Ref: PC-150915

SPRING SINGAPORE CALLS FOR PUBLIC COMMENTS ON SINGAPORE STANDARDS – 15 SEPTEMBER 2015

Singapore Standards are established based on an open system which is also in accordance with the World Trade Organisation requirements. SPRING Singapore is inviting public comments for the following drafts and Singapore Standards:

(I) **Building and Construction**

Revision

1. **Code of practice for air-conditioning and mechanical ventilation in buildings** (Revision of SS 553 : 2009)

This code provides general guidance in the design, construction, installation, testing and commissioning, operation and maintenance of air-conditioning and mechanical ventilation systems in all commercial, office and institutional buildings except health care facilities. The purpose of this code is to establish minimum requirements in mechanical ventilation and air-conditioning engineering practice such that an acceptable indoor thermal environment can be attained in an energy efficient manner with general consideration for the indoor air quality (IAQ), and maintainability of the equipment.

This code does not apply to industrial ventilation in control of specific air contaminants inside workplace as such requirements are separately covered by a different set of regulations. It does not address:

- specific indoor air quality concerns for minimising potential health hazards;
- design requirements of fire protection;
- heating installations as the majority of mechanical ventilation and air-conditioning systems in Singapore do not require any form of heating.

Potential users of the standard include architects, mechanical and electrical engineers, consultants, contractors, equipment manufacturers / suppliers, facilities managers, building owners/developers and relevant government authorities.

This code applies to all air-conditioned premises where air-conditioning is used intermittently or continuously, with the exception of residential premises, factory production areas, hospitals, polyclinics and laboratories. It applies to all types of air-conditioning and air-distribution systems.

In setting indoor air quality standard, this Code considers environmental factors, which include thermal, physical, chemical and biological factors. The purpose of the standard is to specify indoor air quality that will be acceptable to building occupants and to minimise the potential of adverse health effects.

Due to the diversity of contaminants generated from indoor and outdoor sources, the contaminants covered in the Code are not exhaustive. The Code provides limits for contaminants commonly found in an indoor environment, and limits for parameters that are indicative of the quality of the indoor air.

Potential users of the standard include architects, mechanical and electrical engineers, consultants, contractors, relevant government authorities, facilities managers, building owners/developers/occupants and management corporations.


This standard specifies requirements for ribbed weldable reinforcing steel used for the reinforcement of concrete structures. The standard covers steel delivered in the form of bars, coils and decoiled products.

The revision incorporated provisions for additional three (3) steel grades, all of 600 MPa characteristic yield strength, but with different ductility characteristics. The three (3) grades are B600A, B600B and B600C.

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

**Withdrawal**


This standard is recommended for withdrawal as the standard is outdated.

Users can refer to European standards on steel windows and doors, covering material and performance requirements.

**Review**

(Note: Review the existing standards to determine if they should be updated, confirmed or withdraw if they no longer serve the industry's needs – no new draft/version)


This standard establishes principles and requirements for the safety, serviceability and durability of structures, describes the basis for their design and verification and gives guidelines for related aspects of structural reliability. EN 1990 is intended to be used in conjunction with EN 1991 to EN 1999 for the structural design of buildings and civil
engineering works, including geotechnical aspects, structural fire design, situations involving earthquakes, execution and temporary structures.


Proposed new work item
(NOTE: No drafts available at this juncture)

6. Technical Reference (TR) for facility design guidelines of nursing homes

This TR will specify the basic planning guidelines and requirements to promote quality, safety and efficiency in the development of nursing homes

Potential users of the TR may include consultants, architects, engineers, as well as stakeholders and operators of nursing homes.

(II) Chemical Revision


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. The recoating of previously painted surfaces which are in a sound condition and suitable for receiving such a coating is also covered by this standard.


This specification applies to a ready-for-use, air-drying emulsion paint for both exterior and interior use on masonry surfaces and on suitably primed metal and wood surfaces. The recoating of previously painted surfaces which are in a sound condition and suitable for receiving such a coating is also covered by this standard.


This specification applies to a ready-to-use, air-drying elastomeric wall emulsion paint with waterproofing and repairing fine crack properties for exterior use on masonry surfaces. The recoating of previously painted surfaces which are in a sound condition and suitable for receiving such a coating is also covered by this standard.


This standard applies to ready-to-use, air drying water-based sealer for both interior and exterior uses. The standard is developed for sealer applied on concrete surfaces. If application is on large skimmed surfaces or other surfaces, purchaser shall discuss requirements with vendor.

The revision of SS 150, SS 345, SS 500 and SS 579 include the quantitative requirements on heavy metals and VOCs as well as the qualitative requirements on solvents and specific hazardous substances.

Potential users include paint manufacturers, suppliers, test laboratories, contractors, applicators, architectural associations, consultants, facilities/property managers, land surveyors and relevant government agencies.
Withdrawal


This standard is recommended for withdrawal as it is outdated, having been replaced by the latest edition of BS 4800. Users are advised to make direct reference to BS 4800 : 2011 – ‘Schedule of paint colours for building purposes’.

(III) **Electrical and Electronics**

New

12. **LED modules for general lighting – Performance requirements** (Identical adoption of IEC 62717-2014)

This standard specifies the performance requirements for LED modules for general lighting applications, together with the test methods and conditions, required to show compliance with this standard. It covers the following types of LED modules:

- Type 1: Self-ballasted LED modules for use on d.c. supplies up to 250 V or on a.c. supplies up to 1 000 V at 50 Hz or 60 Hz;
- Type 2: LED modules operating with external controlgear connected to the mains voltage, and having further control means inside (“semi-ballasted”) for operation under constant voltage, constant, current or constant power;
- Type 3: LED modules where the complete controlgear is separate from the module for operation under constant voltage, constant current or constant power.

13. **Luminaire performance**

*Part 1 : General requirements* (Identical adoption of IEC 62722-1-2014)

This standard specifies the performance and environmental requirements for luminaires, incorporating electric light sources for operation from supply voltages up to 1 000 V. Unless otherwise detailed, performance data covered under the scope of this standard are for the luminaires in a condition representative of new manufacture, with any specified initial aging procedures completed.

*Part 2-1 : Particular requirements for LED luminaires* (Identical adoption of IEC 62722-2-1-2014)

This standard specifies the performance requirements for LED luminaires, together with the test methods and conditions, required to show compliance with this standard. It applies to LED luminaires for general lighting purposes.

The above standards on LED modules and luminaires are expected to be referenced in procurement by building owners, specifiers, developers and suppliers. Potential users of the standards include test laboratories, manufacturers, purchasers, suppliers, professional engineers, consultants, licensed electrical workers and relevant government agencies.

14. **Self-ballasted LED lamps for general lighting services with supply voltages > 50 V – Performance requirements** (Identical adoption of IEC 62612-2013)

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.
Potential users of the standard include test laboratories, manufacturers, purchasers, suppliers, professional engineers, consultants, contractors, licensed electrical workers, building owners and relevant government agencies.

15. **Self-ballasted LED lamps for general lighting services by voltage > 50 V – Safety specifications** (Identical adoption of IEC 62560-2011)

This standard specifies the safety and interchangeability requirements, together with the test methods and conditions required to show compliance of LED lamps with integrated means for stable operation (self-ballasted LED lamps), intended for domestic and similar general lighting purposes.

16. **Double-capped LED lamps designed to retrofit linear fluorescent lamps – Safety specifications** (Identical adoption of IEC 62776-2014)

This standard specifies the safety and interchangeability requirements, and the exchange operation together with the test methods and conditions required to show compliance of double-capped LED lamps with G5 and G13 caps, intended for replacing fluorescent lamps with the same caps.

Potential users of the standards on LED lamps include test laboratories, manufacturers, purchasers, suppliers, professional engineers, consultants, contractors, licensed electrical workers, building owners and relevant government agencies.

**Revision**

17. **Specification for earthing and bonding clamps** (Revision of SS 322 : 1987)

This standard specifies performance and mechanical requirements for clamps used to provide mechanically and electrically sound means of earthing and/or bonding, which are primarily intended for use in electrical installations for the connection of:

- earthing conductors, having a cross-sectional area in the range 2.5 mm$^2$ to 70 mm$^2$, to earth electrode rods or other means of earthing;
- bonding conductors to metal tubes of circular cross-section that have circumferences of not less than 18.8 mm (i.e. diameters of not less than 6 mm).

Potential users of this standard include manufacturers, test laboratories, purchasers, professional engineers, consultants, suppliers, building owners, contractors, licensed electrical workers and relevant government agencies.

**Withdrawal**


The above TRs on LED modules and luminaire performance are recommended for withdrawal as they will be replaced by the adoption of IEC 62717-201, IEC 62722-1-2015 and IEC 62722-2-1-2015. Refer to items 13 and 14 released for public comment currently.

This standard is recommended for withdrawal as it is outdated. The relevant information which is still current has been included in subclause 12.3 of SS 550 : 2009. Users can refer to IEC 62040-1 – ‘Uninterruptible power systems (UPS), Part 1: General and safety requirements for UPS’.

22. Safety of household and similar electrical appliances (SS 146)

Part 1: 2008 General requirements (Identical adoption of IEC 60335-1 : 2001)

The above parts of SS 146 are recommended for withdrawal as users can refer directly to the respective IEC standards as specified in the Singapore Consumer Protection (Safety Requirements) Registration Scheme Information Booklet*. Where the adoptions were modified to reflect local requirements (as in the case of Parts 2:5 and 2:8 where bare element water heaters are not allowed in Singapore and thermal cut-out shall provide all-pole disconnection), the deviations are also stated in this booklet.

(IV) Energy

Proposed new work item
(Note: No drafts available at this juncture)

23. Energy efficiency and renewable energy sources – Common international terminology


The aim of the standards is to support activities related to energy and deal with renewable energy sources. It addresses the fundamental principles and concepts of renewable energy sources with the goal of improving coherence and common characteristics for energy terms.

Potential users of the standard may include energy managers and coordinators as well as energy services companies, energy system auditors and energy management professionals/consultants.

(V) General Engineering and Safety

Review
(Note: Review the existing standards to determine if they should be updated, confirmed or withdrawn if they no longer serve the industry’s needs – no new draft/version)


This standard provides organisational and logistical requirements for the use of compressed air supply apparatus in occupational diving operations as well as specific requirements for the use of surface-supplied breathing apparatus (SSBA) and self-contained underwater breathing apparatus (SCUBA) in occupational underwater operations in depths not exceeding 50 m and 30 m respectively.

The standard will be reviewed with the intention to update it.
Copies of the drafts and standards are available at:

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**NOTE**

1) The viewing period of the drafts will expire on the closing of the 2-month public comments. Drafts will no longer be available after this date.
2) The submission form for comments can be downloaded at http://www.spring.gov.sg/public_comments

The closing date for comments is **16 November 2015** for the establishment, revision, amendment and withdrawal of Singapore Standards and **16 October 2015** for the review of Singapore Standards and the new work items.

For more information on the standards, please contact Mrs Kay Chua, Senior Manager at Tel: (65) 6279 1804 or Email: kay_chua@spring.gov.sg.
Frequently asked questions about public comment on Singapore Standards:

1. **What is public comment?**

   Singapore Standards are established based on an open system which is also in accordance with the World Trade Organisation requirements. These documents are issued as part of a consultation process before any standards are introduced or reviewed. This important stage in the development of Singapore Standards is the Public Comment period. This mechanism helps industry, companies and other stakeholders be aware of forthcoming changes to Singapore Standards and provide 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 benefit me?**

   The benefits are:
   - It 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;
   - It 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 the National Library Board at the addresses given above. 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 and 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 a new standard?**

   You can inform us of your standardisation needs by completing the Proposal Form at Apply for a Standard.