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Specification for elastomeric wall coating

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Foreword

This Singapore Standard was prepared by the Technical Committee on Surface Coatings under the direction of the Chemical Standards Committee.

This standard was based on a research project undertaken to develop a specification for an elastomeric wall coating suitable for use under the climatic conditions of Singapore which is situated in the humid tropics.

SS 500 : 2002 was amended in September 2014 to include the new performance criteria for wet scrub resistance as described in SS 5 : Part F6 'Determination of wet-scrub resistance'.

This standard is a revision of SS 500 : 2002. The main changes in the revised edition are as follows:

a) Inclusion of quantitative requirements on heavy metals and VOCs;

b) Inclusion of qualitative requirements on solvents and specific hazardous substances.

Annex A (water absorption test) is reproduced from Japanese Industrial Standard JIS K 5400 : 1990 – 'Testing methods for paints' with permission from the Japanese Standards Association. Acknowledgement is made for the use of information from this standard.

This standard is expected to be used by paint manufacturers, suppliers, test laboratories, contractors, applicators, architectural associations, consultants, facilities/property managers, land surveyors and related government agencies.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. SPRING Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

1. *Singapore Standards are subject to periodic review to keep abreast of technological changes and new technical developments. The changes in Singapore Standards are documented through the issue of either amendments or revisions.*

2. *Compliance with a Singapore Standard does not exempt users from legal obligations.*

Specification for elastomeric wall coatings

1 Scope

This standard applies to a ready-to-use, air-drying elastomeric wall emulsion paint with waterproofing and fine crack repairing 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 the standard.

2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ASTM D412	Standard test methods for vulcanized rubber and thermoplastic elastomers – Tension
ASTM D610	Standard practice for evaluating degree of rusting on painted steel surfaces
ASTM D1014	Standard practice for conducting exterior exposure tests of paints and coatings on metal substrates
ASTM D1653	Standard test methods for water vapor transmission of organic coating films
ASTM D3359	Standard test methods for measuring adhesion by tape test
ASTM D3719-00	Standard test method for quantifying dirt collection on coated exterior panels
BS 4800	Schedule of paints colours for building purposes
IEC 62321 : 2008	Electrotechnical products - Determination of levels of six regulated substances (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers)
ISO 11890 Part 1	Paints and varnishes – Determination of volatile organic compound (VOC) content – Part 1 : Difference method
ISO 11890 Part 2	Paints and varnishes – Determination of volatile organic compound (VOC) content – Part 2 : Gas-chromatographic method
SS 5	Methods of test for paints, varnishes and related materials Part B2 : Determination of non-volatile matter content Part B4 : Condition in container Part B7 : Density Part B9 : Brushing properties Part B12 : Consistency of paints using the Stormer viscometer Part B13 : Fineness of grind Part C4 : Determination of low concentrations of mercury in paint by atomic absorption spectroscopy Part C6 : Determination of low concentrations of lead, cadmium and cobalt in paint by atomic absorption spectroscopy Part D3 : Hard-drying time

	Part E1 : Measurement of specular gloss of non-metallic paint films at 20^{o}, 60^{o} and 85^{o} Part E2 : Determination of contrast ratio (opacity) of light-coloured paints at a fixed spreading rate Part E3 : Visual comparison of the colour of paints Part F6 : Determination of wet-scrub resistance Part G2 : Alkali resistance (spotting method) Part G9 : Artificial weathering and exposure to artificial radiation – Exposure to filtered xenon-arc radiation
SS 345	Algae resistance emulsion paint for decorative purposes

NOTE –
1 The review of the SS 5 series was completed in 2013.
2 IEC 62321 : 2008 is used for the evaluation of Cr(VI) content in electrotechnical products and can also be used for coatings.