CEMENT AND SAND SCREEDS

When a reinforced concrete roof slab is overlaid with a screed to provide falls, the screed should be laid in accordance with BS 6229:1982. The surface should be provided with a float finish, even and smooth, free from hollows and ridges. The screed should be designed to remain free from cracks.

SUBSTRATES FOR RAMPS

The surface of the concrete or screed on a ramp should be cross-tamped to provide a key. The height of the tamp should not exceed 5mm.

Mastic asphalt paving

GENERAL

The number of coats should be appropriate to the waterproofing requirements and traffic conditions of the roof.

Due to the nature of mastic asphalt, the nominal thicknesses given are indicative rather than precise. Any irregularities in the horizontal substrate will be reflected in the final surface with accompanying inconsistencies of thickness.

TRAFFICKED APPLICATIONS

Mastic asphalt provides a versatile answer to the problem of providing paving or combined waterproofing and paving to structures and areas subject to traffic.

The specification to be used is dependent on a number of factors such as the type and degree of traffic to which the paved area will be subjected, whether point loading is anticipated and whether the paving is over accommodation areas.



PAVING Pt 1

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.

PAVING Pt

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

(i) (ii)	Type B Grade S Type T50 Grade S	For roads, footways, roof top car parks and similar applications
(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.