



Porous Paving Solutions

Introducing the
next generation of
Porous Asphalts
from Tarmac

Porous Asphalts in planning legislation

The recent announcement on the imminent implementation of Schedule 3 of the Floods and Water Management Act 2010 will have significant implications. It means that all projects larger than 100m² or more than one property, with a drainage implication will need to incorporate a SuDS based drainage scheme and gain approval before construction can commence. There is also likely to be more emphasis on amenity, biodiversity and water quality of that drainage system rather than just the quantity of water from a site. Tarmac porous pavements are proven to improve the quality of road and hardstanding water runoff.

Introducing the next generation of Porous Asphalts from Tarmac

Designed to work with porous pavement designs where a sustainable drainage solution is required for site conditions, planning requirements or client specifications.

Our new and updated range of UltiPorous Asphalts also helps to address climate concerns over flooding and drought events and deliver a longer lasting performance that reduces the carbon footprint compared to non-porous drainage methods.

Where planning conditions specify a SuDS solution for driveways, car parks or access roads, Tarmac's UltiPorous and UltiSuDS can provide the ideal solutions.



Making it easier to choose porous surfacing

Our new range of Porous Asphalts makes the process of choosing a porous surfacing material simpler for architects, design engineers and their clients with applications for the different products clearly defined.

ULTIPOROUS LEISURE

Porous Asphalt for playgrounds, sports surfaces and multi use games areas (MUGA's) with porous binder course. Also suitable for footways, cycle ways and occasional parking.

ULTIPOROUS TENNIS

Porous Asphalt designed for outdoor tennis courts, with porous binder course.

ULTISuDS

BBA HAPAS accredited Porous Asphalt System for larger car parks in residential, retail and commercial spaces developments.

ULTICOLOUR POROUS

Coloured Porous Asphalts for driveways, car parks, roads, cycle lanes and footpaths, with porous binder course. This can be included in a BBA HAPAS accredited system.

ULTIPOROUS

Porous Asphalt for driveways, car parks, footpaths and public spaces in both residential and commercial environments, with porous binder course

**Verified
minimum hydraulic
conductivity**

All Tarmac Porous Asphalts are designed to provide a minimum hydraulic conductivity of 5,000mm/Hr/m² using the BS DD 229 testing method and meet the requirements laid out in CIRIA 753 and SAPCA.



Sustainable drainage and porous paving solutions to manage water and address climate change concerns.

- Reducing the risk from flash flooding
- Conserving water and improving drought resilience
- Improving water quality.

Porous Asphalts to reduce the risk from flash flooding

Our range of Porous Asphalts provide effective water management by capturing surface rainwater and holding it back, delaying it entering local drainage systems.

Conventional paved surfaces are designed to shed water. Unfortunately, under storm conditions, this can mean large volumes of water rapidly entering water courses and resulting in local flooding.

Tarmac's UltiPorous porous surface course, binder and aggregate systems are designed to capture and control rainwater from the moment it makes contact with the paved surface. This results in significant reductions in the speed and volume of discharged water, reducing the risk of flash flooding.

Improving water quality with Porous Asphalts

By trapping pollutants within the pavement UltiPorous Asphalts are proven to improve the quality of surface water run-off. This improves the purity of any surface water entering the environment and helps to reduce pollution in rivers and streams.

Enhancing drought resilience with Porous Asphalts

Improved water quality from Porous Asphalt pavements allows architects to design water capture and storage into new housing, community or commercial developments. This allows rainwater to be retained rather than lost as run-off into rivers. It also helps to improve resilience in times of low rainfall.

Water conservation using Porous Asphalts for rainwater capture and storage

Tarmac Porous Asphalts are suitable for use in sustainable drainage systems that capture rainwater and store it for use as an amenity for things like car washing, window cleaning or watering plants. As research shows, our Porous Asphalts also provide a degree of passive filtration as pollutants are captured and retained within the pavement. This means that the water captured has a relatively higher amenity value and can be used for a wider range of uses.

Porous paving solutions for greenfield sites without drainage infrastructure

Where sites have no access to main sewers and conventional drainage infrastructure, Tarmac UltiPorous can provide a sustainable solution that behaves more like a natural surface than conventional hard paving and can avoid the major groundworks needed to install conventional drainage systems.

Accredited Porous Asphalt with consistent permeability and water conductivity

Control over production and testing helps deliver a consistent product with specific hydraulic conductivity (data available in our product brochure/datasheets). As part of our range Tarmac can supply Porous Asphalts that have been independently tested and accredited by the BBA.

Using Porous Asphalts on industrial and commercial sites

For highly trafficked locations used by a mix of cars and HGV's a hybrid pavement design can be used. By combining dense asphalts on areas that will take high stresses and high loadings and Porous Asphalts for low stress and low load applications, the designer can meet the performance requirements of the surfacing together with the requirement for a SuDS system.

Using a consistent graded aggregate reservoir, Ultiflow, across the whole site will provide storage capacity while minimising the depth of excavation necessary. By incorporating falls on the dense surface, water can be moved into the SuDS system. This allows busy commercial sites to incorporate sustainable drainage, but also deliver long-lasting performance under heavier trafficking.

BBA accredited porous paving solutions

Our UltiSuDS Porous Asphalt system has been independently assessed and accredited by the BBA, confirming that it has achieved the required standard on the following criteria:

- **Resistance to permanent deformation**
- **Durability, water sensitivity and bond to substrate**
- **Surface characteristics and skid resistance**
- **Hydraulic conductivity and ability to eliminate surface water.**

This system is also available with Ulticolour Porous as part of a BBA HAPAS accredited system.

Continuous development of Porous Asphalts

Tarmac has been supplying porous pavements for at least 20 years for a range of applications from supermarket car parks, residential adoptable roads and parking areas. This experience has been used in the continued development of our range of UltiPorous Asphalts.

Since Porous Asphalts have a more open structure, ensuring pavement toughness and durability is a challenge that needs careful consideration.

At Tarmac, we have been using our experience of porous paving materials to enhance durability and have subjected the materials we supply to rigorous testing. As a result, you can be sure that our porous materials will deliver lasting performance.

Development and testing

As part of ongoing development, Tarmac have carried out independent testing at a leading European laboratory with accelerated simulation of long-term trafficking of our Porous Asphalts. The testing has confirmed the durability, cohesion and long-term resistance to trafficking of our Porous Asphalts.

Choosing your porous pavement

Making it easier to choose porous surfacing

Our new range of Porous Asphalts makes the process of choosing a porous surfacing material simpler for architects, design engineers and their clients. All of the technical details are available on NBS source which can be used to build a specification.

Maintaining a Porous Asphalt pavement

Understanding the requirement for scheduled maintenance of Porous Asphalt surfacing is an important element of the process, to prevent the pores becoming blocked and maintain the porous and free draining nature of the system. Fortunately, Tarmac supply detailed aftercare guides, available on our website advising end user clients on how to do this.

Technical support on choosing Porous Asphalts

Our Technical Product Support Managers can offer advice on material selection to help you get the correct material and pavement design for your site.



Find out more

To locate your nearest Tarmac Customer Service Centre, visit the 'Contact' section our website: [tarmac.com](https://www.tarmac.com)



[TARMAC.COM](https://www.tarmac.com)

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WE STAND TOGETHER TO

REINVENT
THE WAY
OUR WORLD
IS BUILT