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Painting of buildings — Code of practice

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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 31 March 2019. It was prepared by Technical Committee STI/28, *Paint systems for non-metallic substrates*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

BS 6150:2019 supersedes BS 6150:2006+A1:2014, which is withdrawn.

Information about this document

This is a full revision of the standard, and it has been restructured and prepared to reflect changes in legislation and coating material technology, and to provide a document that is more accessible and appropriate for the sector.

Attention is drawn to the Construction (Design and Management) Regulations 2015 [1] and the Construction (Design and Management) Regulations (Northern Ireland) 2016 [2] which set out the responsibilities of those involved in construction work, including clients, designers, contractors and workers (available from http://www.legislation.gov.uk/uksi/2015/51/contents/made[1]).

Product references indicated in the text by figures in parentheses, e.g. (B.1/2), refer to the products listed and described in the tables within the annexes.

Hazard warnings

WARNING. This British Standard calls for the use of substances and/or procedures that can be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

Use of this document

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

Presentational conventions

The provisions in this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

The word “should” is used to express recommendations of this standard. The word “may” is used in the text to express permissibility, e.g. as an alternative to the primary recommendation of the clause. The word “can” is used to express possibility, e.g. a consequence of an action or an event.

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

1 Last accessed 20 March 2019.

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

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Introduction

BS 6150, *Painting of buildings – Code of practice*, provides recommendations and guidance concerning paint application on buildings. All parts of a building to which paint and coatings are to be applied need to be designed to avoid, as far as possible, the creation of features or conditions that can cause difficulties in application, impair the performance of coatings, or promote decay or corrosion of structural materials.

Many modern building materials do not require painting. If, however, building materials are chosen which require painting for aesthetic or protective reasons, then design factors need to be considered by the architect at the earliest possible stage. Specifiers need to consider design aspects from the perspective of paint selection, maintenance and expected service life. Opportunities for design change after construction are very limited. For some new build components, e.g. window frames, initial painting is best carried out industrially prior to installation.

Correct selection of paint systems and clear, precise specifying of methods and processes are essential. However, this alone does not ensure that the chosen systems perform satisfactorily, and it is equally important that consideration is given to the factors described in Table 1, including substrate, location and exposure conditions. The influence of design and detailing, proper organization and supervision is of particular importance, and, in some circumstances, an effective inspection procedure. Exposure conditions are the consequence of construction and climatic factors (e.g. see BS EN 927-1:2013, Table 2). The guidance on typical life to maintenance is system specific and applies to mild and moderate exposure conditions. Service life is generally shorter under more severe conditions.

Hazards to health and safety that might be encountered in the painting of buildings and the precautions that need to be taken are described in Annex A. Reference is also made to applicable legislation. These aspects are to be considered in terms of a safe system of work. The health and safety of all persons involved in the building during the painting process, including client, occupier, painter, supervisory and inspection staff, need to be ensured. Annex B gives more information on paints and coatings. Annex C describes the effect of temperature and humidity on paint types and environmental exposure. Annex D gives information on fire. Annex E to Annex I give more information on particular substrates. Annex J provides information on anti-graffiti treatments.

1 Scope

This British Standard gives recommendations for good practice in preparation, initial painting and maintenance painting of buildings (e.g. dwellings, offices, light industrial buildings, schools, hospitals, hotels and public buildings generally) internally and externally, in which decoration is a significant and often the major factor. This British Standard takes into account the need to protect many building materials against weathering or other forms of attack normally encountered. Detailed information is given on wood, metal, masonry and other typical substrates found in buildings.

The paints and coating materials referred to in this British Standard are principally those in common use, with limited reference to specialist coating materials and factory-applied coatings. Some materials have been excluded because of their obsolescence, limited or specialized usage or, in the case of newly developed products, lack of experience of their performance in service.

This British Standard does not cover:

a) the protection of structural steel elements (see BS EN ISO 12944, and BS 5493 for iron structures), including hot spray application;

b) decorative processes and other work usually carried out by specialists, such as asbestos encapsulation, the maintenance of lead surfaces, resin flooring, polymer renders or waterproofing of flat roofs;

c) the particular requirements of listed or historic buildings which are protected by law;

d) limewash and distemper coating materials;

e) preservative treatments for structural timber;

f) reactive coating materials for passive fire protection and systems consisting of these materials (see BS 8202-1, BS EN 16623 and BS 476); and

g) general safety hazards of access for painting (see BS 8210).

The recommendations made in this British Standard are intended to facilitate achievement of standards of finish which, when inspected as described in Clause **10**, will be of a generally acceptable commercial standard for the intended types of buildings, providing that the work of other trades has been completed to a satisfactory standard. Where especially high standards of finish are necessary, more elaborate processes and systems than those described in this British Standard might be necessary.

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 of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 476 (all parts), *Fire tests on building materials and structures*

BS 1336, *Specification for knotting*

BS 5493, *Code of practice for protective coating of iron and steel structures against corrosion*

BS 7664, *Specification for undercoating and finishing paints*

BS 7956, *Specification for primers for woodwork*

BS 8221-1, *Code of practice for cleaning and surface repair of buildings — Part 1: Cleaning of natural stones, brick, terracotta and concrete*

BS EN 927 (all parts), *Paints and varnishes — Coating materials and coating systems for exterior wood*

BS EN 1504-10, *Products and systems for the protection and repair of concrete structures — Definitions, requirements, quality control and evaluation of conformity — Part 10: Site application of products and systems and quality control of the works*

BS EN 12811-1, *Temporary works equipment — Scaffolds — Part 1: Performance requirements and general design*

BS EN 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using test data from reaction to fire tests*

BS EN 13914-1, *Design, preparation and application of external rendering and internal plastering — Part 1: External rendering*

BS EN ISO 4618:2014, *Paints and varnishes — Terms and definitions*

BS EN ISO 8501-3, BS 7079-A3, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 3: Preparation grades of welds, edges and other areas with surface imperfections*