

Care and maintenance of floor surfaces —

Part 2: Code of practice for resilient sheet and tile flooring

Committees responsible for this British Standard

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 Contract Flooring Association
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 Department of the Environment (Building Research Establishment)
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 Industrial Cleaning Machine Manufacturers Association (BEAMA Ltd.)
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Foreword

This Part of BS 6263 has been prepared under the direction of the Textiles and Clothing Standards Policy Committee and is a revision of BS 6263-2 which is superseded and withdrawn.

This Part of this standard is one of a series of Parts of BS 6263 for care and maintenance of floor surfaces, formerly CP 209. In accordance with BSI policy, in which all new and revised codes of practice are to be published with a number in the BS series, this Part of this standard was designated BS 6263-2 when it was first published in 1982.

The first Part of the series, CP 209-1, deals with methods of providing polished finish to wooden flooring using the following:

- a) waxed finishes without prior sealing;
- b) treatment with seals;
- c) treatment with oils.

Suitable flooring treatments for a variety of types of building are also given. When CP 209-1 is revised it will be renumbered BS 6263-1.

This Part of BS 6263 gives recommendations for the care and maintenance of the range of sheet and tile flooring materials covered by BS 8203, i.e. cork, linoleum, plastics and rubber. Recommendations are given for the treatment of flooring in particular environments and types of building. Advice on the maintenance of static-controlled and electrically conductive flooring is also given.

The principal change from the previous edition is that this Part of this standard now covers recommendations for textured flooring.

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.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, 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.

1 Scope

This Part of BS 6263 gives recommendations as a basis for the initial treatment and subsequent maintenance of cork, linoleum, plastics and rubber flooring in sheet and tile form. General guidance on the care and maintenance of flooring in particular environments and special buildings is given.

NOTE 1 The maintenance system should be tailored to suit individual situations.

NOTE 2 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 6263 the following definitions apply.

2.1 Flooring materials

2.1.1

cork tiles

tiles made from cork granules, heated and compressed to form an agglomerate. The granules are bound together by the natural cork resin, this sometimes being supplemented by a proportion of synthetic resin binder

2.1.2

linoleum

flooring in sheet or tile form traditionally made by calendering on a hessian or other type of base a composition consisting of oxidized or polymerized linseed oil, resins, wood flour, cork and inorganic fillers. Toughened and indentation resistant grades of linoleum have been developed by changes in the type of drying oils and resins

2.1.3

cork carpet

material similar to conventional linoleum with the cork flour replaced by a higher proportion of granular cork

2.1.4

rubber flooring

flooring consisting of a vulcanized composition of natural and/or synthetic rubber, antioxidant, fillers, plasticizers, colourants and vulcanizing ingredients. It may be in sheet or tile form and may be of homogeneous composition throughout the thickness or be backed with a different quality of solid rubber, cellular rubber or other material

2.1.5

thermoplastics tiles

tiles made from a material prepared by masticating and calendering a mixture of thermoplastics binders (e.g. coumarone-indene resins, petroleum resins, bitumen), mineral fibre, inorganic fillers and pigments

2.1.6

PVC (vinyl) semi-flexible tiles

tiles made from a material prepared by masticating and calendering a mixture of polymeric binder, mineral fillers and pigments. The binder consists mainly of polymerized vinyl chloride, a vinyl chloride copolymer or a mixture of these together with plasticizer and stabilizer

2.1.7

flexible PVC flooring

flooring manufactured in sheet and tile form from a plasticized polymeric binder, inorganic fillers and pigments. The polymeric binder is either a vinyl chloride polymer, a vinyl chloride copolymer or a mixture of both. It is available in several forms, as homogeneous or heterogeneous flooring with or without a backing

2.1.8

static-controlled flooring

flooring that contains additives to increase its electrical conductivity to the extent that will prevent the build-up of static electrical charge

2.1.9

conducting flooring

flooring that contains additives to increase its electrical conductivity as specified in BS 2050 and BS 3187

2.1.10

textured flooring

flooring which has a deliberate surface texture or relief to provide for either improved underfoot safety or aesthetic purposes

2.2 Cleaning materials

2.2.1

neutral detergent

surfactant or wetting agent with an in-use pH between 6 and 8

2.2.2

mildly alkaline detergent

surfactant or wetting agent with an in-use pH between 8 and 11

2.2.3

strongly alkaline detergent

surfactant or wetting agent with an in-use pH greater than 11

2.2.4

water-based polish stripper

aqueous solution of a detergent specially formulated for the removal of polish films

2.2.5 germicidal cleaner

water-based cleaner consisting of a blend of germicides and detergents

2.2.6 emulsion/pine gel cleaner

water-based cleaner consisting of a blend of soft soap and/or surfactants and pine oil solvents

NOTE Additional germicides may be added.

2.2.7 floor maintainer

polymer or wax reinforced detergent

2.2.8 emulsion polishes

range of water-based surface coatings incorporating resins and polymers which have been emulsified and blended to produce different levels of shine, buffability, detergent resistance on drying and ease of removal. These may be of the metallized type

2.2.9 solvent-based wax remover

cleaner consisting essentially of a mixture of organic solvents that may contain emulsifiers

2.2.10 solvent-based polish

surface coating consisting of a mixture of waxes and solvents that may be in liquid or paste form depending on the types of wax and the proportion in which they are used

2.2.11 water-based seal

dispersion of resins and polymers in water

2.2.12 solvent-based seal

solvent-based material that provides a durable, strongly adhering film that resists penetration by liquids and dirt. There are two main types:

- a) materials based on drying oils and resins (oleoresinous);
- b) materials based on synthetic resins only (plastics).

2.3 Cleaning equipment and processes

2.3.1 abrasive mesh disc

open weave fabric mesh disc, usually of synthetic fibre, that has been coated with resin and impregnated with abrasive material

2.3.2 fibre web pad

circular pad of nonwoven construction made from synthetic and/or natural fibre, resin-based and may be impregnated with abrasive filler

2.3.3 applicator

tool designed to facilitate the even application of liquid coatings to the surface of flooring

2.3.4 mop

long-handled tool with a head of cotton fibre, wool fibre or synthetic cellular material for the removal of surface soiling or the application of liquid coatings

2.3.5 mop sweeper

long-handled, hand-operated tool for collection of surface dust and rubbish

2.3.6 spray unit

container from which the contents are released through an orifice by a trigger action, giving an atomized spray of solution

2.3.7 polishing and/or scrubbing machine

power-operated rotary or cylindrical machine that may be used with brushes, abrasive mesh discs or pads

2.3.8 dry-suction machine

machine for removing dust and dirt from a surface by suction and collecting it in a bag. It may be assisted by brushing

2.3.9 wet-suction machine

machine, fitted with a tank instead of a bag, for collecting liquid from a floor surface by suction

2.3.10 combined machine

machine capable of fulfilling two or more of the functions defined in 2.3.7, 2.3.8 and 2.3.9

2.3.11 dry burnishing

use of a polishing machine on a dry flooring surface

2.3.12 spray cleaning/buffing (burnishing)

use of a polishing machine on a flooring surface lubricated with a minimum quantity of a suitable wetting agent applied by spray

3 Materials, equipment and their use

3.1 Water-based materials

3.1.1 Cleaners

Water-based cleaners are divided into three broad classes of detergents: neutral detergents, mildly alkaline detergents and strongly alkaline detergents. They have the advantage over soap and soap powders that they do not form a scum with hard water.

Neutral and mildly alkaline detergents have a mild action and aqueous solutions should be applied by mop for the removal of surface marks and soiling.

Mildly alkaline detergents used essentially for cleaning usually contain soluble alkaline salts such as carbonates, phosphates but do not contain metasilicates.

Strongly alkaline detergents used essentially for stripping some types of old polish film contain metasilicates or caustic soda. Solutions containing ammonia or an amine can be used to remove metallized polish films. The solution should be applied to the flooring surface and allowed to remain in contact for several minutes to soften and dissolve the polish film. The surface should then be machine cleaned using an abrasive pad, thoroughly rinsed with clean water to remove any alkalinity and mopped dry.

Residual alkali on the flooring surface can affect the adhesion of further applications of emulsion polish. It could cause loss of gloss and possible whitening and powdering of the polish film.

Germicidal cleaners can be used for cleaning a flooring surface and disinfecting it at the same time.

3.1.2 Polishes

Emulsion polishes are suitable for the initial treatment and maintenance of most of the types of flooring covered by this code (see clause 5). They should be applied as a thin coat by mop or applicator and allowed to dry before being exposed to traffic or the application of a second coat.

Dry-bright emulsion polish will not normally require machine buffing at the time of initial application.

3.1.3 Seals

Water-based seals may be used on worn or porous floorings before top dressing with an emulsion polish. They should be applied by mop or applicator and allowed to dry.

3.2 Solvent-based materials

3.2.1 Strippers

Solvent-based wax removers are used for the removal of film deposited from solvent-based polishes. They should be applied sparingly by mop and be allowed to remain in contact for several minutes to soften the wax film before removal using a machine fitted with a synthetic fibre web pad. The stripping of solvent-based polishes should be avoided if at all possible.

3.2.2 Cleaners

Solvent-based liquid cleaners are used for the removal of excessive dirt deposits on solvent-based polishes. This can be achieved by damp mopping or light scrubbing.

3.2.3 Polishes

The use of solvent-based polishes is confined to the maintenance of cork, cork carpet and linoleum to which they should be applied thinly and evenly by mop or applicator, allowed to dry and then dry burnished.

Paste solvent-based polish, with its higher solids content, is recommended for the initial treatment of porous floorings.

Solvent-based polishes may be applied directly to linoleum.

3.2.4 Seals

Solvent-based seals are mainly used on untreated cork tiles and cork carpet. They should be applied thinly and evenly to the flooring surface and allowed to dry thoroughly. The surface should be dry burnished with a fine-grade fibre web pad and the dust removed before the application of the final finish.

Emulsion polishes may be used over these seals.

NOTE Oleoresinous or plastics seals that are damaged may require removal by sanding before retreatment.

3.3 Equipment

3.3.1 General

Floor cleaning machines should comply with BS 5415-1 and BS 5415-2.

3.3.2 Fibre web pads

Fibre web pads, colour graded in degrees of coarseness, are used in conjunction with rotary action floor maintenance machines for stripping, cleaning and dry burnishing floorings.

3.3.3 Abrasive mesh discs

Abrasive mesh discs are available in different grit sizes. They are not normally used for routine maintenance.

3.3.4 Rotary or cylindrical brushes

Brushes are available in a range of types varying from coarse wire for scouring to soft fibre for polishing.

3.3.5 Applicators and mops

The head pads of applicators should be of wool and/or cotton fibres or of cellular material. The applicator or mop should be used lightly wetted, and used with a minimum of pressure.

3.3.6 Mop sweepers

The heads of mop sweepers should be of cotton, wool or synthetic fibre and may be treated to attract and hold dust more effectively.

A two-handled type is available, for use over large surface areas, with two heads set in the form of an adjustable "V" for the better retention of surface debris and dirt.

Both single-headed and double-headed types should be used with the head or heads in continuous contact with the flooring as the sweeper is moved forward over the surface.

3.3.7 Spray units

Spray units may be of an aerosol type, may be pressurized by pump action and may be operated as part of a floor maintenance machine.

The units may contain water, diluted detergent, diluted emulsion polish or diluted floor maintainer for spray buffing/cleaning. The liquid should be applied to a small area of the flooring immediately before using the machine.

3.3.8 Polishing and scrubbing machines

Single-headed and multi-head type machines in a wide range of sizes are available for use with brushes or in conjunction with a drive plate and fibre web pads. Machines in which the peripheral speed exceeds 280 m/min are known as high-speed machines.

WARNING. Care should be taken with ultra high-speed machines to ensure that the machine, when switched on, is always travelling or moving. If stationary, the heat generated may damage the floor surface.

3.3.9 Dry-suction machines

Dry-suction machines may be of the upright, canister or cylinder type, the latter two having the advantage that they can be used in restricted areas. Machines should be fitted with dust collecting bags. These should preferably be of the disposable type, and should have single or multiple filter units to prevent dust escaping into the atmosphere.

3.3.10 Wet-suction machines

Wet-suction machines may be used to collect slurry from the floor surface during the clean-off operation. In use it is important to ensure that the suction head is correctly positioned relative to the floor surface and that the liquid collecting tank, if not fitted with an automatic cut-out valve, is not overfilled.

3.3.11 Combined machines

Combined machines are usually large, may be mains or battery operated and are used for cleaning in one operation by scrubbing and drying or vacuum cleaning and polishing. They are usually used in large areas and passageways.

4 Essential maintenance considerations

4.1 General

4.1.1 The objective in the treatment, care and maintenance of floors is to maintain their appearance, prolong their life and safety features, while protecting them, so that dust, impacted dirt and scuff marks, are kept to the surface where they are more readily removed.

4.1.2 A period of at least 24 h should elapse after completion of the installation of the flooring before the start of maintenance to ensure that the adhesive used has had sufficient time to set or dry. During this time it is essential that the floor surface is covered and protected from the effects of other contract work in progress on the site.

4.1.3 A maintenance programme should be established as recommended in clause 5. This programme should specify cleaning and polishing materials and be implemented by a properly trained operator under the guidance of a responsible supervisor.

4.1.4 Wherever possible, the flooring manufacturer's recommendations should be considered, and the system of maintenance and materials used should be standardized within a given building.

4.1.5 The correct initial treatment of flooring is important and the success of the subsequent maintenance may depend upon its having been carried out correctly. Manufacturers often provide a seal or other surface treatment to their flooring as a protection against surface damage. Such treatments are usually compatible with commercial polishes and should only be removed when specifically recommended by the manufacturer, in which case it is essential that this recommendation be followed.

4.1.6 A mop sweeper or dry-suction machine should be used for the removal of surface debris and dust in preference to a broom, which is always likely to leave a coating of dust on the floor.

4.1.7 Mops should be used with an aqueous solution of a neutral or mildly alkaline detergent for the removal of spillages or surface impacted dirt. The choice of detergent will depend on the type of floor surface and the level of soiling. The mop should be lightly wetted, never saturated, and should always be maintained in a clean state throughout the mopping operation. Ideally this is effected by the use of the two-bucket system, i.e. a bucket for the detergent solution and a bucket for rinsing and wringing.

4.1.8 Pine gel cleaners should be used selectively. The continuous use of this type of cleaner may cause damage to PVC (polyvinyl chloride) floorings in the longer term. Also because of the phenolic content of the pine oil, pine gel cleaners will soften and loosen the adhesion of the protective emulsion polish film. This will lead to the removal of the protective dressing from the surface which it is meant to protect. The rate of this attack on emulsion dressings will depend on the method of use of the pine gel, i.e. mopping will be much faster than spray cleaning. Flooring of natural rubber should not be treated with such cleaners as they will cause softening of the rubber.

4.1.9 Emulsion polishes are the most commonly used materials for providing a protective dressing or coating to a clean floor surface. All emulsion polishes dry to a shine. The buffable or semi-buffable types may be dry burnished to give a higher gloss.

A flooring surface treated with a polish can be maintained in the following ways.

- a) The surface can be dry burnished using a machine fitted with a synthetic fibre web pad containing a fine abrasive; or a soft fibre brush can be used to harden and enhance the gloss.
- b) Using the same attachments and lightly dampening the flooring with water applied by mop or spray, the surface can be burnished to remove scuff marks and impacted dirt and to enhance the gloss finish.
- c) The surface can be spray cleaned. This is a modification of the technique described in b) applying a dilute aqueous solution of a detergent, diluted emulsion polish or diluted floor maintainer to the flooring surface to clean generally and improve the gloss.

4.1.10 The clean-off procedure involves the removal of an accumulation of polish film. If the correct programme of routine maintenance is followed this operation can be deferred for very long periods.

4.1.11 Preventative measures are an essential part of flooring care and maintenance and since dirt and grit are brought into a building mainly from the outside by foot traffic it is important to remove these materials as completely as possible by the use of dust-retaining mats at all entrances to buildings.

These are most effectively catered for at the building planning stage with the provision of mat wells but many types can be positioned at a later date.

To obtain maximum benefit, the dust-retaining mats for public buildings should be laid immediately inside the door entrance and should extend across the full width of the door and into the building; the greater the length of the mat the more effective it will be. It should be at least 2 m long.

The main types of mat are of open-mesh, fibre-reinforced rubber blocks connected by metal rods, ribbed rubber mats and those consisting of a mixture of synthetic and natural fibres in small mat sections for easy maintenance.

The rubber/metal types and ribbed mats should be lifted weekly, vacuum cleaned and washed with an aqueous solution of neutral or mildly alkaline detergent and the mat well should be cleaned out. Fibre mats should be vacuum cleaned daily and periodic maintenance should be carried out according to the manufacturer's instructions. Coir mats are not generally recommended since they are more difficult to clean.

4.2 Safety recommendations for operatives

Manufacturers of cleaning and/or maintenance products are obliged to provide users with safety information.

NOTE See the Health and Safety at Work etc. Act 1974 and the Control of Substances Hazardous to Health Regulations 1988 (COSHH).

In addition, users of the products are obliged to devise and use systems of work which are safe, both to their own staff and to others who may be affected by the work.

In this code, it is assumed that these procedures will be followed, and that users will make any necessary safety assessment required under COSHH.

4.3 Practices to be avoided

The following practices should be avoided:

- a) incorrect use of cleaning agents, particularly the use of excessive concentrations in the belief that this will facilitate the removal of obstinate marks;
- b) excessive use of water, solvents or other materials;

- c) the application of seals or floor dressings on dirty surfaces, wet surfaces or those that, although dry, are highly alkaline;
- d) attempts to build up high thicknesses of seals or polishes while reducing the number of applications; two thin coatings will give better results than a single coat of the same total thickness;
- e) application of second and subsequent coats of floor dressing or polish to within 200 mm to 300 mm of any wall surface;
- f) use, of solvent-based polishes and emulsion polishes on adjacent areas; tracking by foot traffic will reduce the slip resistance on areas treated with emulsion polish and will make further application of polish difficult;
- g) use of solvents and solvent-based products on flooring materials for which they were not intended; surfaces may be softened and caused to swell.

5 Methods of treatment for sheet and tile flooring

5.1 General

The procedures for initial treatment, routine maintenance and clean-off detailed in 5.2 and 5.6 should be adopted.

5.2 Cork tile and cork carpet

5.2.1 Material

It is convenient to classify cork tile flooring into the following three groups according to the surface condition at the time of laying.

- a) Untreated: consisting of cork granules that have received little more than a light sanding during manufacture.
- b) Resin reinforced: where the bond between cork granules has been reinforced with a resinous material; cork carpet can be considered in this category.
- c) Composite tiles: where the surface consists of a skin of transparent material at least 0.5 mm thick, laminated to a cork backing; the skin usually consists of plasticized PVC.

Composite tiles should be treated not as cork tiles but in the same manner as flexible PVC flooring (see 5.5).

5.2.2 Initial treatment

Vacuum clean, and clean with a mop dampened with an aqueous solution of neutral detergent. When dry, apply a solvent-based seal, allow to dry thoroughly and dry burnish using a fine-grade fibre web pad or brush. Due to the porosity of untreated cork, three coats of seal will generally be necessary to provide an even surface which should be allowed to harden for not less than 24 h before emulsion polish is applied. Finally, apply two coats of polish (preferably an emulsion polish). If a solvent-based polish is applied, before doing so, consider the reduction in slip resistance on the sealed cork and adjacent flooring. Also consider the position that will arise regarding resealing when the seal inevitably wears and the wax penetrates into the cork.

Solvent-based polishes can, however, be used without the above complications on unsealed cork.

5.2.3 Routine maintenance

Where a solvent-based polish has been applied, mop sweep, brush or vacuum clean surfaces when necessary and remove marks using the minimum amount of solvent-based liquid polish on a mop. Confine the treatment to the immediate area of the marks. When dry, dry burnish with a fine-grade synthetic fibre web pad or brush. When necessary, thoroughly clean the surface with a solvent-based liquid cleanser and allow to dry. Apply a further dressing of solvent-based liquid polish. When dry, dry burnish with a fine-grade fibre web pad or brush.

Where emulsion polish has been applied, mop sweep, brush or vacuum clean surfaces when necessary and remove any marks using a mop dampened with an aqueous solution of neutral detergent. When dry, dry burnish the surface using a fine-grade fibre web pad or brush. Remove surface dust using a mop sweeper. When necessary, apply a further coat of emulsion polish, allow to dry, and dry burnish with a fine-grade fibre web pad or brush.

5.2.4 Clean-off

Where a solvent-based polish has been applied, remove accumulation of wax by softening with a solvent-based liquid cleanser and scrubbing with a machine fitted with a scrubbing brush or coarse grade fibre web pad. Apply the cleanser to the surface a small section at a time and allow to soften before cleaning. Clean the edges, where the heaviest accumulation occurs, by hand.

Stripping a solvent-based polish is a most laborious and dirty operation that should be avoided if at all possible. Harsh cleaning methods that damage the cork or attack the adhesive should not be used.

Where an emulsion polish has been used, remove this by means of a water-based polish stripper applied by mop. Clean using a machine with a coarse-grade fibre web pad or brush, rinse to remove any alkaline residue and allow to dry. When dry, treat the surface as described in 5.2.2.

5.3 Linoleum sheet and tile

5.3.1 Initial treatment

Mop sweep, brush or vacuum clean the surface and, if lightly soiled, clean with a mop dampened with an aqueous solution of neutral or mildly alkaline detergent. If heavily soiled, lightly scrub with the same solution using a fibre web pad or brush. Thoroughly rinse with clean water and allow to dry. When dry, apply two coats of emulsion polish. Burnishing a buffable or semi-buffable polish with a fine-grade fibre web pad or brush will give a deeper gloss and tougher protective film. Mop sweep after burnishing, if necessary.

5.3.2 Routine maintenance

Mop sweep, brush or vacuum clean the surface, and clean with a mop dampened with an aqueous solution of neutral, mildly alkaline detergent or floor maintainer. When dry, dry burnish with a fine-grade fibre web pad or brush. Alternatively spray buff with a suitable wetting agent or spray buffing solution using a spray cleaning pad and changing the pad when it is soiled. If the floor fails to acquire the desired appearance, carry out the cleaning procedure more thoroughly and apply a coat of emulsion polish to traffic lane areas.

5.3.3 Clean-off

Apply a water-based polish stripper and allow to soften the old finish. Machine clean using a medium-grade or coarse-grade synthetic fibre web pad or brush. Mop or wet suction clean the surface and rinse with clean water. Allow it to dry and apply two coats of emulsion polish. If the correct programme of routine maintenance has been carried out, cleaning-off can be deferred for very long periods.

Traditionally, linoleum was maintained with solvent-based polishes. In this case the procedure recommended in 5.2.3 and 5.2.4 should be followed.

Certain linoleum flooring can be affected by the use of alkaline cleansers and a small area should be initially tested.

5.4 Rubber

5.4.1 General

Natural and synthetic rubber floorings should have the same treatment. Because natural rubbers are softened by oil and grease it is essential that these materials be removed immediately and that emulsion/pine gel cleaners are not used for maintenance.

5.4.2 Initial treatment

For smooth flooring, mop sweep, brush or vacuum clean the floor surface and clean with a mop dampened with an aqueous solution of neutral or mildly alkaline detergent. Rinse with water and allow to dry. Apply two coats of emulsion polish. For ribbed and studded rubber flooring, vacuum or sweep and then mop buff or spray buff with brush under machine. Use an aqueous solution of neutral or mildly alkaline detergent or floor maintainer.

5.4.3 Routine maintenance

For smooth flooring, mop sweep, brush or vacuum clean the floor surface, and clean with a mop dampened with an aqueous solution of neutral, mildly alkaline detergent or floor maintainer depending on the degree of soiling. When dry, dry burnish using a fine-grade fibre web pad or brush. Alternatively, spray buff the surface using a dilute spray buffing solution. Periodically apply a further coat of buffable emulsion polish and dry burnish using a fine-grade fibre web pad or brush.

For ribbed and studded rubber flooring, sweep, then clean with a mop dampened with an aqueous solution of neutral or mildly alkaline detergent. When dry, buff using a soft fibre brush.

5.4.4 Clean-off

For smooth flooring, mop sweep, brush or vacuum clean the floor surface, apply a water-based polish stripper and allow it to soften the old surface finish. Scrub the surface clean using a medium-grade or coarse-grade fibre web pad or brush and thoroughly rinse by mopping with warm water. Apply two coats of emulsion polish.

If the floor is badly worn or porous, apply a water-based seal or an additional coat of emulsion polish.

For ribbed and studded rubber flooring, sweep, apply a water-based polish stripper and allow to soften the old surface finish. Scrub the surface clean using a medium-grade or coarse-grade brush and thoroughly rinse by mopping with warm water. Spray buff using a soft fibre brush.

5.5 Thermoplastics tiles, PVC (vinyl) semi-flexible tiles and flexible PVC flooring

5.5.1 Initial treatment

Mop sweep, brush or vacuum clean the floor surface. If lightly soiled, clean with a mop dampened with an aqueous solution of neutral or mildly alkaline detergent and rinse with clean water. If heavily soiled, lightly scrub with the same solution using a synthetic fibre web pad or brush and thoroughly rinse by mopping with clean water. When dry, apply two coats of emulsion polish.

5.5.2 Routine maintenance

Mop sweep, brush or vacuum clean the surface, then clean with a mop dampened in an aqueous solution of neutral, mildly alkaline detergent or floor maintainer, depending on the degree of soiling.

When dry, dry burnish with a fine synthetic fibre web pad or brush. Alternatively spray buff using diluted spray buffing solution and spray cleaning pad and change the pad when soiled. If the floor fails to respond to the treatment, carry out the cleaning procedure more thoroughly and apply a coat of emulsion polish to traffic lane areas.

5.5.3 Clean-off

Apply a water-based polish stripper and allow to soften the old finish. Machine clean using a medium-grade or coarse-grade fibre web pad. Mop or wet suction clean the surface and rinse with clean water. Allow to dry and apply two coats of emulsion polish.

5.6 Textured flooring

5.6.1 Underfoot safety

For floorings designed for underfoot safety, the manufacturer's advice as regards dressings should be sought.

Where the height of the relief is likely to cause problems, the use of dressings should be kept to an absolute minimum.

5.6.2 Aesthetic purposes

For floorings installed for aesthetic purposes, the manufacturer's instructions for the appropriate smooth flooring should be followed.

6 Maintenance in particular environments, special areas and buildings

6.1 Effects of underfloor heating

The advice of the manufacturer for maintenance of underfloor heated surfaces should be sought.

6.2 Heavy traffic

Where the density of foot traffic is high, e.g. entrances to buildings, a quicker deterioration of the surface treatment will occur. It is recommended that such areas be given a greater frequency of maintenance.

6.3 Abnormal air temperature conditions

Polishes are formulated for use over a narrow range of temperatures. Outside this range their use may give rise to difficulties in application and performance. Where abnormal temperatures make the use of polishes difficult or impossible, surfaces should be maintained by frequent mopping with an aqueous solution of a neutral, mildly alkaline detergent or floor maintainer and buffer, as appropriate.

6.4 Areas where accidental spillages of oil, grease and similar contaminants may occur

It is essential that spillages be removed at the earliest opportunity. All traces of spills should be removed immediately and the floor washed with an aqueous solution of alkaline detergent, rinsed clean and neutralized. When dry, the affected area should be treated again with the appropriate polish.

6.5 Areas where accidental spillage of hazardous material may occur

Floors in areas where accidental contamination with chemicals or bacteriological or radioactive materials may occur, should be well maintained and sealed. It is essential that specialist assistance be sought to deal with any spillage of hazardous material.

6.6 Clean rooms

Clean rooms are areas where it is important that surfaces are maintained in a dust-free state. All cleaning equipment should be used only for the maintenance of these areas and kept within the total complex but outside the actual clean room. Mops and cloths should be made of non-linting material. If necessary, floor surfaces should be maintained with an emulsion polish. For any conductive or static-controlled flooring the manufacturer's advice should be sought with regard to the dressing (see also clause 7). Floors should be mopped daily with an aqueous solution of neutral or mildly alkaline detergent or floor maintainer, as appropriate. Floor polishing machines should be fitted with a separate suction attachment to prevent polish dust from becoming airborne.

Dry-suction machines should be fitted with filtration equipment compatible with the class of environment as specified in BS 5295-1. The frequency and control of the cleaning should be as recommended in BS 5295-3.

Operatives should be properly trained and aware of the need to wear suitable footwear and clothing.

6.7 Sports and leisure centre playing surfaces

Floor surfaces should be mop swept daily and marks removed with an aqueous solution of a neutral detergent. Where soiling is heavy, a mildly alkaline detergent may be used.

Surfaces should be maintained with one or two coats of an emulsion polish of the dry-bright variety as it is important to maintain a surface of high slip resistance. It is essential that the build up of any surface treatment is kept to a minimum. For textured sports playing surfaces the manufacturer's recommendations should be sought.

6.8 Health care buildings

Health care buildings (a term embracing hospitals and a variety of other buildings involved in health care) include some areas that need to be maintained to a degree of cleanliness no higher than socially clean and for these areas the recommendations of this code of practice are appropriate. However, there are extensive areas requiring a wide range of standards of special or clinical hygiene and cleanliness, and special precautions, to which this code does not apply. Specialized advice is available from the Environmental Health and Food Safety Division of the Department of Health, 14 Russell Square, London, WC1B 5EP.

6.9 Computer rooms

A strict routine of dust control and removal may be necessary in computer rooms. Entrances may be fitted with dust control mats to lessen the ingress of foot-borne dirt and the mats should be regularly maintained according to the manufacturer's instructions. Triple-filter dry suction machines should be used for dust and dirt control and should be used at least daily. Floor surfaces should be maintained as described in clauses 5 and 7 and as recommended by the manufacturer's instructions. Amounts of polish on surfaces should be kept to the minimum. Combined polishing and cleaning machines should be fitted with a separate suction attachment to prevent polish dust from becoming airborne. Water should be used sparingly as excess may increase the risk of electrical short-circuit, shock, etc. Cleaning equipment should be well maintained. Floor maintenance should be carried out by properly trained operatives.

6.10 Areas where additional slip resistance is a requirement

All floor surfaces should be maintained in accordance with the recommendations of 5.6.1. Where proprietary types of slip resistant flooring are installed the manufacturer's instructions should be followed. High gloss finishes are often wrongly considered to be hazardous, because to some people they have the appearance of being slippery. The slip resistance of the flooring is lowered when contaminated by dust, water or materials like oils, greases and similar contaminants.

7 Static-controlled and electrically conductive flooring

Seals and polishes should not be used on static-controlled or electrically conductive floorings as they will provide a non-conductive barrier preventing the dissipation of static electricity. Care should also be taken to prevent the transfer by foot traffic of polish from adjacent areas.

Accumulation of dust, grit or any other non-conductive contaminant on the surface of the floor will similarly reduce electrical performance.

The floor should be maintained by mopping with an aqueous solution of neutral or alkaline detergent. Stains and other marks should be carefully removed by hand using an alkaline detergent and fibre pad. The floor should be thoroughly rinsed with water to remove all detergent. Use of certain disinfectants in rinsing water can be harmful to the flooring and affect electrical performance.

Electrical measurements should be made on the clean dry floor after installation and at regular intervals thereafter. Any changes or trends in readings should be investigated.

Publication(s) referred to

- BS 2050, *Specification for electrical resistance of conducting and antistatic products made from flexible polymeric material.*
- BS 3187, *Specification for electrically conducting rubber flooring.*
- BS 5295, *Environmental cleanliness in enclosed spaces.*
- BS 5295-1, *Specification for clean rooms and clean air devices.*
- BS 5295-3, *Guide to operational procedures and disciplines applicable to clean rooms and clean air devices.*
- BS 5415, *Safety of electrical motor-operated industrial and commercial cleaning appliances.*
- BS 5415-1, *Specification for general requirements.*
- BS 5415-2, *Particular requirements.*
- BS 8203, *Code of practice for installation of sheet and tile flooring¹⁾.*
- CP 209, *Care and maintenance of floor surfaces¹⁾.*
- CP 209-1, *Wooden flooring.*

¹⁾ Referred to in the foreword only.

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