

ACHIEVING REQUIRED QUALITY OF WORK

In order to achieve the required quality of work, steps should be taken to ensure that:

- a) Design and specification decisions are taken, recorded and transmitted by the designer
- b) The design intentions are understood and achievable in the given circumstances
- c) The work is regularly monitored to assure conformance

DOCUMENTATION AND PREPARATION

Full documentation should be prepared as described. There should be a full exchange of information before the work begins on site.

Any queries should be resolved before the work begins. Clear instruction on all aspects of the work involved should be given to personnel.

Before work begins all necessary scaffolding should be in position together with sufficient hoisting facilities and measures appropriate for the protection of personnel and the public.

The deck should be in an adequate condition to receive the mastic asphalt and all necessary builder's work should have been completed.

Only sufficient materials for the day's requirements should be taken out of store and placed convenient to the area being worked. They should only be unwrapped immediately prior to use and all wrapping materials should be disposed of carefully.

Equipment should be sited as close as is practicable to the area being worked.

RECEIVING AND CHECKING MATERIALS

Roofing materials should be checked upon arrival on site to ensure that they:

- a) Are correctly marked and/or, where applicable, are in the manufacturer's original wrappers
- b) Conform to the specification
- c) Are sufficient for the work

Goods that do not meet requirements should be removed from site.

Workmanship

RE MELTING

Strict temperature control should be maintained throughout the remelting process. Generally, the temperature of the mastic asphalt should not exceed 240 degrees centigrade.

Remelting should be carried out in mechanically agitated mixers, and cauldrons should only be used in exceptional circumstances, governed by site conditions and the areas of mastic asphalt to be laid.

TRANSPORT OF MOLTEN MATERIAL

When the material is sufficiently molten to be workable, it should be carried in buckets, wheelbarrows or heated dumpers to the point of laying. To prevent the molten material from sticking to the buckets, wheelbarrows, etc. they may be sprinkled inside with a minimum quantity of inorganic dust such as limestone dust. For acid resisting mastic asphalt a silica or similar acid resisting dust should be used.

SETTING OUT

The setting out of the floor into bays should be decided by the asphalt contractor. The arrangement of the bays will normally depend on the design of the floor and the number of spreaders engaged, so that the laying and finishing processes can both be easily controlled by the spreaders, in order to achieve the specified surface regularity.

PLACING THE SEPARATING MEMBRANE

The separating membrane, when required, should be laid loose with lapped joints at least 50mm wide.

LAYING THE MASTIC ASPHALT FLOORING

GENERAL

Laying the flooring should be carried out in accordance with BS8204: Part 5:1994. However, discretion should be allowed to the asphalt contractor if, in his judgement, the circumstances in any particular case call for some modification.

The number of measurements required to check levels and surface regularity should be agreed between the parties concerned bearing in mind the standard required and the likely time and costs involved.

HORIZONTAL WORK

Mastic asphalt flooring should be laid in bays generally in one coat. It should be spread to the specified thickness, timber or metal gauges being used to ensure accuracy. The mastic asphalt should be floated to a uniformly level surface and should be free from roughness or imperfections. If blowing occurs, the bubbles should be stabbed and the area affected carefully made good while the mastic asphalt is still hot.

Multi-coat work should be treated in a manner similar to that for single-coat work, but care should be taken to arrange that the joints in successive layers do not coincide.

JUNCTIONS

The edge of previously laid bays should be warmed and cleaned by the application of hot mastic asphalt before the joint with new material is made.

In the case of two-coat work the junction between adjacent bays of mastic asphalt should not be less than 75mm from the corresponding junction in the preceding coat. This procedure should also be adopted at junctions between the floor finish and skirtings, coves or fillets.

SKIRTINGS

Skirtings should be executed in not less than two coats, particular care being taken to ensure proper adhesion of the first coat to the base. Special care should be taken at external angles to ensure the thickness of the material.

COVE OR ANGLE FILLETS

At the intersection of two planes forming an internal angle and after the mastic asphalt has been laid on horizontal, sloping or vertical surfaces, a solid angle or coved fillet of mastic asphalt, not less than 40mm wide in the face, should be formed in two coats, immediately after first warming and cleaning the intersection by the temporary application of hot mastic asphalt, before the fillets are formed.

ACHIEVING A SAND RUBBED FINISH

Immediately after completion of laying, and whilst the mastic asphalt is still warm, clean sharp sand should be rubbed evenly into the surface of the mastic asphalt with a wooden float.

ACHIEVING A NATURAL FLOAT FINISH

The surface should be finished with a float in a manner similar to that used for a sand rubbed finish but without the use of sand (sometimes referred to as a polished finish).

Testing the surface

SLIP RESISTANCE

If required, the finished floor may be tested for slip resistance in accordance with the method described in BS8204: Part 5 annex B. Independent tests have been conducted on samples of sand rubbed and float finish mastic asphalt flooring.

Results:

Table 5

The slip resistance value is calculated as the mean of five readings and was as follows:

Temp 23°C	Natural float finish	Sand rubbed finish
Leather	62	47
4S (1)	70	61
Male heel rubber	72	67
Female heel rubber	51	45
TRL dry (2)	91	82
TRL wet (2)	21	63

- (1) Rubber & Plastic Research Association standardised rubber test.
 (2) Transport Research Laboratory standard rubber.