WORLD STANDARDS WEEK 2019

CONFERENCE Building an Effective Workforce for the Future



COORDINATED IN WORKCRED

PROGRAM AGENDA

WORLD STANDARDS WEEK 2019

COORDINATED IN WORKCRED

CONFERENCE Building an Effective Workforce for the Future

NOVEMBER 7



ANSI WASHINGTON DC

DIAMOND SPONSOR





IAPMO

Microsoft

Consumer Technology Association



GOLD SPONSOR









FRIEND SPONSOR





WORLD STANDARDS WEEK 2019

CONFERENCE Building an Effective Workforce for the Future

COORDINATED IN WORKCRED

ANSI NOVEMBER 7 WASHINGTON DC



AGENDA

FHI 360, Academy Hall

1825 Connecticut Avenue, NW, 8th Floor, Washington, DC 20009

- 8:00-9:00 Registration and Breakfast
- 9:00-9:10 Welcome Remarks

Joe Bhatia

President and CEO, American National Standards Institute

9:10-9:55 Morning Keynote: Addressing the Skills Gap at Market Scale and Market Speed

Patrick Gallagher, Ph.D.

Chancellor, University of Pittsburgh

Former Acting Deputy Secretary and Director of the National Institute of Standards and Technology, U.S. Department of Commerce

The nature of work is undergoing a rapid and systemic transformation. These changes are upending traditional approaches to job skills training, work credentialing, and hiring practices; they are even being felt in higher education. At present, there is little consensus on approaches that can match the scale or speed of the changes occurring in the marketplace. Any solution will require a multi-stakeholder process involving employers, employees, labor organizations, education and training providers, certification bodies, and accreditation bodies. Dr. Gallagher will propose a tried-andtrue approach—a voluntary consensus process to develop work credentials that function at market scale.

The keynote address will be followed by an interactive Q&A period.

9:55-10:55 Panel: Future of Work

The panel will explore what companies and organizations can expect for the future of work, and how they can prepare to meet those challenges.

Moderator: Jane Oates

President, WorkingNation Former Assistant Secretary, U.S. Department of Labor, Office of Employment and Training

Panelists:

- Stuart Andreason, Ph.D., Director, Center for Workforce and Economic Opportunity, Atlanta Federal Reserve Bank
- Maria Flynn, President and CEO, Jobs for the Future

10:55-11:10 BREAK

11:10-12:10 Panel: New Credentials for the Future Workforce

From skills-based hiring, to badging, to online education, this session will highlight new methods and types of credentials that are disrupting traditional models of learning.

Moderator: Kemi Jona, Ph.D.

Assistant Vice Chancellor for Digital Innovation and Enterprise Learning, Northeastern University

Panelists:

- Andrew Dunckelman, Head of Education and Economic Opportunity, Google.org
- Shanika Hope, Ph.D., Head of Content and Research, Amazon Web Services
- Paige Shevlin, Director of Policy and National Initiatives, Markle Foundation

12:10-12:55 LUNCH

12:55-1:40 Afternoon Keynote: Trends Impacting the Workforce

Jeff Strohl, Ph.D.

Director of Research, Georgetown University Center on Education and the Workforce

In his keynote address, Dr. Strohl will shed light on economic trends and factors affecting the workforce of tomorrow.

The keynote will be followed by an interactive Q&A period.

1:40-2:40 Panel: Upskilling, Reskilling, and Retraining Today's Workforce

In this session, panelists will discuss ways in which their organization is upskilling and reskilling their current workforce to meet the shifting demands of industry.

Moderator: Brad Markell

Executive Director, AFL-CIO Working for America Institute

Panelists:

- Angie Graves, Principal Consultant, Clinical Talent Management Strategy, Kaiser Permanente
- Steve Harmon, Ph.D., Associate Dean of Research, Georgia Tech Professional Education, and Director of Educational Innovation at the Center for 21st Century Universities, Georgia Institute of Technology
- Alex Kaplan, Global Leader, Blockchain and AI for Credentials, IBM Talent and Transformation

2:40-2:55 BREAK

2:55-3:55 Panel: Future of the Standards Workforce

In this panel, members of the standards community will showcase the innovative ways in which they are responding to various workforce challenges.

Moderator: Mary Saunders

Vice President, Government Relations, American National Standards Institute

Panelists:

- **Graham Brent**, CEO, National Commission For The Certification of Crane Operators Foundation
- **Bartholomew Jae**, Director, Education and Development, National Fire Protection Association
- Sara Yerkes, Senior Vice President, Government Relations, International Code Council

3:55 – 4:00 Closing Remarks

Joe Bhatia, ANSI President and CEO

SPEAKER BIOGRAPHIES

Stuart Andreason, Ph.D., Panelist

Dr. Stuart Andreason is the director of the Center for Workforce and Economic Opportunity at the Federal Reserve Bank of Atlanta. In his role, he conducts research and works across the country to support the Federal Reserve and partner organization efforts in workforce development, the labor market, and economic opportunities for low-and moderate-income workers. Dr. Andreason has been at the Federal Reserve since 2014 and previously served as a senior adviser on human capital and workforce development. He is the editor of the three-volume book, *Investing in America's Workforce: Improving Outcomes for Workers and Employers*.

Prior to joining the Federal Reserve Bank of Atlanta, Dr. Andreason was a research associate at the Penn Institute for Urban Research at the University of Pennsylvania. Previously, he led two nonprofit organizations focused on economic revitalization in central Virginia and worked for the Pew Partnership for Civic Change. He has a bachelor's of arts and a master's of arts from the University of Virginia and a Ph.D. from the University of Pennsylvania.

Joe Bhatia, Opening Remarks

Joe Bhatia has been president and CEO of the American National Standards Institute (ANSI) since January 2006. He previously served as executive vice president and COO of the international group at Underwriters Laboratories. Among his numerous leadership positions in domestic and global forums, he serves as vice chairman of the Industry Trade Advisory Committee on Standards and Technical Trade Barriers (ITAC 16), a joint program of the U.S. Department of Commerce and U.S. Trade Representative. He is a member of the International Organization for Standardization Council and its Council Standing Committee on Finance. In 2017 he concluded his term as president of the Pan American Standards Commission, where he also served as vice president for four years. Mr. Bhatia holds a bachelor's of science degree in electrical engineering and a master's of science in business management.

Graham Brent, Panelist

Graham Brent is CEO of the NCCCO Foundation, a 501(c)3 charitable organization formed to provide education about safe working practices, conduct research into safety-related matters, and facilitate entry into the crane and rigging professions by underserved communities. Prior to that appointment in July 2019, Mr. Brent served as CEO of the National Commission for the Certification of Crane Operators (NCCCO), where he was responsible for the management and direction of all aspects of the administration and development of NCCCO's national personnel certification programs. Prior to joining NCCCO in 1996 as executive director, Mr. Brent served as an NCCCO commissioner and instructed operators, inspectors, and management on hazard recognition and equipment safety, as well as Occupational Safety and Health Administration (OSHA) and ANSI standards compliance.

Mr. Brent has 30 years of experience in construction safety, more than 20 of them in personnel certification program development and management. As the executive director and, later, the chief executive officer of NCCCO, he developed an aggressive program development and marketing strategy that steered the fledgling certification body into a market leader providing certifications for more than 25 construction-related activities. Mr. Brent is also a frequent presenter on certification and safety matters at national and international symposiums.

Andrew Dunckelman, Panelist

Andrew Dunckelman leads the education and economic opportunity team at Google.org, Google's philanthropy arm, where he leads Google.org's philanthropic investments in computer science education, digital skills, and the future of work. Previously, he led Google's grantmaking in its international markets. Prior to Google, he worked at The Bridgespan Group, a strategy consultancy for the social sector spun out of Bain & Company. Mr. Dunckelman earned a bachelor of arts degree from Louisiana State University, where he graduated Phi Beta Kappa; a master of public administration in nonprofit management from Indiana University, where he serves on the Distinguished Alumni Council; and a master of business administration with distinction from Harvard Business School.

Maria Flynn, Panelist

Maria Flynn is president and CEO of Jobs for the Future (JFF), leading overall growth strategy, including funding diversification, strategic planning, and partnership building. Previously, as senior vice president, she guided JFF's work to help low-income, low-skilled adults move on to family-supporting careers. She also led federal policy and advocacy strategies, focused on critical education and workforce issues. Ms. Flynn is a national expert on workforce development, career pathways, employer engagement, and place-based initiatives, and speaks regularly at corporate and nonprofit events. These include the SOCAP18 conference, the Fortune CEO Initiative, McKinsey's Consortium for Advancing Adult Learning and Development, the Poynter Institute, and the Illinois State University Forum for Excellence. Ms. Flynn was recognized by *The Boston Globe* as CEO of one of the Top 100 Women-Led Businesses in Massachusetts for 2018. She is an advisor to the MIT Inclusive Innovation Challenge and is on the board of the National Association of Workforce Boards.

Patrick Gallagher, Ph.D., Opening Keynote Speaker

As the University of Pittsburgh's 18th chancellor, Dr. Patrick Gallagher directs one of the nation's premier public institutions for higher education and research. He oversees a community of more than 34,000 students at five distinct campuses, and supports the work of more than 14,000 faculty and staff members. Under his leadership, the University of Pittsburgh has strengthened its status as one of the nation's premier public institutions for higher education and research, including being named a top public university in the Northeast by *The Wall Street Journal* and *Times Higher Education*.

Dr. Gallagher previously spent more than two decades in public service. In 2009, President Barack Obama appointed him to direct the National Institute of Standards and Technology (NIST). He also served as acting deputy secretary of commerce until 2014. He has also completed terms on a wide range of community boards and committees, including President Obama's 12-person Commission on Enhancing National Cybersecurity in 2016. He holds a Ph.D. in physics from the University of Pittsburgh and a bachelor's in physics and philosophy from Benedictine College in Kansas.

Angie Graves, Panelist

Angie Graves is the principal consultant for Clinical Talent Strategy for Kaiser Permanente, developing strategies and solutions for talent acquisition and talent management for the care delivery program that houses nearly 160,000 valued clinical staff. Her role includes influencing and developing functional and organization-wide policies and long-term goals that align with and translate business strategy into talent acquisition and internal mobility strategies. A leader in talent management, talent acquisition, and workforce development for over 20 years, Ms. Graves was formerly director of talent acquisition with Group Health Cooperative, now Kaiser Permanente of Washington State. She is actively involved in many

local organizations that demonstrate her commitment to furthering quality education She strives to support opportunities for students of all backgrounds to attain the education and readiness necessary for future careers in all areas of healthcare.

Steve Harmon, Ph.D., Panelist

Dr. Stephen Harmon serves as associate dean of research at Georgia Tech Professional Education (GTPE), associate director of the Center for 21st Century Universities (C21U), and as a professor at the Georgia Tech College of Design. At GTPE and C21U, he leads the invention, prototyping, and validation efforts associated with educational innovation and research in learning design and technology. His previous position was professor and chair of the Learning Technologies Division in the College of Education and Human Development at Georgia State University.

Dr. Harmon taught fourth-grade English in Egypt after college, and through his travels realized the tremendous need and scarce resources for education and training in developing countries. Returning to the U.S., he earned his master and doctorate degrees in instructional technology from the University of Georgia. His research centers on educational uses of emerging technologies, recently focused on transforming higher education to better meet the needs of modern learners of all ages and society as a whole. A past president of the Association of Educational Communications and Technology, he has over 175 professional publications and presentations, has given dozens of keynote addresses internationally, and was the 2011 recipient of Georgia State University's Innovative Instruction Award. He is a fellow of the Emerging Leaders Program at Georgia Tech and a member of the ACC Academic Leaders Network.

Shanika Hope, Ph.D., Panelist

Dr. Shanika Hope is head of content and research at Amazon Web Services (AWS). A former elementary school teacher, principal, and high school turnaround specialist, she has over 25 years of experience in education. She has managed or supported more than three dozen DC public schools and public charter schools in various capacities, helping principals and teachers to develop systems and structures to support continuous improvement of school leadership, staff morale, and student performance. Schools supported by Dr. Hope realized immediate, significant growth and improvement.

Previously, Dr. Hope was vice president of national urban markets initiatives at McGraw Hill Education, vice president of curriculum and instruction at Discovery Education, assistant superintendent of elementary and secondary education for the DC State Education Office, and a school performance officer for DC Public Schools. She earned a doctorate of philosophy in education leadership and master's degree in math and science education from Old Dominion University in Virginia, where she was selected as a Holmes Scholar.

Bartholomew Jae, Panelist

Bartholomew Jae is the director of education and development at the National Fire Protection Association (NFPA). He leads NFPA's efforts to help institutions and individuals learn to contribute to the fire and life safety ecosystem as skilled engineers, workers, first responders, and authorities, with jurisdiction. He has over 25 years of experience helping companies develop their leaders, talent, and organization, serving as a learning and development leader, strategy and management consultant, and champion of diversity and inclusion. He has worked with global Fortune 500 companies across many industries, including financial services, health and life sciences, energy, and retail and products, as well as in the public sector. Mr. Jae holds a master of business administration and a bachelor of science degree from Bentley University in Massachusetts.

Kemi Jona, Ph.D., Moderator

Dr. Kemi Jona is the assistant vice chancellor for digital innovation and enterprise learning at Northeastern University. He leads the design of new highly-scalable digital experiential learning platforms and enterprise partnerships to support seamless, lifelong learning pathways for all learners. He has worked at the forefront of the learning sciences and learning technologies fields for over 20 years. He is a thought leader in applying insights from cognitive and learning sciences to the design of technology-mediated learning environments and in developing innovative partnerships for new talent and credentialing strategies. Dr. Jona holds a bachelor's degree in computer science and psychology from the University of Wisconsin-Madison, a master's degree in computer science from Yale University, and a Ph.D. in computer science from Northwestern University.

Alex Kaplan, Panelist

Alex Kaplan is the global leader, blockchain and AI for credentials, in IBM's talent and transformation practice. He leads IBM's global work on the application of emerging technologies as an enabler of lifelong learning pathways and talent transformation, and previously worked closely with the IBM teams that created personalized learning on Cloud, Watson Classroom, and Watson Tutor. He has collaborated with leading organizations in education, including Apple, Pearson, and Sesame Workshop. He is also a member of the IBM Industry Academy and serves on the board of directors of the IMS Global Learning Consortium. Mr. Kaplan speaks frequently on the topic of the transformational potential of advanced technologies on learning and talent, and has spoken at both the Harvard and Columbia Graduate Schools of Education, the IMS Global Learning Consortium, the Getty Foundation, IBM Research, the Blockchain Revolution conference, and many other venues.

Brad Markell, Panelist

Brad Markell is the executive director of the AFL-CIO Working for America Institute and chairs the AFL-CIO energy task force. Prior to joining AFL-CIO, he was an International Representative with the UAW in Detroit for 15 years, where his duties included helping develop and advance the union's positions on energy and environmental policy, and performing costing and financial analysis for bargaining. Mr. Markell has participated in several rounds of national bargaining in the automobile, aerospace, and heavy truck industries. Mr. Markell was deeply involved in the negotiations leading to the historic tailpipe emissions standards for light-duty vehicles, and led the UAW's efforts to establish public support for manufacturing clean and efficient vehicles in the United States, including the Advanced Technology Vehicle Manufacturers and the Battery and Electric Drive grant programs administered by DOE. His board and committee service on behalf of the labor movement has been across a broad array of organizations, including the MIT Lean Aerospace Initiative, the Manufacturing Skills Standards Council, the Coalition for Justice in the Maquiladoras, the Michigan Climate Action Council, the Energy Future Coalition, and many others. Mr. Markell holds degrees from the University of Michigan and Wayne State University. He joined the UAW in 1976 and is a member of Local 14 in Toledo, Ohio.

Jane Oates, Moderator

Jane Oates is the president of WorkingNation, a nonprofit media entity that works through film and live events to tell the stories of solutions in skilling, placing, and retaining talent. She previously worked at the Apollo Education Group, managing corporate social responsibility and working on linking universities with employers through thought leadership events. She also served as assistant secretary for employment and training at the U.S. Department of Labor (DOL) under Secretary Hilda Solis. She oversaw all DOL workforce

and visa programs and worked in partnership with other federal agencies to assist cities and states in strengthening local economies. During her 10 years working with Senator Edward M. Kennedy on the Senate's Health, Education, Labor, and Pensions Committee (HELP), Ms. Oates became a national leader in education and workforce programs. She also served as commissioner of the New Jersey Commission of Higher Education under Jon Corzine. She earned a bachelor's degree in education from Boston College and a master's in education from Arcadia University in Pennsylvania.

Paige Shevlin, Panelist

Paige Shevlin is the director of policy and national initiatives at the Markle Foundation. She previously served as economic development policy advisor to the King County Executive in Seattle, responsible for collaborating with regional organizations to create economic and workforce development strategies. Prior to this role, Ms. Shevlin was the special assistant to the president for economic policy at the White House National Economic Council under the Obama administration. She was responsible for leading the development of labor market policies including the vice president's job-driven training initiative and policy decisions relating to Workforce Innovation and Opportunity Act (WIOA) regulations. She previously served as assistant policy director for the Hamilton Project at the Brookings Institution. She holds a master's of public affairs in economics and public policy from Princeton University and a bachelor's in economics from Wellesley College in Massachusetts.

Jeff Strohl, Ph.D., Afternoon Keynote Speaker

Dr. Jeff Strohl is the director of research at the Georgetown University Center on Education and the Workforce, leading the center's research on the supply and demand of education and how education enhances career opportunities. He also focuses on how to quantify skills and how to better understand competencies, given the evolving nature of the U.S. workplace. He was previously a senior analyst and project director at Westat, Inc., working on program evaluation and analysis of education outcomes. He helped design and direct several projects that investigated socioeconomic diversity in American education, and sought to affect postsecondary admissions policies. He also helped design a model that predicts occupational risks to offshoring as a function of workplace competencies, and used economic modeling to evaluate the federal GEAR UP program, the Federal Youth Opportunity Grant Initiative, the Pre-Elementary Education Longitudinal Study, the Office of Federal Contract Compliance programs, and the Occupational Safety and Health Administration's National and Local Emphasis programs. Dr. Strohl received his B.A. from the University of Massachusetts at Amherst and his M.A. and Ph.D. in economics from American University in Washington, DC.

Sara Yerkes, Panelist

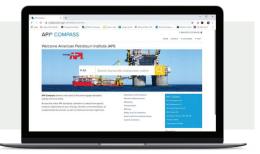
Sara Yerkes is senior vice president of government relations for the International Code Council (ICC). She manages public policy and government relations functions, develops and implements a proactive program of effective lobbying and persuasive advocacy, represents and speaks for ICC on policy matters and program activities, and coordinates strategies to implement policies at the federal, state, and local levels. With ICC since 2001, she also supervises the accomplishment of the developed action plans, and works closely with members of Congress, state legislators, and their staff to draft and endorse legislation that will support and benefit ICC's mission and goals. She seeks opportunities to showcase and expand ICC's influence, and oversees state and local activities that have successfully gained the adoption and use of the International Codes in all 50 states. She also oversees programs such as the Plumbing, Mechanical, and Fuel Gas Program, and fire service activities for the organization.



API COMPASS A PRODUCTIVITY TOOL TO FURTHER SAFETY, REDUCE RISK AND LIABILITY

API is the global leader in convening subject matter experts across segments to establish and maintain consensus standards for the oil and gas industry. These standards further safety, efficiency, environmental protection, and sustainability.

API's digital platform, **Compass**, is a subscription service that is the easiest way to get access to any and all of API's standards and specifications. Compass provides the latest updates, references, and comparison tools to ensure safety, compliance, and interoperability.



DYNAMIC REDLINES

Users can compare the most recent standard against the previous version and the flexibility to compare the current standard against any historical iteration available through API Compass.

MULTIPLE LANGUAGES

Compass offers the ability to search in 13 languages, including: Russian, Spanish, Mandarin, and Portuguese.

HISTORICAL STANDARDS

For no additional charge, historical content is available for API and ASTM.

UNLIMITED CONCURRENT USER LICENSES

All users from an office (or multiple offices) can view documents simultaneously, and there is no limitation as to the number of concurrent user licenses.

ANNOTATIONS

Compass provides the ability to create and share annotations (i.e. notes, spreadsheets, PDFs, images, etc.) within the HTML version of the standards.

UP-TO-DATE STANDARDS

Compass is updated with the latest standard versions and sends users notifications to help maintain compliance.

Compass provides critical safety and compliance information directly to personnel by assisting in the decision-making process – reducing risk and liability to an organization.

- · Ensures high-quality knowledge transfer among engineers and across an organization
- Closes information gaps between entry level engineers and professionals with decades of experience

www.api.org/GetCompass

compass@api.org





Connecting devices and the people who love them. Our standards do that.

To learn more or become part of the process visit standards.CTA.tech/kwspub/join To download CTA standards visit CTA.tech/Research-Standards/Standards-Listing.aspx



DO YOU BELIEVE WATER IS OUR MOST PRECIOUS NATURAL RESOURCE ?

SO DO WE!

IAPMO Codes – Comprehensive and Sustainable



LIVE BY THE CODE LIVE IT – LEARN IT – BUILD IT



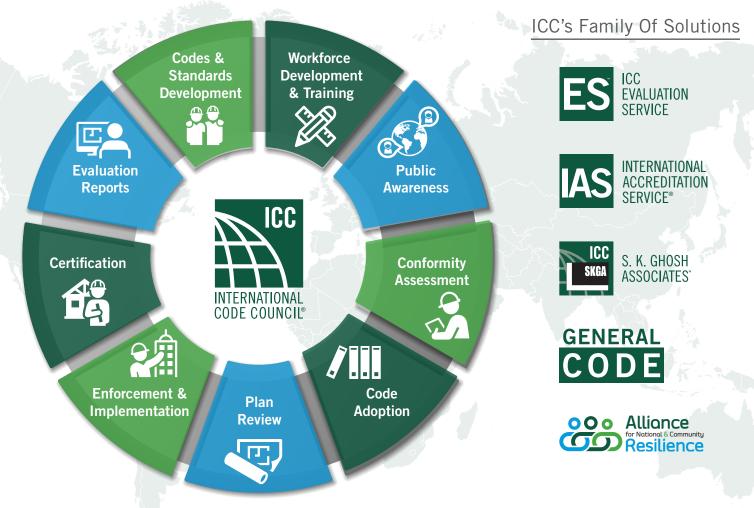
ORDER NOW

WWW.IAPMO.ORG



Working Together for a Safer World

The ICC Family of Solutions is dedicated to the construction of safe, sustainable, affordable and resilient structures. The International Code Council works with the whole building industry to provide a safe built environment for our communities.



The Code Council publishes the International Codes, a complete set of comprehensive, coordinated building safety codes used in the most U.S. communities and around the world.



in

19-18006

www.iccsafe.org

Stronger together.

1.38 Mil

Microsoft is proud to support ANSI and its important role in connection with national and international standardization activities that benefit industry, government, and consumers.



HELP TRANSFORM ELECTRICAL SAFETY. PRESENTING SOLUTIONS THAT HELP TRANSFORM YOUR KNOWLEDGE.

Evolving technology and policy are constantly changing the electrical industry. Keep your knowledge and skills up to date through our NFPA Electrical Solutions. Stay on top of the NEC[®], covering subjects such as power over Ethernet and emergency service disconnects. Be immersed in topics such as electrical safety in the workplace through new training, certification, and online learning. Tap into the networking power of NFPA Xchange[™], sharing knowledge with fellow professionals. **In an industry that's transforming, NFPA Electrical Solutions help you transform with it.**



ELECTRICAL

SOLUTIONS

Learn more at nfpa.org/electricalsolutions

PRODUCTS / TRAINING / CERTIFICATION / DIGITAL RESOURCES





Accredited by the American National Standards Institute (ANSI)



Standards **support public health and safety** through areas like food, water, supplements, home products and sustainability, among others

NSF/ANSI standards are developed through a public process that ensures balanced input from industry representatives, public health/regulatory officials and users/consumer representatives.

> We are also looking for additional members. Contact **standards@nsf.org** to participate!

www.nsf.org



CELEBRATING 75 YEARS of Protecting and Improving Human Health



With 125 years of experience and the development of more than 1,500 Standards, UL continues to break new ground in its mission to help create a safer, more sustainable world. Learn more at UL.org.

UL is a proud sponsor of ANSI World Standards Week 2019!





© 2019 Underwriters Laboratories Inc. All rights reserved. UL and the UL Logo are trademarks of UL LLC.



Where IT all begins www.INCITS.org

Artificial intelligence Biometrics Blockchain & EDLT Cloud Computing and Distributed Platforms Cyber Security Character Sets and Internationalization Data Management and Interchange Digital Manufacturing (3D Printing) Governance of Organizations ID Cards & Security Devices for Personal Identification IT Sustainability Internet of Things Geographic Information Systems MPEG, JPEG Programming Languages Software and Systems Engineering Storage - ATA, Fibre Channel, SCSI

eincits

Ensuring quality in electrical construction

More than two decades ago, the National Electrical Contractors Association (NECA) identified a need to clearly define good workmanship in electrical construction. At that time, NECA envisioned the industry benefits of addressing performance and quality issues that were subjective as provided in the National Electrical Code® (NEC). Through careful analysis and meaningful industry input, the flagship document NECA-1, Standard for Good Workmanship in Electrical Construction, was born. This marked the starting point for a long-range plan to develop an entire library of National Electrical Installation Standards (NEIS).

The NEIS project has since grown to over 45 standards, and has become an effective resource for many electrical contractors, electrical designers and engineers, architects, inspectors, and electricians. Specification writers gain value by referencing these installation standards from their own plans and specifications.

The primary purpose of the NEIS is to supplement and overlay the essential safety requirements in NEC and other related standards while providing users with high-quality installation standards that benefit their businesses and, most importantly, their customers. NECA is an American National Standards Institute (ANSI)-accredited standards development association, bringing integrity and credibility into quality electrical standards development.



Find out more at www.neca-neis.org. On Twitter, follow @NECACodeandStds.

