



BSI Standards Publication

**Spray applied bitumen system for stress
absorbing membrane interlayers –
Materials, installation, and testing –
Specification**

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 April 2023. It was prepared by Subcommittee B/510/2, *Surface Treatments*, under the authority of Technical Committee B/510, *Road Materials*. A list of organizations represented on these committees can be obtained on request to the committee manager.

Supersession

This British Standard partially supersedes [BS 434-2](#), which is expected to be withdrawn in due course.

Relationship with other publications

This British Standard has been introduced to replace BS 434-2:2006, Clause 4. [BS 434-2](#) included clauses for a number of different uses of emulsions, each of which will be reviewed and updated in due course.

Information about this document

Product testing. Users of this British Standard are advised to consider the desirability of having the Type Approval Installation Trial (TAIT) testing witnessed and reported by an independent laboratory.

Test laboratory accreditation. Users of this British Standard are advised to consider the desirability of selecting test laboratories to undertake testing on the TAIT that are accredited to BS EN ISO 17025.

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Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation, and general informative material is presented in smaller italic type and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

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1 Scope

This British Standard specifies requirements for the use of bituminous spray stress absorbing membrane interlayers (SAMIs).

NOTE 1 There are a range of different materials and techniques available for SAMIs, including asphalt, geosynthetics, and bituminous binders, which can include bitumen emulsion, paving grade and modified bitumen.

NOTE 2 PD 6691 gives guidance on the requirements for asphalt.

NOTE 3 ISO/CD TR 18228-10 gives guidance on the design of interlayers with geosynthetics.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions, or limits the application of this document¹⁾. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Standards publications

[BS 1707](#), *Road surface dressing, bond coats, seals, preservatives and other spray-applied treatments – Specification for the method of test for binder sprayers for accuracy of spread of binder (spray bar bench test)*

BS 594987, *Asphalt for roads and other paved areas – Specification for transport, laying, compaction, and product type testing protocols*²⁾

BS EN 1426, *Bitumen and bituminous binders – Determination of needle penetration*

BS EN 1427, *Bitumen and bituminous binders – Determination of the softening point – Ring and Ball method*

BS EN 12272-1, *Surface dressing – Test methods – Part 1: Rate of spread and accuracy of spread of binder and chippings*

BS EN 12273, *Slurry surfacing – Requirements*

BS EN 12274-6, *Slurry surfacing – Test methods – Part 6: Rate of application*

BS EN 12591:2009, *Bitumen and bituminous binders – Specifications for paving grade bitumen*

BS EN 12593, *Bitumen and bituminous binders – Determination of the Fraass breaking point*

BS EN 12607-1, *Bitumen and bituminous binders – Determination of the resistance to hardening under influence of heat and air – Part 1: RTFOT method*

BS EN 13006-1:2011, *Road and airfield surface characteristics – Test methods – Part 1: Measurement of pavement surface macrotexture depth using a volumetric patch technique*

BS EN 13043:2022, *Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas*

BS EN 13108-1, *Bituminous mixtures – Material specifications – Part 1: Asphalt concrete*

BS EN 13108-5, *Bituminous mixtures – Material specifications – Part 5: Stone mastic asphalt*

BS EN 13398, *Bitumen and bituminous binders – Determination of the elastic recovery of modified bitumen*

BS EN 13589, *Bitumen and bituminous binders – Determination of the tensile properties of modified bitumen by the force ductility method*

¹⁾ Documents that are referred to solely in an informative manner are listed in the Bibliography.

²⁾ This document also gives an informative reference to BS 594987:2017.