Design of roof to be asphalted

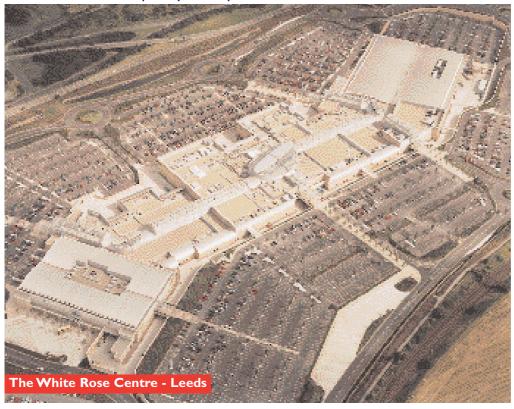
ROOFING

GENERAL

For each roof the designer should first determine the form (pitched or flat) and the type (cold deck, warm deck or inverted) before selecting the appropriate deck material, thermal insulation, and means of vapour control.

The design of flat roofs intended to be covered by mastic asphalt waterproofing should conform to the recommendations of BS 6229:1982, with reference to CP 3 Chapter V and the Building Regulations where applicable.

Walls for plant, planters and similar constructions should not be built off a mastic asphalt membrane. All such supports should be built directly off the structure, and subsequently waterproofed.



PLANTERS / ROOF GARDENS

Waterproofing should be applied horizontally and vertically to the inside and outside faces of planters. If it is only intended to provide a minimum 150mm skirting to the outside face of planters, consideration should be given to the provision of damp-proof courses or cavity trays within the planter walls.

Within planters, the mastic asphalt should be protected from backfilling and subsequent digging operations by concrete slabs, non biodegradable boards or similar means.

ACCESS FOR INSPECTION

To facilitate access for regular inspection (as recommended in BS 6229:1982) consideration should be given to provision of a fixed permanent access to all flat roofs. Such access will also be useful for maintenance and repair.

ROOFING DETAILS

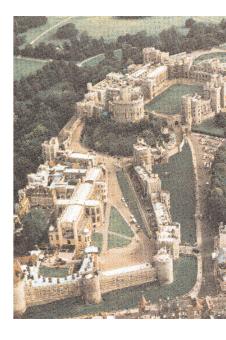
The general arrangement details and the principles to be followed at skirtings, upstands, abutments, verges, gutters and expansion joints are as details illustrated.

ROOFING

SELECTION PARAMETERS

It is important that consideration is given at an early stage to the following:

- a) The type of roof construction to be employed
- b) How anticipated movement is to be accommodated and the locations of any movement joints
- c) What trafficking, if any, is anticipated
- d) The means by which the requirements of the Building Regulations are to be met, particularly the maximum thermal transmittance values of the Building Regulations
- e) How condensation problems are to be prevented
- f) Detail considerations
- g) Roof drainage
- h) What cross falls and/or falls are required to achieve a minimum finished fall of 1:80
- i) How skirting heights and minimum threshold heights are to be incorporated
- j) The correct location of damp-proof courses relative to the mastic asphalt waterproofing
- k) Sufficient working space for the application of materials
- 1) Any other relevant information.



Design of the base

GENERAL

Surfaces to which mastic asphalt is to be applied should be installed or prepared to a true and even surface free from irregularities such as abrupt changes in levels, hollows, ridges, dips, concrete, mortar or plaster droppings. The specification should, therefore, enable the asphalt to be supplied to a reasonably uniform thickness.

All materials should provide a substantial and continuous support to the mastic asphalt roofing and should be able to sustain the loads imposed by traffic both during and after roofing operations.

Any substrate to receive mastic asphalt roofing should be reasonably dry, even, free of dust, laitance, grease, dirt, projecting nail heads, sharp arrisses or holes.

The designer should study the need for movement joints in the structure. Movement joints should be continuous through vertical upstands, walls and edges of buildings.

DRYING OUT THE BASE

Concrete slabs and concrete decks cast in situ should be drained downwards through temporary drain holes formed in the low points of the roof deck. Subject to checking their effect on structural strength, the holes should be 25mm diameter, positioned to avoid reinforcement bars in the

