

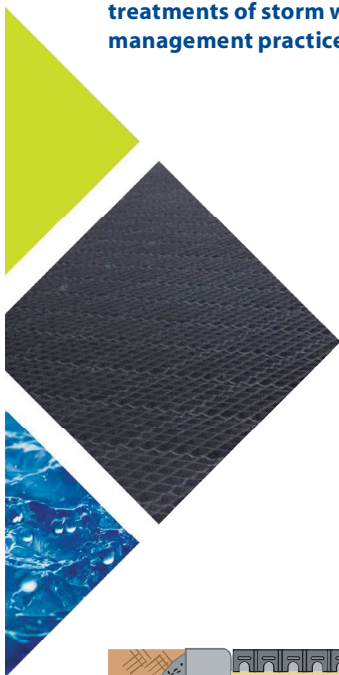
DuoBlock 500 Porous Paving System



DuoBlock Porous Paving System comprises of recycled plastic cellular paving units that encourages the rapid removal of surface water run-off into a structural voided sub-base layer.

When combined with compatible geotextiles, impermeable geomembranes, soil reinforcement products and suitable drainage systems, the DuoBlock System provides an effective and highly efficient sustainable drainage system (SUDS) in accordance with current Ciria guidelines.

The system is suitable for attenuation and infiltration treatments of storm water run-off developed with best management practices (BMP).



DuoBlock Porous Paving System.

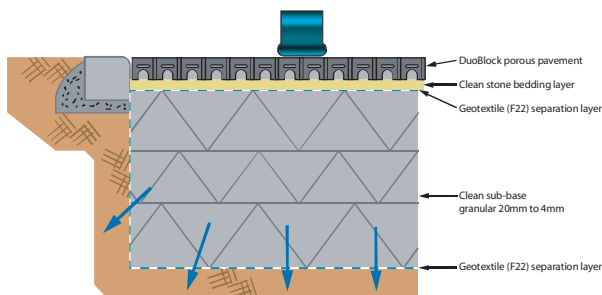
DuoBlock is manufactured in the U.K from 100% recycled polyethylene materials. The system has a long history of use in the civils market as a grass / gravel paving solution and has been developed more recently as a porous paving system. The system includes a unique interlocking facility providing a stable and rigid surface for all types of vehicular loadings, including car parking, access roads, verge reinforcement, helipads, private driveways and other loading applications.

DuoBlock can be used in both infiltration and attenuation applications and is compliant with current ciria guidance for SUDS. The design of a suitably porous sub base is key to the performance of the whole system.

Infiltration System.

These are applications where the surface water run-off is allowed to drain through the system into the existing sub-grade. A geotextile filter fabric is placed on the formation above which a clean graded granular sub-base is placed, typically 20mm to 4mm. A second layer of geotextile is placed between the sub-base and a 20mm deep 5mm single sized gravel bedding material.

The DuoBlock units are placed and infilled with a decorative gravel (max 10mm in size) to architectural requirements.

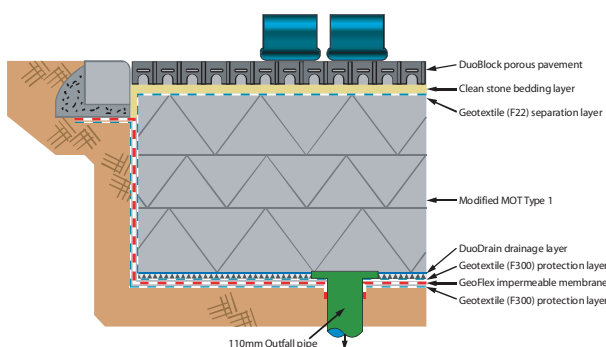


Attenuation System.

The attenuation system provides water storage within the porous sub-base layer and a controlled discharge via a network of DuoDrain geocomposite drainage strips connected to pre-determined outlets.

The system is lined with an appropriate impermeable geomembrane placed on the formation. The graded granular sub-base material 20mm to 4mm is installed to standard engineering practices below the geotextile filter fabric and bedding layer.

The DuoBlocks are infilled with the selected gravel (max 10mm in size).



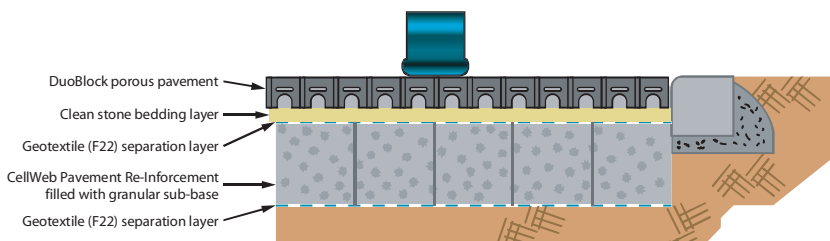
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stormwater
MANAGEMENT

Porous Sub-Base Reinforcement.

The porous sub-base should be made up of clean angular stone typically 20mm to 4mm. The depth of this material is dependant upon soil permeability for infiltration systems and water storage capacity requirements for attenuation applications. This layer is usually between 400mm and 450mm, however, specific site conditions permitting, this layer can be significantly reduced with the introduction of a Cellweb system.

Cellweb is a Cellular Confinement System that increases the bearing structure of infill materials by over 50%. The use of a Cellweb layer within the porous sub-base will dramatically reduce the depth of sub-base required thus reducing the overall construction depths and saving costs both in materials and installation.



DuoBlock Performance Specification:

| | |
|--|---|
| Unit size: | 500mm x 500mm x 50mm nominally |
| Weight: | 2kg |
| Cell wall void ratio: | 6% |
| Water absorption: | nil |
| Infill surface area: | 90% |
| Compressive strength: | 2300kg |
| Infiltration rate through DuoBlock: | 144mm ³ /m ² /hour (144,000mm/hr) |

The SUDS design manual suggests infiltration rates of 5000mm/hr for gravels.



Stormwater Management Ltd can provide a full design service from conception, including specifications and cad drawings, through to site supervision during installation.

Our experienced sales team will deal with your enquiry efficiently and competently.

Stormwater Management Ltd.
Fleming Road, Harrowbrook Ind Est,
Hinckley,
Leicestershire, LE10 3DU.
Tel: 01455 502 222
Fax: 01455 502 223
Web: www.storm-water.co.uk

For more information contact our technical office on 01455 502222 or visit our website at www.storm-water.co.uk