

# ViaFlow<sup>®</sup>

PERMEABLE ASPHALT  
FOR FLOODING AND  
WATER MANAGEMENT



ViaFlow<sup>®</sup> is a porous asphalt available for use in base, binder course and surface course pavement layers.

It may be used as part of a designed SUDS (Sustainable Urban Drainage System) which is engineered to dissipate surface water through the material either for re-use or to a suitable drainage system.

ViaFlow is available with Rubbermix Asphalt and ViaLow Warmmix Asphalt technology enabling embodied carbon reductions of up to 20%, and recycling end-of-life- tyres through the circular economy to provide a more sustainable asphalt.

## Applications

Household driveways.  
Car parking areas.  
Roadside drainage systems.  
SUDS systems.



## Features and benefits



Resistant to scuffing when compared with conventional open graded asphalt



Eliminates surface water and ice



Reduces direct surface run-off



Excellent drainage characteristics

## Product availability

ViaFlow is produced at all Cemex Asphalt supply plants and can be delivered or collected. The use of a polymer modified binder may be subject to a minimum volume,

for smaller volume schemes, the use of a performance enhancing additive is used with penetration grade bitumen.

## Quality

All our asphalt production facilities are quality assured to BS EN ISO 9001 and our asphalt is UKCA marked through our third-party certification to BS EN 13108 Factory Production Control.



Through our National Technical Centre based in Southam, we are committed to bring our customers the highest quality and most innovative products in the industry.

## Technical information

Typical properties for ViaFlow:

Design specification	Surface course	Binder course	
	10mm ViaFlow	14mm ViaFlow	20mm ViaFlow
Air Void Content (BS EN 12697-8)	≥ 18%	≥ 18%	≥ 18%
Initial Texture Depth (BS EN 13036-1)	≥ 1.3mm	≥ 1.3mm	≥ 1.3mm
Water Infiltration Rate (BS EN 12616)	> 5000mm/hr	> 5000mm/hr	> 5000mm/hr
Stiffness at 20°C (BS EN 12796-23)	> 1500MPa	> 1500MPa	> 1500MPa
Wheel Tracking Depth at 60°C (BS 598-110)	< 7mm	< 7mm	< 7mm
Wheel Tracking Rate at 60°C (BS 598-110)	< 5mm/h	< 5mm/h	< 5mm/h
Binder Drainage at 180°C (BS EN 12697-18)	< 0.3%	< 0.3%	< 0.3%
Scuffing Erosion Index	< 2%	< 2%	< 2%

When used as part of a SUDS system, a full design should be undertaken which takes the above properties into consideration.

## Installation

As for all asphalt, the requirements of BS 594987 should be met during installation. The following is a short summary of such requirements:

ViaFlow is best suited to application by a paving machine however smaller areas can be laid by hand.

The recommended installation thickness for ViaFlow are:

Nominal aggregate size (mm)	Nominal layer thickness (mm)	Minimum thickness at any point (mm)
10mm ViaFlow Surface Course	35 - 50	30
14mm ViaFlow Binder Course	40 - 60	35
20mm ViaFlow Binder Course	50 - 90	45

## Delivery

ViaFlow should be delivered or collected using a suitably insulated and sheeted delivery vehicle. If installation is being undertaken by hand, the use of a chuted delivery vehicle may be beneficial to prevent material cooling on site prior to laying. An appropriate release agent such as water or vegetable oil should be used in delivery vehicles. Diesel should not be used as a release agent to clean tools and equipment as it has a detrimental effect on asphalt.

Our network of collect plants sells Leoclean, a heavy duty cleaner which is ideal for removing mineral oil based substances such as bitumen and tar. Additionally we have a wide range of emulsions, sealants, truck sheets and tools to meet your everyday needs.

ViaFlow should be installed on a suitable substrate. Typical construction comprises well compacted free draining subbase, overlaid with the required thickness of ViaFlow binder course and ViaFlow surface course. The use of stabilising aids on the subbase such as geotextiles should be considered to reduce the impact of the paving equipment.

It is vital to keep ViaFlow as hot as possible prior to installation and final compaction. The minimum acceptable temperature on arrival at the site is 130°C, with final compaction having been achieved before the material has cooled to 110°C.

ViaFlow should not be installed during heavy rain/snow. Laying should cease if the air temperature reaches 0°C on a falling thermometer.

Prior to installation of ViaFlow, the substrate should be uniformly sprayed with a suitable bitumen emulsion tack/bond coat at a reduced rate to that required in BS 594987 so that the porous nature of the binder course is not affected.

Compaction should be carried out as soon as possible after the ViaFlow has been spread. A minimum 3T roller should be used for compaction. Smaller plate compactors/rammers should only be used in areas not accessible by the roller. 8-10 passes of the roller should be suitable in most applications.

ViaFlow should be left to cool before the application of lining or use.

## Maintenance and aftercare

The following guidelines should help to maintain the appearance of ViaFlow:

If the ViaFlow is used for vehicle parking, wheels should not be turned whilst the vehicles are stationary to minimise the risk of scuffing.

Point loading of the ViaFlow surface by ladders, jockey wheels, skips etc should be avoided where possible, or their loads spread using boards.

Any spillages of fuel, oil or other chemicals should be removed using an absorbent spill kit. Materials such as sand or cat litter should be avoided to prevent blocking the voids in the asphalt.

The surface should be kept clear of debris to prevent damage as a result of abrasion. Regular sweeping will help to maintain the surface. Pressure washing the surface should be avoided wherever possible.

## Responsibly sourced

Cemex's commitment to sustainable development and ethical and responsible sourcing has been formally recognised through this official accreditation.

The BES 6001 certification complements a range of other ongoing initiatives at Cemex UK to reduce waste, water, energy use and CO<sub>2</sub> emissions, while increasing the use of alternative fuels and by-products in the manufacturing of building materials.



## Vertua – more sustainable by design

The Vertua water conservation label is awarded to selected products characterised by their positive impact on the environment by either reducing water consumption during construction or enabling water to filter back to the soil.



For further information please contact our Asphalt sales department on:

 **0345 155 6367**

 **[asphaltukquoterequest@cemex.com](mailto:asphaltukquoterequest@cemex.com)**

 **[cemex.co.uk/asphalt-range](https://cemex.co.uk/asphalt-range)**

Cemex is a global leader in the building materials industry providing high-quality, innovative products and exceptional service to both customers and the community in the most sustainable and efficient way possible.

Cemex UK Operations Ltd, Cemex House,  
Binley Business Park, Harry Weston Road,  
Coventry, CV3 2TY

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