

Submit Comments

## **ENTERPRISE SINGAPORE CALLS FOR PUBLIC COMMENTS – 11 SEPTEMBER 2020**

Under the National Standardisation Programme, the public comment period is an important stage of standards development. Members of the public are invited to provide feedback on draft Singapore Standards for publication and work item proposals for development and review of Singapore Standards and Technical References. The establishment of Singapore Standards is done in accordance with the World Trade Organisation's requirements for the development of national standards.

### **A) Notification of Draft Singapore Standards for Publication**

Members of the public are invited to comment on the following Singapore Standard documents:

Biomedical and Health – [medical face masks](#) (5 standards), [clinical investigation of medical devices](#)

Building and Construction – [ceramic wall and floor tiling](#), [treatment of timber and plywood with copper/chrome/arsenic wood preservatives](#)

Electrical and Electronics – [protection against lightning](#)

Manufacturing – [qualification of parts printed by metal additive manufacturing](#)

Quality and Safety – [flowmeter regulators](#)

For more information on viewing the documents, [click here](#).

Closing date for comments: **12 November 2020**

Please submit comments to: [kay\\_chua@enterprisesg.gov.sg](mailto:kay_chua@enterprisesg.gov.sg).

### **B) Notification of Work Item Proposals**

#### **B.1 Proposal for New Work Items**

New Work Items (NWIs) are approved proposals to develop new Singapore Standards or Technical References (pre-standards).

Members of the public are invited to comment on the scope of the new standard and contents that can be included into the following proposal:

Electrical and Electronics – [electrical energy storage systems](#)

Closing date for comments: **12 October 2020**.

Please submit comments to: [kay\\_chua@enterprisesg.gov.sg](mailto:kay_chua@enterprisesg.gov.sg).

#### **B.2 Proposal for the Review of Singapore Standards**

Published Singapore Standards are reviewed to determine if they should be updated, confirmed or withdrawn (if they no longer serve the industry's needs) or classified as mature standards (no foreseeable changes; to be reviewed only upon request).

Members of the public are invited to comment on the following standards to be reviewed:

Chemical – [paints and coatings](#) (7 standards)

Food – [safety and hygiene practices for the vending industry](#)

Quality and Safety – [single point anchor devices and flexible horizontal lifeline systems](#)

The reviews are ongoing and the new versions/drafts are not available at this juncture. Users can refer to the current standard to provide feedback. [Click here](#) to view or purchase the standard.

Closing date for comments: **12 October 2020**.

Members of the public are invited to join as standards partners, co-opted members or resource members subject to the approval of relevant committees and working groups.

To comment or to join in the development of these standards, please write to [kay\\_chua@enterprisesg.gov.sg](mailto:kay_chua@enterprisesg.gov.sg).

## **A) Notification of draft Singapore Standards for Publication**

### **(I) Biomedical and Health**

#### **New**

#### **1. Standard specification for performance of materials used in medical face masks (Identical adoption of ASTM F2100-19)**

This standard covers the classifications, performance requirements, and test methods for the materials used in the construction of medical face masks that are used in health care services such as surgery and patient care. Medical face mask material performance is based on testing for bacterial filtration efficiency, differential pressure, sub-micron particulate filtration efficiency, resistance to penetration by synthetic blood, and flammability. This standard does not address all aspects of medical face mask design and performance, the effectiveness of medical face mask designs as related to the barrier and breathability properties, and respiratory protection, which may be necessary for some health care services.

#### **2. Standard test method for evaluating the bacterial filtration efficiency (BFE) of medical face mask materials, using a biological aerosol of *Staphylococcus aureus* (Identical adoption of ASTM F2101-19)**

This standard offers a procedure for evaluation of medical face mask materials for bacterial filtration efficiency. It does not define acceptable levels of bacterial filtration efficiency. Therefore, when using this test method it is necessary to describe the specific condition under which testing is conducted. This test method has been specifically designed for measuring bacterial filtration efficiency of medical face masks, using *Staphylococcus aureus* (*S. aureus*) as the challenge organism. The use of *S. aureus* is based on its clinical relevance as a leading cause of nosocomial infections. This test method has been designed to introduce a bacterial aerosol challenge to the test specimens at a flow rate of 28.3 L/min (1 ft<sup>3</sup>/min). This flow rate is within the range of normal respiration and within the limitations of the cascade impactor.

#### **3. Standard test method for determining the initial efficiency of materials used in medical face masks to penetration by particulates using latex spheres [Identical adoption of ASTM F2299 / F2299M-03(2017)]**

This standard measures the initial filtration efficiency of materials used in medical face masks by sampling representative volumes of the upstream and downstream latex aerosol concentrations in a controlled airflow chamber. This test method provides specific test techniques for both manufacturers and users to evaluate materials when exposed to aerosol particle sizes between 0.1 and 5.0 µm. It establishes a basis of efficiency comparison between medical face mask materials.

**4. Respiratory protective devices – Filtering half masks to protect against particles – Requirements, testing, marking** (Identical adoption of EN 149:2001+A1:2009)

This standard specifies the minimum requirements for filtering half masks used as respiratory protective devices, specifically against particles, and the required laboratory and practical performance tests to assess masks' compliance. Half masks used for escape purposes are excluded from the scope of this standard.

**5. Medical face masks — Requirements and test methods** (Identical adoption of EN 14683 :2019)

This standard specifies the construction, design, performance requirements and test methods for medical face masks intended to limit the transmission of infective agents from staff to patients during surgical procedures and other medical settings with similar requirements. A medical face mask with an appropriate microbial barrier can also be effective in reducing the emission of infective agents from the nose and mouth of an asymptomatic carrier or a patient with clinical symptoms.

Potential users of the standards on face masks include medical mask manufacturers, medical professionals, researchers, testing, inspection and certification bodies, and regulators.

**Revision**

**6. Clinical investigation of medical devices for human subjects – Good clinical practice** (Identical adoption of ISO 14155:2020)

This standard addresses good clinical practice for the design, conduct, recording and reporting of clinical investigations carried out in human subjects to assess the clinical performance or effectiveness and safety of medical devices.

For post-market clinical investigations, the principles set forth in this standard are intended to be followed as far as relevant, considering the nature of the clinical investigation.

This standard specifies general requirements intended to:

- protect the rights, safety and well-being of human subjects,
- ensure the scientific conduct of the clinical investigation and the credibility of the clinical investigation results,
- define the responsibilities of the sponsor and principal investigator, and
- assist sponsors, investigators, ethics committees, regulatory authorities and other bodies involved in the conformity assessment of medical devices.

Potential users of the standard include medical device manufacturers, researchers and regulators.

**(II) Building and Construction**

**New**

**7. Code of practice for ceramic wall and floor tiling**

The review of CP 68 : 1997, “Code of practice for ceramic wall and floor tiling” resulted in the development of this new standard which is intended to replace CP 68 (see item 8).

This standard provides requirements for the design and installation of ceramic and mosaic floor and wall tiling in normal internal and external conditions. The standard also deals with classes and types of background and their suitability to receive tiling using the following fixing methods:

- Bedding in cementitious adhesives on an intermediate substrate or as a direct bedding method.
- Bedding in organic based adhesives (dispersion or reaction resin) on an intermediate substrate or as a direct bedding method.

This standard does not cover both natural and agglomerated stone tiles. It also does not cover the design and installation of ceramic tiles in specific conditions such as in a swimming pool, and in situations where there are specific environmental or functional requirements, such as the need for a sterile environment and conditions that are potentially detrimental to either the installation or the background.

Potential users of the standard include architects, professional engineers, consultants, contractors, developers, testing/accreditation bodies and relevant regulatory/government agencies.

### **Withdrawal**

#### **8. Code of practice for ceramic wall and floor tiling (CP 68 : 1997)**

This standard is proposed for withdrawal as it will be replaced by the new standard on ceramic wall and floor tiling (see item 7 above).

### **Mature standard**

#### **9. Specification for treatment of timber and plywood with copper/chrome/arsenic wood preservatives (SS 72 : 2014)**

This standard specifies requirements for the treatment of timber, plywood or veneer with water-borne wood preservatives which consist of mixtures of copper, chromium and arsenic. This standard covers the composition of the preservatives, the method of application and the retentions from the treatment.

It is proposed to classify SS 72 as a mature standard as there are no foreseeable changes to the standard. Hence, it will not be reviewed until a request is put forth to do so.

Users of the standard include architects, professional engineers, consultants, contractors, developers, testing / accreditation bodies and relevant regulatory/government agencies.

### **(III) Electrical and Electronic**

#### **10. Amendment No. 1 to Protection against lightning – Part 3 : Physical damage to structures and life hazard (SS 555 : Part 3 : 2018)**

This amendment is to provide better clarity on some of the clauses to reflect current industry practices.

Users of the standard include architects, engineers, manufacturers, and contractors.

[\(Click here\)](#) to download the Amendment)

### **(IV) Manufacturing**

#### **New**

#### **11. Qualification of parts printed by metal additive manufacturing**

This standard provides users with a framework for qualification and certification of additive manufacturing (AM) printed parts and processes during AM metal part production. To produce consistent AM parts, there is a need to consider the aspects of raw material, machine, operator and part. This standard is applicable to the powder bed fusion (PBF), especially powder bed fusion of metal using laser beam (PBF-LB/M).

This standard specifies the part classification and qualification requirements for AM parts and processes. The classification and qualification requirements are divided into part classification, pre-process qualification for AM machine, in-process qualification for AM parts at specimen level and post-process qualification for AM parts.

Potential users of the standard include AM design engineers, manufacturing engineers, maintenance engineers, industry associations, research institutions and government agencies.

(V) **Quality and Safety**

**Withdrawal**

12. **Specification for flowmeter regulators used on cylinders for welding, cutting and allied processes – Classification and specifications (SS 446 : 1998)**

The standard is proposed for withdrawal due to its low usage by the industry. Users can refer to ISO 2503, “Gas welding equipment – Pressure regulators and pressure regulators with flow-metering devices for gas cylinders used in welding, cutting and allied processes up to 300 bar (30 MPa)”.

Copies of the drafts and standards are available at:

Viewing from Singapore Standards eShop

Login to Singapore Standards eShop at: [www.singaporestandardseshop.sg](http://www.singaporestandardseshop.sg)

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Viewing Singapore Standards and ISO Standards from National Libraries

All public libraries’ multimedia stations and on personal internet/mobile devices (e.g. mobile phones, notebooks, tablets) at all public libraries via NLB eDatabases “Singapore and ISO Standards Collection” (refer to [www.nlb.gov.sg/VisitUs.aspx](http://www.nlb.gov.sg/VisitUs.aspx) for address and viewing hours)

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**NOTE** – The viewing period of the drafts and standards will expire on the closing of the public comment period and will no longer be available after this date.

**B) Notification of Work Item Proposals**

**B.1 Proposed New Work Item**

(I) **Electrical and Electronic**

1. **Electrical energy storage (EES) systems – Planning and performance assessment of electrical energy storage systems – General specification (Modified adoption of IEC TS 62933-3-1:2018)**

After the announcement on the adoption of IEC TS 62933-5-1, “Safety considerations for grid-integrated EES systems – General specification” as a Technical Reference (TR) in May 2019, it was determined that there was a need to adopt another TR, IEC TS 62933-3-1, “Planning and performance assessment of electrical energy storage systems – General specification” to supplement it with the planning aspect.

The standard, TR IEC TS 62933-3-1, is applicable to EES systems designed for grid-connected indoor or outdoor installation and operation. It includes considerations of the following:

- necessary functions and capabilities of EES systems;
- test items and performance assessment methods for EES systems;
- requirements for monitoring and acquisition of EES system operating parameters;
- exchange of system information and control capabilities required.

The two TRs are expected to be published in Sep 2020. Any comments on these two TRs can be sent using the feedback form found at the end of the publications.

Potential users of the standard include batteries and EES manufacturers, utility companies, professional engineers, testing companies and relevant regulatory/government agencies.

## **B.2 Review of Singapore Standards**

### ***(I) Chemical***

#### **1. Specification for paint – Finishing, gloss enamel (SS 7 : 1998)**

This standard provides a minimum requirement for the product which acts as a protective coating for wood and metal surfaces.

#### **2. Specification for undercoat paint for gloss enamel (SS 34 : 1998)**

This standard provides a minimum requirement for the product which is used in sealing and levelling wood and metal surfaces before applying a top coat.

#### **3. Specification for aluminium paint (SS 37 : 1998)**

This standard provides a minimum requirement for aluminium paints that acts as a protective coating for interior and exterior surfaces.

#### **4. Specification for aluminium wood primer (SS 38 : 1998)**

This standard provides a minimum requirement for the primer on wood surfaces for its sealing properties and to receive the top coat.

#### **5. Specification for emulsion paint for decorative purposes (SS 150 : 2015)**

This standard applies to a ready-for-use, air drying emulsion, flat finish for both exterior and interior use on masonry surfaces including concrete, bricks, stucco, concrete block, cement sheets and sidings and on suitably primed metal and wood surfaces.

#### **6. Specification for algae resistant emulsion paint for decorative purposes (SS 345 : 2015)**

This standard applies to a ready-to-use, air drying emulsion paint for both exterior and interior use on masonry surfaces and on suitably primed metal and wood surfaces.

#### **7. Specification for elastomeric wall coating (SS 500 : 2015)**

This standard applies to ready-to-use, air drying elastomeric wall emulsion paint with waterproofing and fine crack repairing properties for exterior use on masonry surfaces.

The intended outcome of the review will be a revision of SS 7 and SS 34, and the amendment of SS 37, SS 38, SS 150, SS 345 and SS 500.

Users of these paint standards include paint manufacturers, suppliers, test laboratories, contractors, applicators, architectural associations, consultants, facilities/property managers, land surveyors and related government agencies.

**(II) Food**

**8. Guidelines on food safety and good hygiene practices for the vending industry (TR 57 : 2017)**

This TR provides practical guidance on the hygienic handling of food and the temperature control requirements for those operating in the vending industry.

This TR covers the hygiene guidelines for the design, installation and maintenance of machine, and operations, which include the supply and replenishment of food and related accessories. It is applicable to the following categories of food vending machines:

- Machines vending pre-packed shelf-stable food products, irrespective if the food products are sold at ambient temperature or at chilled temperature (e.g. confectionery and snacks sold at ambient temperature) or at chilled temperature (e.g. canned and bottled drinks sold at chilled temperature)
- Machines vending juices and beverages that are prepared on-site (e.g. freshly squeezed orange juice and freshly brewed ground coffee).
- Machines vending both hot and cold beverages from powdered ingredients or syrups
- Temperature-controlled machines vending individually wrapped ice cream and pre-packed products such as milk and milk products
- Temperature controlled machines vending ready-to-eat food items such as pizzas, toasted sandwiches or pre-packed meals. Machine may vend these food items frozen, chilled or hot.

Users of the standard include operators and suppliers of food vending machines, academia and government agency.

**(III) Quality and Safety**

**9. Specification for personal protective equipment for protection against falls from a height – Single point anchor devices and flexible horizontal lifeline systems (SS 570 : 2011)**

This standard specifies requirements, test methods, user instructions, marking, labelling and packaging, as appropriate, of permanent, temporary single-point anchor devices and flexible horizontal lifelines systems, exclusively for the attachment of personal protective equipment (PPE) for protection against falls from a height for fall arrest, work positioning and travel restriction (work restraint).

It is applicable only to anchor devices for PPE that conform to the SS 528 series on personal fall-arrest systems.

The standard is reviewed with the intention to update it.

Users of the standard may include consultants, suppliers, work-at-height users, training providers, industry associations, professional institutions, tertiary institutions, testing, inspection and certification bodies, and relevant government agencies.

Submit Comments

## Frequently asked questions about public comment on Singapore Standards:

### 1. What is the public comment on Singapore Standards?

Singapore Standards are established based on an open system which is also in accordance with the requirements of the World Trade Organisation. These documents are issued as part of a consultation process before any standards are introduced or reviewed. The public comment period is an important stage in the development of Singapore Standards. This mechanism helps industry, companies and other stakeholders to be aware of forthcoming changes to Singapore Standards and provides them with an opportunity to influence, before their publication, the standards that have been developed by their industry and for their industry.

### 2. How does public comment on Singapore Standards benefit me?

This mechanism:

- ensures that your views are considered and gives you the opportunity to influence the content of the standards in your area of expertise and in your industry;
- enables you to be familiar with the content of the standards before they are published and you stand to gain a competitive advantage with this prior knowledge of the standards.

### 3. Why do I have to pay for the standards which are proposed for review or withdrawal?

These standards are available for **free viewing** at Toppan Leefung Pte Ltd and all public libraries. However, the normal price of the standard will be charged for those who wish to purchase a copy. At the stage where we propose to review or withdraw the standards, the standards are still current and in use. We seek comments for these standards so as to:

- provide an opportunity for the industry to provide inputs for the review of the standard that would make the standard suitable for the industry's use,
- provide feedback on the continued need for the standard so that it will not be withdrawn,

### 4. What happens after I have submitted my comments?

The comments will be channelled to the relevant standards committee for consideration and you will be informed of the outcome of the committee's decision. You may be invited to meet the committee if clarification is required on your feedback.

### 5. Can I view drafts after the public comment period?

Drafts will not be available after the public comment period.

### 6. How do I request for the development of a new standard?

You can propose the development of a new standard [here](#).