BS 8204-6:2008+A1:2010

Incorporating Corrigendum No. 1

BRITISH STANDARD

Screeds, bases and in situ floorings –

Part 6: Synthetic resin floorings – Code of practice

ICS 91.060.30

Publishing and copyright information

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The following BSI references relate to the work on this standard:
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Amendments issued since publication

Date	Text affected
October 2010	See foreword
November 2010	C1 See foreword

Contents

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 46, a blank page and a back cover.

Foreword

Publishing information

This part of BS 8204 is published by BSI and came into effect on 31 January 2008. It was prepared by Subcommittee B/507/6, *Screeds and in situ floorings*, under the authority of Technical Committee B/507, *Paving units, kerbs, screeds and in situ floorings*. A list of organizations represented on this committee can be obtained on request to its secretary. The start and finish of text introduced or altered by Amendment No. 1 is indicated in the text by tags ▮A1⟩ ⟨A1▮. Minor editorial changes are not tagged.

Amendment A1 introduces the following principal change.

- A new Annex B (normative).

The start and finish of text introduced or altered by Corrigendum No. 1 is indicated in the text by tags ▮C1⟩ ⟨C1▮.

Corrigendum No. 1 corrects **B.2.1** and Figure B.1.

Supersession

BS 8204-6:2008+A1:2010 supersedes BS 8204-6:2008, which is withdrawn.

Relationship with other publications

The other parts of BS 8204 are the following:

- *Part 1: Concrete bases and cement sand levelling screeds to receive floorings – Code of practice;*
- *Part 2: Concrete wearing surfaces – Code of practice;*
- *Part 3: Code of practice for polymer modified cementitious wearing surfaces;*
- *Part 4: Code of practice for terrazzo wearing surfaces;*
- *Part 5: Code of practice for mastic asphalt underlays and wearing surfaces;*
- *Part 7: Pumpable self-smoothing screeds – Code of practice.*

Use of this document

As a code of practice, this 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 standard is expected to be able to justify any course of action that deviates from its recommendations.

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”.

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

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

The term “resin” is derived from “epoxy resin”, the compound on which the first resin floorings were based. Many different types of synthetic resins are now used to manufacture resin floorings but the one common feature is that a polymerization, or curing, reaction takes place in situ to produce the final synthetic resin finish. Synthetic resin flooring is available in a wide range of thicknesses from thin floor seals to heavy-duty industrial protective coatings. The resulting flooring can provide a seamless surface with greatly enhanced performance compared with the concrete base on which it is applied.

Concrete wearing surfaces give satisfactory service under many industrial conditions but become less effective where there are specific requirements for chemical resistance, hygiene, cleanliness, and resistance to high impact or abrasion. The main properties of synthetic resin floorings can be summarized as follows:

a) a strong permanent bond to the concrete base;

b) resistance to a wide spectrum of aggressive chemicals;

c) impermeability to liquids;

d) toughness, durability, resilience and resistance to impact or abrasion;

e) hygienic and easily cleaned surfaces;

f) resistance to cracking;

g) relatively thin applied thickness;

h) rapid installation and curing with minimum disruption to normal operations.

1 Scope

This part of BS 8204 gives recommendations for the design and installation of in situ synthetic resin flooring, based on liquid synthetic resin binders in which curing takes place by chemical reaction of the resin components, used internally in buildings. The synthetic resin floorings are bonded to direct finished concrete slabs, polymer-modified cementitious or fine concrete screeds and to existing concrete floors.

Annex A gives recommendations for the design and installation of resin terrazzo flooring.

Synthetic resin floorings applied to other materials such as timber or metal are not covered by this code of practice.

The installation of resilient sports surfacings based on synthetic resins is not covered by this code of practice.

2 Normative references

The following referenced documents are indispensable for the application 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 5395-1, *Stairs, ladders and walkways – Part 1: Code of practice for the design, construction and maintenance of straight stairs and winders*

BS 6100-1, *Glossary of building and civil engineering terms – Part 1: General and miscellaneous*

BS 6100-6, *Glossary of building and civil engineering terms – Part 6: Concrete and plaster*

BS 7976-2, *Pendulum testers – Part 2: Method of operation*

BS 8102, *Code of practice for protection of structures against water from the ground*

BS 8203, *Code of practice for installation of resilient floor coverings*

BS 8204-1:2003, *Screeds, bases and in situ floorings – Part 1: Concrete bases and cement sand levelling screeds to receive floorings – Code of practice*

BS 8204-2, *Screeds, bases and in situ floorings – Part 2: Concrete wearing surfaces – Code of practice*

BS 8204-3:2004, *Screeds, bases and in situ floorings – Part 3: Code of practice for polymer modified cementitious wearing surfaces*

BS 8204-7, *Screeds, bases and in situ floorings – Part 7: Pumpable self-smoothing screeds – Code of practice*

BS 8500-2:2006, *Concrete – Complementary British Standard to BS EN 206-1 – Part 2: Specification for constituent materials and concrete*

BS EN 12504-2:2001, *Testing concrete in structures – Part 2: Non-destructive testing – Determination of rebound number*

BS EN 13318, *Screed material and floor screeds – Definitions*

BS EN 13529, *Products and systems for the protection and repair of concrete structures – Test methods – Determination of resistance to severe chemical attack*

BS EN 13813, *Screed material and floor screeds – Screed material – Properties and requirements*

CP 102, *Code of practice for protection of buildings against water from the ground*

3 Terms and definitions

For the purposes of this part of BS 8204, the terms and definitions given in BS EN 13318, BS 6100-1, BS 6100-6 and the following apply.

3.1 base

building element that provides the support for a screed and/or floor finishes

3.2 flooring

uppermost fixed layer of a floor that is designed to provide a wearing surface

3.3 direct finished base slab

base that is finished to receive directly the flooring to be applied without the need for a levelling screed

3.4 screed

layer or layers of screed material laid in situ, directly onto a base, bonded or unbonded, or onto an intermediate layer or insulating layer, to obtain one or more of the following purposes:

- to obtain a defined level;
- to carry the final flooring;
- to provide a wearing surface.

3.5 screed material

composition comprising binder, aggregates and possibly liquid to ensure the setting of the binder and in some cases admixtures and/or additives

3.6 levelling screed

screed finished to obtain a defined level and to receive the final flooring

3.7 synthetic resin

reactive organic polymeric binder for a flooring system comprising one or more components which react in situ at ambient temperature

3.8 synthetic resin screed

screed based on synthetic resin as the binder where a flowing or trowellable composition is converted in situ to a solid layer by a chemical reaction of the synthetic resin

3.9 departure from datum

deviation in height of the surface of a flooring layer from a fixed datum plane