

Specification for undercoat and finishing paints

ICS 87.040

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee STI/28, Paint systems for non-metallic substrates, upon which the following bodies were represented:

- British Cement Association
- British Coatings Federation Ltd
- British Decorators Association
- Department for Education
- Department of the Environment, Transport and the Regions
- European Resin Manufacturer's Association
- Furniture Industry Research Association
- Ministry of Defence
- Oil & Colour Chemists Association
- Society of Chemical Industry
- Timber Research & Development Association
- Union of Construction, Allied Trades & Technicians

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Foreword

This British Standard has been prepared by Technical Committee STI/28. This standard supersedes BS 7664:1993, which is withdrawn.

It is intended that this standard should encompass those materials that are widely available at the date of its publication, for example systems based on mineral spirit reducible alkyd resins which are suitable for both interior and exterior applications. The composition of these materials is, however, not specified and it is possible that advances in technology may produce water-borne coating systems that meet the requirements of this British Standard.

Paints conforming to this standard can be satisfactorily applied under all reasonable climatic conditions, i.e. when the ambient temperature is between 5 °C and 30 °C and the relative humidity is not greater than 85 % .

In general, the test procedures have been aligned, wherever possible, with those specified in the BS 3900 series. This has, however, not been possible for the following tests.

- a) *Opacity (contrast ratio)*. This test (see annex G) is broadly in line with BS 3900-D6:1982, except that sealed black and white card is used as the substrate and the opacity is determined and the minimum value specified for a two-coat system.
- b) *Yellowing test*. This test (see annex I) determines the maximum instrumental colour difference that occurs after storage of painted panels in complete darkness for a specified time.
- c) *Artificial weathering*. This test (see annex L) is based on ASTM G53:1988, using type UVA 351 fluorescent tubes. The test is carried out on a three-coat system using acid chromate pickled hard aluminium as a stable substrate. As the colour range of materials covered by this British Standard is potentially very large, it has not been possible to specify a maximum colour change for every finishing coat colour. A range of nine colours, together with white, has therefore been selected (see clause 4). The maximum colour change, minimum gloss level and the freedom from chalking after 1 000 h artificial weathering are specified for this limited range of colours.
- d) *Natural weathering*. This test (see annex M) is based on the European Standard EN 927-3¹⁾, and is carried out on a three-coat system. In the test, a primer conforming to BS 7956:2000 is used on a relatively unstable substrate for a period of 12 months. Limits for cracking, blistering, flaking, adhesion and mould growth are specified in EN 927-2¹⁾.

It has been assumed in the drafting of this specification that it will be used and applied by persons who are appropriately qualified and experienced.

WARNING This British Standard calls for the use of substances and/or procedures that may be injurious to health if adequate precautions are not taken. This standard refers only to technical suitability and does not absolve either the designer, the producer, the supplier or the user from statutory obligations relating to health and safety at any stage of manufacture or use.

¹⁾ In preparation

Product certification. Users of this British Standard are advised to consider the desirability of third party certification or product conformity with this British Standard, based on testing and continuing product surveillance. This may be coupled with the assessment of a supplier's quality systems against the appropriate standard in the BS EN ISO 9000 series.

Enquiries on the availability of third party certification schemes are forwarded by BSI to the Association of British Certification Bodies. If a third party certification scheme does not already exist, users should consider approaching a body from the list of Association Members.

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