



Technical Standards Program

ESTA Standards Watch

November 2017

Volume 21, Number 21

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Three ESTA Standards Reaffirmed & Published

On Thursday, 2 November 2017, ANSI's Board of Standards Review approved the reaffirmations of three of ESTA's standards. They are now published and can be downloaded from [ESTA's website](#) at no cost or purchased from [ANSI](#) and [IHS](#) for the list price of \$40.00 USD. The no-cost download from ESTA's website is made possible by the sponsorship of ProSight Specialty Insurance. The three reaffirmed standards are:

ANSI E1.9 - 2007 (R2017), Reporting Photometric Performance Data for Luminaires Used in Entertainment Lighting. This standard defines the minimum photometric data to be presented on documents purporting to accurately describe the photometric performance of stage and studio luminaires used in the live entertainment and performance industries.

ANSI E1.25 – 2012 (R2017), Recommended Basic Conditions for Measuring the Photometric Output of Stage and Studio Luminaires by Measuring Illumination Levels Produced on a Planar Surface. This document describes the basic conditions for measuring the photometric output of a stage or studio luminaire by testing methods that measure the illumination levels produced by the luminaire on a planar surface. These testing methods include, but are not limited to, measurements taken by digital cameras or hand-held meters. This standard is not intended to give guidance on testing conditions for testing methods that use goniophotometers.

ANSI E1.36 – 2007 (R2017), Model Procedure for Permitting the Use of Tungsten-Halogen Incandescent Lamps and Stage and Studio Luminaires in Vendor Exhibit Booths in Convention and Trade Show Exhibition Halls. This document has been written to offer a model set of procedures that can be used by convention center and trade show exhibition hall staff to mitigate the risks perceived to be associated with the use of tungsten-halogen lamps and stage and studio luminaires. This policy applies to all luminaires that use tungsten-halogen lamps and to all stage and studio luminaires being used by vendors to provide illumination or to create effects with light in exhibit booths at convention centers or trade shows.

BSR E1.4-2, Statically Suspended Rigging Systems, Now in Public Review

BSR E1.4-2, Statically Suspended Rigging Systems, is in public review through 25 December 2017 at http://tsp.esta.org/tsp/documents/public_review_docs.php. This draft standard addresses statically suspended rigging systems (equipment and components) permanently installed in performances spaces, places of assembly, and other areas used for entertainment purposes where not otherwise covered by other E1 standards. This standard intends to establish minimum performance criteria, recommendations and guidelines that can be used for installation, use, maintenance and inspection purposes. Comments are due before Boxing Day!

International Code of Practice for Entertainment Rigging Now Available

ESTA and PLASA have announce the release of an *International Code of Practice for Entertainment Rigging* (ICOPER) which is available as a free download at www.esta.org/icoper or www.plasa.org/icoper. ICOPER was created to promote awareness and safety worldwide by providing a model code of practice with a focus on arena rigging. However, this code of practice is applicable to all event production rigging disciplines.

Key areas covered in ICOPER include pre-installation, planning and engineering; drawing conventions; equipment selection; onsite rigging work, lifting operations, show rigging operations, de-rigging work; and post production. Also included are a glossary, an appendix covering determinate and indeterminate rigging systems, and a regional comparison of terms regarding Standards.

The principal authors of the Code, who met regularly via WebEx over a period of twenty months, are Nick Barnfield (New Zealand), Tiny Good (Australia), Chris Higgs (United Kingdom), Ed Kish (United States), Bill Sapsis (United States), and Roy Schilderman (The Netherlands). ESTA's Lori Rubinstein provided administrative support for the project.

The authors believe that recognition and acceptance of this universal code will help promote regulatory harmony and reduce potential conflicts between regions around the world. They hope the resulting improvements in communications and relations with regional and local regulators will be particularly beneficial to those professionals involved in international production. Regulations and standards differ around the world, so ICOPER is not prescriptive. However, it provides a series of guidelines that, if followed, will produce uniformly predictable results and enhance safe practice.

ESTA-curated Educational Sessions at NAMM 2018

ESTA is curating four tracks of educational sessions at The 2018 NAMM Show in Anaheim, CA, January 25-28: Lighting, Lighting Networking, Rigging, and Safety. The USITT Electrical Workshop is also being offered. All sessions are free of charge once you pay the \$25 registration fee for the show, and all sessions offer ETCP renewal credits.

Visit esta.org/namm for the schedule and course descriptions. Fill out the form at the top of the page and click the Notify Me button and you will be notified as soon as class registration opens on November 15th and sent the special ESTA show registration discount code. Please note: once you hit submit you will receive an email requiring you to confirm your request to be added to the mailing list.

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 the TBTs, 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.

Mexico Notification MEX/335/MEX (MEX/335, Add.1)

Date issued: 31 October 2017

Corrigendum type: Addendum

Correction type: Correction with full text

Corrigendum: Mexican Official Standard NOM-029-ENER-2017, Energy efficiency of external power supplies. Limits, test methods and labelling

Any comments should be addressed to: Secretaría de Economía (Ministry of the Economy) Subsecretaría de Competitividad y Normatividad (Under-Secretariat of Competitiveness and Standardization) Dirección General de Normas (General Directorate of Standards) Tel.: (+52) 55 5729 9100, Ext. 43244 Fax: (+52) 55 5520 9715 Website: <http://www.economia.gob.mx/comunidad-negocios/normalizacion/catalogo-mexicano-de-normas>

Email: normasomc@economia.gob.mx, sofia.pacheco@economia.gob.mx, jose.ramosr@economia.gob.mx

Text available at: http://www.dof.gob.mx/nota_detalle.php?codigo=5502722&fecha=27/10/2017 and https://members.wto.org/crnattachments/2017/TBT/MEX/17_4816_00_s.pdf

United States of America Notification USA/1309

Date issued: 23 October 2017

Agency responsible: Environmental Protection Agency (EPA)

National inquiry point: USA WTO TBT Enquiry Point

Products covered: Chemical substances

Title: Significant New Use Rules on Certain Chemical Substances (19 page(s), in English)

Description of content: EPA is promulgating significant new use rules (SNURs) under the Toxic Substances Control Act (TSCA) for 29 chemical substances which were the subject of premanufacture notices (PMNs). The chemical substances are subject to consent orders issued by EPA pursuant to section 5(e) of TSCA. This action requires persons who intend to manufacture (defined by statute to include import) or process any of these 29 chemical substances for an activity that is designated as a significant new use by this rule to notify EPA at least 90 days before commencing that activity. The required notification initiates EPA's evaluation of the intended use within the applicable review period. Persons may not commence manufacture or processing for the significant new use until EPA has conducted a review of the notice, made an appropriate determination on the notice, and has taken such actions as are required with that determination. [TSM note: Most of these 29 chemical substances would not be of immediate concern to *Standards Watch* readers unless they are involved in the production of plastics and resins, but a few might—particularly cellulose pulp (wood fiber) and alkyl bisphenol (used in printing ink).]

Objective and rationale: Protection of the environment

Relevant documents: 82 Federal Register (FR) 48637, 19 October 2017; Title 40 Code of Federal Regulations (CFR) Parts 9 and 721. Will appear in the Federal Register when adopted.

Proposed date of adoption: 2 November 2017

Proposed date of entry into force: 18 December 2017

Final date for comments: 20 November 2017

Full text URL: https://members.wto.org/crnattachments/2017/TBT/USA/17_4737_00_e.pdf

Brazil Notification BRA/751

Date issued: 19 October 2017

Agency responsible: Ministry of Mines and Energy (MME)

National inquiry point: TBT/WTO Enquiry Point (INMETRO)

Products covered: Electric converters (HS 8502)

Title: Draft Ordinance N°. 398, 10 October 2017 (2 page(s), in Portuguese)

Description of content: Draft inter-ministerial regulation proposing a specific regulation and a target program for electric converters setting maximum levels of energy consumption or energy efficiency of machines and appliances manufactured or marketed in the country on the basis of relevant technical

indicators. [TSM note: Among other things, the document contains maximum limits on power losses in transformers, from 0.6% to 0.02% no-load to 0.25% to 1.3% full-load, depending on the power rating of the transformer.]

Objective and rationale: Protection of environment; Consumer information/labelling.

Relevant documents: (1) Brazilian Official Journal (Diário Oficial da União) Nº 197, 13 October 2017, section 1, pages 53/54; (2) Law Nº 10.295, 17 October 2001 (3) Brazilian Official Journal; (4) Not Applicable.

Proposed date of adoption: Not given by country

Proposed date of entry into force: Not given by country

Final date for comments: 27 November 2017

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/BRA/full_text/pdf/BRA751\(portuguese\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/BRA/full_text/pdf/BRA751(portuguese).pdf)

European Union Notification: EU/522

Date issued: 13 October 2017

Agency responsible: EU-TBT Enquiry Point

National inquiry point: EU-TBT Enquiry Point

Products covered: Chemical substances in nanoform/nanomaterials

Title: Draft Commission Regulation amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards Annexes I, III, VI, VII, VIII, IX, X, XI, and XII to address nanoforms of substances (and its accompanying annex) (6 + 26 pages, in English)

Description of content: Nanoforms are chemical substances that fulfil the Commission Recommendation 2011/696/EU on the definition of nanomaterial. The purpose of this draft Regulation is to clarify registration duties and obligations for nanoforms of substances under REACH by amending its technical Annexes: Annex I, with general provisions for assessing substances and preparing chemical safety reports; Annex III and Annexes VI to XI, with the standard information requirements for substances to be registered in different quantities placed on the market in the EU, requirements on substance identification and general rules for adaptation of standard testing regime; and Annex XII, containing provisions for downstream users to assess substances and prepare chemical safety reports.

Objective and rationale: Protection of human health and the environment, ensuring the proper functioning of the EU internal market. The REACH Regulation lays down specific registration duties and obligations on manufacturers, importers and downstream users to generate data on substances they manufacture, import or use to assess the risks related to these substances and to develop and recommend appropriate risk management measures. Nanoforms of substances may have specific toxicological profiles and exposure patterns, and may require specific risk assessment and adequate sets of risk management measures. Clarifications to requirements for the registration of nanoforms of substances and related downstream user obligations should be included in the Annexes I, III and VI-XII to the REACH Regulation to ensure that the risk assessments conducted are appropriate.

Relevant documents: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 353, 31.12.2008, p. 1.): <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02006R1907-20170102> Commission Recommendation 2011/696/EU of 18 October 2011 on the definition of nanomaterial (OJ L 275, 20.10.2011, p. 38-40): <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1486928403347&uri=CELEX:32011H0696>

Proposed date of adoption: 31 March 2018

Proposed date of entry into force: 1 January 2020

Final date for comments: 12 December 2017

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/EU/full_text/pdf/EU522\[1\]\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/EU/full_text/pdf/EU522[1](english).pdf) and [https://tsapps.nist.gov/notifyus/docs/wto_country/EU/full_text/pdf/EU522\[2\]\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/EU/full_text/pdf/EU522[2](english).pdf)

Viet Nam Notification VNM/108

Date issued: 2 November 2017

Agency responsible: Bureau for Safe Work, Ministry of Labor Invalid and Social Affairs

National inquiry point: WTO TBT Enquiry Point Vietnam

Products covered: Protective equipment

Title: Draft National technical regulation for Personal - protector for eye (15 page(s), in Vietnamese)

Description of content: This draft national technical regulation stipulates requirements on occupational safety for eye protective equipment which is used to prevent dangerous and harmful elements causing eye damages and impaired vision to protect the eyes of workers. This draft national technical regulation does not regulate the maintenance of safety from harmful agents from nuclear radiation, X-rays, laser beams and low-temperature infrared radiation emitted from low heat sources. This draft national technical regulation applies to organizations and individuals who manufacture, import, supply and use eye protective equipment; competent state agencies and other relevant organizations and individuals.

Objective and rationale: Protection of human health or safety

Relevant documents: Circular 28/2012/TT-BKHCN Providing for Announcement of Standard Conformity and Announcement of Technical-Regulation Conformity and Method to Assess Conformity with Standards and Technical Regulations; EN 166:2001 Personal eye- protection – Specifications; TCVN 5082:1990 (ISO 4849:1981) Personal eye-protection - Specifications

Proposed date of adoption: 1 December 2017

Proposed date of entry into force: 1 May 2018

Final date for comments: 1 January 2018

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/VNM/full_text/pdf/VNM108\(vietnamese\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/VNM/full_text/pdf/VNM108(vietnamese).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 11 December 2017

ANSI/ASHRAE Standard 134-2005 (R2014), Graphic Symbols for Heating, Ventilation, Air-Conditioning and Refrigerating Systems (withdrawal of ANSI/ASHRAE Standard 134-2005 (R2014))

The purpose of this standard is to define graphic symbols for heating, ventilating, air-conditioning and refrigerating systems. The standard is no longer valid in the current architect/engineering marketplace with the use of 3D families instead.

Single copy price: \$35.00

Order from: standards.section@ashrae.org

Send comments to: <http://www.ashrae.org/standards-research--technology/public-reviewdrafts>

BSR/ISA 61511-1-201x, Functional safety - Safety instrumented systems for the process industry sector - Part 1: Framework, definitions, system, hardware and software requirements (identical national adoption of IEC 61511-1 Ed. 2.0)

Gives requirements for the specification, design, installation, operation and maintenance of a safety instrumented system (SIS), so that it can be confidently entrusted to achieve or maintain a safe state of the process. Developed as a process sector implementation of IEC 61508:2010.

Single copy price: \$300.00

Order from and send comments to: crobinson@isa.org

BSR/ISA 61511-2-201x, Functional safety - Safety instrumented systems for the process industry sector - Part 2: Guidelines for the application of IEC -61511-1 (identical national adoption of IEC 61511-2 Ed. 2.0)

Provides guidance on the specification, design, installation, operation, and maintenance of SIFs and related SIS as defined in IEC 61511-1.

Single copy price: \$200.00

Order from and send comments to: crobinson@isa.org

Due 18 December 2017

BSR A14.1-201x, Portable Wood Ladders (new standard)

The purpose of this standard is to provide reasonable safety for life, limb, and property. In order to develop an effective safety program, the standard may serve also as a basis for purchase requirements and for instructions in personnel training. It may also assist in the preparation of motivational/instructional material such as safety practices, manuals, posters, and the like. This standard is also intended to provide the manufacturer, purchaser, and user of wood ladders with a set of specifications and requirements against which a ladder may be

compared.

Single copy price: \$250.00 USD

Order from and send comments to: info@americanladderinstitute.org.

Subject must be titled: Public Comments A14.1.

BSR/GBI 01-201X, Green Building Assessment Protocol for Commercial Buildings (revision of ANSI/GBI 01-2010)

The standard includes criteria and practices for environmentally preferable design and construction of commercial buildings. Six green building Assessment Areas are included: Project Management, Site, Energy, Water, Materials, and Indoor Environment. The only text available for public comment are the substantive limited revisions, which are denoted with strikethrough and underline in the Substantive Limited Revisions document.

Single copy price: \$25.00

Obtain an electronic copy from: https://www.thegbi.org/content/misc/Limited_Revisions_of_the_BSR-GBI-01-201X_10-20-17.pdf

Send comments to: Maria Woodbury, comment@thegbi.org

BSR/TIA 920.123-201x, Transmission Requirements for Digital Interface Communications Devices with Group Speakerphone (new standard)

Establishes transmission performance requirements for group speakerphone devices that function as narrowband (300 to 3400 Hz) or wideband (100 to 7000 Hz) digital interface communications devices, or both. Group speakerphones are devices used for one or more individuals in a small to large setting with users at a distance further away (up to 2 meters, or more) than those for personal devices. Typically, the speaker and microphone are located in the base unit together, but there may be satellite microphones.

Single copy price: \$60.00

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

Due 2 January 2018

BSR/IEEE 24748-5-201x, ISO/IEC/IEEE International Standard - Systems and Software Engineering - Life Cycle Management - Part 5: Software Development Planning (new standard)

This International Standard provides a common framework for planning and controlling the technical processes and activities to produce and sustain software products. The complete life cycle is covered by this International Standard, from idea conception to the retirement of a software product. The framework described by this International Standard provides for best practices in communication and cooperation among parties that plan for, develop, utilize, and manage modern software.

Single copy price: \$58.00 (pdf); \$73.00 (print)

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

Send comments to: Karen Evangelista, k.evangelista@ieee.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, 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 A14.8-201x, Requirements for Ladder Accessories (revision of ANSI A14.8-2013)

This standard is intended to provide guidelines for the safe design and construction of ladder accessories covered by this standard. It is also intended to provide the manufacturer of ladders and ladder accessories with a set of design, performance, and construction requirements to which this product may be compared. It is not the purpose of this standard to specify all the construction details or materials to be used for portable ladder accessories, but rather to provide general requirements and testing methods.

Contact: Ben Barclay, info@americanladderinstitute.org

BSR/AWS D1.3/D1.3M-201x, Structural Welding Code - Sheet Steel (revision of ANSI/AWS D1.3/D1.3M-2017)

This code contains the requirements for arc welding of structural sheet/strip steels, including cold-formed members, collectively referred to as “sheet steel” in this standard, which are equal to or less than 3/16 in (0.188 in) [4.8 mm] in nominal thickness. When this code is stipulated in contract documents, conformance with all its provisions shall be required, except for those provisions that the engineer or contract documents specifically modifies or exempts.

Contact: Jennifer Molin, jmolin@aws.org

BSR/AWS D1.8/D1.8M-201x, Structural Welding Code – Seismic Supplement (revision of ANSI/AWS D1.8/D1.8M-2016)

The provisions of this code supplement the provisions of AWS D1.1/D1.1M, Structural Welding Code - Steel, and shall apply to the design, fabrication, quality control, and quality assurance of welded joints designed in accordance with the AISC Seismic Provisions for Structural Steel Buildings. All provisions of AWS D1.1/D1.1M for statically loaded structures shall apply to the designated welds, except as modified in this standard.

Contact: Jennifer Molin, jmolin@aws.org

BSR C18.5M Part 1-201x, Lithium Secondary Cells and Batteries (new standard)

This standard applies to portable rechargeable lithium-ion cells and batteries. It contains general information and standardized performance and mechanical tests.

Contact: Khaled Masri, Khaled.Masri@nema.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 C137.0-2017, Standard for Lighting Systems Terms and Definitions (new standard): 20 October 2017

ANSI Z535.1-2017, Standard on Safety Colors (revision of ANSI Z535.1-2006 (R2011)): 20 October 2017

ANSI Z535.2-2011 (R2017), Environmental and Facility Signs (reaffirmation of ANSI Z535.2-2011): 18 October 2017

ANSI Z535.3-2011 (R2017), Standard Criteria for Safety Symbols (reaffirmation of ANSI Z535.3-2011): 20 October 2017

ANSI Z535.4-2011 (R2017), Product Safety Signs and Labels (reaffirmation of ANSI Z535.4-2011): 20 October 2017

ANSI Z535.5-2011 (R2017), Standard for Safety Tags and Barricade Tapes (for Temporary Hazards) (reaffirmation of ANSI Z535.5 -2011): 25 October 2017

ANSI Z535.6-2011 (R2017), Product Safety Information in Product Manuals, Instructions, and Other Collateral Materials (reaffirmation of ANSI Z535.6-2011): 27 October 2017

ANSI/IES TM-23-2017, Lighting Control Protocols (new standard): 27 October 2017

ANSI/NSF 170-2017 (i20r1), Glossary of Food Equipment Terminology (revision of ANSI/NSF 170-2017): 15 October 2017

ANSI/TIA 4966-1-2017, Telecommunications Infrastructure Standard for Educational Facilities - Addendum 1: Updated References, Accommodation of New Media Types (addenda to ANSI/TIA 4966-2014): 27 October 2017

ANSI/TIA 862-B-1-2017, Structured Cabling Infrastructure Standard for Intelligent Building Systems - Addendum 1: Updated References, Accommodation of New Media Types (addenda to ANSI/TIA 862-B-2016): 27 October 2017

Draft IEC & ISO Standards

This section lists proposed standards that the International Electromechanical Commission (IEC) or the 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 and ISO documents should be sent to Charles T. Zegers at czegers@ansi.org and Karen Hughes at isot@ansi.org respectively. Any prices, if shown, are for purchases through ANSI. The sort order is by due date then alphanumeric.

ISO/IEC DIS 26553, Information technology - Software and systems engineering - Tools and methods for product line realization, 17 November 2017, \$134.00

ISO/IEC DIS 26554, Information technology - Software and systems engineering - Tools and methods for product line testing, 17 November 2017, \$134.00

ISO/IEC DIS 26556, Information technology - Software and systems engineering - Tools and methods for product line organizational management, 17 November 2017, \$134.00

21A/642/CD, IEC 63056 ED1: Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for secondary lithium cells and batteries for use in electrical energy storage systems, 1 December 2017

21A/641/CD, IEC 63118 ED1: Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium batteries for use in road vehicles not for the propulsion, 1 December 2017

21A/643/CD, IEC 63057 ED1: Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for secondary lithium batteries for use in road vehicles not for the propulsion, 1 December 2017

110/927/CD, IEC TS 62341-6-5 ED1: Organic light emitting diode (OLED) displays - Measuring methods of dynamic range properties, 2 December 2017

CIS/H/339/FDIS, IEC 61000-6-4/AMD2 ED2: Electromagnetic compatibility (EMC) - Part 6-4: Generic standards – Emission standard for industrial environments, 8 December 2017

18/1594/CDV, IEC 60092-302-2 ED1: Electrical installations in ships -Part 302-2: Marine Power switchgear and controlgear assemblies, 12 January 2018

77A/983/CD, IEC TR 61000-1-8 ED1: EMC - Part 1-8: Phase angles of harmonic current emissions and voltages in the public supply networks, and future expectation, 12 January 2018

77B/788/CD, IEC 61000-4-20 ED3: Electromagnetic compatibility (EMC) - Part 4-20: Testing and measurement techniques – Emission and immunity testing in transverse electromagnetic (TEM) waveguides, 12 January 2018

ISO/IEC DIS 28360-1, Information technology - Office equipment -Determination of chemical emission rates from electronic equipment - Part 1: Using-consumables, 12 January 2018, \$119.00

ISO/DIS 20671, Brand evaluation - Principles and fundamentals, 13 January 2018, \$58.00

ISO/DIS 10551, Ergonomics of the physical environment – Subjective judgement scales for assessing physical environments, 15 January 2018, \$71.00

ISO/DIS 18646-2, Robotics - Performance criteria and related test methods for service robots - Part 2: Navigation, 15 January 2018, \$82.00

Recently Published IEC & ISO Documents

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/TR 61547-1 Ed. 2.0 en:2017, Equipment for general lighting purposes - EMC immunity requirements - Part 1: An objective light flickermeter and voltage fluctuation immunity test method, \$235.00

IEC/TS 60479-2 Ed. 4.0 en:2017, Effects of current on human beings and livestock - Part 2: Special aspects, \$317.00

S+ IEC/TS 60479-2 Ed. 4.0 en:2017 (Redline version), Effects of current on human beings and livestock - Part 2: Special aspects, \$412.00

ISO 5175-1:2017, Gas welding equipment - Safety devices - Part 1: Devices incorporating a flame (flashback) arrestor, \$103.00

ISO 5175-2:2017, Gas welding equipment - Safety devices - Part 2: Devices not incorporating a flame (flashback) arrestor, \$68.00

ISO 13061-11:2017, Physical and mechanical properties of wood - Test methods for small clear wood specimens - Part 11: Determination of resistance to impact indentation, \$45.00

ISO 13061-12:2017, Physical and mechanical properties of wood - Test methods for small clear wood specimens - Part 12: Determination of static hardness, \$45.00

ISO 13061-17:2017, Physical and mechanical properties of wood - Test methods for small clear wood specimens - Part 17: Determination of ultimate stress in compression parallel to grain, \$45.00

ISO 15746-2:2017, Automation systems and integration - Integration of advanced process control and optimization capabilities for manufacturing systems - Part 2: Activity models and information exchange, \$185.00

ISO 16283-1/Amd1:2017, Acoustics - Field measurement of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation - Amendment 1, \$19.00

ISO/IEC 23003-4/Amd2:2017, Information technology - MPEG audio technologies - Part 4: Dynamic Range Control - Amendment 2: Reference software, \$19.00

ISO/IEC 18477-4:2017, Information technology – Scalable compression and coding of continuous-tone still images - Part 4: Conformance testing, \$162.00

ISO/IEC TR 29170-1:2017, Information technology - Advanced image coding and evaluation - Part 1: Guidelines for image coding system evaluation, \$162.00

ISO/TR 21865:2017, Fireworks - Third party testing – Voluntary scheme, \$45.00

TSP Meeting Schedule

The November meetings will be at the **Tropicana Las Vegas Casino Hotel Resort**, 3801 Las Vegas Blvd. South. All working group meetings will have a WebEx option.

Control Protocols Working Group (CPWG)	09:00 – noon	Thursday 16 November 2017
CPWG BSR E1.20 TG	14:00 – 17:00	Sunday 19 November 2017
CPWG BSR E1.33, RDMnet TG	10:00 – 18:00	Monday 20 November 2017
CPWG BSR E1.37-4 TG	13:00 – 15:00	Thursday 16 November 2017
CPWG BSR E1.59 TG	09:00 – 13:00	Wednesday 15 November 2017
Electrical Power Working Group (EPWG)	19:00 – 22:00	Friday 17 November 2017
Event Safety Crowd Management TG	14:00 – 18:00	Wednesday 15 November 2017
	09:00 – 13:00	Thursday 16 November 2017
Event Safety Communications TG	14:00 – 17:00	Thursday 16 November 2017
Event Safety Fire TG	14:00 – 17:00	Thursday 16 November 2017
Event Safety Rigging TG	14:00 – 18:00	Friday 17 November 2017
Event Safety Structures TG	09:00 – 13:00	Wednesday 15 November 2017
Event Safety Weather TG	09:00 – noon	Thursday 16 November 2017
Event Safety Working Group (ESWG)	09:00 – noon	Friday 17 November 2017
Floors Working Group (FWG)	13:00 – 14:30	Friday 17 November 2017
Fog & Smoke Working Group (FSWG)	15:00 – 17:00	Friday 17 November 2017
Photometrics Working Group (PWG)	13:00 – 15:00	Thursday 16 November 2017
Rigging E1.6-3 TG	14:00 – 18:00	Wednesday 15 November 2017
Rigging Working Group (RWG)	19:00 – 23:00	Wednesday 15 November 2017
Stage Lifts Working Group (SLWG)	09:00 – 11:00	Saturday 18 November 2017
Technical Standards Council (TSC)	14:00 – 18:00	Wednesday 15 November 2017

The January 2018 meetings are in conjunction with the NAMM Show at the Anaheim Convention Center.

At the Anaheim Hilton

Control Protocols Working Group	19:00 – 23:00	Friday 26 January 2018
Electrical Power Working Group	19:00 – 22:00	Sunday 28 January 2018
Event Safety Working Group	14:00 – 18:00	Saturday 27 January 2018
Floors Working Group	11:00 – 13:00	Saturday 27 January 2018
Rigging Working Group	19:00 – 23:00	Saturday 27 January 2018
Stage Lifts Working Group	09:00 – noon	Sunday 28 January 2018

At the Disney Paradise Pier Hotel

Technical Standards Council	09:00 – 13:00	Monday 29 January 2018
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The most up-to-date schedule always can be found at <http://tsp.esta.org/tsp/meetings/index.php>.

ESTA Standards Watch

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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
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
1 212 244 1505 ext. 606
Fax 1 212 244 1502

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