Technical Standards Program

ESTA Standards Watch

Late August 2019 Volume 23, Number 16

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Two in review and a new

The TSP working group meetings held in Texas in the third week of July resulted in several projects moving forward. A few of them are listed below. More will be listed as the minutes of the meetings and action items are sorted out.

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. Larger, heavier units are outside the scope of this standard. The scope also covers the railings provided as fall protection accessories, and the legging systems.

The major substantive change in this fourth review version is rolling back a response to a second public review comment. In that public review a comment suggested we should add specific coefficients of friction values to better define “slip resistance.” We did, but later public review comments pointed out flaws in that. The coefficients are meaningless unless the shoe sole is specified, and specifying shoes is outside the scope of the standard. We have gone back to the language used in the *International Building Code* and *International Fire Code* that simply say floors should be slip resistant. The revised draft standard is posted at https://tsp.esta.org/tsp/documents/public_review_docs.php. 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. It too is posted at https://tsp.esta.org/tsp/documents/public_review_docs.php. The public review runs through October 7. It is finished when October 8 starts.

The Fog & Smoke Working Group has voted to open **ANSI E1.23 – 2010 (R2015), Entertainment Technology - Design and Execution of Theatrical Fog Effects,** for revision and to rename it “Entertainment Technology—Design, Execution, and Maintenance of Atmospheric Effects.” The addition of “Maintenance” to the title signifies the changes planned. The existing standard helps an effects designer plan a safe effect and carry it out, but problems emerge when the environment for the effect changes (e.g., the show changes theatres, the HVAC flips from cooling to heating) and so the effect might not be what was originally planned. Problems also can emerge in the motion picture industry when an effect is within safe exposure limits for an eight-hour workday and a 40-hour workweek, but the shoots go on, take after take, so people are exposed for many more hours a day than eight and for many more hours than 40 in a workweek.

Anyone interested in this E1.23 project can help by either joining the Fog & Smoke Working Group or commenting in future public reviews. Information about joining working groups is available at https://tsp.esta.org/tsp/working_groups/index.html.

ETCP Handbook cover contest

The Entertainment Technician Certification Program has announced a contest to select a new cover for each of its handbooks. The contest is open to ETCP Certified Technicians, who may submit one image per handbook category (Rigging – Arena & Theatre and/or Entertainment Electrician/PPDT). The final winners will be selected from two finalists for each handbook by popular vote of ETCP Certificants. A photo credit with a short bio will be included in the new handbooks, and each of the two winners will receive a $100 gift certificate for ETCP Personalized SWAG. ETCP will issue a press release announcing the winners.

Great images should focus on the target handbook's discipline and should not feature any identifiable person. Images should be submitted at https://esta.org/upload/etcpcontest2019.php. More information also is available on that site.

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. Don't leave your colleagues in the dark!

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.

NFPA Tentative Interim Amendments issued for 2020 edition of the NEC

The NFPA has published seven Tentative Interim Amendments to the 2020 edition of the National Electrical Code, NFPA 70. They are posted under the “Current & Prior Editions” tab on the NFPA website. The 2020 edition of the NEC will be available 6 September 2019.

Tentative Interim Amendment, TIA 20-1:

725.121(C) Marking. The power sources for limited power circuits in 725.121(A)(3), limited power circuits for listed audio/video equipment, listed information technology equipment, listed communications equipment, and listed industrial equipment in 725.121(A)(4) shall have a label indicating the maximum voltage and maximum current or maximum voltage and nominal current output per conductor for each connection point on the power source. Where multiple connection points have the same rating, a single label shall be permitted to be used. For equipment with a rated current per conductor less than 0.3 amperes, the effective date shall be January 1, 2021.

Tentative Interim Amendment, TIA 20-2:

210.52(C)(2) Island and Peninsular Countertops and Work Surfaces. Receptacle outlets shall be installed in accordance with 210.52(C)(2)(a) and (C)(2)(b).

(a) At least one receptacle shall be provided for the first 0.84 m2 (9 ft2), or fraction thereof, of the countertop or work surface. A receptacle outlet shall be provided for every additional 1.7 m^2 (18 ft^2), or fraction thereof, of the countertop or work surface.

(b) At least one receptacle outlet shall be located within 600 mm (2 ft) of the outer end of a peninsular countertop or work surface. Additional required receptacle outlets shall be permitted to be located as determined by the installer, designer, or building owner. The location of the receptacle outlets shall be in accordance with 210.52(C)(3).

A peninsular countertop shall be measured from the connected perpendicular wall.

Tentative Interim Amendment, TIA 20-3:

725.121(C) Marking. The power sources for limited power circuits in 725.121(A)(3), limited power circuits for listed audio/video equipment, listed information technology equipment, listed communications equipment, and listed industrial equipment in 725.121(A)(4) shall have a label indicating the maximum voltage and rated current output per conductor for each connection point on the power source. Where multiple connection points have the same rating, a single label shall be permitted to be used.

Informational Note No. 1: Rated current for power sources covered in 725.144 is the output current per conductor the power source is designed to deliver to an operational load at normal operating conditions, as declared by the manufacturer.

Informational Note No. 2: An example of a label is “52V @ 0.433A, 57V MAX” for an IEEE 802.3 compliant Class 8 power source.

Tentative Interim Amendment, TIA 20-4:

240.67(C) Performance Testing. ~~Where a method to reduce clearing time is required in 240.67(B), the~~The arc energy reduction protection system shall be performance tested by primary current injection testing or another approved method when first installed on site. This testing shall be conducted by a qualified person(s) in accordance with the manufacturer’s instructions.
~~Performance testing of an instantaneous element of the protective device shall be conducted by a qualified person(s) using a test process of primary current injection and the manufacturer’s recommended test procedures.~~
A written record of this testing shall be made and shall be available to the authority having jurisdiction.
Informational Note: Some energy reduction protection systems cannot be tested using a test process of primary current injection due to either the protection method being damaged such as with the use of fuse technology or because current is not the primary method of arc detection.

Tentative Interim Amendment, TIA 20-5:

240.87(C) Performance Testing. The arc energy reduction protection system shall be performance tested by primary current injection testing or another approved method when first installed on site. This testing shall be conducted by a qualified person(s) in accordance with the manufacturer’s instructions.
~~Performance testing of an instantaneous element of the protective device shall be conducted by a qualified person(s) using a test process of primary current injection and the manufacturer’s recommended test procedures.~~

A written record of this testing shall be made and shall be available to the authority having jurisdiction.
Informational Note: Some energy reduction protection systems cannot be tested using a test process of primary current injection due to either the protection method being damaged such as with the use of fuse technology or because current is not the primary method of arc detection.

Tentative Interim Amendment, TIA 20-6:

Revise Annex Example D3 to read as follows:

Example D3 Store Building A store ~~50~~ 80 ft by 60 ft, or ~~3000~~ 4,800 ft^2, has 30 ft of show window. There are a total of 80 duplex receptacles. The service is 120/240 V, single phase 3-wire service. Actual connected lighting load is ~~8500~~ 7,000 VA, all of which for this example is considered continuous. All calculations are rounded up or down as permitted in 220.5(B).

Calculated Load
(see 220.40)

Noncontinuous Loads

Receptacle Load *(see 220.44)*		
80 receptacles at 180 VA		14,400 VA
10,000 VA at 100%		10,000 VA
14,400 VA - 10,000 VA = 4,400 VA at 50%		2,200 VA
	Subtotal	12,200 VA

Continuous Loads

General Lighting*		
~~3000~~4,800 ft^2 at ~~3~~ 1.9 VA/ft^2		~~9,000~~ 9,120 VA
Show Window Lighting Load		
30 ft at 200 VA/ft [see 220.14(G)]		6,000 VA
Outside Sign Circuit [see 220.14(F)]		1,200 VA
	Subtotal	~~16,200~~16,320 VA
	Subtotal from noncontinuous	12,200 VA
	Total noncontinuous loads + continuous loads =	~~28,400~~28,520 VA

*In the example, the actual connected lighting load at 125% (~~8500~~7,000 × 1.25 VA) is less than the load from Table 220.12, so the required minimum lighting load from Table 220.12 is used in the calculation. Had the actual lighting load × 125% been greater than the value calculated from Table 220.12, the actual connected lighting load would have been used.

Minimum Number of Branch Circuits Required
General Lighting: Branch circuits need only be installed to supply the actual connected load [see 210.11(B)].
~~8500~~ 7,000 VA × 1.25 = ~~10,625~~ 8,750 VA
~~10,625~~ 8,750 VA ÷ 240 V = ~~44~~ 36.45 A for 3-wire, 120/240 V
8,750 VA ÷ 120 V = 72.92 A
The lighting load would be permitted to be served by 2-wire or 3-wire, 15- or 20-A circuits with combined capacity equal to ~~44~~ 36 A or greater for 3-wire circuits or ~~88~~ 73 A or greater for 2-wire circuits. The feeder capacity as well as the number of branch-circuit positions available for lighting circuits in the panelboard must reflect the full calculated load of ~~9000 VA × 1.25 = 11,250~~ 9,120 VA. Lighting loads from Table 220.12 already include 125% for continuous load. See note at bottom of Table 220.12.

Show Window
6,000 VA × 1.25 = 7,500 VA
7,500 VA ÷ 240 V = 31.25 A for 3-wire, 120/240 V
7,500 VA ÷ 120 V = 62.5 A for 2-wire, 120 V

The show window lighting is permitted to be served by 2-wire or 3-wire circuits with a capacity equal to 31 A or greater for 3-wire circuits or ~~62~~ 63 A or greater for 2-wire circuits.

Receptacles required by 210.62 are assumed to be included in the receptacle load above if these receptacles do not supply the show window lighting load.

Receptacles
Receptacle Load:
14,400 VA ÷ 240 V = 60 A for 3-wire, 120/240 V
14,400 VA ÷ 120 V = 120 A for 3-wire, 120/240 V

The receptacle load would be permitted to be served by 2-wire or 3-wire circuits with a capacity equal to 60 A or greater for 3-wire circuits or 120 A or greater for 2-wire circuits.

Minimum Size Feeder (or Service) Overcurrent Protection (see 215.3 or 230.90)

Subtotal noncontinuous loads	12,200 VA
Subtotal continuous loads not from Table 220.12 at 125% (~~16,200~~ 7,200 VA × 1.25) (sign and show window)	~~20,250~~ 9,000 VA
Subtotal of calculated continuous loads with 125% already included ~~Total~~	~~32,450~~ 9,120 VA
Total	30,320 VA

~~32,450~~ 30,320 VA ÷ 240 V = 135 126 A
The next higher standard size is 150 A *(see 240.6)*.

Minimum Size Feeders (or Service Conductors) Required
[see 215.2, 230.42(A)]
For 120/240 V, 3-wire system,
~~32,450~~ 30,320 VA ÷ 240 V = ~~135~~ 126 A Service or feeder conductor is ~~1/0~~ 1 AWG Cu in accordance with 215.3 and Table 310.16 (with 75°C terminations).

Tentative Interim Amendment, TIA 20-7:

Delete Table 430.252 in its entirety.

A Tentative Interim Amendment is an amendment to an NFPA standard processed in accordance with Section 5 of the NFPA Regulations. It has not gone through the entire standards development process of being published in a First Draft Report and a Second Draft Report for public review and comment. TIAs are effective only between editions of the standard, until the next formal review and revision cycle starts. A TIA automatically becomes a public input for the next edition of the standard, and then goes through the full standards development process.

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.

Republic of Korea Notification KOR/853

Date issued: 21 August 2019
Agency responsible: Ministry of Environment
National inquiry point: Korean Agency for Technology and Standards (KATS), Ministry of Commerce, Industry and Energy (MOCIE) (KATS/MOCIE)
Products covered: Noise-generating construction machinery
Title: Partial Amendment of the Enforcement Rule of the Noise and Vibration Control Act (56 pages in Korean)
Description of content: - Act: a Partial Amendment of the Enforcement Rule of the Noise and Vibration Control Act - Main contents: Operation standards of noise-generating construction machineries (Attachment 18-2)
1) Newly-developed standards for generators and concrete cutters to control noise generating construction machinery
2) As the Ministry of Environment is mandated to develop noise control standards of noise-generating construction machineries pursuant to the Noise and Vibration Control Act, it has already been implementing the standards for four out of nine types of noise-generating construction machineries since February 2014. This time, the partial amendment aims at setting up two more standards for generator and concrete cutter.
- Existing noise standards: excavator, tamping machine, loader, air compressor
Objective and rationale: - To provide consumers with noise information of noise-generating construction machineries - To prevent any damage of residents caused by low-noise construction machineries
Relevant documents: Ministry of Environment Public Notice No. 2019-0485 (June 25, 2019)
Proposed date of adoption: Not given by country
Proposed date of entry into force: 1 October 2020
Final date for comments: 20 October 2019
Full text: https://tsapps.nist.gov/notifyus/docs/wto_country/KOR/full_text/pdf/KOR853(korean).pdf

Italy Notification ITA/35

Date issued: 23 August 2019
Agency responsible: Ministry for Economic Development
National inquiry point: TBT Italia Enquiry Point, Ministry for Economic Development
Products covered: ICT products and services
Title: Security in ICT Procurement (30 pages in Italian)

Description of content: The Guidelines are a document drawn up by a working group promoted by the Cyber Security Unit [NSC] of the Security Intelligence Department [DIS] at the Office of the Prime Minister [PCM], which approved its drafting. In addition to the DIS, the Department of Civil Protection, the Ministry of Foreign Affairs [MEA], the Ministry of the Economy and Finance [MEF], the Ministry of Economic Development [MiSE], the Agency for Digital Italy [AgID], Consip, the Ministries of the Interior, of Justice and of Defence contributed to the document.
The Guidelines collect technical-administrative recommendations, best practices and operational tools (with examples to facilitate their use) to ensure, within the procedures for the procurement of IT goods and services of public administrations, the compliance of the latter with adequate security levels.
Objective and rationale: The draft Guidelines covered by this notification are necessary to verify the security level of the current acquisition processes and possibly to raise this level without thereby excessively increasing the complexity of the processes and the effort required to conduct them.
Relevant documents: References to basic texts:
- ISO 22317 - Guidelines for business impact analysis: https://www.iso.org/standard/50054.html;
- ISO 27001 - Information security management systems: https://www.iso.org/isoiec-27001-information-security.html;
- ISO 31000 Risk management: https://www.iso.org/iso-31000-risk-management.html;
- Guidelines for secure software development: https://www.agid.gov.it/it/sicurezza/cert-pa/linee-guida-sviluppo-del-software-sicuro;
- AgID Minimum security measures: https://www.agid.gov.it/it/sicurezza/misure-minime-sicurezza-ict;
- ISO 15408 Standard Common Criteria: https://www.iso.org/standard/50341.html
Proposed date of adoption: 1 November 2019
Proposed date of entry into force: 1 November 2019
Final date for comments: 11 November 2019 (ten days after it's a done deal)
Full text: https://tsapps.nist.gov/notifyus/docs/wto_country/ITA/full_text/pdf/ITA35(italian).pdf

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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 August 2019

In the 16 August issue of *ANSI Standards Action*, the National Fire Protection Association announced the availability of Second Draft Reports for concurrent review and comment by NFPA and ANSI. The disposition of all comments received are published in the Second Draft Report, located on the document's information page under the next edition tab. The document's specific URL, www.nfpa.org/doc#next (for example ww.nfpa.org/101next), can easily access the document's information page. All Notices of Intent to Make A Motion on the 2019 Fall Revision Cycle Second Draft Reports must be received by 29 August 2019. The NFPA standards that might be of particular interest to *Standards Watch* readers include:

BSR/NFPA 75-201x, Standard for the Fire Protection of Information Technology Equipment (revision of ANSI/NFPA 75-2017)
This standard covers the requirements for the protection of information technology equipment and information technology equipment areas.
Obtain an electronic copy and offer comments at: http://www.nfpa.org/75next

BSR/NFPA 76-201x, Standard for the Fire Protection of Telecommunications Facilities (revision of ANSI/NFPA 76-2016)
This standard provides requirements for fire protection of telecommunications facilities where telecommunications services such as telephone (landline, wireless) transmission, data transmission, internet transmission, voice-over internet protocol (VoIP) transmission, and video transmission are rendered to the public.
Obtain an electronic copy and offer comments at: http://www.nfpa.org/76next

BSR/NFPA 91-201x, Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Particulate Solids (revision of ANSI/NFPA 91-2015)
This standard provides minimum requirements for the design, construction, installation, operation, testing, and maintenance of exhaust systems for air conveying of vapors, gases, mists, and particulate solids as they relate to fire and/or explosion prevention, except as modified or amplified by other applicable NFPA standards.
Obtain an electronic copy and offer comments at: www.nfpa.org/91next

BSR/NFPA 600-201x, Standard on Facility Fire Brigades (revision of ANSI/NFPA 600-2015)
This standard contains minimum requirements for organizing, operating, training, and equipping industrial fire brigades. It also contains minimum requirements for the occupational safety and health of industrial fire brigade members while performing fire fighting and related activities.
Obtain an electronic copy and offer comments at: www.nfpa.org/600next

BSR/NFPA 730-201x, Guide for Premises Security (revision of ANSI/NFPA 730-2018)
This guide describes construction, protection, occupancy features, and practices intended to reduce security vulnerabilities to life and property.
Obtain an electronic copy and offer comments at: www.nfpa.org/730next

BSR/NFPA 731-201x, Standard for the Installation of Electronic Premises Security Systems (revision of ANSI/NFPA 731-2017)
This standard covers the application, location, installation, performance, testing, and maintenance of electronic premises security systems and their components.
Obtain an electronic copy and offer comments at: www.nfpa.org/731next

Due 22 September 2019

RIA TR R15.706-2019, Technical Report for Industrial Robots and Robot Systems - Safety Requirements - User Responsibilities (technical report)
ANSI/RIA R15.06-2012 provides information for the safe design, manufacturing, installation, operation, maintenance and decommissioning of industrial robots and robot systems. It is directed to a variety of stakeholders including the manufacturer, integrator and supplier of robots and robot systems. These suppliers are required to produce machines (robots and robot systems) with the intent of providing the capabilities, functionality, and information needed for the end-user to safely use the robot systems. The standard addresses the entire supply chain of the robot systems, but does not include requirements or guidance to the end-user who is responsible for the safety of the robot system in use. This technical report is directed to the user stakeholder. It provides guidance and expands on the responsibilities that are implied, but not stated specifically, in the standard.
Single copy price: $50.00; $40 for RIA members
Order from: Robotic Industries Association, 1-734-994-6088, www.robotics.org

Due 30 September 2019

BSR/AWS A2.4-201x, Standard Symbols for Welding, Brazing, and Nondestructive Examination (revision of ANSI/AWS A2.4-2012)
This standard establishes a method for specifying certain welding, brazing, and nondestructive examination information by means of symbols, including the examination method, frequency, and extent. Detailed information and examples are provided for the construction and interpretation of these symbols.
Single copy price: $172.00
Obtain an electronic copy from: sborrero@aws.org
Send comments to: adavis@aws.org

BSR ISEA Z87.1-201x, Occupational and Education Personal Eye and Face Protection Devices (revision of ANSI ISEA Z87.1-2015)
This standard sets forth criteria related to the requirements, testing, permanent marking, selection, care, and use of protectors to minimize the occurrence and severity or prevention of injuries from such hazards as impact, non-ionizing radiation and liquid splash exposures in occupational and educational environments including, but not limited to, machinery operations, material welding and cutting, chemical handling, and assembly operations. Certain hazardous exposures are not covered in this standard. These include, but are not limited to: bloodborne

pathogens, X-rays, high-energy particulate radiation, microwaves, radio-frequency radiation, lasers, masers, electric arc flash. and sports and recreation.
Single copy price: $40.00
Obtain an electronic copy from: www.safetyequipment.org/resources/shop
Send comments to: cfargo@safetyequipment.org

BSR MH1-201X, Pallets, Slip Sheets, and Other Bases for Unit Loads (revision, redesignation and consolidation of ANSI MH1-2016 and ANSI MH1.14-2016)
This standard pertains to pallets used in the unit load method of assembling, stacking, storing, handling, and transporting materials and products. The standards were to accomplish the following: define terminology and nomenclature associated with pallets; apply to pallets irrespective of components and materials used in their fabrication; provide a series of recommended pallet dimensions and sizes; describe procedures for pallet sampling, inspection and testing; indicate procedures for designating pallet requirements. The purpose of this project is to incorporate ANSI MH1.14-2016, Molded, Wood-Based Composite Pallets, into MH1, then withdraw ANSI MH1.14 as a stand-alone standard.
Single copy price: Free
Order from and send comments to: Patrick Davison, pdavison@mhi.org

Due 7 October 2019

BSR/ASD PRG 320-201x, Standard for Performance-Rated Cross-Laminated Timber (revision of ANSI/APA PRG 320-2018)
Update the existing standard to include Structural Composite Lumber and revise the existing standard on glue bond durability requirements
Single copy price: Free!
Order from and send comments to: Borjen Yeh, borjen.yeh@apawood.org

BSR/ESD S6.1-201x, ESD Association Standard for the Protection of Electrostatic Discharge Susceptible Items - Grounding (revision of ANSI/ESD S6.1-2014)
This standard applies to bonding and grounding for the prevention of ESD in an EPA. The procedures, materials, and techniques specified in this standard may not be applicable for grounding of electrical sources operating at frequencies above 400 Hz. Electrically initiated explosive devices and hazardous areas with flammable atmospheres may require additional considerations that may not be adequately covered by these requirements.
Single copy price: $105.00 (List)/$75.00 (ESD Members) [Hard Cover]; $130.00 (List)/$100.00 (ESD Members) [Soft Cover]
Order from and send comments to: Christina Earl, cearl@esda.org

BSR/ESD STM12.1-201x, ESD Association Standard Test Method for the Protection of Electrostatic Discharge Susceptible Items - Seating - Resistance Measurement (revision of ANSI/ESD STM12.1-2014)
The test methods established here are designed to measure the resistance of seating. The resistances considered here are measured from various components of the seating to a groundable point such as a conductive caster or a drag chain. Resistivity measurements are not within the scope or purpose of this standard test method.
Single copy price: $105.00 (List)/$75.00 (ESD Members) [Hard Cover]; $130.00 (List)/$100.00 (ESD Members) [Soft Cover]
Order from and send comments to: Christina Earl, cearl@esda.org

BSR/ESD STM15.1-201x, ESD Association Standard Test Method for the Protection of Electrostatic Discharge Susceptible Items - Methods for Resistance Measurement of Gloves and Finger Cots (revision and redesignation of ANSI/ESD STM15.1-201x)
This document applies to all gloves and finger cots with a resistance as measured with personnel as a system of less than 1.0 x 1011 ohms. This document provides test procedures for measuring the electrical resistance of gloves or finger cots. The document also provides methods for performing intrinsic resistance measurements that include surface, volume, and two-point resistance using ANSI/ESD STM11.11, STM11.12, and STM11.13, respectively. “In-use” resistance measurement of the glove/finger cot and personnel together as a system is defined using a constant area and force electrode (CAFE).

Single copy price: $105.00 (List)/$75.00 (ESD Members) [Hard Cover]; $130.00 (List)/$100.00 (ESD Members) [Soft Cover]
Order from and send comments to: Christina Earl, cearl@esda.org

BSR/E1.4-3-201x, Entertainment Technology - Manually Operated Hoist Rigging Systems (revision and partition of ANSI E1.4-2014)
This standard applies to 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.
Single copy price: Free!
Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public_review_docs.php
Send comments to: Karl Ruling, standards@esta.org

CSA public review announcements

The CSA Group has announced drafts for public review that might be of interest to *Standards Watch* readers. To participate in CSA public reviews, please visit: http://publicreview.csa.ca/.

Due 2 September 2019

C392, Testing of three-phase squirrel cage induction motors during refurbishment (new edition)
This standard covers integral horsepower, three-phase, alternating current, squirrel cage induction motors rated up to 15 kV at 50/60 Hz. This standard also covers inverter duty motors. This standard may also be applied with discretion to products outside the scope of this standard.

Due 8 October 2019

S505, Techniques for Dealing with Wind, Snow, & Drifting Snow as it pertains to Northern Infrastructure and Climate Change (the status, whether a new standard or a revision, is not listed)
This standard addresses risks to Northern infrastructure due to wind, snow, and snow drifting. It incorporates various themes, all in the context of Canada's North and climate change:

- weather data, climate variables, and relevant projections and forecasts
- reduce risk of damage
- climate adaptation strategies
- Improve function and accessibility
- design construction techniques

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/ASSP/ISO/IEC 31010-201x, Risk management - Risk assessment techniques (identical national adoption of ISO/IEC 31010:2019 and revision of ANSI/ASSE Z690.3-2011)
This International Standard provides guidance on the selection and application of techniques for assessing risk in a wide range of situations. The techniques are used to assist in making decisions where there is uncertainty, to provide information about particular risks and as part of a process for managing risk. The document provides summaries of a range of techniques, with references to other documents where the techniques are described in more detail.
Contact: Ovidiu Munteanu, OMunteanu@ASSP.org

BSR/ASSP Z359.14-201x, Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and Rescue Systems (revision and redesignation of ANSI/ASSE Z359.14-2014)
This standard establishes requirements for the performance, design, qualification testing, markings and instructions, inspections, maintenance and storage, and removal from service of self-retracting devices (SRDs)

including self-retracting lanyards (SRLs), selfretracting lanyards with integral rescue capability (SRL-Rs), and self-retracting lanyards, personal (SRL-P's). This standard establishes requirements for SRDs intended for use in personal fall arrest or rescue systems for authorized persons within the capacity range of 130 to 310 pounds (59 to 141 kg).
Contact: Ovidiu Munteanu, OMunteanu@ASSP.org

BSR/ASSP Z359.16-201x, Safety Requirements for Climbing Ladder Fall Arrest Systems (revision and redesignation of ANSI ASSE Z359.16-2016)
This standard establishes requirements for the performance, design, marking, qualification testing, instructions for use, inspection, maintenance, storage, and removal from service of vertically oriented Climbing Ladder Fall Arrest Systems (CLFAS) consisting of flexible and rigid carriers with multiple attachment points and associated carrier sleeves for users within the capacity range of 130 to 310 pounds (59 to 141 kg).
Contact: Ovidiu Munteanu, OMunteanu@ASSP.org

BSR/NSF 503-201x, Cannabis and Hemp Product Certification (new standard)
This Standard is intended to contain manufacturing and product testing requirements for cannabis or hemp products for use by humans. It will assist in the determination of adequate facilities and controls for dietary supplement manufacture with sufficient quality to ensure suitability for intended use. Products and ingredients deemed a hazard to public health or safety by a regulatory agency having jurisdiction shall be excluded from the scope of this document. Conventional foods are excluded from the scope of this Standard. Manufacturers shall exercise due diligence to ensure compliance with all applicable regulatory requirements, but compliance with this Standard in itself does not imply that all regulatory requirements have been met.
Contact: Jessica Evans, jevans@nsf.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.

Nine new addenda to ANSI/ASHRAE/IES 90.1-2019:

1. **ANSI/ASHRAE/IES Addendum be 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): 8/19/2019
2. **ANSI/ASHRAE/IES Addendum bp 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): 8/19/2019
3. **ANSI/ASHRAE/IES Addendum br 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): 8/19/2019
4. **ANSI/ASHRAE/IES Addendum bs ANSI/ASHRAE/IES Standard 90.1-2016,** Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 8/19/2019
5. **ANSI/ASHRAE/IES Addendum cf 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): 8/19/2019
6. **ANSI/ASHRAE/IES Addendum cq 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): 8/19/2019
7. **ANSI/ASHRAE/IES Addendum ct 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): 8/19/2019
8. **ANSI/ASHRAE/IES Addendum cu 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): 8/19/2019

9. **ANSI/ASHRAE/IES Addendum cy 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): 8/19/2019

ANSI/ASTM E2073-2019, Reinstatement of Test Method for Photopic Luminance of Photoluminescent (Phosphorescent) Markings (new standard): 7/9/2019

ANSI/UL 498-2019, Standard for Safety for Attachment Plugs and Receptacles (revision of ANSI/UL 498-2018): 8/9/2019

ANSI/UL 498-2019a, Standard for Safety for Attachment Plugs and Receptacles (revision of ANSI/UL 498-2018): 8/9/2019

Draft IEC & ISO documents

This section lists proposed documents that the International Electromechanical 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.

22G/396/CDV, IEC 61800-1 ED2: Adjustable speed electrical power drive systems - Part 1: General requirements - Rating specifications for low voltage adjustable speed DC power drive systems, 1 November 2019

23H/456/CDV, IEC 60309-1 ED5: Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes - Part 1: General requirements, 1 November 2019

23H/457/CDV, IEC 60309-2 ED5: Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes - Part 2: Dimensional interchangeability requirements for pin and contact tube accessories, 1 November 2019

23H/458/CDV, IEC 60309-4 ED2: Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes - Part 4: Switched socket-outlets and connectors, with or without interlock, 1 November 2019

ISO/IEC DIS 23090-8, Information technology - Coded representation of immersive media - Part 8: Network based media processing, 1 November 2019, $175.00

125/8/NP, PNW 125-8: Personal e-Transporters - Safety requirements and test methods, 8 November 2019

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/IEC 9075-2/Cor1:2019, Information technology – Database languages - SQL - Part 2: Foundation (SQL/Foundation) - Corrigendum, FREE

ISO/IEC 9075-4/Cor1:2019, Information technology – Database languages - SQL - Part 4: Persistent stored modules (SQL/PSM) - Corrigendum, FREE

ISO/IEC 9075-9/Cor1:2019, Information technology – Database languages - SQL - Part 9: Management of External Data (SQL/MED) - Corrigendum, FREE

ISO/IEC 9075-11/Cor1:2019, Information technology – Database languages - SQL - Part 11: Information and definition schemas (SQL/Schemata) - Corrigendum, FREE

ISO/IEC 9075-13/Cor1:2019, Information technology – Database languages - SQL - Part 13: SQL Routines and types using the Java TM programming language (SQL/JRT) - Corrigendum, FREE

ISO/IEC 9075-14/Cor1:2019, Information technology – Database languages - SQL - Part 14: XML-Related Specifications (SQL/XML) - Corrigendum, FREE

ISO/IEC 15961-2:2019, Information technology - Data protocol for radio frequency identification (RFID) for item management - Part 2: Registration of RFID data constructs, $68.00

ISO/IEC 21000-22:2019, Information technology – Multimedia framework (MPEG-21) - Part 22: User Description, $232.00

ISO/IEC 27102:2019, Information security management – Guidelines for cyber-insurance, $103.00

ISO/IEC TR 29106/Amd2:2019, Information technology – Generic cabling - Introduction to the MICE environmental classification - Amendment 2, FREE!

ESTA Standards Watch

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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	14:00 – 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
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	19:00 - 23:00	Saturday 18 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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