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(ICS 91.120.30)

SINGAPORE STANDARD

Specification for preformed waterproofing membranes for concealed roofing system

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membranes for concealed roofing system**

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Foreword

This Singapore Standard was prepared by the Technical Committee for Singapore Standard Specification for Preformed Waterproofing Membranes for Concealed Roofing System under the direction of the Building Materials Product Standards Committee.

This standard stipulates the appropriate performance requirements and the evaluation methods for the preformed waterproofing membranes.

The performance of the preformed waterproofing membrane as an effective barrier against water penetration is also dependent upon the technical design of the roofing system. In obtaining a good waterproofing system, proper installation is just as important as intelligent design and good manufacture. This standard may serve as a standard reference for the specification for preformed waterproofing membranes in the building industry.

In preparing this standard, the following standards were used:

1. ASTM D146:1990 Standard test methods for sampling and testing bitumen-saturated felts and woven fabrics for roofing and waterproofing
2. ASTM D412:1992 Standard test methods for vulcanized rubber and thermoplastic rubbers and thermoplastic elastomers – Tension
3. ASTM D570:1988 Standard test method for water absorption of plastics
4. ASTM D1204:1994 Standard test method for linear dimensional changes of nonrigid thermoplastic sheeting or film at elevated temperature
5. ASTM D 3767:2014 Standard practice for rubber – Measurement of dimensions
6. ASTM E96:1993 Standard test methods for water vapor transmission of materials
7. DIN 16726:1986 Plastic roofing felt and waterproofing sheet. Testing
8. UEAtc M.O.A.T No. 29:1984 Directives for the assessment of roofing systems using PVC sheets without reinforcement, loose laid under heavy protection and not compatible with bitumen
9. UEAtc M.O.A.T No. 30:1984 Special directives for the assessment of reinforced waterproof coverings in atactic polypropylene (APP) polymer bitumen

Acknowledgement is made for the use of information from the above standards. The original ASTM standards are published in the Annual Book of ASTM Standards, copyright American Society of Testing and Materials, 1916 Race Street, Philadelphia, PA 19103, U.S.A. These standards may be obtained from SISIR or from ASTM direct.

This standard does not purport to address the safety problems associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

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

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1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "mature standards". Mature standards will not be subject to further review unless there are requests to review such standards.*
2. *An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.*
3. *Compliance with a SS or TR does not exempt users from any legal obligations.*

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1 Scope

In view of the diverse variety of available materials, this Singapore Standard specifies the performance requirements and evaluation methods for the bituminous and non-bituminous preformed membrane for use as waterproofing material for concealed roofing system. It covers both fully bonded and loosely-laid preformed membranes. This standard does not cover the weathering effect in exposed roofing system.