

BRITISH STANDARD

Screeds, bases and in situ floorings –

Part 6: Synthetic resin floorings – Code of practice

ICS 91.060.30



NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© BSI 2010

ISBN 978 0 580 73670 4

The following BSI references relate to the work on this standard:

Committee reference B/507/6

Draft for comment 07/30087832 DC

10/30218586 DC

Publication history

First published November 2001

Second edition published January 2008

Amendments issued since publication

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

Contents

Foreword *ii*

Introduction *1*

- 1** Scope *1*
- 2** Normative references *2*
- 3** Terms and definitions *3*
- 4** Exchange of information and time schedule *4*
- 5** Materials *6*
- 6** Design *7*
- 7** Design and preparation of concrete bases and fine concrete screeds *23*
- 8** Work on site *27*
- 9** Blistering of the completed floor *31*
- 10** Health and safety *33*
- 11** Inspection and testing *33*
- 12** Maintenance *35*

Annexes

Annex A (normative) The design and installation of resin terrazzo flooring *36*

- A1** Annex B (normative) Determination of slip resistance of pedestrian surfaces by the ramp/trolley method, alternatively known as the roller coaster method *41* **A1**

Bibliography *46*

List of figures

- Figure 1 – Typical movement joints *18*
- Figure 2 – Typical transition joint *20*
- Figure 3 – Typical stainless steel drainage channel *21*
- Figure 4 – Typical floor-to-wall joint *22*
- Figure 5 – Typical service duct *23*
- A1** Figure B.1 – Trolley and ramp *42*
- Figure B.2 – Calculation to determine the coefficient of friction or the equivalent slip resistance *44* **A1**

List of tables

- Table 1 – Types of synthetic resin flooring *8*
- Table 2 – Classification of surface regularity *16*
- A1** Table B.1 – Reproducibility *44* **A1**

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

3.10 surface regularity

deviation in height of the surface of a flooring layer over short distances in a local area

NOTE This is sometimes referred to as flatness.

4 Exchange of information and time schedule

4.1 General

Consultation and exchange of information between all parties concerned with the building operations should be arranged, so that each party has full knowledge of the particulars of the flooring work and is able to cooperate in producing the necessary conditions to complete a satisfactory job.

Some of the items listed in 4.3, 4.4 and 4.5 may need special precautions or procedures and responsibility for these should be determined in advance of the work.

4.2 Selection of flooring to be applied

It is essential that, in the design and construction stages, there is full consultation with the manufacturer of the synthetic resin flooring to ensure that the product to be selected is entirely suited for the conditions both during application and in subsequent service. This consultation should take account of the following items, however, it should be noted that some of these items may only apply where the client has specified particular performance requirements:

- a) the intended use of the synthetic resin flooring, including the type, extent and frequency of traffic;
- b) the type of loading (static or dynamic) and severity of impact;
- c) the details of all chemicals, including those used for cleaning or sterilizing, which could come into contact with the floor, and likely extent, frequency and temperature of any spillage;
- d) likely contamination in service and implications for slip resistance;
- e) the temperatures that the flooring is required to withstand in normal service or as part of the cleaning operations and whether exposure is by radiant or conductive heat or by direct contact;
- f) the uniformity and retention of colour, appearance and decorative effects, including the usage of multiple batches in large areas;
- g) the extent to which the flooring will be exposed to direct sunlight or ultraviolet light;
- h) the appearance and quality of finish;

NOTE Where appearance is critical, it may be advisable to prepare a suitably sized, on-site test panel of the finished flooring in advance of the main work.

- i) the need to reduce the risk of osmotic blistering (see 9.2);
- j) compliance with hygiene or food industry requirements;

- k) type and frequency of cleaning available (see Clause 11);
- l) special requirements, such as fire resistance or anti-static characteristics;
- m) expected life of the flooring;
- n) thickness of flooring to be installed;
- o) time available for the application and curing of the flooring;
- p) age, specification where known and nature of the base, including information about any previous use of the floor that could affect adhesion, and any preparatory treatment required.

4.3 Information to be provided to the flooring contractor

All relevant information should be provided in good time to those responsible for installing the flooring and to others whose work could be affected. This should include the following:

- a) description, situation and address of site and means of access;
- b) those conditions of contract which could practically affect this particular work;
- c) location and area of flooring to be installed;
- d) finished floor level, falls and maximum permissible departure from datum in each location;
- e) class of surface regularity of the finished flooring;
- f) colour of the flooring to be applied, and a plan for the use of different batches as necessary;
- g) type of damp-proofing and insulation if present;
- h) type and thickness of any levelling screed proposed, and whether any curing compound is to be applied;
- i) type of finish of base or fine concrete screed;
- j) any work consequent upon services passing through the floor;
- k) treatment of joints;
- l) treatment of channels;
- m) treatment of skirtings and kerbs;
- n) treatment of junctions with adjacent floorings and doorway thresholds;
- o) any special requirements related to underfloor heating;
- p) the timing of the introduction of heating in the building;
- q) date for the completion of the base or fine concrete screed to receive the flooring;
- r) dates for the start and completion of the individual sections of the floor;
- s) details and frequency of any compliance testing required;

- t) any potential restrictions on working hours;
- u) any limitations on installation due to production or other activities.

It should be noted that some of items a) to t) may not apply in all cases and that this will depend on the individual client's requirements.

4.4 Information to be provided by the flooring contractor

The flooring contractor should provide in good time to those responsible for the building, details of the conditions needed for the installation of the flooring. These should include:

- a) the extent of weatherproof areas to be provided for storage of raw materials and mixing of the flooring product and whether any temperature control is necessary;
- b) the ambient temperature requirements in the area where the flooring is to be installed;
- c) the power and lighting requirements to facilitate the laying operation;
- d) the protective screening to isolate the working area from adjacent facilities;
- e) the minimum time intervals after the flooring is installed before allowing foot traffic, vehicular traffic and water or chemical exposure;
- f) the protection necessary for the flooring between installation and final handover.

4.5 Time schedule

When planning the floor installation, allowances should be made for the following:

- a) curing and drying of the base concrete, fine concrete levelling screed, and/or polymer modified cementitious levelling screed;
- b) time between commencement and completion of work;
- c) period of curing and protection of the completed flooring from damage by other trades, including restriction of access.

5 Materials

5.1 General

All synthetic resin flooring products should conform to the requirements of BS EN 13813.

For all synthetic resin flooring products the setting reaction, by which the initially liquid components are converted into a strong tough polymer, begins only when the base resin and the reactive hardener or catalyst are intimately mixed. To obtain the optimum results these components should be blended in the precise proportions needed for the chemical reaction to occur. Mixing should be thorough to ensure the final product is homogeneous and uniform in properties.

Optimum performance is assured by the use either of pre-batched components or the precise proportioning of the components on site from bulk supplies. Since it is imperative that the chemical balance is not upset, no attempt should be made to use subdivided packs of pre-batched components, or to blend in any other additional materials such as diluents or aggregates.

Any separate primers or surface seals should be applied strictly in accordance with the manufacturer's recommendations in order to achieve maximum bond between each application.

5.2 Synthetic resin types

A variety of synthetic resins can form the binder of a flooring system. These typically include epoxy, polyurethane and methacrylate resins.

The different resin types give different combinations of application characteristics and in-service performance. Careful consideration should be given to the factors that will affect the selection of a resin type (see Clause 6).

6 Design

6.1 Selection parameters

Flooring systems should be selected on the basis of:

- a) type and degree of traffic;
- b) temperatures to which flooring will be exposed;
- c) nature and duration of any chemical contact with the floor;
- d) wet or dry service conditions;
- e) slip resistance requirements;
- f) ease and method of cleaning (including hygiene requirements);
- g) moisture condition and temperature of the substrate;
- h) time available for application and curing of the flooring;
- i) ambient conditions at time of installation.

The most appropriate flooring for any situation will depend upon the particular service conditions to which it will be subjected and the conditions under which it will be applied, and the choice should be made in discussions between all the interested parties, including client, designer, contractor and supplier. It is not possible to provide a simple guide to the usage of different flooring types, since so many parameters can affect the decision for a particular situation.

6.2 Types of synthetic resin flooring

Synthetic resin floorings can be divided into different types varying in thickness and surface finish (see Table 1):

All of these types of flooring can be produced on the basis of each of the different synthetic resin types listed in 5.2. For any synthetic resin type there are a wide range of formulations and properties possible. Care must be taken to ensure that manufacturers' data sheets and recommendations are fully considered before selecting products for a specific set of circumstances or conditions.

Some of these types of flooring may be produced with special decorative effects by the incorporation of coloured particles or flakes in the surface. Terrazzo-like finishes (ground exposed aggregate) may be produced from certain trowel-applied floorings of Types 5 to 8 (see Annex A). Slip resistant or anti-static/conductive versions of all these categories may also be available.

Table 1 Types of synthetic resin flooring

Type	Name	Description	Typical thickness
1	Floor seal	Applied in two or more coats. Generally solvent or water-borne.	Up to 150 µm
2	Floor coating	Applied in two or more coats. Generally solvent-free.	150 µm to 300 µm
3	High build floor coating	Applied in two or more coats. Generally solvent-free.	300 µm to 1 000 µm
4	Multi-layer flooring	Aggregate-dressed systems based on multiple layers of floor coatings or flow-applied floorings, often described as "sandwich" systems.	>2 mm
5	Flow-applied flooring	Often referred to as "self-smoothing" or "self-levelling" flooring and having a smooth surface.	2 mm to 3 mm
6	Resin screed flooring	Trowel-finished, heavily filled systems, generally incorporating a surface coating to minimize porosity and provide a wearing surface.	>4 mm
7	Heavy duty flowable flooring	Having a smooth surface.	4 mm to 6 mm
8	Heavy duty resin flooring	Trowel-finished, aggregate filled systems effectively impervious throughout their thickness.	>6 mm

NOTE "Heavy duty" refers to those situations where there is continual abrasive wear or the possibility of impact damage to the flooring.

6.3 Durability

Generally, the service life will be proportional to the applied thickness of the synthetic resin flooring. However, many operational factors will directly affect the performance, including the severity of traffic (wheel type and loading), the frequency and efficiency of cleaning, mechanical handling abuse and impact. In most industrial facilities there will be a variety of situations for which a different type of synthetic resin flooring will be most appropriate. Conversely, there will be areas of a facility where some types of flooring are inappropriate.

Floorings of Types 1 to 3 should be installed only where there will be pedestrian or commercial use or in lighter industrial situations. Where there is regular or heavy fork-lift truck traffic, the thicker floorings of Types 4 to 8 should be installed. For the heaviest usage, particularly where there is the possibility of significant impact damage, then floorings of Types 7 and 8 should be installed.

Premature failure of the coatings of floorings of Types 1 to 3 could occur if grit or metal swarf were not cleaned away and were then ground into the surface under the action of traffic. A thicker type of flooring, which would be more durable, should be installed in such situations.

6.4 Timing

Synthetic resin floorings are frequently selected for use because they can permit rapid installation and hence minimum disruption to industrial or commercial operations. However, in planning the flooring installation other associated aspects of the work should be taken into account (see 4.4 and 4.5).

In new works, or in existing works where a new sub-floor is first to be installed, the curing of the concrete base should be taken into account. Where the synthetic resin flooring chosen is not susceptible to moisture in a concrete base, it may be applied over a new concrete base as soon as it is firm enough to withstand the physical loads imposed. Generally, the concrete should be allowed to dry for three to four weeks after the necessary curing, before the resin flooring is applied.

For those synthetic resin floorings that are moisture sensitive, sufficient time should be allowed in the installation programme for the concrete to dry out to a level acceptable for the application of the flooring. It should be noted that the use of curing membranes will effectively prevent drying out until they are removed.

Concrete bases dry slowly (see 7.3). It may be preferable to apply a purpose-designed damp-proof membrane over the concrete to reduce the rate of moisture transmission from below thus allowing the flooring to be applied at an early age. There is a risk when sealing moisture into a structure, that this may cause blistering of the synthetic resin flooring if other conditions prevail (see Clause 9).

Most synthetic resin floorings achieve their full potential properties within seven days. Generally they can be walked on after overnight cure and can take light traffic after one day to three days depending on the system and on the ambient temperature conditions. Certain synthetic resin floorings, particularly those based on methacrylate resins, can achieve their full strength and chemical resistance within a few hours, depending on the formulation used.

The flooring should always be allowed to achieve full cure before it is washed or exposed to any chemicals, otherwise some surface disfigurement may occur.

6.5 Adhesion

Synthetic resin floorings of all types are designed to adhere well to dry, sound concrete. However, their tolerance to damp concrete will differ and this should be taken into consideration if the flooring is to be applied onto recent concrete that has not dried out sufficiently or if wet methods of surface preparation have been used. Epoxy resins can be formulated to have good tolerance to moisture in concrete, but floorings based on other resin types may use specially designed primers to counter potential problems.

The quality of the adhesion can also be influenced by the dimensional stability of the flooring system. Some resin floorings are subject to significant shrinkage during setting and this can cause adverse stresses at the bond line which become evident later as cracking or detachment.

6.6 Surface smoothness and slip resistance

As a general rule, the smoother and less porous a floor surface, the easier it is to keep clean. However, whilst resin-based flooring can be formulated to produce smooth, non-porous surfaces with excellent slip resistance under dry conditions, the surface may have to be textured if it is to have adequate slip resistance under contaminated conditions.

The heavier the likely build-up of contaminants, the coarser the surface texture has to be to retain the required level of slip resistance. However, coarse textured surfaces are more difficult to clean, so where both slip resistance and ease of cleaning are important, a compromise should be made. Flooring should be selected with a texture to suit specific working conditions and hygiene standards, and the client should be advised to implement a programme of frequent effective cleaning.

The flooring should be finished to produce a reasonable slip resistance for the expected use. The Pendulum Test Value (PTV) should be not less than 40 when tested, wet or dry as appropriate for the anticipated service conditions including any likely surface contamination, by the method described in BS 7976-2. Special consideration should be given to the slip resistance of ramps.

In particularly wet areas, the client should be advised of the benefits of the use of special footwear with slip resistant soles, which can allow a smoother floor finish to be adopted. In such situations a PTV in wet or contaminated areas of not less than 33 might be acceptable.

6.7 Chemical resistance and resistance to staining

Synthetic resin floorings can provide an effective method of protecting concrete substrates sensitive to attack from aggressive liquid spillages, when correctly specified and applied.

Selected synthetic resin floorings can perform satisfactorily when exposed to many of the chemicals and products found in normal industrial service situations. Where the flooring is likely to be exposed to conditions of aggressive liquid spillage, the floor design should be carefully considered, e.g. provision of adequate drainage and maintenance of good housekeeping standards, to ensure an acceptable service life. In practice, prolonged contact with large quantities of aggressive chemicals is unlikely because of the potential health hazards involved.

No single synthetic resin flooring will be completely resistant to prolonged contact with all types and combinations of chemicals. On account of the wide variety of chemical products used in industry and the diversity of synthetic resin floorings, it is not practical to provide a simple guide to chemical resistance. Where floorings are likely to be exposed to chemicals, advice on which synthetic resin floorings would be appropriate should be sought from the manufacturer or contractor based on their laboratory testing of the synthetic resin screed material to the method described in BS EN 13529, or on their experience in similar locations.

Resistance to particular chemicals does not exclude the possibility of surface staining. Some chemicals may cause discoloration of the flooring surface without affecting the service integrity and durability of the flooring material. If aesthetic appearance is a major requirement, the client should be advised whether the proposed flooring would be resistant to staining as well as to chemical attack in the particular environment.

In deciding which product to recommend for a particular situation, the manufacturer or contractor should be provided with the following information:

- a) chemical constituents and concentration of likely spillage;
- b) temperature of the spillage;
- c) quantity and frequency of the spillage;
- d) presence of water and procedures for emergency wash-down;
- e) regular cleaning procedures;
- f) falls, drainage and sumps to be provided.

6.8 Colour and resistance to ultraviolet radiation

Synthetic resin floorings are generally selected for use for specific performance requirements. As a consequence, the range of colours available has traditionally been limited owing to the availability of pigments with the required level of chemical resistance. However, lighter and brighter colours are increasingly specified in order to improve the general working environment. The colour of the flooring then becomes more critical and special precautions should be specified in relation to batch control of the product in consultation with the manufacturer (see **8.1.2**).

Care should be taken in selection of the flooring in areas where the surface will be exposed to strong sunlight or to ultraviolet radiation. Some pigments and synthetic resin binders, being organic in nature, will discolour on prolonged exposure to this type of radiation. If aesthetic appearance is a major requirement then the flooring system should be chosen accordingly.

6.9 Temperature resistance

6.9.1 Heat distortion temperatures

Most synthetic resin floorings will withstand constant temperatures up to 50 °C without adverse effect. Such floorings have relatively low heat distortion temperatures (HDT), generally between 50 °C and 100 °C, much lower than for ceramic tiles or concrete floors.

In practice, some synthetic resin floorings have proved capable of withstanding temperatures higher than their HDT, e.g. for steam cleaning or pressurized hot water washing, through attention to formulation, application and floor design.

Where the flooring is likely to be exposed to high temperatures, the designer should follow the provisions of **6.9.2** to **6.9.5**.

6.9.2 Nature and type of heat source

Owing to the low heat capacity of air and the relatively slow changes in temperature caused by convected and radiant heat, dry heat is normally only a problem in extreme conditions, e.g. close to oven doors. Liquids in contact with floors give a much higher heat transfer and therefore pose more of a risk.

Particular care should be taken in the design of the flooring where extreme temperature variations are likely, such as in cold stores and areas around ovens or furnaces. The thermal movement of the flooring in these areas in relation to the surroundings should be carefully considered and appropriate joints installed.

Where direct radiant heat at a level the flooring cannot tolerate is anticipated, such as the thresholds to oven doors, a more heat-resistant flooring, such as ceramic tiling, should be installed in the immediate vicinity. A movement joint between such an area and the resin flooring may then be required.

6.9.3 Duration of contact with the flooring

The length of time that the flooring is exposed to heat will affect the temperature resistance of the resin flooring and this will depend on the overall design of the installation. Wherever possible, known bulk discharge should be piped direct to the drains. Where this is not possible, floors regularly subjected to discharge of large volumes of hot liquids should be laid to adequate falls (see **6.15**) and be regularly washed down to the drains or be protected by the installation of cooling sprays. Such a cold water curtain not only cools the floor but can also dilute any aggressive spillage to safer levels.