

Floor Preparation

All aspects of floor preparation and floorcovering installation should be in accordance with BS5325 (The Installation of Textile Floorcoverings). During the laying period a temperature of at least 18°C must be maintained and a floor temperature of at least 15°C. The type and condition of the subfloor has a direct influence on the installation and performance of a floorcovering and the importance of subfloor preparation cannot be emphasised too strongly.

CONCRETE and SAND/CEMENT SCREED

These must be fully cured, sound, smooth, dry and free from laitance, dust, plaster and any other contaminants which will prevent good adhesion.

Direct to earth subfloors must incorporate an effective damp proof membrane. Materials and methods for damp-proofing solid floors are described in BS8102.

New concrete and sand/cement screeds must be left for construction moisture to dry out before floorcoverings are laid. For estimated drying times see BS8203. Floorcoverings should not be laid until a hygrometer test in accordance with BS8203 Annex A Dampness Testing, gives a relative humidity reading of not more than 75%.

Damp floors may be treated with waterproof surface membranes as appropriate.

Uneven surfaces must be smoothed with smoothing underlayments to prepare the surface for adhesive and floorcovering.

Very absorbent surfaces should be primed before the application of adhesive or smoothing underlayment.

CONCRETE TREATMENTS/COATINGS

Waterproofing admixtures may adversely affect adhesion and should not be used.

Chemical hardening/curing treatments should not be used on concrete bases as there could be an interaction with the smoothing underlayment or adhesive used. If these chemical treatments have been used they should be mechanically removed eg. by scabbling or shot blasting the surface before applying the underlayment or adhesive.

Concrete floor paints must be completely removed by mechanical methods such as scabbling or shot blasting before application of the underlayment or adhesive.

Epoxy and polyurethane surface coatings should preferably be removed but if this is not possible and provided they are firmly bonded, some coatings may be primed with undiluted primer prior to skimming with the smoothing underlayment. Coatings vary considerably in this respect and we would suggest that you check adhesion by prior testing to ensure a satisfactory bond is achieved.

NON-ABSORBENT SURFACES

Ceramic and quarry tiles, granolithic, terrazzo and power floated concrete slabs which have been trowelled to produce a dense smooth surface tend to be non-absorbent in nature. If the adhesive is not suitable for direct application to a non-absorbent surface, then the subfloor must be skimmed with a minimum 3mm of the appropriate underlayment. Heavily glazed surfaces should be treated to create a key for the smoothing underlayment by scabbling or scouring with a coarse abrasive.

NB Tiled surfaces should be skimmed with a smoothing underlayment to prevent the tile pattern transferring through to the surface of the floorcovering.

Terrazzo and quarry tiles are unaffected by dampness but may be sufficiently permeable to allow passage of water vapour and are often laid in areas which do not incorporate a damp proof membrane. Where this is the case, these bases

should be damp proofed by covering with a layer of flooring grade mastic asphalt complying with BS6925.

Asphalt and surface waterproof membranes must be skimmed with a minimum of 3mm acrylic underlayment.

EXISTING FLOORCOVERINGS

Thermoplastic, vinyl asbestos or similar floor tiles, flexible vinyl and rubber sheet and tiles, linoleum and textile floorcoverings must be removed, together with the bulk of the adhesive and the subfloor made good before installing the new floorcovering.

Adhesive remaining on cementitious subfloors should be removed by mechanical methods such as scraping, scabbling or shot blasting at least until a thin, smooth firmly bonded residue remains. All adhesive that is loose, lumpy, powdering, soft or water soluble must be removed. A minimum of 3mm of the appropriate underlayment should be applied before the installation of a new floorcovering.

Adhesive remaining on wooden floors should be overpinned with flooring grade plywood (see wooden floors). Any existing underlays should first be removed.

WOODEN FLOORS

Wooden floors must be structurally sound, level, smooth, dry and clean. Adequate ventilation should be provided to suspended timber floors at ground level to ensure that the moisture content of the wood is maintained at equilibrium. Worn or uneven floorboards should be either replaced or levelled by sanding, planing or patch filling with latex underlayment before finally covering with flooring grade plywood. Sheets should be positioned, joints staggered and nailed at 100mm-150mm centres. (See BS8203 for details).

Wood blocks are not suitable for direct application of sheet or tile flooring because of continuous differential movement of the blocks and the risk of the wood block design transferring through the floorcovering surface. Provided that the wood blocks are smooth, sound, level and securely bonded, they should be overpinned with flooring grade plywood. Any uneven areas should be first patch filled with latex smoothing underlayment. Wood blocks laid on the ground floors must have an effective damp proof membrane incorporated in the subfloor. If there is any doubt that all these conditions can be met then the wood blocks must be removed, and the subfloor made good.

Wood mosaic panels require overpinning with flooring grade plywood in all cases. This is not practical on solid floors and panels should therefore be removed and the subfloor made good as above. If panels laid over a flexing timber floor need patch filling, a latex underlayment should be used. In all other respects wood mosaic panels should be treated as for wood blocks.

Chipboard should comply with BS5669 flooring grades type C2, C4 or C5.

It is essential that **floating chipboard** and other **composition floors** are dry, as a gully may develop between the skirting board and the edge of the floorcovering as the boards shrink on drying.

Chipboard, plywood and hardboard must be primed, diluted as recommended by the manufacturer.

RAISED ACCESS MODULAR FLOORS

These are designed to give ready access to underfloor services.

All module units must be structurally sound, level, smooth and free from contaminants.

Backed carpet tiles are suitable for this type of base, broadloom carpets are not suitable

COMPOSITION FLOORS

Floor Preparation

Composition floors such as those constructed of magnesium oxychloride (magnesite) cement or polyvinyl acetate/cement will be adversely affected by dampness rising from the ground if they are covered with an impervious layer. Unless it can be established that the composition floor is adequately protected against rising dampness, it must be removed and the base made good before floorcoverings are installed. If the floor is protected against dampness then cracks and small hollows should be patch filled and the whole area skimmed with a minimum of 3mm of the appropriate underlayment.