

SURFACE FINISHES

It is normal practice to sand-rub mastic asphalt paving. In addition, the surface can be crimped but the advice of the asphalt contractor should be sought as the gradient of the ramps may make control of the crimping roller difficult or it may be physically impossible to crimp edges. Alternatively, if superior skid resistance is necessary a synthetic resin-bonded grit or other surface dressing can be applied subject to specification.

SOLAR REFLECTIVE TREATMENT

The use of solar reflective paint on mastic asphalt skirtings and vertical work is recommended. The solar reflective treatment should be applied as soon as practicable after the mastic asphalt has been laid.

Care should be taken to ensure that paints specified as a solar reflective treatment on mastic asphalt are suitable for the purpose and that the specification requires their application in accordance with the manufacturer's instructions.

In the case of roofs subject to light pedestrian traffic, overlaid light coloured tiles or pavings will act as a solar reflective treatment.

Design considerations

CLASSIFICATION

The types and grades of mastic asphalt shall be specified according to the asphalt cement incorporated, according to Table 1: BS 1447:1988

Type B : bitumen

Type T50 : 50% refined Lake Asphalt, 50% bitumen by mass.

The designer should select the tables appropriate for this specified design criteria.

GRADES AND THICKNESSES

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| (i) | Type B Grade S | For roads, footways, roof top car parks and similar applications |
| (ii) | Type T50 Grade S | |
| (iii) | Type T50 Grade H | For bus stops, loading bays and areas subject to very high stresses |
| (iv) | Polymer modified | High performance grades of paving incorporating polymer modified binders are available from MAC manufacturers and are designed to meet the demands of modern construction. |

Recommended grades and thicknesses of mastic asphalt

Grade	Application	Thickness range	Nominal size coarse aggregate	Coarse agg. content, % by mass of total mix
S	Footways	20-30mm	3mm	25 ± 5
S	Roof top car parks	25-35mm	6 or 10mm	30 ± 5
S	Roads & carriageways	30-50mm	6 or 10mm	40 ± 10
H	Heavily stressed areas	40-50mm	10mm	45 ± 10

Note: Some indentations should be expected from long-standing point loads and deformation may result from situations of very high stress.

HARDNESS NUMBER

When tested in accordance with BS 5284:1993, the hardness number of the mastic asphalt at the time of manufacture and prior to the addition of any coarse aggregate shall be:

Grade S 30 to 60 @ 25 degrees Centigrade
Grade H 15 to 25 @ 25 degrees Centigrade

PAVING Pt 1

Detail considerations

MOVEMENT JOINTS

It is normally only necessary to provide movement joints in mastic asphalt waterproofing or paving where one is provided in the structure. Movement joints should always be located at the high point of the falls.

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

KEYING TO VERTICAL SURFACES

Refer to Roofing Section

SKIRTINGS TO BRICKWORK AND CONCRETE

Refer to Roofing Section

Site work

WORK PLANNING

Where mastic asphalt waterproofing is to be overlaid with mastic asphalt paving 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 of the paving.

paving