

Preparation of sloping & vertical surfaces to provide a key

Please refer to Roofing Section.

Movement joints

Allowance should be made for movement joints in mastic asphalt flooring where such joints are incorporated in the base on which the asphalt is applied.

Where floors will be cleaned by washing down, or are in wet process areas, expansion joints should not be located at low points of falls or near to gullies or channels.

If a proprietary movement joint system is used it is essential to ensure that it is capable of accepting the expected type of traffic and degree of movement, that the materials of which it is made are compatible with mastic asphalt and that a secure and watertight joint can be made between the movement joint and the combined mastic asphalt waterproofing and flooring.

Where joints in the concrete base or screed are liable to move, they should be carried through the base and/or screed and the mastic asphalt to the floor surface by means of a proprietary movement joint profile. These vary in depth and thickness. Movement joint profiles should also be used between mastic asphalt and other types of flooring, and centrally over supporting beams and walls to suspended structural floors.

Tolerances on finished flooring

General

Floor level is defined as the mean height of the floor surface measured in relation to the height of a fixed datum. Some variation in level can be allowed without detriment to the satisfactory use of the floor.

Surface regularity or flatness is a measure of the waviness of the surface of the floor. For convenience in checking, tolerances on surface regularity are normally expressed in terms of the permissible departure from the underside of a 3m straightedge laid in contact with the floor.



Departure from datum

The designer should specify the maximum allowed departure of the finished flooring surface from datum, taking into account the area of the floor and its intended use. For large areas a tolerance of +/- 15mm from datum is usually satisfactory.

Surface irregularity

For normal commercial floors, the maximum departure of the surface from a 3m straightedge should be 5mm. A departure of 10mm may be acceptable for floors where the surface regularity is not critical. In special circumstances (such as television studio floors) a closer tolerance, e.g. a maximum departure of 3mm under a 3m straightedge may be necessary (see [Table 4](#)).

The specification of close tolerances can incur increased costs.

The classification of surface regularity for mastic asphalt flooring and underlays is given in [Table 4](#). Details of the method of checking surface regularity are given in BS8204-5:2004+A1:2011.

There should be no noticeable change in level across any joints in the mastic asphalt flooring.

Table 4

Classification of surface regularity for mastic asphalt floorings and underlays

Class	Maximum permissible departure from a 3m straightedge laid in contact with the floor	Application	Mastic Asphalt Grade
SR1	3mm	High standard floors Special floors	Grades I and II
SR2	5mm	Normal standard floors	Grades I, II and III
SR3	10mm	Utility standard floors. Other floors, the surface regularity of which is not critical	Grades III and IV and Paving Grade

Mastic asphalt underlay to other floor finishes

Where mastic asphalt is to be used as an underlay it should be laid to the surface regularity selected by the specifier. The surface finish of the mastic asphalt underlay should be as specified by the manufacturer of the flooring to be applied.

Site work

Work planning

Where mastic asphalt waterproofing is to be overlaid with mastic asphalt flooring the work should be arranged so that the overlaying is undertaken as a continuous operation and precautions should be taken to prevent contamination of the surface of the waterproofing prior to laying the flooring.



Preparation

If the asphalt is delivered in blocks and melted down on site any additional coarse aggregate should be incorporated at this stage. Alternatively the asphalt can be delivered molten in a hot charge transporter in which case any coarse aggregate is incorporated during manufacture.

Before commencing laying the mastic asphalt flooring, the following should be checked:

- a). The base has been properly laid to the specified falls (where required), tolerances and finishes, the equivalent of a wood float finish being required on horizontal concrete screeds or slab
- b). All chases have been properly cut
- c). All outlets have been installed, fixed and located at the correct height relative to the base
- d). Vertical surfaces have been properly prepared
- e). Movement joints have been correctly installed