

## MASTIC ASPHALT FLOORING/WATERPROOFING

On ground-supported and suspended concrete bases, where wet processes are to be used, mastic asphalt should be laid in two coats, the first coat being an underlay or waterproofing mastic asphalt. This system should be used in toilet and shower compartments on suspended concrete slabs over accommodation areas, wet process areas and in breweries and food factories.

### DRAINAGE OF FLOOR AREAS (falls and channels to shed water)

Where wet processes or regular cleansing of the floor is a user requirement it is essential that careful consideration be given to the provision of adequate falls to channels and gullies to prevent ponding.

Falls are essential where acid and chemical resisting mastic asphalt is laid, in order to facilitate washing down. In shower rooms similar provisions are essential.

The arrangement of falls and the location of drainage outlets are interdependent and should be considered carefully at the design stage as adjustment of finished levels will be difficult at a later stage.

Where channels are needed, they should be formed in the base and lined with appropriate material. It is recommended that falls of not less than 1 in 60 should be provided both over the general floor area and in channels (see detail 9).

Where a mastic asphalt is an underlay to ceramic tiling or similar pavings, and surface drainage is required, it is essential that the gullies are located at the level of the mastic asphalt waterproofing. An adequate number of outlets should be provided, of a type suitable for use in conjunction with mastic asphalt.

### EFFECTS OF TEMPERATURE

Mastic asphalt is a thermoplastic material. Its resistance to indentation will be reduced with increase in temperature. As they are liable to be damaged at very low temperatures, flooring grades should never be used externally or in unheated buildings. For these locations a paving grade mastic asphalt should be used.

### REGULATING COURSES

On old or uneven floors a mastic asphalt regulating course may be used provided the total thickness permits. The mastic asphalt manufacturer should be consulted prior to the commencement of work regarding the feasibility of providing a regulating course, and the grade and build up of mastic asphalt to be used.

## Special applications

### GENERAL

Where particular conditions have to be met and where mastic asphalt conforming to Type F1076 or Type F1451 of BS 6925:1988 does not fulfil certain specific requirements, special proprietary grades of mastic asphalt should be used.

## CHEMICAL AND ACID RESISTING FLOORING

Grades of mastic asphalt manufactured with limestone aggregate will be readily attacked by acids. Each situation should be considered individually and the fullest technical information obtained, including the nature and concentration of the liquors, the degree of spillage expected and the temperatures involved.

The majority of solvents will attack mastic asphalt.

Table 3 gives guidance on the suitability of mastic asphalt for use in contact with common substances. If the substance in question is not listed in this table, advice should be sought from the mastic asphalt manufacturer.

## SPARK RESISTANT FLOORING

In certain circumstances, as in some types of munition factories, special grades of mastic asphalt should be used in order to minimise the risks of fire or of explosion from sparking. Where spark resistant flooring is required, a mastic asphalt manufacturer should be consulted for guidance.

## POSTAL SORTING OFFICE FLOORING

A proprietary grade of mastic asphalt should be used for traffic conditions and requirements of postal sorting office floors. Where such flooring is required, a mastic asphalt manufacturer should be consulted for guidance.

## PLANT ROOM FLOORS AND TANK ROOM FLOORS

Where water storage is located in a tank room at or near roof level the flooring is essentially a waterproof lining serving a similar function to that of the mastic asphalt roofing. The amount of usage may be no more than that on an average roof and will involve occasional light maintenance traffic. In this situation roofing grade mastic asphalt should be used unless special traffic or environmental conditions have to be considered, when the mastic asphalt manufacturer should be consulted.

## OIL RESISTING FLOORING

Oil resisting mastic asphalts are no longer available and so a suitable oil resistant coating should be applied over the mastic asphalt. The oil resistant coating should be applied as soon as possible after installation of the flooring and prior to any traffic or the floor being put into service.

## FLOORING FOR UNHEATED BUILDINGS

Paving grade flooring should be laid in one coat within the range of 25mm to 50mm thick. It may be laid externally or in unheated areas. In areas of heavy traffic or areas where heavy loads are anticipated, reference should be made to the mastic asphalt manufacturer for guidance.

In the case of paving grade material, the percentage of coarse aggregate to be added may be varied within the limits given in Table 3 of BS 1447:1988, in proportion to the thickness to be laid.

