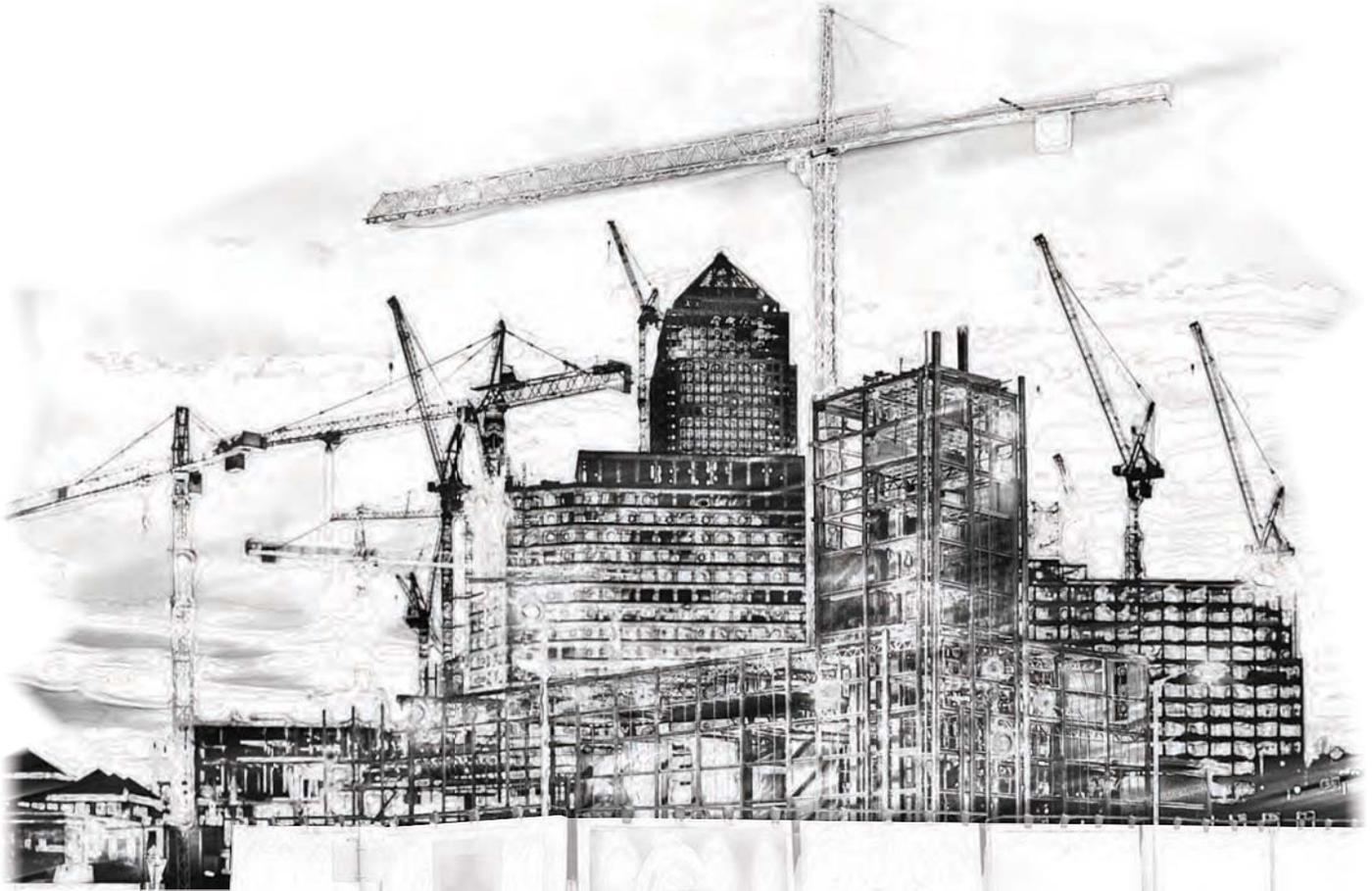




# 2014 Associated Schools of Construction 50<sup>th</sup> Annual International Conference

The Westin | Washington, DC | March 26-28, 2014



***Working Together to Define Construction  
Education for the Next 50 Years***

*Hosted by*

Department of Building Construction | Virginia Polytechnic Institute and State University



**VirginiaTech**  
*Invent the Future*<sup>®</sup>

## Session 13

Thursday, March 27 | 2:15 – 3:45 p.m. | National Ballroom C

### Sustainable High-Performance Buildings Panel

**Moderator:** Georg Reichard, Virginia Tech

High-performance buildings push the envelope (enclosure) and other building systems to new limits. While excessive energy consumption has covered for many design and operation errors in the past, this era is gone. Our new buildings will require a different approach for design, construction, and operation, where this paradigm shifts in performance not only requires new knowledge from designers and contractors, but also from owners, facility managers, and occupants in the later stages of a buildings life cycle. What will this development demand from the future construction professionals, and what can we do in academia to better prepare them for this high-performance future?

The Sustainable High-Performance Buildings Panel represents a range of industry stakeholders providing insights regarding opportunities and barriers as they relate to the high-performance buildings industry. The panel speakers cover the technical, economical, ecological, and legal perspectives of builders, performance contractors, design specialists, and government stakeholders, who all share the need for a highly educated construction elite of the future.

### Panelists/Speakers



#### W. Brewster Earle

President  
Comfort Systems USA Energy Services

W. Brewster Earle is the President of Comfort Systems USA Energy Services; the energy services subsidiary of

Comfort Systems, USA. Brewster also serves as a corporate officer for Comfort Systems USA in his capacity as Senior Vice President, Energy Services. Brewster has more than 20 years' experience in the energy business, working with a variety of clients including healthcare, manufacturing, municipal, education, and not-for-profit institutions. Brewster has had experience in project development and consultative sales, retail natural gas and electricity procurement, sales and portfolio management, and construction project management. Brewster's primary expertise is in financial and economic modeling, structured finance, and project development.

Brewster is a LEED® Accredited Professional and a member of the Association of Energy Engineers (AEE). He is a Certified Energy Manager (CEM), and a Certified Sustainable Development Professional (CSDP). Brewster served from 2008-2011 as the first chairman of the Associated Builders and Contractors (ABC) National Green Building Committee.

Brewster earned an MBA from Rensselaer Polytechnic Institute and a Bachelor of Arts & Sciences from the University of Connecticut.



#### David S. Jaffe

Vice President  
Legal Advocacy, National Association of Home Builders

David Jaffe is Vice President, Legal Advocacy in the Office of the General Counsel for the National Association of

Home Builders in Washington, D.C., where he specializes in industry advocacy with an emphasis on construction law and risk management. Mr. Jaffe focuses on anticipating and identifying legal issues of concern to builders and proactively developing effective legal strategies to help them minimize their liability and improve their business performance. Mr. Jaffe oversees NAHB's Legal Research Program and is the co-author of Contracts and Liability (5th edition) and is the author of Warranties and Disclaimers for Builders and Warranties and Disclaimers for Remodelers and co-author of Warranties for Builders and Remodelers (2nd edition).



### John P. McManus

Editorial Director for the Residential Construction Group at Hanley Wood

John McManus is an award-winning editorial director for the Residential Construction Group at Hanley Wood in Washington, DC. In addition to

the Builder digital, print, and in-person editorial and programming portfolio, the group includes strategic content direction for Affordable Housing Finance, Apartment Finance Today, Custom Home, Multifamily Executive, and Residential Architect. Prior to this appointment, McManus was founding editorial director for the Hanley Wood Radar Desk, an enterprise-wide innovation hub that curates, aggregates, and distributes content for the Washington, D.C.-based business-to-business media organization's audience segments: residential construction, design, remodeling, and commercial construction.



### Sam Rashkin

Chief Architect  
Building Technologies Program,  
U.S. Department of Energy

As Chief Architect for the Department of Energy's Building Technologies Office, Sam Rashkin's primary role is leading

deployment of successful research for new and existing high-performance homes. In his prior position, he managed the growth of ENERGY STAR for Homes from its inception in 1996 to more than 8,500 builder partners, over one million labeled homes, and over 25 percent market penetration nationwide. More recently he has been instrumental in promoting building science education throughout the construction industry and

Sam Rashkin has recently been recognized for his contributions to sustainable housing with the 2012 Hanley Award and authored a new book titled "Retooling the U.S. Housing Industry: How It Got Here, Why It's Broken, and How to Fix It".



### Paul E. Totten

Senior Principal  
Halsall, A Parsons Brinckerhoff  
Company

Paul E. Totten is a Senior Principal in the Washington, DC office of Halsall, A Parsons Brinckerhoff Company. He

has over 15 years of experience in the fields of structural engineering, building technology, and building science. He has concentrated his expertise on the evaluation and analysis of heat, air, and moisture transfer, and the cumulative effect these have on building components and building operation. He is past co-chair of the Washington, DC AIA/NIBS Building Enclosure Council, and a member of NIBS, ASHRAE and USGBC. He is a committee member of the NIBS Consultative Council Topical Committee for defining high performance building metrics as well as the committee chair for NIBS Building Enclosure Technology and Environment Council (BETEC) Education committee. He is the lead instructor for the Building Science and Technology course taught at The Catholic University of America, School of Architecture and Planning in Washington, DC in the Master of Science in Sustainable Design program and a lecturer for the AIA DC High Performance Building series.