



# Technical Standards Program

## ESTA Standards Watch

September 2016

Volume 20, Number 17

---

### Table of Contents

<a href="#">New Project: The Event Safety Guide, second edition.....</a>	<a href="#">1</a>
<a href="#">Two ESTA Draft Standards in Public Review.....</a>	<a href="#">2</a>
<a href="#">ICC Public Comment Agenda Available.....</a>	<a href="#">2</a>
<a href="#">ANSI Webinar on Brexit and Standardization.....</a>	<a href="#">2</a>
<a href="#">Opus – German Stage Award Entries Now Invited.....</a>	<a href="#">3</a>
<a href="#">WTO Technical Barrier to Trade Notifications.....</a>	<a href="#">3</a>
Argentina Notification ARG/305.....	3
Trinidad and Tobago Notification TTO/116.....	3
Trinidad and Tobago Notification TTO/115 ( Corr.1 ).....	4
<a href="#">ANSI Public Review Announcements.....</a>	<a href="#">4</a>
Due 10 October 2016.....	4
Due 17 October 2016.....	5
Due 24 October 2016.....	5
Due 25 October 2016.....	6
Due 1 November 2016.....	6
<a href="#">BSI Public Review Announcements.....</a>	<a href="#">7</a>
Due 24 October 2016.....	7
Due 13 November 2016.....	7
<a href="#">DIN Public Review Announcements.....</a>	<a href="#">7</a>
Due 16 November 2016.....	7
<a href="#">New ANS Projects.....</a>	<a href="#">7</a>
<a href="#">Final Actions on American National Standards.....</a>	<a href="#">9</a>
<a href="#">Draft IEC &amp; ISO Standards.....</a>	<a href="#">10</a>
<a href="#">Recently Published IEC &amp; ISO Standards.....</a>	<a href="#">11</a>
<a href="#">TSP Meeting Schedule.....</a>	<a href="#">13</a>
<a href="#">Investors in Innovation.....</a>	<a href="#">14</a>

---

### New Project: The Event Safety Guide, second edition

The Event Safety Alliance and ESTA have agreed on a joint copyright that will allow a second edition of *The Event Safety Guide* to be developed as an American National Standard. The project is so new that it does not have an alphanumeric designation yet; the first working group meeting will be on the morning of Friday, October 21, at the Embassy Suites, 3600 Paradise Road in Las Vegas. The working group has a special membership application form, available at [http://tsp.esta.org/tsp/working\\_groups/index.html](http://tsp.esta.org/tsp/working_groups/index.html).

The special application form is necessitated by the working group having interest categories different from ESTA's other working groups. The working group needs representation in each of the interest categories to have a balance of interests. The interest categories are:

- Event producer
- Equipment producer
- Equipment dealer or rental business
- Designer of events (including artistic elements, safety systems, etc.)
- Event worker
- Performing artist
- Event insurance company
- General interest

Voters in the Technical Standards Program are required to attend meetings and to vote on letter ballots. Membership in ESTA or any other organization is not a requirement for participation in ESTA's Technical Standards Program, but there is a \$100 a year per person participation fee—a flat rate, regardless of voting status or the number of working groups a person joins.

The first edition of The Event Safety Guide is an excellent reference to help people plan and execute safe events. However, it needs expansion and revision for a second edition, and American National Standard status would help it gain wider recognition and more people using it. The revision work can be done as part of the process of creating an ANS. The plan is to work on the *Guide* as a multi-part standard, so that sections needing little work can be adopted and published quickly.

## Two ESTA Draft Standards in Public Review

Two draft standards are posted for public comment at [http://tsp.esta.org/tsp/documents/public\\_review\\_docs.php](http://tsp.esta.org/tsp/documents/public_review_docs.php). Instructions on how to comment are available, along with the review forms and the draft standards. The public reviews are over at the end of the day on 26 September. Submit comments to [standards@esta.org](mailto:standards@esta.org) before 27 September 2016.

### **BSR E1.4-3 – 20xx, Entertainment Technology—Manually Operated Hoist Rigging Systems**

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 intends to establish 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.

### **BSR E1.47 – 20xx, Entertainment Technology—Recommended Guidelines for Entertainment Rigging System Inspections**

These guidelines include recommended inspector qualifications and responsibilities, scope and frequency of inspections, content of the rigging inspection report, and related information concerning the inspection process. Consensus on this document has been achieved, but one change is needed to bring clause 5.1.6 into compliance with the ANSI requirements for commercial terms and conditions in American National Standards.

## ICC Public Comment Agenda Available

The schedule for the 2016 Group B Public Comment Hearings is now available at <http://go.iccsafe.org/e/25182/uploads-2016-PCH-Schedule-pdf/bsxqn9/1078403454>. The hearings will begin at 08:00 on Wednesday, Oct. 19, at the Kansas City Convention Center. Final changes to the codes will be decided through both in-person and online voting. Register to attend the ICC 2016 Annual Conference, Public Comment Hearings and Expo at <http://go.iccsafe.org/e/25182/2016-ICC-PCH-index-html/bsxqnf/1078403454>.

## ANSI Webinar on Brexit and Standardization

The American National Standards Institute (ANSI) will host an international policy webinar on Friday, 23 September 2016, from 09:00 to 10:30 ET to highlight Brexit's impact on international and regional standardization. The session—free for ANSI members and \$49 for all other participants—will feature opening

remarks by ANSI president and CEO Joe Bhatia, followed by 15 minute remarks with presentations from several standardization expert speakers. All interested stakeholders can visit the webinar registration page at <http://estalink.us/5zj21>.

---

## Opus – German Stage Award Entries Now Invited

The entry period is now open for the Opus – German Stage Award. New rules allow entries to be for individuals and for team projects. Please visit <http://pls.messefrankfurt.com/frankfurt/de/besucher/events/awards/opus.html> or <http://pls.messefrankfurt.com/frankfurt/en/besucher/events/awards/opus.html> for more information in German or English respectively. The application form button is three-quarters of the way down the page: “Reichen Sie jetzt” or “Apply now.” The award ceremony will take place on 6 April 2017 in the Saal Europa at Messe Frankfurt. The deadline for entries is 4 November 2016.

---

## WTO Technical Barrier to Trade Notifications

The U.S. Department of Commerce's service, Notify U.S., recently has announced WTO Technical Barrier to Trade notices that may be of interest to *Standards Watch* readers. If you have a problem with these notices, you can protest through your representative to the WTO. See "Guidance for Comment Submissions by U.S. Industry on TBT Notifications" at <http://tsapps.nist.gov/notifyus/data/guidance/guidance.cfm> or <http://ec.europa.eu/enterprise/tbt/> for advice on filing objections.

### Argentina Notification ARG/305

**Date issued:** 1 September 2016

**Agency Responsible:** Secretariat of Trade

**National inquiry point:** Dirección Nacional de Comercio Interior (DNCI)

**Products covered:** Lifts and lift components

**Title:** Certification of compliance with the essential safety requirements for lifts and/or their safety components. Amendment

**Description of content:** Replaces Annex II of former Secretariat of Industry, Trade and Mining Resolution No. 897/1999 concerning certification procedures and deadlines.

**Objective and rationale:** Amendment of implementation deadlines.

**Relevant documents:** Previous documents: G/TBT/Notif.00/60

([http://www.puntofocal.gov.ar/notific\\_otros\\_miembros/Arg/00-60\\_t.pdf](http://www.puntofocal.gov.ar/notific_otros_miembros/Arg/00-60_t.pdf)) and Add.1

([http://www.puntofocal.gov.ar/notific\\_otros\\_miembros/Arg/00-60a1\\_t.pdf](http://www.puntofocal.gov.ar/notific_otros_miembros/Arg/00-60a1_t.pdf)), Add.2

([http://www.puntofocal.gov.ar/notific\\_otros\\_miembros/Arg/00-60a2\\_t.pdf](http://www.puntofocal.gov.ar/notific_otros_miembros/Arg/00-60a2_t.pdf)), Add.3

([http://www.puntofocal.gov.ar/notific\\_otros\\_miembros/Arg/00-60a3\\_t.pdf](http://www.puntofocal.gov.ar/notific_otros_miembros/Arg/00-60a3_t.pdf))

**Proposed date of adoption:** Not given by country

**Proposed date of entry into force:** Not given by country

**Final date for comments:** Not given by country

**Full text:** [https://tsapps.nist.gov/notifyus/docs/wto\\_country/ARG/full\\_text/pdf/ARG305\(spanish\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/ARG/full_text/pdf/ARG305(spanish).pdf)

### Trinidad and Tobago Notification TTO/116

**Date issued:** 29 August 2016

**Agency responsible:** Trinidad and Tobago Bureau of Standards (TTBS)

**National inquiry point:** Trinidad and Tobago Bureau of Standards (TTBS)

**Products covered:** Electric cables - Low voltage energy cables of rated voltages up to and including 450/750 V (Uo/U) - Cables for general applications - Single core non-sheathed cables with thermoplastic PVC insulation

**Title:** TTS 650:20XX, Electric cables - Low voltage energy cables of rated voltages up to and including 450/750 V (Uo/U) - Cables for general applications - Single core non-sheathed cables with thermoplastic PVC insulation (9 pages, in English)

**Description of content:** This Standard applies to non-sheathed single core cables insulated with thermoplastic (PVC) insulation. The cables are of rated voltages Uo/U up to and including 450/750 V. The cables are intended for fixed wiring applications.

**Objective and rationale:** Compulsory status has been recommended in order to protect the consumer or user against danger to health or safety by ensuring a product of acceptable quality.

**Relevant documents:** BS EN 50525-2-31:2011, Electric cables - Low voltage energy cables of rated voltages up to and including 450/750 V (Uo/U) - Part 2-31: Cables for general applications - Single core non-sheathed cables with thermoplastic PVC insulation.

**Proposed date of adoption:** Not given by country

**Proposed date of entry into force:** 1 June 2017

**Final date for comments:** 10/28/2016

**Full text:** [https://tsapps.nist.gov/notifyus/docs/wto\\_country/TTO/full\\_text/pdf/TTO116\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/TTO/full_text/pdf/TTO116(english).pdf)

#### **Trinidad and Tobago Notification TTO/115 ( Corr.1 )**

**Date issued:** 29 August 2016

**Agency responsible:** Trinidad and Tobago Bureau of Standards (TTBS)

**National inquiry point:** Trinidad and Tobago Bureau of Standards (TTBS)

**Products covered:** Self-ballasted LED lamps

**Title:** TTS 651:20XX, Self-ballasted LED lamps for general lighting services with supply voltages > 50 V - Performance requirements (9 pages, in English)

**Description of content:** This standard specifies the performance requirements, together with the test methods and conditions required to show compliance of LED lamps with integral means for stable operation, intended for domestic and similar general lighting purposes, having: 1. a rated power up to 60 W 2. a rated voltage of >50 V a.c. up to 250 V a.c. 3. a lamp cap as listed in IEC 62560

**Objective and rationale:** Compulsory status has been recommended in order to ensure acceptable product quality

**Relevant documents:** IEC 62616:2013, Self-ballasted LED lamps for general lighting services with supply voltages > 50 V - Performance requirements

**Proposed date of adoption:** Not given by country

**Proposed date of entry into force:** 1 June 2017

**Final date for comments:** 28 October 2016

**Full text:** [https://tsapps.nist.gov/notifyus/docs/wto\\_country/TTO/full\\_text/pdf/TTO115\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/TTO/full_text/pdf/TTO115(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](mailto:psa@ansi.org).

### **Due 10 October 2016**

#### **BSR ASSE A10.11-201X, Safety Requirements for Personnel Nets** (revision of ANSI ASSE A10.11-2010)

Establishes safety requirements for the selection, installation, and use of personnel nets during construction, repair, and demolition operations.

Single copy price: \$50.00

Order from and send comments to: Tim Fisher, [TFisher@ASSE.Org](mailto:TFisher@ASSE.Org)

#### **BSR/AWS D9.1M/D9.1-201x, Sheet Metal Welding Code** (revision of ANSI/AWS D9.1M/D9.1-2012)

This code provides qualification, workmanship, and inspection requirements for both arc welding and braze welding, as they apply to the fabrication and erection of nonstructural sheet metal components and systems.

Single copy price: \$40.00

Order from and send comments to: Jennifer Molin, [jmolin@aws.org](mailto:jmolin@aws.org)

#### **BSR/ICC A117.1-201x, Accessible and Usable Buildings and Facilities** (revision of ANSI/ICC A117.1-2009)

Site design and architectural features affecting the accessibility and usability of buildings and facilities, consideration to be given to all types of physical and sensory disabilities, to publicly used buildings and facilities, and to residential structures.

Single copy price: Free

Obtain an electronic copy from: <http://www.iccsafe.org/icc-asc-a117/>

Send comments to: Edward Wirtschoreck, [ewirtschoreck@iccsafe.org](mailto:ewirtschoreck@iccsafe.org)

**BSR/NSF 426-201x (i2r1), Standard for Environmental Leadership Assessment of Servers** (new standard)

This standard defines environmental performance criteria for computer servers as defined in the Energy Star Server specifications, including managed servers and blade servers. This standard establishes criteria for multiple levels of environmental leadership and performance throughout the product life cycle, relating to reduction or elimination of environmentally sensitive materials, materials selection, design for end of life, lifecycle extension, energy conservation, end-of-life management, corporate responsibility, and packaging. This is a new joint standard between IEEE and NSF. Single copy price: Free

Obtain an electronic copy from: <http://estalink.us/pdy3i>

Send comments to: Jessica Slomka, [jslomka@nsf.org](mailto:jslomka@nsf.org)

**BSR/NSF 342-201x (i9r1), Sustainability Assessment for Wallcovering Products** (revision of ANSI/NSF 342-2014)

The overall purpose of this standard is to facilitate the thorough communication of information that is verifiable, accurate, and credible associated with the production, distribution, and use of wallcovering products. Such communication is expected to encourage the demand for and supply of products that cause less impact on the environment and society, thereby stimulating the potential for market-driven continuous improvement. The standard is voluntary and encourages inclusive participation in the production and distribution of sustainable wallcovering products within the supply chain.

Single copy price: Free

Obtain an electronic copy from: [http://standards.nsf.org/apps/group\\_public/document.php?document\\_id=34175](http://standards.nsf.org/apps/group_public/document.php?document_id=34175)

Send comments to: Kianda Franklin, [kfranklin@nsf.org](mailto:kfranklin@nsf.org)

**Due 17 October 2016**

**BSR ASSE Z359.6-201X, Specifications and Design Requirements for Active Fall Protection Systems**

(revision of ANSI ASSE Z359.6-2009)

This standard is intended for engineers who are trained as qualified persons and who have expertise in the design of active fall protection systems. It specifies requirements for the design and performance of complete active fall protection systems, including travel restraint and vertical and horizontal fall arrest systems.

Single copy price: \$100.00

Order from and send comments to: Tim Fisher, (847) 768-3411, [TFisher@ASSE.Org](mailto:TFisher@ASSE.Org)

**Due 24 October 2016**

**BSR/NASBLA 102-201X, Basic Boating Knowledge - Sailing** (new standard)

This standard applies to basic sailing knowledge education and proficiency assessment in the United States, U.S. territories, and the District of Columbia. This document establishes the national standard for basic recreational sailing knowledge with a primary focus on safety and mitigation of risks associated with recreational sail boating. This standard contains the basic knowledge elements that an entry-level operator should have in order to safely operate a small sailboat of less than 26 feet in length by day in light to moderate winds (up to 12 knots) and sea conditions.

Single copy price: Free

Order from and send comments to: Pamela Dillon, [pam@nasbla.org](mailto:pam@nasbla.org)

**BSR C18.3M, Part 2-201x, Portable Lithium Primary Cells and Batteries - Safety Standard** (revision of ANSI C18.3M, Part 2-2011)

This American National Standard specifies tests and requirements for portable primary lithium cells and batteries, both the chemical systems and the types covered in ANSI C18.3M, Part 1, to ensure their safe operation under normal use and reasonably foreseeable misuse. For reference, the chemical systems standardized in ANSI C18.3M, Part 1 are: lithium carbon monofluoride, lithium manganese dioxide, and lithium iron disulfide.

Single copy price: \$84.00

Order from and send comments to: Khaled Masri, [khaled.masri@nema.org](mailto:khaled.masri@nema.org)

## Due 25 October 2016

### **BSR/ASME BTH-1-201x , Design of Below-the-Hook Lifting Devices** (revision of ANSI/ASME BTH-1-2014)

This standard provides minimum structural and mechanical design and electrical component selection criteria for ASME B30.20, Below-the-Hook Lifting Devices. The provisions defined in this standard address the most common and broadly applicable aspects of the design or modification of below-the-hook lifting devices.

Compliance with requirements and criteria that may be unique to specialized industries and environments is outside the scope of this standard. Lifting devices designed to this standard shall comply with ASME B30.20, Below-the-Hook Lifting Devices. ASME B30.20 includes provisions that apply to the marking, construction, installation, inspection, testing, maintenance, and operation of below-the-hook lifting devices.

Single copy price: Free

Order from: Mayra Santiago, [ansibox@asme.org](mailto:ansibox@asme.org)

Send comments to: Grace Bolan, [bolang@asme.org](mailto:bolang@asme.org)

### **BSR/IEEE 45.8-201x, Recommended Practice for Electrical Installations on Shipboard - Cable Systems** (new standard)

The scope of this document is to provide recommendations for selection, application, and installation of electrical power, signal, control, data, and specialty marine cable systems on shipboard. These recommendations include the present-day technologies, engineering methods, and engineering practices.

Single copy price: \$72.00 (pdf); \$90.00 (print)

Order from: online: <http://standards.ieee.org/store>

Send comments to: Karen Evangelista, [k.evangelista@ieee.org](mailto:k.evangelista@ieee.org)

### **BSR/IEEE 1048-201x, Guide for Protective Grounding of Power Lines** (new standard)

This document provides guidelines for temporary protective grounding of electric power lines to aid in the protection of workers from voltages and currents that might develop at a de-energized worksite during maintenance of AC overhead and underground, transmission, and distribution lines, cables and equipment.

Single copy price: \$70.00 (pdf)

Order from: online: <http://standards.ieee.org/store>

Send comments to: Karen Evangelista, [k.evangelista@ieee.org](mailto:k.evangelista@ieee.org)

### **BSR/IEEE 1855-201x, Standard for Fuzzy Markup Language** (new standard)

This standard defines an XML-based language, named Fuzzy Markup Language (FML), aimed at providing a unified and well-defined representation of Fuzzy Logic Systems (FLSs). This standard includes an extendable schema that natively defines the basic components of a fuzzy logic system and enables the modeling of different categories of fuzzy inference engines, including Mamdani [B16], Tsukamoto [B21], TakagiSugeno-Kang (TSK) [B20], and anYa [B5].

Single copy price: \$89.00 (pdf); \$111.00 (print)

Order from: online: <http://standards.ieee.org/store>

Send comments to: Karen Evangelista, [k.evangelista@ieee.org](mailto:k.evangelista@ieee.org)

## Due 1 November 2016

### **BSR/IEEE 24748-4-201x, ISO/IEC/IEEE International Standard for Systems and Software Engineering - Life Cycle Management - Part 4: Systems Engineering Planning** (new standard)

This part of ISO/IEC/IEEE 24748 specifies the Technical Management processes from ISO/IEC/IEEE 15288 that are required to be implemented for planning a systems engineering project, gives guidelines for applying the required processes, specifies a required information item, a plan for the technical management and execution of the project that is to be produced through the implementation of the Project Planning process, gives guidelines for the format and content of the required information item, and provides normative definition of the content of the information item that results from the application of these processes to that end.

Single copy price: \$89.00 (pdf); \$111.00 (print)

Order from: online: <http://standards.ieee.org/store>

Send comments to: Karen Evangelista, [k.evangelista@ieee.org](mailto:k.evangelista@ieee.org)

## BSI Public Review Announcements

BSI Standards has announced draft documents for public review that might be of interest to *Standards Watch* readers. The documents may be commented on at <http://drafts.bsigroup.com/>.

**Due 24 October 2016**

### **EN 12665, Light and lighting. Basic terms and criteria for specifying lighting requirements**

This European Standard defines basic terms and definitions for use in all lighting applications. This standard also sets out a framework for the specification of lighting requirements, giving details of aspects that are to be considered when setting those requirements.

### **EN 15088, Aluminium and aluminium alloys. Structural products for construction works. Technical conditions for inspection and delivery**

This European Standard specifies requirements for conformity assessment of performance characteristics for semi-finished structural aluminium construction products that are used on load bearing structural construction works, covering both building and civil engineering works. This standard specifies product characteristics, testing assessment, sampling methods and conformity assessment covering manufacturing characteristics. It covers semi-finished products which may not fit into structural products without any further transformation (e.g. cutting, drilling). This standard does not apply to products which are produced from semi-finished products and after transformation are used on particular structural construction products, covered by EN 1090-1. This European standard does not apply to construction products that are produced with joining operations (e.g. bolting, welding) covered by EN 1090-1.

**Due 13 November 2016**

### **BS 1722-17, Fences – Part 17: Specification for electric security fences – Design, installation and maintenance**

This British Standard specifies requirements for the design, installation and maintenance of electric security fences. It is applicable to installations where the electric security fence is to provide both a deterrent effect and a physical barrier. It does not outline the specific method to be used in construction. Construction specifics are covered in the appointed approved manufacturers installation courses and material available only to accredited installation dealers and marketing partners.

---

## DIN Public Review Announcements

The Deutsches Institut für Normung has announced draft documents for public review that may be of interest to *Standards Watch* readers. After you register with DIN at <http://www.entwuerfe.din.de/>, you may purchase and comment on DIN draft standards. They are written in German.

**Due 16 November 2016**

### **DIN 15584-1, Digitales Kino - Bild-Projektion - Teil 1: Bild-Geometrien und deren Toleranzen**

The draft standard defines the displayed pixel area of digital image projection formats. It also contains the tolerances within which the image formats are to be presented. The draft standard is applicable to all newly established theater installations and inspections of projection equipment in cinemas, with the exceptions that it is not applicable to home cinema installations or Full -HD or Ultra HD displays.

Single-copy price: 60.50 €

### **DIN 15700, Veranstaltungstechnik - Mobile Potentialausgleichssysteme**

This draft standard applies to the use of mobile systems for providing grounding (earthing) and equipotential bonding of equipment. Grounding and bonding for lightning protection is not included.

Single-copy price: 60.50 €

---

## 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, or (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 C136.54-201x, Occupancy Sensors for Roadway and Area Lighting** (new standard)

This standard covers the following roadway and area lighting equipment, which may be physically and electrically interchanged to operate within established values: (a) Occupancy, vacancy or motion sensors (hereafter called “controls”) that may be mounted in or on roadway and area luminaires, (b) Occupancy or motion sensors that may be mounted externally to control an LED luminaire, (c) Auxiliary devices used to connect occupancy sensors or to augment operation of occupancy sensors used on LED luminaires, and (d) Controls that may provide continuous dimming. Contact: Karen Willis, [Karen.Willis@nema.org](mailto:Karen.Willis@nema.org)

**BSR/AISI S400-22-201x, North American Standard for Seismic Design of Cold-Formed Steel Structural Systems** (revision, redesignation and consolidation of ANSI/AISI S400-2015)

AISI S-400 is applicable for the design and construction of cold-formed steel members and connections in seismic force resisting systems (SFRS) in buildings and other structures. Contact: Helen Chen, [Hchen@steel.org](mailto:Hchen@steel.org)

**BSR/AWS B2.1-1-001-201X, Standard Welding Procedure Specification (SWPS) for Shielded Metal Arc Welding of Carbon Steel, (M-1/P-1, Group 1 or 2), 3/16 inch [5 mm] through 3/4 inch [19 mm], E7016 and E7018, in the As-Welded Condition, Primarily Plate and Structural Applications** (new standard)

This standard contains the essential welding variables for carbon steel plate and pipe in the thickness range of 3/16 inch [5 mm] through 3/4 inch [19 mm], using manual shielded metal arc welding. It cites the base metals and operating conditions necessary to make the weldment, the filler metal specifications, and the allowable joint designs for fillet and groove welds. This SWPS was developed primarily for plate and structural applications. Contact: Jennifer Rosario, [jrosario@aws.org](mailto:jrosario@aws.org)

**BSR/AWS B2.1-1-002-201X, Gas Tungsten Arc Welding of Carbon Steel, (M-1/P-1, Group 1 or 2), 3/16 inch [5 mm] through 7/8 inch [22 mm], ER70S-2, ER70S-3, in the As-Welded Condition, Primarily Plate and Structural Applications** (new standard)

This standard contains the essential welding variables for carbon steel plate and pipe in the thickness range of 3/16 inch [5 mm] through 7/8 inch [22 mm], using manual gas tungsten arc welding. It cites the base metals and operating conditions necessary to make the weldment, the filler metal specifications, and the allowable joint designs for fillet and groove welds. This SWPS was developed primarily for plate and structural applications. Contact: Jennifer Rosario, [jrosario@aws.org](mailto:jrosario@aws.org)

**BSR/IES RP-42-201x, Roadway Lighting Handbook** (new standard)

Presently, all IES Roadway standards are published as separate documents with different publication dates/content. A Master Handbook will harmonize all the relevant topics and set them on a regular update schedule of about 3 years, similar to codes. This updated volume will also incorporate additional information/references/citations regarding current vision, environmental, and health data, as applicable. Contact: Pat McGillicuddy, [pmcgillicuddy@ies.org](mailto:pmcgillicuddy@ies.org)

**BSR/INFOCOMM 2M-201x, Standard Guide for Audiovisual Systems Design and Coordination Processes** (revision of ANSI/INFOCOMM 2M-2010)

As previously published, this standard outlined a consistent set of the standard tasks, responsibilities, and deliverables required for professional audiovisual systems design, coordination, and integration. A properly documented audiovisual system provides clear definition and coordination of processes, resources, and responsibilities of the design and installation project teams. The system goals and project requirements will be documented in a logical and efficient manner and reported to the client. Contact: Ann Brigida, [abrigida@infocomm.org](mailto:abrigida@infocomm.org)

**BSR/NFPA 70B-201x, Recommended Practice for Electrical Equipment Maintenance** (revision of ANSI/NFPA 70B-2015)

This recommended practice applies to preventive maintenance for electrical, electronic, and communication systems and equipment and is not intended to duplicate or supersede instructions that manufacturers normally

provide. Systems and equipment covered are typical of those installed in industrial plants, institutional and commercial buildings, and large multifamily residential complexes. Consumer appliances and equipment intended primarily for use in the home are not included. Contact: Carolyn Cronin, [ccronin@nfpa.org](mailto:ccronin@nfpa.org)

**BSR/NFPA 350-201x, Guide for Safe Confined Space Entry and Work** (revision of ANSI/NFPA 350-2015)

This guide is intended to protect workers who enter into confined spaces for inspection or testing or to perform associated work from death and from life-threatening and other injuries or illnesses and to protect facilities, equipment, non-confined space personnel, and the public from injuries associated with confined space incidents. Contact: Carolyn Cronin, [ccronin@nfpa.org](mailto:ccronin@nfpa.org)

**BSR/NFPA 551-201x, Guide for the Evaluation of Fire Risk Assessments** (revision of ANSI/NFPA 551-2012)

This guide is intended to provide assistance, primarily to authorities having jurisdiction (AHJs), in evaluating the appropriateness and execution of a fire risk assessment (FRA) for a given fire safety problem. While this guide primarily addresses regulatory officials, it also is intended for others who review FRAs, such as insurance company representatives and building owners. Contact: Carolyn Cronin, [ccronin@nfpa.org](mailto:ccronin@nfpa.org)

**BSR/NFPA 701-201x, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films**  
(revision of ANSI/NFPA 701-2014)

This standard establishes test methods to assess the propagation of flame of various textiles and films under specified fire test conditions. Contact: Carolyn Cronin, [ccronin@nfpa.org](mailto:ccronin@nfpa.org)

**BSR/NFPA 900-201x, Building Energy Code** (revision of ANSI/NFPA 900-2015)

These regulations shall control the minimum energy-efficient requirements for the following: (1) The design, construction, reconstruction, alteration, repair, demolition, removal, inspection, issuance, and revocation of permits or licenses, installation of equipment related to energy conservation in all buildings and structures and parts thereof; (2) The rehabilitation and maintenance of construction related to energy efficiency in existing buildings; and (3) The standards or requirements for materials to be used in connection therewith. Contact: Carolyn Cronin, [ccronin@nfpa.org](mailto:ccronin@nfpa.org)

**BSR/NFPA 1561-201x, Standard on Emergency Services Incident Management System and Command Safety** (revision of ANSI/NFPA 1561-2013)

This standard contains the minimum requirements for an incident management system to be used by emergency services to manage all emergency incidents. Contact: Carolyn Cronin, [ccronin@nfpa.org](mailto:ccronin@nfpa.org)

**BSR/NFPA 1600-201x, Standard on Disaster/Emergency Management and Business Continuity/Continuity of Operations Programs** (revision of ANSI/NFPA 1600-2015)

This standard shall establish a common set of criteria for all hazards disaster/emergency management and business continuity programs, referred to in this standard as “the program.” Contact: Carolyn Cronin, [ccronin@nfpa.org](mailto:ccronin@nfpa.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 C78.50-2016**, Electric Lamps - Assigned LED Lamp Codes (revision of ANSI C78.50-2014): 23 August 2016

**ANSI C78.51-2016**, Electric Lamps: LED (Light Emitting Diode) Lamps - Method of Designation (new standard): 23 August 2016

**ANSI/ATIS 0600015.03-2016**, Energy Efficiency for Telecommunication Equipment: Methodology for Measurement and Reporting for Router and Ethernet Switch Products (revision of ANSI ATIS 0600015.03-2013): 30 August 2016

**ANSI/AWS A1.1-2016**, Metric Practice Guide for the Welding Industry (new standard): 30 August 2016

**ANSI/IEEE 1788-2015**, Standard for Interval Arithmetic (new standard): 26 August 2016

**ANSI/IEEE 3333.1.1-2015**, Standard for Quality of Experience (QoE) and Visual-Comfort Assessments of Three-Dimensional (3D) Contents Based on Psychophysical Studies (new standard): 18 August 2016

---

## **Draft IEC & ISO Standards**

This section lists proposed standards that the International Electromechanical Commission (IEC) and International Organization for Standardization (ISO) are considering for approval. Standards Watch readers interested in reviewing and commenting on the 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](mailto:czegers@ansi.org). Comments from US citizens regarding ISO documents should be sent to Karen Hughes at [isot@ansi.org](mailto:isot@ansi.org). The prices, when shown, are for purchases through ANSI; prices elsewhere may differ. The sort order is first by due date then by alphanumeric designation.

**ISO/IEC 14496-10/DAMd4**, Information technology - Coding of audiovisual objects - Part 10: Advanced Video Coding - Amendment 4: Additional colour space and tone mapping descriptors; 09 November 2015 [*sic*]; \$82.00

**ISO/IEC 14496-22/DAMd2**, Information technology - Coding of audiovisual objects - Part 22: Open Font Format - Amendment 2: Updated text layout features and implementations; 25 September 2016; \$67.00

**ISO/IEC 21000-22/DAMd1**, Information technology – Multimedia framework (MPEG-21) - Amendment 1: Reference software for MPEG-21 user description; 25 September 2016; \$82.00

**29/917/DTR, IEC TR 63079**: Code of practice for hearing loop systems (HLS); 21 October 2016

**ISO/IEC 23003-4/DAMd2**, Information technology - MPEG audio technologies - Part 4: Dynamic Range Control - Amendment 2: Reference software; 04 November 2016; \$33.00

**ISO/IEC 23008-12/DAMd1**, Information technology - High efficiency coding and media delivery in heterogeneous environments - Part 12: Image file format - Amendment 1: Support for AVC, JPEG and layered coding of images; 04 November 2016; \$88.00

**ISO 17949/DAMd1**, Impact test procedures for road vehicles – Seating and positioning procedures for anthropomorphic test devices - Procedure for the WorldSID 50th percentile male side-impact dummy in front outboard seating positions - Amendment 1; 06 November 2016; \$29.00

**ISO/IEC 23001-8/DAMd1**, Information technology - MPEG systems technologies - Part 8: Coding-independent code points - Amendment 1: Additional code points for colour description; 10 November 2016; \$62.00

**34C/1250/CD, IEC 62386-101 A1 Ed.2**: Digital addressable lighting interface - Part 101: General requirements - System components; 11 November 2016

**34C/1252/CD, IEC 62386-102 A1 Ed.2**: Digital addressable lighting interface - Part 102: General requirements - Control gear; 11 November 2016

**34C/1254/CD, IEC 62386-103 A1 Ed.1**: Digital addressable lighting interface - Part 103: General requirements - Control devices; 11 November 2016

**3D/282/DTS, IEC/TS 62720 Ed2**: Identification of units of measurement for computer-based processing; 11 November 2016

**ISO/DIS 80000-4**, Quantities and units - Part 4: Mechanics ; 13 November 2016; \$82.00

**100/2720/CDV, IEC 61937-3 Ed.3.0:** Digital audio -Interface for nonlinear PCM encoded audio bitstreams applying IEC 60958 - Part 3: Non-linear PCM bitstreams according to the AC-3 and enhanced AC -3 formats (TA 4); 18 November 2016

**100/2721/CDV, IEC 61937-9 Ed.2.0:** Digital audio - Interface for nonlinear PCM encoded audio bitstreams applying IEC 60958 - Part 9: Non-linear PCM bitstreams according to the MAT format (TA 4); 18 November 2016

**100/2723/CDV, IEC 61937-14 Ed.1.0:** Digital audio - Interface for nonlinear PCM encoded audio bitstreams applying IEC 60958 - Part 14: Non-linear PCM bitstreams according to the AC-4 format (TA 4); 18 November 2016

**4/313A/CDV, Amendment 1 to IEC 62504 Ed.1:** General lighting - Light emitting diode (LED) products and related equipment – Terms and definitions; 18 November 2016

**ISO/DIS 16069,** Graphical symbols - Safety signs - Safety way guidance systems (SWGS); 18 November 2016; \$112.00

**ISO/IEC 13818-1/DAmD8,** Extensions for simplified carriage of MPEG -4 over MPEG-2; 13 November 2021 [sic]; \$40.00

---

## Recently Published IEC & ISO Standards

Listed here are documents recently approved by the IEC and ISO. A list of standards resellers is available at <http://webstore.ansi.org/faq.aspx#resellers>.

**IEC 61730-1 Ed. 2.0 b:2016,** Photovoltaic (PV) module safety qualification - Part 1: Requirements for construction, \$303.00

**IEC 61730-2 Ed. 2.0 b:2016,** Photovoltaic (PV) module safety qualification - Part 2: Requirements for testing, \$303.00

**S+ IEC 61730-2 Ed. 2.0 en:2016** (Redline version), Photovoltaic (PV) module safety qualification - Part 2: Requirements for testing, \$363.00

**IEC 61800-5-1 Amd.1 Ed. 2.0 b:2016,** Amendment 1 – Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy, \$61.00

**IEC 61800-5-1 Ed. 2.1 b:2016,** Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy, \$545.00

**IEC 62680-1-3 Ed. 1.0 en:2016,** Universal serial bus interfaces for data and power - Part 1-3: Universal Serial Bus interfaces - Common components - USB Type-C™ cable and connector specification, \$411.00

**IEC 62849 Ed. 1.0 b:2016,** Performance evaluation methods of mobile household robots, \$206.00

**IEC/TR 63036 Ed. 1.0 en:2016,** Electrical interface specification for phase-cut dimmer in phase-cut dimmed lighting systems, \$230.00

**ISO 18746:2016,** Traditional Chinese medicine - Sterile intradermal acupuncture needles for single use, \$88.00

**ISO 28564-2:2016,** Public information guidance systems - Part 2: Guidelines for the design and use of location signs and direction signs, \$173.00

**ISO 30400:2016,** Human resource management – Vocabulary, \$123.00

**ISO 30405:2016**, Human resource management - Guidelines on recruitment, \$149.00

**ISO 30408:2016**, Human resource management - Guidelines on human governance, \$123.00

**ISO 30409:2016**, Human resource management - Workforce planning, \$173.00

**ISO/CIE 11664-5:2016**, Colorimetry - Part 5: CIE 1976 L\*u\*v\* colour space and u, v uniform chromaticity scale diagram, \$88.00

**ISO/TR 14073:2016**, Environmental management - Water footprint - Illustrative examples on how to apply ISO 14046, \$240.00

## TSP Meeting Schedule

The 2016 LDI meetings will take place at the Embassy Suites, 3600 Paradise Road, south of the Las Vegas Convention Center. You can view the full schedule of ESTA LDI 2016 meetings at <http://tsp.esta.org/tsp/meetings/index.php>.

<b>At the Embassy Suites, 3600 Paradise Road (unless otherwise noted):</b>		
Control Protocols Working Group (CPWG)	09:00 – 11:30	Thursday 20 October 2016
CPWG BSR E1.33, RDMnet TG	10:00 – 18:00	Monday 24 October 2016
CPWG BSR E1.37-6 PID Descriptions TG	14:00 – 17:00	Sunday 23 October 2016
CPWG BSR E1.59, Vector Transmission TG	14:00 – 18:00	Wednesday 19 October 2016
CPWG sACN IPv6 TG (This meeting is on the ESTA booth #2181)	13:00 – 17:00	Thursday 20 October 2016
Electrical Power Working Group (EPWG)	19:00 – 23:00	Friday 21 October 2016
Event Safety Working Group (ESWG)	09:00 – 13:00	Friday 21 October 2016
Floors Working Group (FWG)	15:00 – 18:00	Friday 21 October 2016
Rigging Working Group (RWG)	19:00 – 23:00	Wednesday 19 October 2016
RWG BSR E1.4-3, Manual Hoists TG	14:00 – 18:00	Wednesday 19 October 2016
RWG BSR E1.6-1, Powered Hoist TG	09:00 – 13:00	Thursday 20 October 2016
RWG BSR E1.56, Rigging Points TG	09:00 – 13:00	Thursday 20 October 2016
Technical Standards Council	14:00 – 18:00	Wednesday 19 October 2016

---

## ESTA Standards Watch

is distributed as a benefit to ESTA members and as a communications medium for ESTA's Technical Standards Program. Original material is copyright the Entertainment Services and Technology Association.

### Editors:

Karl G. Ruling, Technical Standards Manager  
Entertainment Services and Technology Association  
630 Ninth Avenue, Suite 609  
New York, NY 10036  
USA  
[karl.ruling@esta.org](mailto:karl.ruling@esta.org)  
1 212 244 1505 ext. 703  
Fax 1 212 244 1502

Erin Grabe, Asst. Technical Standards Manager  
Entertainment Services and Technology Association  
630 Ninth Avenue, Suite 609  
New York, NY 10036,  
USA  
[erin.grabe@esta.org](mailto:erin.grabe@esta.org)  
1 212 244 1505 ext. 606  
Fax 1 212 244 1502

As of 15 April 2013, all of the standards published by ESTA's Technical Standards Program are available to download, free of charge, at <http://www.tsp.esta.org/freestandards>, courtesy of a partnership between ESTA and [ProSight Specialty Insurance](#).

## Investors in Innovation

The Technical Standard Program is financially supported by ESTA members and by companies and individuals who make undirected donations.

Please consider joining the Investors in Innovation. Information about becoming an Investor in Innovation is available at <http://tsp.esta.org/invest>. The Investors in Innovation listed on the TSP website ([http://tsp.esta.org/tsp/inv\\_in\\_innovation/investors.html](http://tsp.esta.org/tsp/inv_in_innovation/investors.html)) include the following generous companies and individuals.

---

### **VISIONARY** (\$10,000 & up; >100 employees/members)

Columbus McKinnon  
ETC  
LDI

ProSight Specialty Insurance  
United States Institute for Theatre Technology

### **VISIONARY** (\$5,000 & up; 20–100 employees/members)

Altman Lighting, Inc.

JR Clancy

### **VISIONARY** (\$500 & up; <20 employees/members)

B-Hive Industries, Inc.  
Boston Illumination group  
Candela Controls Inc.  
EGI Event Production Services\*  
John T. McGraw  
Sapsis Rigging Inc.

Steve Terry  
Theatre Projects  
Theatre Safety Programs  
Steve A. Walker & Associates\*  
Ralph Weber

---

### **INVESTOR** (\$3,000–\$9,999; >100 employees/members)

Barbizon Electric  
Lex

Rosco Laboratories  
Texas Scenic Company

### **INVESTOR** (\$1,500–\$4,999; 20–100 employees/members)

American Society of Theatre Consultants

H&H Specialties, Inc.

### **INVESTOR** (\$200–\$499; <20 employees/members)

Indianapolis Stage Sales & Rentals, Inc.\*  
LuciTag  
Lumenradio AB

Nudelta Digital  
Project SSSH Incorporated

---

### **SUPPORTER** (<\$3,000; >100 employees/members)

Ian Foulds, IATSE Local 873  
IATSE Local 80

PSAV

### **SUPPORTER** (<\$1,500; 20–100 employees/members)

Blizzard Lighting, LLC  
Lycian Stage Lighting  
Oasis Stage Werks  
Stage Equipment & Lighting

TOMCAT  
Total Structures\*  
Vincent Lighting Systems\*

### **SUPPORTER** (<\$200; <20 employees/members)

Milton Davis  
Michael Lay  
Niscon Inc.  
Skjonberg Controls Inc.

Christopher B. Tilton  
Tracy Underhill  
Ken Vannice

\*Investor for over 15 years