



Technical Standards Program

ESTA Standards Watch

September 2019

Volume 23, Number 17

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ANSI E1.33, RDMnet approved and published

On 27 August ANSI's Board of Standards Review approved E1.33 RDMnet, as an American National Standard. It is now published and available on the ESTA website at tsp.esta.org/freestandards. The American National Standard designation is internationally recognized as a mark of technical diligence and commercial impartiality.

Officially known as ANSI E1.33 - 2019, Entertainment Technology – (RDMnet) Message Transport and Management for ANSI E1.20 (RDM) compatible and similar devices over IP Networks, the RDMnet standard was developed by the hard-working, all-volunteer members of the TSP's Control Protocols Working Group (CPWG).

RDMnet is a generational step forward, extending existing RDM functionality beyond the current physical limits of local DMX512 connections onto wide area hi-speed Ethernet networks. It allows for large-scale system monitoring and configuration while adding mobile device support. RDMnet also provides vendor agnostic

configuration of network gateways, as well as system partitioning between multiple venues on the same Ethernet network. Multiple control consoles are now easily integrated and synchronized on the same control network.

RDMnet (as well as over 60 other safety and compliance standards) is available as a free download from tsp.esta.org/freestandards. ESTA's free standards library made possible by the sponsorship of ProSight Specialty Insurance. The standard also may be purchased for \$40 USD from the ANSI and IHS on-line standards stores.

Three more ESTA standards approved with publication pending

On 9 September the ANSI Board of Standards Review approved the reaffirmations of three Control Protocols Working Group standards. They will be published soon, probably before the next issue of *Standards Watch*. They are reaffirmations of existing standards, so if you want to know what they will say, read the last edition.

ANSI E1.27-2 – 2009 (R2019), Entertainment Technology -- Recommended Practice for Permanently Installed Control Cables for Use with DMX512-A Products, is the second part of a two-part standard for DMX512 cabling, and is for permanently installed cables. The first part, ANSI E1.27-1, is for portable control cables.

ANSI E1.30-3 – 2009 (R2019), EPI 25 Time Reference in ACN Systems Using SNTP and NTP, is another recipe in the E1.30 cookbook for ACN. It offers ways of providing a time reference so events can be synchronized.

ANSI E1.30-10 – 2009 (R2019), EPI 32, Identification of Draft Device Description Language Modules, is a recommended way of identifying a Device Description Language Module for ACN as a trial version, one under development, not for release yet. ANSI E1.30-10 is part of an open series of E1.30 documents that suggests ways of doing common tasks with ANSI E1.17, Architecture for Control Networks.

Three Draft ESTA Standards Available for Public Review

Three new or revised standards are available for public review on the ESTA TSP website at <http://estalink.us/pr>. Anyone materially affected by the documents is invited to review them and to offer comments before the deadline. The review documents are available for free. They are listed below in order of action due-date. Note that the reviews do not all end on the same day.

BSR E1.62, Minimum specifications for mass-produced portable platforms, ramps, stairs, and choral risers for live performance events, is being offered for a fourth public review. The proposed standard covers mass-produced portable platforms, stair units and ramps used with those platforms, and choral risers, designed to be used for the presentation of music concerts, dramatic plays, fashion shows, and other entertainment and special events. The units covered by this standard are of a size and weight that allows them to be moved and erected by one or two people. The scope also covers the railings provided as fall protection accessories, and the legging systems. The public review runs through September 23; by the start of September 24 the review is finished.

BSR E1.4-3, Entertainment Technology — Manually Operated Hoist Rigging Systems, is a standard for permanently installed, human-powered manually operated hoists, used as part of rigging systems for raising, lowering, and suspension of scenery, properties, lighting, and similar loads. This standard establishes requirements for the design, manufacture, installation, inspection, and maintenance of manual hoist systems for lifting and suspension of loads for performance, presentation, and theatrical production. The public review runs through October 7. It is finished when October 8 starts.

BSR E1.21, Entertainment Technology — Temporary Structures Used for Technical Production of Outdoor Entertainment Events, is a revision of ANSI E1.21-2013 to deepen the requirements for operations management plans, designated person responsibilities, and related requirements. E1.21 establishes a minimum acceptable level of design and performance parameters to ensure structural reliability, safety, and to establish a

reasonable standard of care for temporary special event structures. The public review runs through October 28. It is over when October 29 starts.

Comments sought on US DOE GSIL efficacy rules

The US Department of Energy has announced changes to its proposed rules governing general service lamp minimum efficacy. One change is a *fait accompli*; the other is open for comment for 60 days, with the clock starting from the notice's publication in the *Federal Register* on 5 September 2019.

Energy Conservation Program: Definition for General Service Lamps

ACTION: Final rules; withdrawal.

This rule is a *fait accompli* taking effect 7 October 2019, abandoning a proposal to expand the definition of General Service Lamp and General Service Incandescent Lamp to include five specialty incandescent lamps: rough service lamps, vibration service lamps, 3-way incandescent lamps, high lumen lamps, and shatter-resistant lamps. In addition, the DOE shall maintain the existing exclusions of incandescent reflector lamps (IRLs) from the statutory definitions of GSIL and GSL, as well as T-shape lamps that use no more than 40 W or have a length of more than 10 inches, B, BA, CA, F, G16–1/2, G25, G30, S, and M–14 lamps of 40 W or less. The DOE also shall not consider candelabra base incandescent lamps to be General Service Lamps because the existing definition of GSIL applies only to medium screw-base lamps. This final rule is available at <https://www.govinfo.gov/content/pkg/FR-2019-09-05/pdf/2019-18940.pdf>.

Energy Conservation Program: Energy Conservation Standards for General Service Incandescent Lamps.

ACTION: Notice of proposed determination and request for comment

This action, open for public comment, is a proposal not to increase the minimum efficacy requirements for General Service Incandescent Lamps. The notice of that determination with instructions for commenting is available at <https://www.govinfo.gov/content/pkg/FR-2019-09-05/pdf/2019-18941.pdf>.

The document is 33 pages long. It includes a lengthy discussion of the DOE's legal charge to determine if minimum efficacy standards shall be raised, various Executive Orders that must be considered, and what technical and market factors to consider. Among those factors analyzed were the technologies available to increase lamp efficacy and the costs and benefits of those technologies. "Based on the results of these analyses . . . , DOE has tentatively determined that current standards for GSILs do not need to be amended because more stringent standards are not economically justified."

If this DOE determination stands, owners of R40 border lights need not fear the banning of replacement lamps for their luminaires. It also is evidence that it is highly unlikely that anything like the European Ecodesign Regulations will be considered in the United States for at least a couple of years. Please note, while incandescent lamps less efficacious than those already allowed will not be banned by US regulations, their use may be restricted by standards and local regulations mandating energy efficiency for buildings. See the proposed Addendum ah to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017 listed elsewhere in this issue of *Standards Watch*.

Written comments and information are requested by the DOE and will be accepted on or before 4 November 2019. Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at <http://www.regulations.gov>. Information about delivering comments by mail or by hand is available in the *Federal Register* notice.

DOE will hold a public meeting on Tuesday, 15 October 2019, from 10:00 to 15:00 at the U.S. Department of Energy, Forrestal Building, Room 8E–089, 1000 Independence Avenue SW, Washington, DC 20585. The meeting also will be broadcast as a webinar. More information about the meeting and webinar is available in the *Federal Register* notice.

ICC 2019 Public Comment Hearings schedule and agenda available

The schedule for the 2019 Public Comment Hearings to be held on 23–30 October 2019, at the Rio Hotel and Convention Center in Las Vegas, Nevada, is now posted at <https://www.iccsafe.org/wp-content/uploads/2019-PCH-Schedule.pdf>. The Public Comment Hearing Agenda is scheduled to post at <https://cdn-web.iccsafe.org/wp-content/uploads/2019-ICC-PUBLIC-COMMENT-AGENDA-compressed-2019-upload-upload.pdf>.

Behind the Scenes holiday cards on sale

The 2019 BTS Holiday Cards are now on sale at <https://behindthescenescharity.org/cms/product-category/cards/>. Card sales help fund the work of the Behind the Scenes charity, which provides financial support to entertainment technology industry professionals if they, or their immediate dependent family, are seriously ill or injured. It can help pay for funeral expenses, too.

One sponsorship left for 2020 New World Rigging Symposium

ESTA and USITT have announced the sponsors for the 2020 New World Rigging Symposium taking place March 31 – April 1 in Houston, TX in conjunction with the USITT Conference and Stage Expo. Only one sponsorship opportunity is left available, a Silver sponsorship at \$5,000.

The New World Rigging Symposium conveys your message to a highly targeted audience of top riggers, engineers, safety professionals, venue managers, and others. It demonstrates your support for bringing the rigging community together to learn, network, discuss current issues and new technologies, and help shape the future of the industry. If you are interested in claiming that last sponsorship, visit www.esta.org/nwrs_sponsorships to learn more.

WTO Technical Barrier to Trade notifications

Notify US, the U.S. Department of Commerce's service to announce Technical Barrier to Trade filings, has announced TBTs that may be of interest to Standards Watch readers. If you have a problem with any TBTs, you can protest through your representative to the World Trade Organization. See the guidance documents at <http://tsapps.nist.gov/notifyus/data/guidance/guidance.cfm> or <http://ec.europa.eu/growth/tools-databases/tbt/en/tbt-and-you/being-heard/> for advice on filing objections.

China Notification CHN/1350

Date issued: 2 September 2019

Agency responsible: General Administration of Quality Supervision and Inspection and Quarantine of the People's Republic of China (AQSIQ)

National inquiry point: General Administration of Quality Supervision and Inspection and Quarantine of the People's Republic of China (AQSIQ)

Products covered: Chemical substances and their mixtures, excluding medicines, pesticides, veterinary drugs, cosmetics, foods, food additives, feeds, feed additives, fertilizers, radioactive materials, etc (chemical substances whose usage have been changed to industrial use, as well as those used as raw materials or intermediates of the above products are excluded).

Title: Environmental Risk Assessment and Control Regulation for Chemical Substances (Notification Draft) (22 pages in Chinese)

Description of content: The Regulation established the following major systems: Environmental Risk Assessment, Basic Information Report, Environmental Risk Screening, Investigation and Monitoring of the Occurrence of Chemical Substances, List of Chemical Substances for Priority Environmental Management, List of Prohibited and Restricted Chemical Substances, Environmental Permit of Import and Export of Chemical Substances, Environmental Management Registration of New Chemical Substances.

Objective and rationale: Protection of the environment

Relevant documents: none listed

Proposed date of adoption: Not given by country

Proposed date of entry into force: Not given by country

Final date for comments: 1 November 2019

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/CHN/full_text/pdf/CHN1350\(simplified_chinese\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/CHN/full_text/pdf/CHN1350(simplified_chinese).pdf)

China Notification CHN/1351

Date issued: 2 September 2019

Agency responsible: General Administration of Quality Supervision and Inspection and Quarantine of the People's Republic of China (AQSIQ)

National Inquiry Point: General Administration of Quality Supervision and Inspection and Quarantine of the People's Republic of China (AQSIQ)

Products covered: New chemical substances;

Title: Measures on the Environmental Management of New Chemical Substances (Notification Draft) (21 pages, in Chinese)

Description of content: Enterprises that produce or import new chemical substances shall be registered or filed before producing or importing. New chemical substances without registration or filing are prohibited in research production importation and processing.

Objective and rationale: Protection of the environment

Relevant documents: none listed

Proposed date of adoption: Not given by country

Proposed date of entry into force: Not given by country

Final date for comments: 1 November 2019

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/CHN/full_text/pdf/CHN1351\(simplified_chinese\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/CHN/full_text/pdf/CHN1351(simplified_chinese).pdf)

European Union Notification EU/679

Date issued: 4 September 2019

Agency responsible: EU-TBT Enquiry Point

National Inquiry Point: EU-TBT Enquiry Point

Products covered: Electrical and electronic equipment

Title: Draft Commission Delegated Directive amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for the use of cadmium and lead in plastic profiles in electrical and electronic windows and doors containing recovered polyvinyl chloride (7 pages + 2-page annex in English)

Description of content: This draft Commission Delegated Directive concerns an application specific and temporary exemption from the RoHS 2 (Directive 2011/65/EU) substance restrictions.

Objective and rationale: Adaptation of existing legislation to scientific and technical progress, granting manufacturers adequate transition time for compliance.

Relevant documents:

- Scientific background studies justifying the specific exemption are available (<https://publications.europa.eu/en/publication-detail/-/publication/e8c8a008-3e99-11e7-a08e-01aa75ed71a1>)
- Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1438768100804&uri=CELEX:32011L0065>

Proposed date of adoption: 1 November 2019

Proposed date of entry into force: Not given by country

Final date for comments: 3 November 2019

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/EU/full_text/pdf/EU679\[1\]\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/EU/full_text/pdf/EU679[1](english).pdf) and [https://tsapps.nist.gov/notifyus/docs/wto_country/EU/full_text/pdf/EU679\[2\]\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/EU/full_text/pdf/EU679[2](english).pdf)

ANSI public review announcements

The following documents have been announced for public review by ANSI. Please send your comments before the deadline to the person indicated and to ANSI's Board of Standards Review at psa@ansi.org.

Due 29 September 2019

BSR/ASRHAE/ICC/USGBC/IES Addendum ah to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum ah increases the efficacy requirements for light sources and the percentage of light sources in dwelling units that must meet the higher requirements. This addendum reflects the availability of highly efficient lighting products on the market and ASHRAE's effort to continue developing 189.1 as a high-performance standard. The new requirements were determined with consideration of published averages for both directional and omnidirectional lamps and include an exception for appliance lighting. The changes are as follows:

Add new Section 7.4.6.2 and renumber remaining sections

7.4.6.2 Dwelling Units. This section supersedes ANSI/ASHRAE/IES Standard 90.1, Section 9.4.4. Not less than 90% of the permanently installed lighting serving dwelling units shall be provided by lamps with an efficacy of not less than 75 lm/W or luminaires with an efficacy of not less than 55 lm/W.

Exception to 7.4.6.2: Lighting attached to or integral to appliances.

7.4.6.23 Occupancy Sensor Controls with Multilevel Switching or Dimming ...

Revise Section 7.4.7.3.1 (e) as follows:

e. Lighting1. Integral LED lamps not subject to Section 7.4.6.2: ENERGY STAR Program Requirements for Integral LED Lamps

Offer comments at: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

Due 14 October 2019

BSR/ASTM WK59635-201x, Test Method for Determining Flammability of Exterior Wall Assemblies for Multi-story Structures (new standard)

This fire-test-response test method prescribes a method for qualitatively assessing the fire propagation characteristics of exterior wall assemblies that are constructed using combustible materials or incorporate combustible components. This test method determines the comparative burning characteristics of exterior wall assemblies by evaluating the fire spread over their exterior surface, the heat flux from the fire plume to the exterior surface of the wall assembly, and the fire spread within the test specimen. This fire-test-response test method does not assess the fire resistance or the loadbearing function of the exterior wall assembly. [The standard addresses the hazard demonstrated by the Grenfell Tower fire in London in June 2017.]

Single copy price: Free

Obtain an electronic copy from: iklineburger@astm.org or visit <https://www.astm.org/DATABASE.CART/WORKITEMS/WK59635.htm>

Sent comments to: Laura Klineburger, accreditation@astm.org

BSR/AWS F4.2-201X, Safety Guidelines for Proper Selection of Welding Cables (new standard)

This document provides guidance on the safe and proper selection of welding cables. This includes identifying specific criteria including minimum copper content, gauge sizing, electrical performance, and resistance for welding cable sizes.

Single copy price: \$32.00

Order from: Stephen Hedrick, steveh@aws.org

Send comments to: pportela@aws.org

BSR/HPVA EF-201X, The Standard for Engineered Wood Flooring (revision of ANSI/HPVA EF-2012)

Revise current ANS. This standard establishes nationally recognized requirements for commercially available engineered wood flooring. It is intended to provide manufacturers, distributors, and users with a basis for common understanding of the characteristics of these products.

Single copy price: \$40.00

Order from and send comments to: standards@decorativehardwoods.org

BSR/UL 61010-2-032-201x, Standard for Safety for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-032:Particular Requirements for Hand-Held and Hand Manipulated Current Sensors for Electrical Test and Measurement (identical national adoption of IEC 61010-2-032 and revision of ANSI/UL 61010-2-032-2014 (R2018))

This proposal for UL 61010-2-032 covers Types A-D current sensors and is an Adoption of IEC 61010-2-032, Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 2-032: Particular Requirements for Hand-Held and Hand Manipulated Current Sensors for Electrical Test and Measurement (fourth edition, issued by IEC June 2019) as a new IEC-based UL standard, UL 61010-2-032 with no US Differences.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/Home/ProposalsDefault.aspx>

Order from: <http://www.shopulstandards.com>

Enter comments at the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

BSR/UL 61010-2-033-201X, Standard for Safety for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-033: Particular Requirements for Hand-Held Multimeters for Domestic and Professional Use, Capable of measuring MAINS Voltage. (identical national adoption of IEC 61010-2-033 and revision of ANSI/UL 61010-2-033-2014 (R2018))

This proposal for UL 61010-2-033 covers hand-held multimeters for domestic and professional use and is an Adoption of IEC 61010-2-033, Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 2-033: Particular Requirements for Hand-Held Multimeters for Domestic and Professional Use, Capable of measuring MAINS Voltage, UL 61010-2-033, (second edition, issued by IEC June 2019) as a new IEC-based UL standard, UL 61010-2-033 with no US Differences.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/Home/ProposalsDefault.aspx>

Order from: <http://www.shopulstandards.com>

Enter comments at the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

Due 21 October 2019

BSR/ASSP A10.44-201X, Control of Energy Sources (Lockout/Tagout) for Construction and Demolition Operations (revision of ANSI/ASSP A10.44-2014)

This standard establishes the minimum requirements for the control of energy sources to prevent release of harmful energy that could cause death, injury, or illness to personnel performing construction and demolition work.

Single copy price: \$125.00

Order from and send comments to: Tim Fisher, tfisher@assp.org

BSR/CTA 2087-201x, Recommendations and Best Practices for Connection and Use of Accessories for XR Technologies (new standard)

This document will explore XR (including augmented and virtual reality) technologies accessories and their connections and performance requirements with XR technologies hardware. The output would be to develop the following: (1) Agree on common terminology and definitions, and (2) Agree on a common connectivity standard including device compatibility.

Single copy price: Free

Order from and send comments to: Veronica Lancaster, vlancaster@cta.tech

BSR/IAPMO UMC 1-202x, Uniform Mechanical Code (revision of ANSI/IAPMO UMC 1-2018)

This code provides minimum standards to safeguard life or limb; health; property; and public welfare by regulating and controlling the design; construction; installation; quality of materials; location; operation; and maintenance or use of heating, ventilating, cooling, refrigeration systems; incinerators; and other miscellaneous heat-producing appliances. The provisions of this code apply to the erection, installation, alteration, repair, relocation, replacement, addition to, use, or maintenance of mechanical systems.

Single copy price: \$10.00

Order from: Hugo Aguilar, hugo.aguilar@iapmo.org

Send comments to: Gabriella Davis, Gaby.Davis@iapmo.org

BSR/IAPMO UPC 1-2021-201x, Uniform Plumbing Code (revision of ANSI/IAPMO UPC 1-2018)

This code provides minimum standards and requirements to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of plumbing systems. The provisions of this code apply to the erection, installation, alteration, repair, relocation, addition to, use or maintenance of plumbing systems.

Single copy price: \$10.00

Order from: Hugo Aguilar, hugo.aguilar@iapmo.org

Send comments to: Gabriella Davis, Gaby.Davis@iapmo.org

Due 29 October 2019

BSR/ASME B107.500-201x, Pliers (revision of ANSI/ASME B107.500-2010)

This standard defines essential performance and safety requirements for several types of pliers, including long-nose pliers, shears, electronic pliers, and wire cutters. It specifies test methods to evaluate performance related to the defined requirements and safety and indicates limitations of safe use.

Single copy price: Free

Obtain an electronic copy from: <http://cstools.asme.org/publicreview>

Send comments to: Daniel Papert, papertd@asme.org

BSR/ASME Y14.38-200x, Abbreviations and Acronyms for Use on Drawings and Related Documents (revision of ANSI/ASME Y14.38 -2007 (R2013))

This standard provides abbreviations and acronyms, referred to in this standard as "abbreviations," used in engineering product definition and related documentation.

Single copy price: Free

Obtain an electronic copy from: <http://cstools.asme.org/publicreview>

Send comments to: Fredric Constantino, constantinof@asme.org

Due 5 November 2019

BSR/ASME B107.100-201x, Flat Wrenches (revision of ANSI/ASME B107.100-2010)

This standard defines essential performance and safety requirements specifically applicable to combination wrenches; box wrenches; double-head, open-end wrenches; double-head, flare-nut, adjustable wrenches; body repair tools; and ratcheting box wrenches. It specifies test methods to evaluate performance, related to the defined requirements and safety, and indicates limitations of safe use.

Single copy price: Free

Obtain an electronic copy from: <http://cstools.asme.org/publicreview>

Send comments to: papertd@asme.org

BSR/UL 2849-201x, Standard for Safety for Electrical Systems for eBikes (new standard)

This standard covers the electrical system of eBikes including both Electrically Power Assisted Cycle (EPAC – pedal assist) and nonpedal assist eBike types. The electrical systems may include on-board components and off-board components of eBikes. As a minimum, the electrical system consists of the battery, battery management system (BMS), interconnecting wiring, and power inlet. Any additional components or systems required to demonstrate compliance are included based on the overall system application. Off-board components include dedicated chargers for charging batteries that are removed from the eBike during charging or dedicated chargers for charging batteries that are in place on the eBike during charging. This standard does not cover the mechanical structure of the eBike unless specified otherwise.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/Home/ProposalsDefault.aspx>

Send comments to: Patricia Sena, patricia.a.sena@ul.org

New ANS projects

ANSI has announced the following new projects that might materially affect *Standards Watch* readers—or at least be interesting to them. Contact the developer if you (a) want to be involved in the project, (b) object to the project and wish it to be abandoned, or (c) if you would like to point out that its scope is covered by an existing standard, thereby possibly making the project redundant or conflicting.

BSR/AISC 370-201x, Specification for Structural Stainless Steel Buildings (new standard)

There is currently no up-to-date standard available for the design, fabrication, and erection of stainless-steel round hollow structural sections, and no standard at all for the rest of the structural stainless-steel products to be covered by this new standard. This will provide a state-of-the-art consensus standard for use by stakeholders. This standard applies to the design, fabrication, and erection of austenitic and duplex stainless steel:

- sections made from annealed sheet, strip, and plate that have not been subsequently cold formed or rolled;
- hollow structural sections;
- round and square bar, annealed, and cold-finished; and
- hot-rolled or extruded shapes.

It also applies to precipitation hardening stainless steel bar.

Contact: Cynthia Duncan, duncan@aisc.org

BSR/ASSP Z590.5-201X, Management Systems for the Implementation of Total Worker Health Programs in the Workplace (new standard)

This standard defines requirements for the implementation, enhancement, and ongoing improvement of a management system addressing Total Worker Health Programs in the Workplace.

Contact: Tim Fisher, TFisher@ASSP.org

BSR/ASSP Z590.7-201X, Management Systems for the Implementation of Total Worker Health Programs in the Workplace (new standard)

This standard defines requirements for the implementation, enhancement, and ongoing improvement of a management system addressing Total Worker Health Programs in the Workplace.

Contact: Tim Fisher, TFisher@ASSP.org

BSR/SAIA A92.20-201x, Design, Calculations, Safety Requirements and Test Methods for Mobile Elevating Work Platforms (MEWPs) (revision of ANSI/SAIA A92.20-2018)

Project Need: To revise the current standard to comply with the ANSI Commercial Terms Policy based on the decision of the ANSI BSR.

This standard is intended to be used in conjunction with BSR/SAIA A92.22, Safe Use of MEWPs, and ANSI/SAIA A92.24-2018, Training Requirements for Operators of MEWPs. This American National Standard specifies safety requirements and preventive measures, and the means for their verification, for certain types and sizes of mobile elevating work platforms (MEWPs) intended to position personnel, along with their necessary tools and materials, at work locations. It contains the structural design calculations and stability criteria, construction, safety examinations, and tests that shall be applied before a MEWP is first put into service.

Contact: DeAnna Martin, deanna@saiainline.org

BSR/SAIA A92.22-201x, Safe Use of Mobile Elevating Work Platforms (MEWPs) (revision of ANSI/SAIA A92.22-2018)

Project Need: To revise the current standard to comply with the ANSI Commercial Terms Policy based on the decision of the ANSI BSR.

This standard is intended to be used in conjunction with BSR/SAIA A92.20, Design calculations, safety requirements and test methods for Mobile Elevating Work Platforms (MEWPs) and ANSI/SAIA A92.24-2018, Training Requirements for Operators of Mobile Elevating Work Platforms (MEWPs). This standard specifies requirements for application, inspection, training, maintenance, repair and safe operation of Mobile Elevating Work Platforms (hereafter known as MEWPs). It applies to all types and sizes of MEWPs as specified in BSR/SAIA A92.20 that are intended to position personnel, along with their necessary tools and materials, at work locations.

Contact: DeAnna Martin, deanna@saiainline.org

Final actions on American National Standards

The documents listed below have been approved by the ANSI Board of Standards Review or by an ANSI-Audited Designator on the date noted.

ANSI/ASME B107.110-2019, Socket Wrenches, Handles, and Attachments (revision of ANSI/ASME B107.110-2012): 29 August 2019

Twenty-four addenda to ASHRAE standards, including five for BACnet:

1. **ANSI/ASHRAE Addendum 62.1ad-2019**, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 26 August 2019
2. **ANSI/ASHRAE Addendum 62.1ae-2019**, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 26 August 2019
3. **ANSI/ASHRAE Addendum 62.1af-2019**, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 26 August 2019
4. **ANSI/ASHRAE Addendum 62.1al-2019**, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 26 August 2019
5. **ANSI/ASHRAE Addendum 62.1an-2019**, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 26 August 2019
6. **ANSI/ASHRAE Addendum 62.1as-2019**, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 26 August 2019
7. **ANSI/ASHRAE Addendum 62.1L-2019**, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 26 August 2019
8. **ANSI/ASHRAE Addendum 135bs-2019**, BACnet - A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016): 26 August 2019
9. **ANSI/ASHRAE Addendum br to ANSI/ASHRAE Standard 135-2019**, BACnet – A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016): 26 August 2019
10. **ANSI/ASHRAE Addendum bt to ANSI/ASHRAE Standard 135-2019**, BACnet – A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016): 26 August 2019
11. **ANSI/ASHRAE Addendum bu to ANSI/ASHRAE Standard 135-2019**, BACnet – A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016): 26 August 2019
12. **ANSI/ASHRAE Addendum bw to ANSI/ASHRAE Standard 135-2019**, BACnet - A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016): 26 August 2019
13. **ANSI/ASHRAE/ICC/USGBC/IES Addendum 189.1a-2019**, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017): 26 August 2019
14. **ANSI/ASHRAE/ICC/USGBC/IES Addendum 189.1b-2019**, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017): 26 August 2019
15. **ANSI/ASHRAE/IES Addendum 90.1bm-2019**, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 19 August 2019
16. **ANSI/ASHRAE/IES Addendum 90.1bn-2019**, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 19 August 2019
17. **ANSI/ASHRAE/IES Addendum 90.1bu-2019**, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 19 August 2019
18. **ANSI/ASHRAE/IES Addendum 90.1bv-2019**, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 19 August 2019
19. **ANSI/ASHRAE/IES Addendum 90.1cm-2019**, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 19 August 2019
20. **ANSI/ASHRAE/IES Addendum bo to ANSI/ASHRAE/IES Standard 90.1-2019**, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 26 August 2019
21. **ANSI/ASHRAE/IES Addendum cl to ANSI/ASHRAE/IES Standard 90.1-2019**, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 26 August 2019
22. **ANSI/ASHRAE/IES Addendum cv to ANSI/ASHRAE/IES Standard 90.1-2019**, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 26 August 2019

23. **ANSI/ASHRAE/IES Addendum cw to ANSI/ASHRAE/IES Standard 90.1-2019**, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 26 August 2019
24. **ANSI/ASHRAE/ICC/USGBC/IES Addendum x to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2019**, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017): 26 August 2019

ANSI/ASSP Z10.0-2019, Occupational Health and Safety Management Systems (revision and redesignation of ANSI/ASSE Z10-2012 (R2017)): 22 August 2019

Draft IEC & ISO documents

This section lists proposed documents that the International Electrotechnical Commission (IEC) is considering for approval and that may be of interest to *Standards Watch* readers. Anyone interested in reviewing and commenting on a document should order a copy from their national representative and submit their comments through them. Comments from US citizens on IEC documents should be sent to Charles T. Zegers at czegers@ansi.org. Comments from US citizens on ISO documents should be sent to Karen Hughes at isot@ansi.org. Any prices, if shown, are for purchases through ANSI. The sort order is by due date then alphanumeric.

21/1020/CD, IEC 63193 ED1: Lead-acid batteries for propulsion of lightweight means of locomotion - General requirements and methods of test, 1 October 2019

34/629/CD, IEC 63117 ED1: General requirements for lighting systems - Safety, 1 October 2019

35/1433/CD, IEC 62281/AMD1 ED4: Amendment 1: Safety of primary and secondary lithium cells and batteries during transport, 1 October 2019

CIS/F/777/DISH, CISPR 15/ISH1 ED9: Interpretation Sheet 1 – Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment, 1 October 2019

110/1142/CD, IEC 62906-5-5 ED1: Laser display devices - Part 5-5: Optical measuring methods of raster-scanning retina direct projection devices, 2 October 2019

77A/1039/FDIS, IEC 61000-4-11 ED3: Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase, 4 October 2019

65/756/CDV, IEC 62443-2-1 ED2: Security for industrial automation and control systems - Part 2-1: Security program requirements for IACS asset owners, 1 November 2019

110/1117/CDV, IEC 62977-2-2 ED1: Electronic displays - Part 2-2: Measurements of optical characteristics - Ambient performance, 1 November 2019

34/621/CDV, IEC 63103 ED1: Lighting equipment - Non-active mode power measurement, 2 November 2019

34/639/NP, PNW 34-639: Digital addressable lighting interface – Part 150: Auxiliary power supply, 2 November 2019

34/640/NP, PNW 34-640: Digital addressable lighting interface – Part 250: Particular requirements for control gear - Integrated Bus Power Supply (Device Type 49), 2 November 2019

34/641/NP, PNW 34-641: Digital addressable lighting interface – Part 251: Particular requirements for control gear - Memory bank 1 extension (Device Type 50), 2 November 2019

34/642/NP, PNW 34-642: Digital addressable lighting interface – Part 252: Particular requirements for control gear - Energy Reporting (Device Type 51), 2 November 2019

34/643/NP, PNW 34-643: Digital addressable lighting interface – Part 253: Particular requirements for control gear - Diagnostics and maintenance (Device Type 52), 2 November 2019

CIS/D/462/CDV, CISPR 36 ED1: Electric and hybrid electric road vehicles - Radio disturbance characteristics - Limits and methods of measurement for the protection of off-board receivers below 30 MHz, 2 November 2019

SyCSmartCities/108/CD, IEC 60050-831 ED1: International Electrotechnical Vocabulary (IEV) - Part 831: Smart city systems, 2 November 2019

ISO/IEC DIS 10779, Information technology - Office equipment - Accessibility guidelines for older persons and persons with disabilities, 17 November 2019, \$82.00

ISO/DIS 10303-238, Industrial automation systems and integration - Product data representation and exchange - Part 238: Application protocol: Model based integrated manufacturing, 23 November 2019, \$29.00

Recently published IEC & ISO documents

Listed here are documents recently approved by the IEC or ISO that may be of use or interest to *Standards Watch* readers. Prices shown are from the [ANSI Webstore](#).

ISO 80000-2:2019, Quantities and units - Part 2: Mathematics, \$185.00

ISO 80000-4:2019, Quantities and units - Part 4: Mechanics, \$103.00

ISO 80000-5:2019, Quantities and units - Part 5: Thermodynamics, \$103.00

ISO 80000-7:2019, Quantities and units - Part 7: Light and radiation, \$162.00

ISO 80000-9:2019, Quantities and units - Part 9: Physical chemistry and molecular physics, \$103.00

ISO 80000-10:2019, Quantities and units - Part 10: Atomic and nuclear physics, \$185.00

ISO 80000-12:2019, Quantities and units - Part 12: Condensed matter physics, \$103.00

ISO/IEC 15909-1:2019, Systems and software engineering – High-level Petri nets - Part 1: Concepts, definitions and graphical notation, \$162.00

ISO/IEC 21122-3:2019, Information technology - JPEG XS low-latency lightweight image coding system - Part 3: Transport and container formats, \$185.00

ISO/IEC 25030:2019, Systems and software engineering – Systems and software quality requirements and evaluation (SQuaRE) - Quality requirements framework, \$185.00

ISO/IEC Guide 59:2019, ISO and IEC recommended practices for standardization by national bodies, \$103.00

ISO/IEC TR 33015:2019, Information technology – Process assessment - Guidance for process risk determination, \$162.00

ISO/TS 17033:2019, Ethical claims and supporting information - Principles and requirements, \$103.00

TSP meeting schedule

The following meetings will be at the Marriott Solana in Westlake, TX. The meeting schedule is posted at <https://esta.org/ESTA/meetings.php>. Use the "Reserve a Hotel Room" link on that page to reserve a hotel room.

Control Protocols IPv6 PIDs (RDM) Task Group	14:00 – 18:00	Saturday 26 October 2019
Control Protocols Next Gen Task Group	09:00 – 13:00	Sunday 27 October 2019
Control Protocols Task Group (unregistered topic)	19:00 – 23:00	Friday 25 October 2019
Control Protocols Working Group	09:00 – 13:00	Saturday 26 October 2019
Electrical Power Working Group	19:00 – 23:00	Friday 25 October 2019
Event Safety Fire Safety TG	09:00 – 13:00	Saturday 26 October 2019
Event Safety Rigging Task Group	09:00 – 13:00	Friday 25 October 2019
Event Safety Working Group	14:00 – 18:00	Saturday 26 October 2019
Floors Working Group	09:00 – 13:00	Friday 25 October 2019
Fog & Smoke Working Group	14:00 – 18:00	Thursday 24 October 2019
Followspot Position Working Group	16:00 – 18:00	Friday 25 October 2019
Photometrics Working Group	14:00 – 18:00	Sunday 27 October 2019
Rigging E1.39	09:00 – 13:00	Saturday 26 October 2019
Rigging E1.67 TG	14:00 – 18:00	Friday 25 October 2019
Rigging Working Group	19:00 – 23:00	Saturday 26 October 2019
Stage Machinery Working Group	19:00 – 23:00	Thursday 24 October 2019
Stage Machinery E1.6-4 Task Group	09:00 – 13:00	Friday 25 October 2019
Stage Machinery E1.64 Task Group	14:00 – 18:00	Thursday 24 October 2019
Technical Standards Council	09:00 – 13:00	Sunday 27 October 2019

The following meetings will be at the Wyndham Garden Anaheim in conjunction with NAMM 2020:

Control Protocols Working Group	09:00 - 13:00	Friday 17 January 2020
Event Safety Fire Safety TG	09:00 - 13:00	Saturday 18 January 2020
Event Safety Working Group	14:00 - 18:00	Saturday 18 January 2020
Floors Working Group	09:00 - 13:00	Saturday 18 January 2020
Followspot Position Working Group	09:00 - 13:00	Thursday 16 January 2020
Photometrics Working Group	14:00 - 18:00	Friday 17 January 2020
Rigging Working Group:	19:00 - 23:00	Friday 17 January 2020
Stage Machinery E1.6-4 TG	14:00 - 18:00	Friday 17 January 2020
Stage Machinery E1.64 TG	09:00 - 13:00	Thursday 16 January 2020
Stage Machinery Working Group	14:00 - 18:00	Thursday 16 January 2020
Technical Standards Council	09:00 - 13:00	Sunday 19 January 2020

TSP donors who have made long-term, multi-year pledges

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