

Exterior wood coating systems —

Part 1: Guide to classification and selection

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- British Resin Manufacturers' Association
- British Wood Preserving Association
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Foreword

This Part of BS 6952 has been prepared under the direction of the Pigments, Paints and Varnishes Standards Committee. It gives guidance on the classification and selection of exterior coatings including stains, varnishes and paints for timber.

In recent years there has been a proliferation of claims and terms concerning wood coatings, which has caused confusion. Descriptive names for coating systems cut across technical, functional and end use categories making it difficult to devise an unequivocal simple terminology applicable to all product types. This Part of BS 6952 attempts to avoid this problem by separately defining categories of appearance and end use but with no assumptions as to whether or not a given product by its appearance alone will be suitable or unsuitable for a particular use. The objective is to avoid misuse of coatings either by the misunderstanding or overstatement of performance claims. In this way the possibilities for future technical advance are recognized. However this Part of BS 6952 does point out where current experience has shown characteristic coating behaviour so that users may be forewarned where to seek specific assurances.

It is a major objective of this Part of BS 6952 to identify those considerations which should be taken into account when assessing the suitability or otherwise of a coating system for use in a particular situation and to provide a framework for communicating this information between manufacturer and user.

When products are subject to the Food and Environmental Protection Act (FEPA) appropriate action should be taken to ensure compliance.

Responsibility for the assignment of coatings to the appropriate use and appearance categories rests solely with the coatings manufacturer.

This Part of BS 6952 is complementary to, and should be read in conjunction with, BS 6150, which covers other building materials and includes considerable detail concerning good practice, application methods and the properties of various substrates including wood and wood-based products.

It is intended that future Parts of BS 6952 will include material requirements and methods of test.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 12, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Section 1. General

1 Scope

This Part of BS 6952 provides guidance to the user on the selection of wood coating systems for external use which are intended to meet their end use requirements in terms of both appearance and performance. The guide describes a nomenclature and framework such that the user can describe the appearance which it is wished to achieve for a specific end use and the manufacturer can confirm that a product has the desired appearance and is recommended for the proposed use and can also identify any operational or other constraints.

This Part of BS 6952 identifies and explains the significance of key properties (e.g. permeability) which will have an important bearing on performance (e.g. durability) but does not set performance criteria. A framework for summarizing necessary information about products is also described (see Table 2).

NOTE 1 Further Parts of BS 6952 dealing with performance criteria and methods of test for exterior wood coating systems are in preparation.

NOTE 2 This Part of BS 6952 is principally concerned with coatings for solid wood but may also be applicable to other wood based products including plywood. Manufacturers of coatings should be consulted on applications to these substrates.

NOTE 3 The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this Part of BS 6952 the definitions given in BS 2015, BS 4261 and BS 6100-4 apply together with the following.

2.1

blocking

self adhesion of coatings that are brought into contact after their recommended initial drying period. The term is usually used when adhesion is sufficient to cause damage on separation of the coated components

2.2

exterior woodstain

a type of natural finish (see also 5.2.3)

2.3

natural finish

a product which does not totally obscure the surface characteristics of wood

NOTE This term is used somewhat loosely and a wide range of products, varnishes and low build stains may be completely transparent (see 5.2.3). Stains of higher build especially the darker coloured products tend to obscure the grain pattern. Opaque stains obscure all grain but not the texture and surface profile. They share this property with paint and the terminology is not precise. (See also 2.5.5 of BS 6150:1982.)

2.4

opaque stain

a coating for wood which has the general application characteristics and solid content associated with a woodstain but contains opaque pigment

NOTE It might also be legitimately described as a paint (see also Table 6 ref 6/9) of BS 6150:1982).

2.5

permeability

the rate of water vapour transmission through the coating system

2.6

preservative

a product containing a fungicide which is intended to inhibit the development of fungi in the wood to which it is applied

NOTE This term is used somewhat loosely in the paint industry. Some products often are only intended to prevent the development of blue stain¹⁾ or mould fungi which mar the appearance of the finish and may or may not be wood preservatives as defined in BS 4261.

2.7

protective system

a product that protects the timber surface from the physical and chemical effects of the weather

NOTE Such products do not necessarily protect against attack by fungi.

2.8

self priming paint

a product which provides a paint-like, fully opaque coating through successive application of one, two or more coats without a separate primer or undercoat

2.9

substrate

the surface of wood or existing coating to which the coating system is to be applied

2.10

system

full application of all the products required to achieve the desired finish. Various one or more coats of a single product or several coats of separate products, e.g. primer, undercoat, topcoat

¹⁾ A method for determining the preventative effectiveness of a preservative treatment against blue stain in service is described in EN 152-1 and EN 152-2 which will be published as BS 7066-2 and BS 7066-3.

2.11

topcoat

1) The final coat in a system involving application of two or more products. Applied to paints, refers to a conventional gloss or matt final coat, which is an essential part of the finishing system, but in relation to exterior woodstains, may refer to an optional final coat applied on top of a complete system to increase build without increasing opacity or to modify sheen.

2) An interim maintenance coat applied to a partly weathered system to extend the time before full maintenance is required.