

Specification Advice

Permeable Pathway (SUDS)

Water Flow

Fine sand lightly cast onto uncured surface



No infiltration



Full infiltration



The typical depth of Pebbo Permeable Paving surface:

A Pebbo aggregate size of 6mm requires a 18mm depth layer of Pebbo
A Pebbo aggregate size of 10mm requires a 24mm depth layer of Pebbo

Binder Course laid by others in well compacted layers

A 70mm minimum depth of AC 14mm open surf asphalt concrete, max 100/150 pen to BS EN 13108-1:2006 (Bituminous Macadam)

OR

50mm depth Pebbo equivalent base layer.

Sub-base

A 150mm minimum depth of well compacted Type 3 granular sub-base to SHW clause 805 or 4/40mm, 4/20mm graded crushed concrete aggregate to EN12620 or locally available secondary or recycled aggregates which comply with the above specification blinded with 2/6.3mm graded crushed concrete aggregate to EN12620.

An impermeable membrane to convey water to infiltration/storage system etc (optional)

A geo-textile membrane to prevent upward migration of fine soil particles may be required (optional)

Capping Layer if required in one or more layers. (please see notes below)

Sub-grade

Full infiltration - water returns to ground surface

No infiltration - impermeable membrane used to convey water to storage tank for either storage or controlled release

Purpose

An attractive, permeable and durable surface which avoids the need for planning permission under the 2008 SUDS Planning Order 1998 on the paving of front gardens.

Advantages

Permeable, minimum number of joints, easy to maintain and quick drying

Notes

If there is a danger that standing water will soften the sub-grade in an unlined system a nominal fall to an outfall should be considered.

If plastic or silty sub grade is present (CBR <2%) it may be necessary to stabilise the sub grade or partially replace it with sub-base/granular capping.

Total sub-base thickness will be dictated by expected loading/required water storage capacity/sub-grade strength.

The maximum deviation of the base should not exceed 3mm under a 1 metre straight edge.

This specification is based on normal good practice for flexible surfacing and does not absolve the specifier from designing a construction suitable for the expected traffic and ground conditions pertaining on a given site.