

Q24 SUSTAINABLE URBAN DRAINAGE SYSTEM

Standard contract documentation
To be read with preliminaries/general conditions

Q24 SUSTAINABLE URBAN DRAINAGE SYSTEM

Aquaflow paving
TYPE(S) OF PAVING
Permeable concrete block Paving

Manufacturer:
 Hanson Formpave
 Tufthorn Avenue, Coleford
 Gloucestershire, GL16 8PR
 t 01594 836999
 f 01594 810577
 e-mail:
 designservices@formpave.co.uk
 technical@formpave.co.uk
 sales@formpave.co.uk
 web-site: www.formpave.co.uk

Reference

Aquaflow, Aquaflow ML, MLE, MLTB, Aquasett or Aquaslab.

Size

As per manufacturer's specification

Colours

Red brindle, Golden brindle, Natural, Charcoal, Burnt red.
Aquasett available in Red brindle, Vendage, Traditional and Pennant.

Setting out

Aquaslab: Staggered stretcher bond with double stretcher course around all perimeters.

Aquasett: Staggered stretcher bond or 90o herringbone with double stretcher course around all perimeters.

Aquasett combined: Staggered stretcher bond with double stretcher course around all perimeters.

Aquaflow block: 90o herringbone with double stretcher course around all perimeters.

Aquaflow ML: Include stretcher course around edge in conjunction with MLE and MLTB.

Kerbs

Standard kerb system or Forest Edging: both to be haunched with concrete.

Laying course*

50mm depth of 2-6mm. single size clean crushed stone to BS EN 13242: 2002.

Inbitex® †

As specification

Sub-base specification*

All granular sub-base material shall comprise crushed gravel, rock or concrete possessing well defined edges. It must be sound, clean, non friable and free from clay or other deleterious matter.

The material must be non plastic when tested in accordance with BS1377 Test No.4

* The crushed stone used for the laying course and sub-base must have a minimum 10% fines value of 150kN when tested in accordance with BS812 Part 111.

The selected test samples shall not be oven dried and should be soaked in water at room temperature for 48 hours before the test. The 100mm deep upper layer of sub-base material should be graded 5mm-20mm to BS EN 13242: 2002.

Grading of lower layer of subbase stone:

BS EN Sieve size	% passing
80 mm	100
63 mm	90-100
40 mm	60-80
20 mm	15-30
10 mm	0-5

Depth of Sub-base

It is recommended that a subbase depth of 350mm should be used. The depth of sub-base may be varied at the discretion of the Engineer. Alternatively 270mm of sub-base overlaid with 80mm of dense bitumen base course to Clause 903 of the Highways Agency Specification may be used.

Intergrid(s) † SC Intergrid.

DBM Running Course

To be 20mm dense base binder course manufactured with 100/150 grade bitumen to BS4987. The DBM shall conform with the requirements of BS 4987.

Membrane †

Generally a taped membrane will be suitable for most applications of the tanked system. If a guaranteed watertight system is required a fully welded system should be installed. Examples of this type of application would be sites with a high water table, methane contamination, areas above basements or retaining walls. Further advice should be sought from the Hanson Formpave design team.

Fin drain †

300mm Hydraway Fin Drain to BBA Number 95/85.

Seal †

Formpave top hat seal

Sub-grade

Where the structure is to be over-run by heavy vehicles the sub-grade should have, or be improved to have, a CBR of at least 15%. Poor sub-grades with low CBR's may be improved by incorporating a capping layer of cement, lime or bituminous bound materials. Alternatively granular materials in accordance with clause 613 of the Highways Agency specification may be used.