challenge: Protecting a building's network and equipment connections from unauthorized access. What basic cybersecurity measures should be in place to protect a BAS from hackers? How can the FM and IT teams coordinate to provide the ultimate barrier to unwanted activity? This session identifies the threat and offers a series of solutions.

Learning Objectives:

1. Discuss what basic cybersecurity measures should be in place to protect a building's automation system
2. Analyze how the FM and IT teams should coordinate to prevent unwanted access
3. Review existing and emerging threats to critical facility cybersecurity measures

4. Assess solutions to a variety of threats and their impact on overall facility operations

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Compliant

W3.9C | Room: 9C

Emerging High-Efficiency Water and Plumbing Codes and Standards

Presenter(s): Bill Hoffman, Principal, H.W. Hoffman and Associates

Government requirements, plumbing codes, and rating systems like LEED are all being modified to recognize the need for and importance of water efficiency. The two major national plumbing codes issued their 2015 plumbing code versions with conservation and use of alternate sources playing a major role, and both the US Department of Energy and the EPA have new water efficiency standards. In addition, many cities and utilities are beginning to benchmark water use — just like they did a decade before to spotlight energy inefficiencies. Even the U.S. EPA's Energy Star Portfolio Manager now has a water component, and many of the nation's largest cities are requiring all commercial properties to use this to benchmark water efficiency, including New York, Minneapolis, and other cities.

Learning Objectives:

1. Discuss how new plumbing codes and federal/local regulations will impact selection of facility equipment and design in the future
2. Determine the new equipment standards for water efficiency
3. Understand how LEED Version 4.0 has been revised to require new water efficiency components
4. Analyze how benchmarking can be used to compare water use in similar facilities

AUDIENCE: INTERMEDIATE | CEU: 0.1

2:10 P.M.

Get Smart

W4.10 | Room: 10A

Technology and Maintenance Planning

Presenter(s): Bill Conley, RWC, President/Principal-in-charge, Conley Group

A comprehensive case study will demonstrate how vision, program development experience and technology helped a large municipal utility build a ten-year management plan. This plan proactively centralized its maintenance program for HVAC and roofing systems on 240 buildings at 42 sites dispersed across North Central Texas.

Learning Objectives:

1. Learn how large, multi-site building inventories can be effectively managed with a centralized maintenance control program
2. Demonstrate how maintenance needs and costs for most building systems are predictable over a 5-to-10 year period
3. Understand that building system reliability and performance must be proactively managed in order to optimize service life and maintain asset value
4. Explain how technology allows for effective data assimilation updates and access to plan while tracking maintenance programs

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Smart

W4.6 | Room: 6

Chilled Water Energy Savings Study

Presenter(s): Steven Rybka, Regional Application Consultant, Belimo Americas

This session provides an overview of energy valve technology that controls coil flow first by water temperature (correcting Delta T) then by a typical Building Management System thermostat controller, allowing water coils to function at the designed BTU output and eliminating overflow waste. Attendees will learn how smart building technology allows the user to data log energy usage, confirm coil performance and quantify the energy valve without adding additional points to a BMS.

Learning Objectives:

1. Review chilled water system design
2. Learn how energy valve technologies can control coil flow
3. Calculate savings achieved by eliminating overflow waste

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Connected

W4.7 | Room: 7

The Changing Demographics in the High-Performance Buildings Workforce

Presenter(s): Renee Joseph, Vice President, Channel Sales and Marketing Operations, Johnson Controls, Inc.

Lyle Gladney, FMP, Customer Business Manager, Johnson Controls, Inc.

Brian Pfeifer, P.E., LEED AP O+M, Technologies Manager, Johnson Controls, Inc. Enterprise Properties Group

In this session, hear from a seasoned industry expert for a perspective on how the demographics have changed over the last ten years in the high-performance, facility management and the HVACR industries. For example, there are now more women in the facility management and HVACR industry than there ever was before. This presentation will be on these stats and detail the reasons for this demographic shift.

Learning Objectives:

1. Analyze changing workplace demographics in the facility management industry
2. Review statistics on the workforce to reflect these changes
3. Discuss trends and reasons for this shift in the workforce reflecting these changes

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Efficient

W4.8 | Room: 8

Energy Benchmarking: Right or Wrong?

Presenter(s): Richard G. Lubinski, CEM, CDSM, CSDP, CEMSC, BEP, President, Think Energy Management LLC

Utility benchmarking is a growing government mandate in many cities and states for buildings over 50,000 SF and a useful tool to C&I building owners. You cannot control what you do not measure. Attend this session to get a better understanding of energy benchmarking, who is required to use energy benchmarking,

and what tools can help benchmark. Finally, we will discuss net energy efficiency improvements for those states that require energy benchmarking for privately held buildings.

Learning Objectives:

1. Review what is the unit of measurement in utility benchmarking
2. Name a couple cities that require utility benchmarking
3. Learn what size building are required to report their energy use
4. Comprehend the fines if you do not report energy use

AUDIENCE: INTERMEDIATE | CEU: 0.1

Get Compliant

W4.9C | Room: 9C

Austin Convention Center's LEED Gold Adventure

Presenter(s): David Thomas, CFM, LEED AP, Convention Facility Manager, Austin Convention Center Department

Late in 2011, the Austin Convention Center (ACC) earned a LEED-EB Gold rating from the US Green Buildings Council. It was the result of a four-year journey by the facilities team that implemented sustainable and energy-saving innovations such as waste diversion, wind energy, LED lighting, a composting program, water conservation measures, AV charging stations, green cleaning practices and more. Attend this session led by Austin Convention facility manager David Thomas for an in-depth account of the group effort that resulted in the facility becoming the first LEED EB Gold-rated convention center in Texas, and one of two nationally.

Learning Objectives:

1. Analyze factors in the ACC District's decision to pursue a LEED rating
2. Review how the ACC staff evaluated various sustainable options under the LEED scoring criteria
3. Understand ongoing benefits of achieving a LEED rating
4. Discuss lessons learned by the ACC staff

AUDIENCE: INTERMEDIATE | CEU: 0.1

3:10 P.M.

W5.9A | Room: 9A

HPB+W Feud

Survey says...Join us for our high-performance version of Family Feud! We surveyed HPB+W attendees on a number of facilities-related questions, and now we invite you to face off against your fellow attendees to guess the most popular answers! Your handle on the concepts and trends discussed throughout the conference will come in handy, as well as your personal experiences in the facilities world. If you haven't filled out a game survey, be sure to stop by the HPB+W booth #405 in the expo hall to submit your responses – your participation helps shape this interactive networking session. Prizes will be awarded to the winning team, so bring your high-performance A-game!





We make data **big**™.

These days, everyone's making a big deal of big data. But the fact is, Automated Logic has been putting analytics to work in buildings for more than 30 years. We design and develop intuitive, intelligent, complete controls that make it easy for building owners and managers to understand data, make decisions and balance efficiency with occupant comfort. We are a world leader in energy solutions, and in making data simpler, **we make it big.**

We make data **big**™.

Next level building automation engineered
to help you make smart decisions.

automatedlogic.com

AUTOMATEDLOGIC

 United Technologies

© Automated Logic Corporation, 2016. All rights reserved.

Your building is always on your mind.
And now, it's also at your fingertips.



From thermographic floor plans to the Environmental Index to Time-lapse™ Graphics, Automated Logic has been a pioneer in providing visual data to help building owners and managers make smart decisions. And with **WebCTRL®**, we're taking that leadership even further. WebCTRL enables you to access your building automation system from anywhere in the world using a desktop computer, laptop, tablet or smartphone. It's an intuitive tool that allows you to monitor your building and leverage data to save on operating costs. In other words, in making data powerful and accessible from anywhere, **we make it big.**

We make data **big.**™

Next level building automation engineered
to help you make smart decisions.

automatedlogic.com

AUTOMATEDLOGIC
United Technologies

© Automated Logic Corporation, 2016. All rights reserved.

HPB+W Booth 605



Exhibitor Listings

Aceto Corp.

Booth #323
4 Tri Harbor Court
Port Washington, NY 11050
800-636-7363
www.anti-clog1.com

CDC Anti-Clog #1 is a preventative condensate drain pan treatment that has been proven to control the growth of, or inactive, Legionnaire's disease bacteria in experimental laboratory conditions. Comes in four easy to use sizes that can be mixed and matched for optimum effectiveness. EPA registered and NSF approved.

Active Power

Booth #431
2128 W. Barker Lane
Austin, TX 78758
512-836-6464
www.activepower.com

Active Power designs and manufactures flywheel uninterruptible power supply (UPS) systems, modular infrastructure solutions (MIS), and energy storage products for mission critical and renewable applications worldwide. The company's products deliver an unmatched combination of total cost of ownership, reliability and sustainability for leading organizations around the world.

AGF Manufacturing Inc.

Booth #423
100 Quaker Lane
Malvern, PA 19355
610-240-4900
www.testandrain.com

AGF's COLLECTanDRAIN Auxiliary Drains prevent accidental system trips, deter vandalism, and with proper maintenance, help prevent system breakdowns as a result of freeze-ups in dry and pre-action fire protection systems. AGF's CORRinSITE Corrosion Monitors were developed in response to the increase of corrosion related failures in both wet and dry pipe fire protection systems.

Apogee Enterprises Inc.

Booth #417
4400 W. 78th St., Suite 520
Minneapolis, MN 55435
952-487-7558
www.apog.com

Apogee Enterprises designs, manufactures, installs, and renovates windows, curtainwalls, storefront and entrances for commercial buildings. Our companies include Viracon, Wausau Window and Wall Systems, Tubelite, Alumicor, Linetec and Harmon, Inc. Our products offer some of the highest performing glass and aluminum in the industry. See us about our free energy modeling.

The Association of Energy Engineers



Austin & San Antonio Chapter

Association of Energy Engineers-Austin/San Antonio Chapter

Booth #231
3103 Bee Cave Road
Austin, TX 78746
512-925-2189
www.txaee.org

Our mission is to advance professional careers in energy management, provide networking and training opportunities, and stay up to date on advancements in the field and disseminate that to our member network.



Austin Association of Facility & Maintenance Engineers

Booth #305
PO Box 203173
Austin, TX 78720
512-828-7455
www.aafame.org

AAFAME is the largest organization in Texas

dedicated to the education & advancement for building and operating engineers

AUTOMATEDLOGIC

United Technologies

Automated Logic Corp.

Booth #605
1150 Roberts Blvd.
Kennesaw, GA 30144
770-429-3000
www.automatedlogic.com

Automated Logic is a leading provider of innovative building management solutions. For more than 30 years, ALC has been dedicated to designing easy-to-use building automation systems that provide the highest possible energy efficiency, while ensuring occupant comfort. Automated Logic is a part of UTC Building and Industrial Systems, a unit of United Technologies Corp.

BACnet International

Booth #510
1827 Powers Ferry Road,
Building 14, Suite 100
Atlanta, GA 30339
770-971-6003

www.bacnetinternational.org
BACnet® International is an organization that encourages the successful use of BACnet® in building automation and control systems through interoperability testing educational programs, and promotional activities. BACnet® International complements the work of other BACnet®-related groups whose charters limit their commercial activities.

Bautex Systems, LLC

Booth #331
5602 Central Texas Drive
San Marcos, TX 78666
512-637-1200
www.bautexsystems.com

Bautex Block is an insulated concrete block wall system used to construct commercial and residential buildings to meet building and energy codes and provide fire and storm safety.

Belimo Americas

Booth #607
33 Turner Road
Danbury, CT 06810
800-543-9038
www.belimo.us

Belimo is a world leader in the design, manufacture and marketing of damper actuators and control valve assemblies used in commercial HVAC systems. Belimo is well known for its innovation of the direct-coupled actuator and innovations in pressure independent control valve technology. Belimo provides the solutions that customers need to maintain an efficient building environment.

Benjamin Electric Company

Booth #512
1615 Staunton Ave.
Los Angeles, CA 90021
213-749-7731
www.benjaminSMARTpower.com

Our panelboards provide a complete energy management solution by utilizing our embedded metering system. This system measures the electrical energy consumption on all branch circuits and provides remote on-off control of each circuit. The continuous measurement of energy on each circuit, combined with the capability to remotely control the circuits, allows development of automated control schemes that reduce energy costs.

**BOMA Austin**

Booth #630
PO Box 153187
Austin, TX 78715
512-529-5070
www.bomaAustin.org

BOMA Austin, founded in 1974, is a not-for-profit trade association, composed of more than 250 members owning, managing, and/or providing services to more than 35 million square feet of commercial property. BOMA Austin promotes the highest ethical and professional standards in the commercial real estate industry through advocacy, networking and education. BOMA Austin is federated with BOMA Texas and BOMA International.

BOMI International

Booth #517
One Park Place, Suite 475
Annapolis, MD 21401
800-235-BOMI
www.bomi.org

BOMI International, a nonprofit

educational organization founded in 1970, provides education and expertise to property, facility, and building systems management personnel. Over 90,000 industry professionals have turned to BOMI International's courses, certificates, and designations to meet their continuing education, professional development, and staff training needs. Ask about our new High-Performance Sustainable Buildings Program!

building OPERATING management

Building Operating Management Magazine

Booth #405
2100 W. Florist Ave.
Milwaukee, WI 53209
414-228-7701
www.facilitiesnet.com/bom

Official media sponsor of HPB+W 2016. *Building Operating Management* magazine is the leading magazine for building owners and facilities executives responsible for commercial and institutional buildings. Readers are executives who own or manage high-rise office buildings, college campuses, school districts, hospitals, medical clinics, retail chains, hotels and government buildings.

BuildPulse Inc.

Booth #617
605 1st Ave, Suite 220
Seattle, WA 98104
206-258-8320
www.buildpulse.com

The only plug and play automated continuous commissioning software for HVAC systems that provides your team with answers. By leveraging BuildPulse analytics you can put your team back in the field by clearly identifying and explaining issues. BuildPulse prioritizes issues by cost, why they need to be fixed, when they occur, and how to fix them.

CAREL USA

Booth #316
385 S. Oak St.
Manheim, PA 17545
717-664-0500
www.carelusa.com

CAREL is one of the world leaders in control solutions for air-conditioning, refrigeration, and systems for humidification and evaporative cooling. CAREL provides complete solutions for controlling the temperature-humidity conditions demanded by mission critical

applications, guaranteeing precise humidification while maximizing energy savings and hygiene.

Carrier Corporation

Booth #610
11100 Metric Blvd., Suite 400
Austin, TX 78758
210-825-9764
www.carrier.com

Carrier is your single-source provider for complete system solutions. Visit us in booth 610 to see the i-Vu® control system, which combines our world-class equipment, advanced i-Vu controls, and the powerful i-Vu user interface to form a cohesive and intuitive BACnet® Building Automation System.

Chatsworth Products

Booth #410
31425 Agoura Road
Westlake Village, CA 91361
800-834-4969
www.chatsworth.com

Chatsworth Products' (CPI) mission is to address critical IT infrastructure needs with products and services that protect your ever-growing investment in information and communication technology. We act as your partner and are prepared to respond to your requirements with global availability and rapid product customization.

Connectrac

Booth #313
1350 Manufacturing St., Suite 203
Dallas, TX 75207
214-941-1319
www.connectrac.com

Connectrac floor-mounted cabling access systems are innovative alternatives to core drilling, raised floor systems and power poles for power/voice/data connectivity. Connectrac wireways offer elegant and discreet technology access in open interior spaces through our ADA compliant "In-Carpet" or "On-Floor" styles. Through Connectrac, connectivity can be simplified conveniently and affordably.

**CREW AUSTIN**

A chapter of CREW NETWORK

CREW Austin (Commercial Real Estate Women)

Booth #324
3209 Blue Ridge Drive
Cedar Park, TX 78613
512-828-7455
www.crewaustin.com

To provide business and leadership opportunities in an environment that promotes and encourages women in commercial real estate.

criticalfacilitiesSM SUMMIT

Critical Facilities Summit

Booth #405

2100 W. Florist Ave.
Milwaukee, WI 53209
414-228-7701

www.criticalfacilitiessummit.com

Critical Facilities Summit is an exclusive event that focuses on data centers and mission critical issues from the FM and design/build perspectives. No other conference offers this comprehensive overview of what's working now in the design, construction and management of data centers, hospitals, labs and other mission critical facilities.



CTLGroup

Booth #326

5400 Old Orchard Road
Skokie, IL 60077
847-965-7500

www.ctlgroup.com

CTLGroup is an internationally recognized expert consulting engineering and materials science firm, providing engineering, architecture, and scientific testing to our clients across the globe. Our engineering expertise is complemented by one of the largest and most comprehensive private materials and structural testing laboratories in the world.

DALLAS
2030
DISTRICT[®]

Dallas 2030 District

Booth #604

Dallas, TX
972-814-4345

www.2030Districts.org/Dallas

Dallas's 2030 District is a private-sector-led initiative intended to transform Dallas's urban core by supporting building owners and occupants in their efforts to reduce waste and increase building performance. By making a no-nonsense business case for efficient operations, the district is driving innovation through collaboration, leveraged financing, and shared resources.

Dex-O-Tex by Crossfield Products Corp.

Booth #609

3000 E. Harcourt St.
Rancho Dominguez, CA 90221-5589
310-886-9100

www.dexotex.com

Scientifically Superior™ and performance proven, Dex-O-Tex floor, wall and waterproofing systems are made for demanding environments that require long-term protection, durability, cleanliness and aesthetics.

DuctSox

Booth #626

9866 Kapp Court
Dubuque, IA 52068
866-382-8769

www.ductsox.com

DuctSox are fabric ductwork and diffuser products used to distribute and disperse air in open ceiling architecture, underfloor, and critical environments. They are cost effective and an aesthetically attractive alternative to metal ductwork. Advantages and benefits include: superior air dispersion, simple easy installation, quick balancing, lightweight, flexible, air porous fabrics available, hygienic, and fast shipping.

Duro-Last Roofing, Inc.

Booth #318

525 Morley Drive
Saginaw, MI 48601
800-248-0280

www.duro-last.com

Known as the "World's Best Roof[®]," the Duro-Last[®] roofing system is perfect for any flat, low-sloped, new or retrofit application. Whether your project is best handled with prefabricated Duro-Last deck sheets or roll goods, contractors can optimize installation time by using our precision-fabricated accessories and flashings.

Electro Industries

Booth #419

1800 Shames Drive
Westbury, NY 11590
516-334-0870

www.electroind.com

Electro Industries/GaugeTech, a worldwide leader in sub-metering and power monitoring, manufactures products that reliably track energy usage and identify inefficiencies, while offering the latest technology in remote monitoring and self-calibration.

FacilityConneX

Booth #330

138 Industrial Park Drive
Plymouth, MA 02360
508-830-0088

facilityconnex.com

FacilityConneX is an advanced monitoring

and optimization solution capable of tracking the performance of your key equipment by identifying faults that drives down maintenance and energy costs while increasing operational efficiency. FCX integrates the power of cloud based technology (IoT) with real time analytics and hands on consulting engineers available to assist staff to create a continuous cost savings program.



Facility Maintenance Decisions Magazine

Booth #405

2100 W. Florist Ave.
Milwaukee, WI 53209
414-228-7701

www.facilitiesnet.com/fmd

Official media sponsor of NFMT 2016.

Facility Maintenance Decisions Magazine is the only magazine written exclusively for engineering and maintenance executives at commercial and institutional facilities.

Facility Maintenance Decisions readers enjoy valuable editorial coverage aimed at helping them do their jobs better. Topics include: business management, environmental issues, grounds care, technology, product reviews, and industry trends.

FiberTite Roofing Systems by Seaman Corp.

Booth #211

1000 Venture Blvd.
Wooster, OH 44691
330-202-1111

www.fibertite.com

Backed by over 60 years of coated fabric innovation, Seaman Corporation's FiberTite[®], introduced in 1979, is a premier single-ply roofing system. Its unique four-layer construction, which includes twice the fiber and the highest content of Dupont™ Elvaloy™ KEE, provides unmatched puncture, chemical and UV resistance. In fact, standard ASTM testing proves FiberTite is over 5 times more puncture resistant than even a standard 20-year Modified Bitumen system.

Fluke Corporation

Booth #618

6920 Seaway Blvd.
Everett, WA 98203
425-347-6100

www.fluke.com

Fluke Corporation is the world leader in the manufacture, distribution and service of electronic test tools and software. From industrial electronic installation, maintenance and service, to precision measurement and quality control, Fluke tools help keep industry around the globe

running. Typical users include technicians, engineers, metrologists, medical-device manufacturers, and computer network professionals who use tools to help extend their abilities.

General Coatings Manufacturing Corp.

Booth #523

1220 E. North Ave
Fresno, CA 93725
559-495-4004

www.generalcoatings.net

General Coatings Manufacturing Corp. is a leading manufacturer of high yielding spray-foam for roofing and wall insulation. GCMC produces acrylic & silicone roof coatings along with polyurethane and polyurea coatings. Over the past 25 years GCMC has developed a reputation as a company that provides exceptional products with an outstanding return-on-investment for industrial, commercial and residential users.



High-Performance Buildings+Workplaces

Booth #405

2100 W. Florist Ave.
Milwaukee, WI 53209
414-228-7701

www.nfamt.com/highperformance

Your show host! Now in its second year, this event brings together facility professionals from every corner of the FM industry – government, education, commercial office, healthcare, retail and hospitality. HPB+W presents the latest information in the move toward sustainable, efficient, and occupant-focused facilities. Stop by the HPB+W booth to meet our staff, learn more about how we put the agenda together, and make suggestions for next year's conference.

Hot Logic LLC

Booth #322

1705 Eaton Drive
Grand Haven, MI 49417
616-935-1040

www.myhotlogic.com

Using patented Smart Self Technology the Hot Logic heats the meal slowly and evenly, preserving the moisture and flavor of the food. Then it holds the meal at a hot, serving temperature for hours. Your meal

is always moist, hot and ready to eat. Check us out. You won't be sorry.

Hubbell Control Solutions

Booth #206

9601 Dessau Road, Building One,
Suite, 100
Austin, TX 78754
512-450-1100

www.hubbell-automation.com

Hubbell Control Solutions (part of Hubbell Lighting) is a strong proponent of energy-saving lighting controls. From introducing the industry's first self-adaptive occupancy sensor to today's advanced wired and wireless distributed intelligence lighting controls, the company continues to offer the most comprehensive line of occupancy sensors on the market. Other products include daylight harvesting and high bay controls. Innovative. Integrated. Simple.



International Facility Management Association

Booth #524

2525 Wallingwood Drive, Building 13A
Austin, TX 78746
512-329-6785

www.ifmaaustin.org

The International Facility Management Association (IFMA) is the premier professional association for facility management. Supporting the largest community of FM professionals in the industry, IFMA membership comprises more than 17,300 facility professionals throughout 55 countries. IFMA was established in 1980 as a not-for-profit, incorporated association dedicated to promoting excellence in the management of facilities.

ISAVE Team

Booth #310

1515 E. Woodfield Road, Suite 118
Schaumburg, IL 60173
847-619-9528

www.isaveteam.org

The ISAVE Team is a consortium of mechanical insulation contractors who specialize in energy conservation and the reduction of greenhouse gas emissions in the US and Canada.

ISSA - the Worldwide Cleaning Industry Association

Booth #325

3300 Dundee Road
Northbrook, IL 60062-2303
800-225-4772

www.issa.com

ISSA, the worldwide cleaning industry association, helps facility managers make the connection between cleaning, occupant health, sustainability, and profits. It offers the largest events, education, training, tools, and publications specifically about professional cleaning. ISSA provides free tools such as the Cleaning Industry Management Standard (CIMS), the Cleaning Industry Training Standard (CITS), Pandemic Planning Toolkit, and more to help you distinguish your facility. Visit www.issa.com.

LEDs Unlimited LLC, Distributor for Revolution Lighting Technologies

Booth #619

3300 Parliament
Lago Vista, TX 78645
877-249-0113

www.leds-unlimited.com

RVLTI is a leader in design, manufacturer, and sales of LED Lighting Solutions for the industrial, commercial and government markets. As a multi-brand LED Lighting company, RVLTI offers interior and exterior LED lamps, LED illumination for Signage, Outdoor LED Lighting, and a revolutionary smart grid control system for outdoor lighting applications.

Measurlogic Inc.

Booth #212

7334 S. Alton Way, Suite 14M
Centennial, CO 80114
303-805-5252

www.measurlogic.com

Measurlogic has manufactured revenue grade AC and DC electrical sub-meters under the DTS brand, in Centennial, Colorado, since 2000. Our newest meter, the DTS 307 has one of the smallest footprints in the industry, with dimensions at 3.11" (79mm) H x 4.25" (108mm) D x 1.38" (35mm) W. The DTS 307 is available with either Modbus RTU or BACNet MS/TP protocols; a kWh version is also available.

Mitsubishi Electric Cooling & Heating

Booth #210

14521 Old Katy Road, Suite 100
Houston, TX 77079
832-504-9178

www.mehvac.com

Mitsubishi Electric Cooling & Heating is the leader in Air Conditioning VRF technologies worldwide. Our products are energy efficient, flexible for installations

and able to be configured and reconfigured in many different ways. Visit us at: <http://www.mehvac.com/> to learn more and let us know how we can help you today!

Nalco Water

Booth #418
1601 W. Diehl Road
Naperville, IL 60563
630-305-1239
www.nalco.ecolab.com

Nalco, an Ecolab Company, global leader in water, hygiene and energy technologies and services that protect people and vital resources. Our innovative solutions for water, air, energy management and facility maintenance deliver maximum ROI by reducing total energy costs, protecting building assets, minimizing risk and increasing tenant satisfaction. Come to our booth 418 to see our Safe, Simple, Sustainable product: 3D TRASAR® Solid Cooling Water Program.

National Fenestration Rating Council (NFRC)

Booth #204
6305 Ivy Lane, Suite 140
Greenbelt, MD 20770
240-821-9505
www.windowratings.org

NFRC helps people understand what makes windows, doors, and skylights more energy efficient.

Neptune Benson

Booth #527
6 Jefferson Drive
Coventry, RI 02816
401-821-2200
www.neptunebenson.com

Neptune Benson's Vortisand is a high performance automatic backwashable cross-flow microsand filter which filters down to submicron levels; 10 to 50 times finer than other media filters. Vortisand combines a cross-flow condition and sand filtration in the same vessel. This technology excels in a variety of applications such as HVAC side-stream filtration, process water, rain-harvesting water and more.

NetworkThermostat

Booth #227
PO Box 3161
Grapevine, TX 76099
866-5630711

www.networkthermostat.com
Since 1995, NetworkThermostat™ maintains the position of industry leader in providing Internet Thermostat solutions for facilities, small businesses, and commercial or light industrial applications. Our award winning products and technologies give simple, reliable HVAC controls, anywhere and anytime, to

maximize energy savings while providing comfort to the occupants.



NFMT

Booth #405
2100 W. Florist Ave.
Milwaukee, WI 53209
414-228-7701
www.nfmt.com

NFMT hosts a family of events produced throughout the year by *Building Operating Management* magazine and *Facility Maintenance Decisions* magazine. Additional events include NFMT Vegas at the Mirage, November 1-2 and the flagship event, NFMT held at the Baltimore Convention Center, March 7-9, 2017. To learn more about any of these live events or the NFMT membership program stop by booth 405.

NUDURA Corp./ FutureStone, LLC

Booth #615
P.O. Box 16426
Fort Worth, TX 76162
817-377-9215
www.futurestone.com

NUDURA Insulated Concrete Forms (ICF) offer a variety of superior performance benefits when building structures. These include maximum energy efficiency, greater sound, fire and impact resistance, long-term value, thermal mass and disaster resilience. NUDURA'S superior building envelope was a key element in achieving the first Net-Zero public school in the United States.

Nu Flow America

Booth #511
1313 Boundary Road
Oshawa, ON L1S 6Z7
905-433-5510
www.nuflowtech.com
Pipe rehabilitation.

ONICON Incorporated & Air Monitor Corporation

Booth #317
11451 Belcher Road S.
Largo, FL 33773
727-447-6140
www.onicon.com

ONICON Incorporated and Air Monitor Corporation are manufacturers of water flow, airflow & energy meters for HVAC applications. These meters are ideal for campus energy, central plant, mixed use facilities, multi-family residential buildings, etc. Retrofit kits are available for installation without shutdown, and communications protocols are available with all meters.

Panoramic Power

Booth #611
44 W. 28th St., 8th Floor
New York, NY 10001
646-794-4240
www.panpwr.com

A leading provider of device level energy management solutions, enables businesses to optimize their energy consumption and improve system level performance and facility operations. Using an affordable real-time wireless sensor technology and a cloud-base analytics solution, companies across a wide range of industries gain critical and continuous insights into their energy usage and are able to optimize operations, processes and maintenance resources.

PCI Solar

Booth #319
4401 Freidrich Lane, Building 3, #306
Austin, TX 78744
512-443-0535
www.pcisolar.com

PCI Solar is a division of Performance Contracting Group (PCG), one of the leading specialty contractors in the U.S. With a 60 year history, PCG's reputation for "providing value that exceeds customers' expectations" has resulted in over \$1 billion in annual revenue. PCI Solar has found success completing extremely complex solar projects for customers nationwide.

Philips Lighting

Booth #404
200 Franklin Square Drive
Somerset, NJ 08873
858-568-8962
www.usa.lighting.philips.com

Philips Lighting is dedicated to enhancing life with light. We have more than 120 years of transforming how lighting is used to enhance the human experience. We provide a wide range of meaningful innovations — from light sources, luminaires and controls to lighting solutions and services — to address real needs and aspirations.

Quadlogic Controls

Booth #223
33-00 Northern Blvd.
Long Island City, NY 11101
212-930-9300
www.quadlogic.com

Quadlogic Controls is a designer, manufacturer, and of electric revenue grade smart submetering systems. QLC does residential, commercial and industrial applications. From Jet Blue terminal at JFK to Mall of America Quadlogic can design and submetering commission a system that meets your needs at the lowest possible total applied cost.

RectorSeal

Booth #205
2601 Spenwick Dr.
Houston, TX 77055
713-263-8001
www.rectorseal.com

Founded in 1937, The RectorSeal Corporation is a leading manufacturer of chemical specialty products for professional tradesmen. Steady growth has been achieved through a commitment to producing the highest quality products for the Plumbing contractor. RectorSeal aggressively pursues new and unique technologies to serve the Plumbing and A/C trades. RectorSeal is devoted to innovative, quality products and professional technical service.

Reliable Controls Corp. USA

Booth #505
1164 W Madison St, Unit 228
Chicago, IL 60607
312-890-1602
www.reliablecontrols.com

Reliable Controls specializes in the design and manufacture of Internet-Connected green building controls. Our MACH-System™ monitors and controls the complete spectrum of digital building equipment while remaining simple, flexible and sustainable offering long term value. Our products utilize the ASHRAE standard BACnet protocol and ship with a 5-year warranty.

**San Antonio 2030 District**

Booth #604
3103 Bee Cave Road
San Antonio, TX 78746
512-279-0763
www.2030districts.org/sanantonio
San Antonio's 2030 District is a private-sector-led initiative intended to transform San Antonio's urban core by supporting building owners and occupants in their efforts to reduce waste and increase building performance. By making a no-nonsense business case for efficient operations, the district is driving innovation through collaboration, leveraged financing, and shared resources.

SCA

Booth #426
1451 McMahan Drive
Neenah, WI 54956
920-720-4730
www.torkusa.com
Tork, an SCA brand, is the leading global brand in workplace hygiene. From paper

towels in hospital washrooms to napkin dispensers in restaurants, Tork delivers a great experience. We're dedicated to serving your needs in a sustainable way t saving you time, money and effort, so you can focus on what matters most to your business.

Scranton Products

Booth #430
801 E. Corey St.
Scranton, PA 18505
570-348-0997
www.scrantonproducts.com

With over 25 years of experience, Scranton Products is the industry leader in plastic bathroom partitions and lockers. Constructed from premium, American-made solid plastic, our products resist dents, scratches, corrosion and graffiti and mildew. When you purchase Scranton Products, you are investing in peace of mind. With unmatched durability and array of designer colors and textures, Scranton Products installs confidence in every product.

Serge Ferrari
Serge Ferrari North America

Booth #516
1460 SW 6th Court
Pompano Beach, FL 33069
866-942-3600
www.sergeferrari.com

Serge Ferrari is a leading manufacturer of flexible composite materials used globally for noise, heat, glare, light, visibility and maintenance control: building facades, indoor and outdoor shades and blinds, acoustic absorbing walls or ceilings, awnings, canopies, retractables, tensile structures, furniture upholstery, and much more. New construction and retrofit. Patented Preconstraint® technology for durability and long-term use, and 100% recyclable with Taxyloop®.

SolarCity

Booth #427
3055 Clearview Way
San Mateo, CA 94402
888-765-2489
www.solarcity.com

SolarCity is America's largest solar power provider. We make clean energy available to homeowners, businesses, schools, non-profits and government organizations at a lower cost than energy generated by burning fossil fuels.

**South-Central Partnership for Energy Efficiency as a Resource (SPEER)**

Booth #604
3103 Bee Cave Road, Suite 135
Austin, TX 78746
512-279-0763
www.eepartnership.org

SPEER aims to accelerate the adoption of advanced building systems and energy efficient products and services in Texas and Oklahoma. These two states include nearly 30 million people and many of the fastest growing cities in America. There is a tremendous opportunity to increase energy efficiency in the region through building codes, retrofits for existing buildings, training, innovative energy policies.

Stewart Signs

Booth #422
2201 Cantu Court, Suite 215
Sarasota, FL 34232
800-237-3928
www.stewartsigns.com

Signs is the nation's largest supplier of Changeable Letter and Electronic LED Signs.

STULZ Air Technology Systems

Booth #531
1572 Tilco Drive
Frederick, MD 21704
240-529-1265
www.stulz-usa.com

STULZ-USA is a manufacturer of precision environmental control equipment for Data Centers and mission critical applications. STULZ offers a full line of CRACs, CRAHs, air handling units (AHUs), ultrasonic humidifiers, and also engineers custom solutions. STULZ proudly designs and manufactures all products in their ISO-9001 facility in Frederick MD, USA.

Tate, Inc.

Booth #526
7510 Montevideo Road
Jessup, MD 20794
800-231-7788
www.tateinc.com

Tate, Inc. is an industry leader for access floor systems and airflow management solutions. Tate products provide service distribution solutions across a wide variety of sectors, and our selection of high-end finishes allow clients to create a signature design while providing a cost effective service distribution solution. Tate, Inc. is a member of the Kingspan Group of companies.



Texas PACE Authority

Booth #225

98 San Jacinto Blvd.
Austin, TX 78701
512-469-6184

www.texaspaceauthority.org

The Texas PACE Authority uses a market-based approach to energy finance to administer Texas' Property Assessed Clean Energy (PACE) program. PACE enables Texas businesses to access up to 100% long-term, affordable private financing for energy and water efficiency retrofits. PACE projects pay for themselves. Learn how PACE can help you increase net operating income and building value.

Total Security Solutions

Booth #513

170 National Park Drive
Fowlerville, MI 48836
800-513-1468

www.tssbulletproof.com

Total Security Solutions designs, builds, and installs bullet proof barrier systems that blend seamlessly into any environment. We partner with municipalities, banks, schools, and private businesses to deliver customized security solutions, including bullet proof doors and windows, as quickly as possible. Because we value customer service above all else, we never settle for 'good enough.'

Trane

Booth #416

800-A Beaty Street
Davidson, NC 28036
800-755-5115

www.trane.com/buildingadvantage

Trane®, a business of Ingersoll Rand, is the world leader in creating and sustaining safe, comfortable and energy efficient environments. Trane Building Advantage™ is a portfolio of energy services and solutions that turn buildings into business advantages by helping building owners realize real outcomes that matter.

Triacta Power Solutions

Booth #327

130 Industrial Ave., Unit 100
Carleton Place, ON K7C 3T2
613-256-2868

www.triacta.com

Triacta designs and manufactures high-end, ANSI C12.20 Class 0.2 meters for the tracking, monitoring and verification of real-time energy consumption in multi-unit commercial, institutional and residential buildings. Every Triacta meter ships with software that combines meter management, automated data collection,

powerful analysis tools and flexible billing capabilities — everything you need to create and manage your metering infrastructure.

U.S. Department of State

Booth #519

1140, 1701 N. Ft. Myer Drive
Arlington, VA 22209
703-875-4523

careers.state.gov

The U.S. Department of State is the lead foreign affairs agency formulating and implementing the President's foreign policy and representing the interests of the United States throughout the world. The Department carries out this mission at over 270 embassies around the world. A Foreign Service Facility Manager (FSFM) manages the operations and maintenance of the Department of State's real property assets abroad.



USGBC Texas

Booth #622

1909 Woodall Rodgers Freeway,
Suite 100
Dallas, TX 75201
214-571-9244

usgbcnorthtexas.org

The mission of USGBC Texas is to transform the way buildings and communities are designed, built, and operated, enabling an environmentally and socially responsible, healthy, and prosperous environment that improves the quality of life for all Texans.

Vector Concepts, Inc.

Booth #522

9010 N. Royal Lane, Suite 110
Irving, TX 75063
972-399-1303

www.vectorconcepts.com

We are a 25 year company that takes great pride in offering the best products and providing the best customer service. We are able to cover all your flooring needs.

WaterSignal

Booth #311

510 Staghorn Court
Alpharetta, GA 30004
844-232-6100

www.watersignal.com

WaterSignal is a green technology company focused on water conservation. WaterSignal measures water flow in real-time to detect leaks and monitor domestic meters, irrigation systems, and cooling towers for commercial, multifamily, medical and

educational properties. WaterSignal is located in Alpharetta, GA, and currently has operations in 19 states.

Weathermatic

Booth #612

3301 W. Kingsley Road
Garland, TX 75041
888-484-3776

www.weathermatic.com/services

Weathermatic Sustainability Services create customized water conservation programs for commercial landscapes, proven to save 50% in irrigation water by pairing weather-based smart irrigation technology with professional system installation, management, and real-time usage reporting. We work with many of the top commercial real estate companies in the country, as well as many Fortune 500 companies.

Western Colloid Roofing Systems

Booth #518

PO Box 50688
Phoenix, AZ 85076
480-883-2866

www.westerncolloid.com

Manufacturer of FM 4470 Class 1 Approved Fluid Applied Reinforced Roof Systems. Monolithic, sustainable, multi layered roof systems designed to meet your buildings needs. Warranties from 5 - 25 years. We also offer solutions for existing coal tar.

Whittaker Co., RE

Booth #616

302 S. Croton Ave.
New Castle, PA 16101
724-658-8568

www.whittakersystem.com

R.E. Whittaker Company manufactures solutions for the long term maintenance of your carpet. The equipment and Crystal® family of chemistries form a system that has been globally proven over the last 25 years as an effective means to extend the life of your investment through low moisture carpet cleaning.



SAVE
THE
DATE

for **NFMT 2017** – America's #1 Facilities Conference and Expo.

Mark your calendar to experience three full days of facilities management education, inspiring speakers, networking with peers and a giant expo hall – all for free.

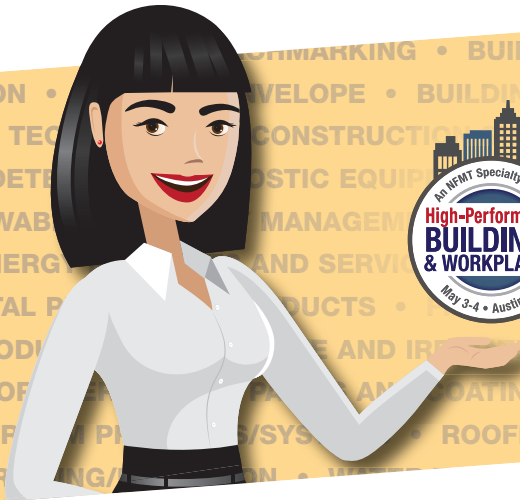
MARCH 7-9, 2017

BUILDING OPERATING MANAGEMENT'S
NFMT[®]**2017**

National Facilities Management & Technology March 7-9, 2017 • Baltimore

www.nfmt.com/baltimore

HPB+W Booth 405



Exhibitors by Product Categories

ACOUSTICAL SOLUTIONS/ SOUND MASKING

Serge Ferrari North America.....	516
NUDURA Corp./FutureStone, LLC.....	615

AIR DISTRIBUTION/ HUMIDIFICATION

CAREL USA.....	316
DuctSox.....	626
Mitsubishi Electric Cooling & Heating.....	210
Tate, Inc.....	526

ARCHITECTURAL AND ENGINEERING SERVICES

CTLGroup.....	326
U.S. Department of State.....	519
USGBC Texas.....	613
WaterSignal.....	311

BACK-UP POWER

Active Power.....	431
-------------------	-----

BENCHMARKING

Dallas 2030 District.....	525
ISSA - the Worldwide Cleaning Industry Association.....	325
San Antonio 2030 District.....	525
South-Central Partnership for Energy Efficiency as a Resource (SPEER).....	525
WaterSignal.....	311

BUILDING AUTOMATION/ CONTROLS

Automated Logic Corp.....	605
BACnet International.....	510
Belimo Americas.....	607
BuildPulse Inc.....	617
FacilityConneX.....	330
Hubbell Control Solutions.....	206
Mitsubishi Electric Cooling & Heating.....	210
NetworkThermostat.....	227
Reliable Controls Corporation.....	505
Triacta Power Solutions.....	327
WaterSignal.....	311
Weathermatic.....	612

BUILDING AUTOMATION/ SYSTEM INTEGRATION

Carrier Corporation.....	610
Trane.....	416

BUILDING ENVELOPE

Apogee Enterprises Inc.....	417
Bautex Systems, LLC.....	331
CTLGroup.....	326
NUDURA Corp./FutureStone, LLC.....	615
Serge Ferrari North America.....	516

BUILDING RESTORATION

Apogee Enterprises Inc.....	417
Nu Flow America.....	511
Texas PACE Authority.....	225
Western Colloid Roofing Systems.....	518

CHEMICALS: MAINTENANCE/ CLEANING

Nalco Water.....	418
Whittaker Co., RE.....	616

COMMUNICATIONS TECHNOLOGY

Chatsworth Products.....	410
Connectrac.....	313

CONSTRUCTION SUPPORT SERVICES

U.S. Department of State.....	519
-------------------------------	-----

CONSULTING

CTLGroup.....	326
Dallas 2030 District.....	525
ISSA - the Worldwide Cleaning Industry Association.....	325

CONTROL SYSTEMS

Benjamin Electric Company.....	512
Carrier Corporation.....	610
LEDs Unlimited LLC, Distributor for Revolution Lighting Technologies.....	619
NetworkThermostat.....	227
Reliable Controls Corporation.....	505
Weathermatic.....	612

DATA MANAGEMENT

Fluke Corporation.....	618
WaterSignal.....	311

DETECTION/DIAGNOSTIC EQUIPMENT

FacilityConneX.....	330
Fluke Corporation.....	618

DOORS/DOOR HARDWARE

Apogee Enterprises Inc.....	417
Total Security Solutions.....	513

ELECTRICAL DISTRIBUTION

Benjamin Electric Company.....	512
--------------------------------	-----

ENERGY MANAGEMENT SYSTEMS

Association of Energy Engineers -Austin/San Antonio Chapter.....	231
Automated Logic Corp.....	605
Belimo Americas.....	607
Benjamin Electric Company.....	512
Carrier Corporation.....	610
Electro Industries.....	419
Measurlogic Inc.....	212
NetworkThermostat.....	227
Panoramic Power.....	611
Quadlogic Controls.....	223
South-Central Partnership for Energy Efficiency as a Resource (SPEER).....	525
Trane.....	416
Triacta Power Solutions.....	327

ENERGY METERING AND MONITORING

Benjamin Electric Company.....	512
Electro Industries.....	419
Hubbell Control Solutions.....	206
Measurlogic Inc.....	212
Panoramic Power.....	611
Quadlogic Controls.....	223
Triacta Power Solutions.....	327

ENERGY PRODUCTS AND SERVICES

Active Power.....	431
-------------------	-----

Automated Logic Corp.....	605
BuildPulse Inc.....	617
CAREL USA.....	316
Electro Industries.....	419
Hot Logic LLC.....	322
ISAVE Team.....	310
LEDs Unlimited LLC, Distributor for Revolution Lighting Technologies.....	619
Measurlogic Inc.....	212
Panoramic Power.....	611
Philips Lighting.....	404
San Antonio 2030 District.....	525
SolarCity.....	427
South-Central Partnership for Energy Efficiency as a Resource (SPEER).....	525
STULZ Air Technology Systems.....	531
Trane.....	416
Triacta Power Solutions.....	327

ENERGY-RENEWABLE

Association of Energy Engineers -Austin/San Antonio Chapter.....	231
Dallas 2030 District.....	525
Measurlogic Inc.....	212
San Antonio 2030 District.....	525
SolarCity.....	427
South-Central Partnership for Energy Efficiency as a Resource (SPEER).....	525
Texas PACE Authority.....	225

ENVIRONMENTAL PREFERRED PRODUCTS

Bautex Systems, LLC.....	331
DuctSox.....	626
NUDURA Corp./FutureStone, LLC.....	615
Serge Ferrari North America.....	516
SolarCity.....	427
Weathermatic.....	612
Western Colloid Roofing Systems.....	518

FILTRATION

Neptune Benson.....	527
---------------------	-----

FIRE SAFETY

AGF Manufacturing Inc.....	423
----------------------------	-----

FLOORING

Connectrac.....	313
CTLGroup.....	326
Dex-O-Tex by Crossfield Products Corp.....	609
Tate, Inc.....	526
Vector Concepts, Inc.....	522
Whittaker Co., RE.....	616

HVAC

Aceto Corp.....	323
Belimo Americas.....	607
CAREL USA.....	316
Carrier Corporation.....	610
DuctSox.....	626
FacilityConneX.....	330
ISAVE Team.....	310

Mitsubishi Electric Cooling & Heating.....	210
Nalco Water.....	418
Neptune Benson.....	527
NetworkThermostat.....	227
ONICON Incorporated & Air Monitor Corporation.....	317
Reliable Controls Corporation.....	505
STULZ Air Technology Systems.....	531
Trane.....	416

INSULATION

Bautex Systems, LLC.....	331
General Coatings Manufacturing Corp.....	523
ISAVE Team.....	310
NUDURA Corp./FutureStone, LLC.....	615

INTERIOR PRODUCTS

LEDs Unlimited LLC, Distributor for Revolution Lighting Technologies.....	619
Stewart Signs.....	422
Tate, Inc.....	526

LANDSCAPE AND IRRIGATION

Weathermatic.....	612
-------------------	-----

LIGHTING

Hubbell Control Solutions.....	206
LEDs Unlimited LLC, Distributor for Revolution Lighting Technologies.....	619
Philips Lighting.....	404

MAINTENANCE PRODUCTS/SERVICES

Aceto Corp.....	323
Fluke Corporation.....	618
International Facility Management Association.....	524
Panoramic Power.....	611
San Antonio 2030 District.....	525
U.S. Department of State.....	519

OPERATIONAL SUPPORT SERVICES

CREW Austin (Commercial Real Estate Women).....	324
Dallas 2030 District.....	525
International Facility Management Association.....	524
Texas PACE Authority.....	225
U.S. Department of State.....	519

PAINTS AND COATINGS

Dex-O-Tex by Crossfield Products Corp.....	609
General Coatings Manufacturing Corp.....	523
Western Colloid Roofing Systems.....	518

PLUMBING

ISAVE Team.....	310
Nu Flow America.....	511
RectorSeal.....	205

POWER DISTRIBUTION/GENERATION

Active Power.....	431
-------------------	-----

SolarCity.....	427
----------------	-----

PUBLICATIONS

<i>Building Operating Management Magazine</i>	405
<i>Facility Maintenance Decisions Magazine</i>	405
ISSA - the Worldwide Cleaning Industry Association.....	325

RESTROOM PRODUCTS/SYSTEMS

Nalco Water.....	418
SCA.....	426
Scranton Products.....	430

ROOFING

Duro-Last Roofing, Inc.....	318
FiberTite Roofing Systems by Seaman Corp.....	211
General Coatings Manufacturing Corp.....	523
Western Colloid Roofing Systems.....	518

SAFETY PRODUCTS

Total Security Solutions.....	513
-------------------------------	-----

SECURITY/ACCESS CONTROL

Total Security Solutions.....	513
-------------------------------	-----

SOFTWARE

FacilityConneX.....	330
Fluke Corporation.....	618
Reliable Controls Corporation.....	505

TRAINING/EDUCATION

Association of Energy Engineers -Austin/San Antonio Chapter.....	231
Austin Association of Facility & Maintenance Engineers... ..	530
BOMA Austin.....	630
BOMI International.....	517
CREW Austin (Commercial Real Estate Women).....	324
HPB+W.....	405
ISSA - the Worldwide Cleaning Industry Association.....	325
National Fenestration Rating Council (NFRC).....	204
Texas PACE Authority.....	225

WATER TREATMENT

Aceto Corp.....	323
Nalco Water.....	418
Neptune Benson.....	527

WINDOWS/WINDOW TECHNOLOGY

Apogee Enterprises Inc.....	417
National Fenestration Rating Council (NFRC).....	204
Serge Ferrari North America.....	516
Total Security Solutions.....	513

WIRING AND CABLING

Chatsworth Products.....	410
Connectrac.....	313
Tate, Inc.....	526

Expo Hall

AUSTIN
 CONVENTION CENTER

Expo Hall Hours

Tuesday
 11:00 A.M. - 3:00 P.M.







Wednesday
 11:00 A.M. - 2:00 P.M.

Exhibitor
Service
Desk

Exhibitor
Lounge

2017
Space
Selection

Pre-Sale

-  BACnet International
-  Membership Lounge
-  HPB+W Café
-  Main Stage
-  Charging Stations
-  HPB+W



630	626	622
531	527	523

530	526	524	522
431	427	425	423

430	426	422	
331	327	325	323

330	326	324	322
231	227	225	223

222 Main Stage

Membership
Lounge
220

619	617	615
-----	-----	-----

611	609	607	605
-----	-----	-----	-----

618	616
519	517

612	610
513	511

604
505



518	516
419	417

512	510
413	411

504
405



418	416
319	317

410	
313	311

404
305

318	316
219	217

310
211

306	304
207	205

216

212	210
-----	-----

206	204
-----	-----



Entrance

To Cesar Chavez Street >>

\$1,699 of FM Training for \$99

*“One of the Best Membership Opportunities
Out There for Facilities Professionals”*



Your NFMT Membership Includes:

- ✓ The NFMT Educational Session Video Collection (\$796 value)
- ✓ More than 60 educational sessions recorded at all NFMT 2016 Conferences
- ✓ Quarterly FM Webcasts (\$396 value)
- ✓ Weekly FM Videos (\$468 value)
- ✓ NFMT Members polo shirt* (\$39 value)
- ✓ *Shirt to be picked up at an NFMT event

Total package value is \$1,699.

You pay just \$99 for your NFMT Membership! Enjoy all the benefits of an NFMT Membership. [JOIN TODAY!](#)

**Plus, enjoy special perks
at all NFMT Events in 2016**

High-Performance Buildings + Workplaces

May 3-4 Austin, TX

NFMT Vegas

November 1-2 Las Vegas, NV

NFMT.Com/Online/Members

HPB+W Booth 405



Upcoming Events

HPB+W is one conference in a suite of live events produced by *Building Operating Management* and *Facility Maintenance Decisions* magazines.

Critical Facilities Summit

Mission critical facilities are a different breed of buildings and must be operated and managed differently. This event is tailored for 24/7 facilities such as data centers, hospitals, laboratories and trading centers, and offers a unique networking and learning opportunity for the mission critical community. Whether you are implementing DCIM, considering a colocation data center, consolidating space or looking for clarification on ASHRAE recommendations—this is the event for you.

www.criticalfacilitiessummit.com

criticalfacilities
SUMMIT

Charlotte Convention Center • Charlotte, NC • October 3-5, 2016

NFMT Vegas

NFMT Vegas is a complimentary two-day event that draws facilities professionals from government, education, commercial office, healthcare, retail, hospitality and industrial organizations. NFMT Vegas focuses on themes like sustainability, leadership and career development, safety and security, and maintenance and operations.

www.nfnt.com/vegas

BUILDING OPERATING MANAGEMENT'S
NFMT VEGAS

National Facilities Management & Technology November 1-2, 2016 • Mirage Events Center

NFMT 2017

Our flagship event, NFMT has been the premiere facilities management event for over 16 years. Over three days in Baltimore, attendees can sit in on sessions that cover a wide range of topics including leadership, staff development, energy efficiency, safety and security, maintenance and operations and technology. With over 500 exhibitors in the expo hall, attendees experience hands-on demonstrations of upcoming technology to round out the learning process.

www.nfnt.com/baltimore

BUILDING OPERATING MANAGEMENT'S
NFMT 2017

National Facilities Management & Technology March 7-9, 2017 • Baltimore

High-Performance Buildings + Workplaces 2017

Join us again next year as we continue the discussions that began in Austin this week. As energy prices continue to fluctuate, a new generation joins the workforce, and technology advances, it is vital to ensure buildings operate at peak performance by striking a balanced combination of energy efficiency, system optimization and occupant comfort and engagement.

www.nfnt.com/highperformance



Upcoming Event Dates

2016

Critical Facilities Summit
October 3-5, 2016
Charlotte Convention Center

NFMT Vegas
November 1-2, 2016
Mirage Events Center

2017

NFMT 2017
March 7-9, 2017
Baltimore Convention Center



Show Extras


Show Concierge: Booth #405

Visit us during expo hours for all of your show needs:

- Additional directories
- Copies of *Building Operating Management* and *Facility Maintenance Decisions* magazines
- General show questions, comments, and feedback

Concession Stand Hours

Use your \$5 lunch coupon at the HPB+W Café located inside of the expo hall.

- | | | |
|---|-----------|------------------------|
|  | Tuesday | 11:00 A.M. – 2:00 P.M. |
| | Wednesday | 11:00 A.M. – 2:00 P.M. |

Lost and Found

If you lose something within the Austin Convention Center, visit the Show Office in Room 2 by registration on the ground level.



Charging Stations

Need to charge your electronics? Visit one of our charging stations located in the exhibit hall, booth #216

Hashtag

If you are posting about the conference on social media, make sure to include the official hashtag **#HPBW16**

Show Hotels

HOTEL
VAN ZANDT
A KIMPTON HOTEL

Hotel Van Zandt
605 Davis Street
Austin, TX 78701
512-542-5300



Hilton Garden Inn
500 N. Interstate 35
Austin, TX 78701
512-480-8181

NFMT Members

Looking to know more about all things NFMT?

Become a member today by signing up at registration for only \$99 a year! Here is a preview of what our members receive:

- Access to handout materials prior to events
- Early sign-up for tours or events
- Special registration counters
- Members-only lounge on the expo floor
- Additional lunch coupons (1 per day)
- A NFMT Member shirt



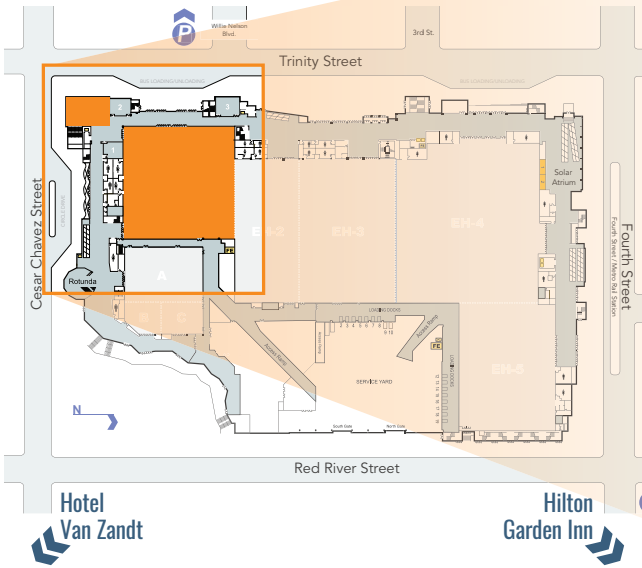
Stop by registration, learn more and sign up today!



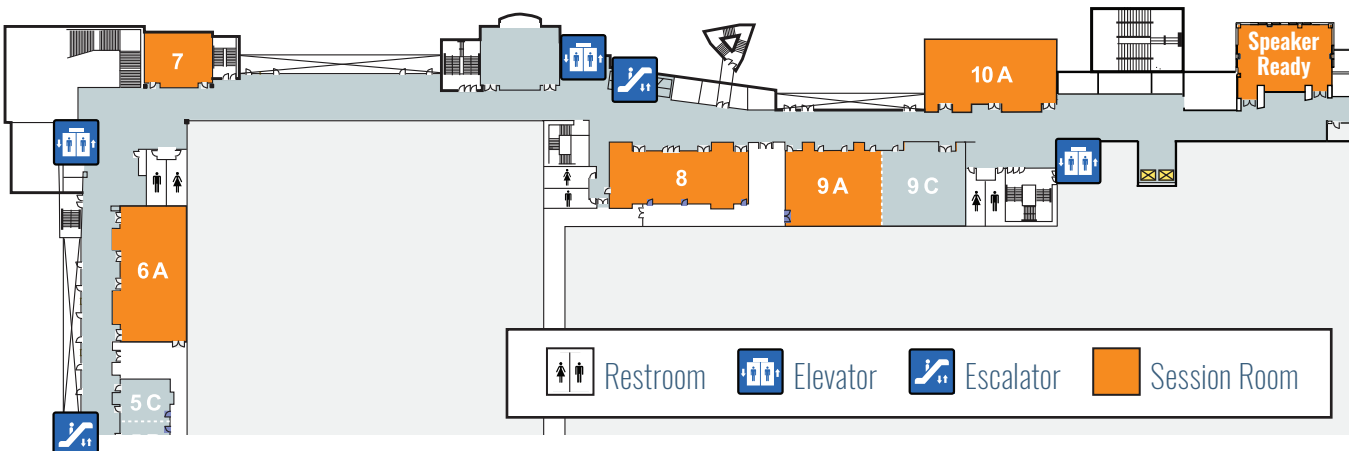
Conference Map

AUSTIN
CONVENTION CENTER

Level 1



Level 3



Brought to you by *Building Operating Management*



DON'T MISS **THE ONLY EVENT** FOR
Mission Critical, Facility Design, Construction and Management

criticalfacilitiesSM
— SUMMIT —

criticalfacilitiesummit.com

HPB+W Booth 405