TARMAC
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ULTIDRIVE
POROUS

The ultimate porous driveway surface

ULTIDRIVE POROUS is a porous asphalt with excellent drainage characteristics and proven long term durability.

Our driveways are under daily attack. As cars become more powerful, modern asphalt has to develop to cope with scuffing and abrasion from power assisted steering. In addition, fuel or oil spillages will quickly degrade standard bitumen binders.

ULTIDRIVE POROUS combines excellent drainage characteristics with long term durability using a modified binder which provides enhanced fuel resistance. It is a hard wearing permeable asphalt that eliminates the problem of surface water whilst meeting relevant local planning requirements.

ULTIDRIVE POROUS is available as a 6mm or a 10mm surface course and a 20mm and 32mm binder course providing effective drainage, whilst maintaining long term durability.

ULTIMATE SOLUTIONS

ULTIMATE RESULTS

Proven performance

Using the latest Porous Asphalt technology and a modified binder, the open aggregate structure allows effective drainage and ensures no surface water ponding.

Enhanced compliance

The porous structure acts as a short term reservoir for rainwater and reduces direct surface water run-off to meet the requirements of planning regulations and the Code for Sustainable Homes.

Improved safety

Excellent drainage characteristics eliminate the problem of both standing water and ice patches that can typically occur in cold weather conditions.

Faster completion

When used with a porous receiving course, ULTIDRIVE POROUS avoids the need for expensive additional drainage, thereby allowing quicker project delivery and reduced disruption to clients and end users.

Ultimate solutions

Available as a porous surface and binder course for driveways and car parks. When combined with the Tarmac ULTIFLOW range of drainage aggregates, ULTIDRIVE POROUS offers a complete sustainable drainage solution.

HOW IT WORKS

ULTIDRIVE POROUS is an engineered asphalt that has been designed for excellent drainage and a long lasting finish.

Exceptional drainage

Traditional paved surfaces are laid to shed water. Unfortunately this can mean that drains are quickly overwhelmed after heavy rainfall. As a result, planning rules increasingly require proposals for large paved areas to include measures to reduce the risk of localised flooding.

Supplied to accredited contractors as a surface course and porous binder course, ULTIDRIVE POROUS offers a complete drainage solution for driveways and parking areas. The open structure means that rainwater quickly flows into the asphalt structure and is then slowly released into the ground, helping to avoid standing water and flooding.

Longer lasting finish

The modified binder in ULTIDRIVE POROUS improves workability and delivers a tough, durable finish with enhanced resistance to the stresses associated with power steering and oil spills. Effective aggregate interlock from the design and installation process means that ULTIDRIVE POROUS has a more open aggregate structure and excellent drainage characteristics

Private driveway - Oldham

CHALLENGE

With a steep gradient and stringent planning requirements, this private driveway presented the architect with a number of problems. The local planning department specified that measures were needed to control surface water run-off in order to help mitigate local flood risk.

SOLUTION

The contractor recommended ULTIDRIVE POROUS citing proven long term durability, ease of handling and impressive drainage characteristics.

RESULT

ULTIDRIVE POROUS was delivered and laid within the specified time frame, avoiding delays to the client's schedule. Its smooth, even finish complemented the design of the client's property and the permeable surface eliminated the need for additional ironwork.

Car parking area - Crewe

CHALLENGE

The parking area for this sheltered housing complex needed to be well drained and, maintain safety for vulnerable residents. Conventional approaches would have required additional excavation to install soak-aways.

SOLUTION

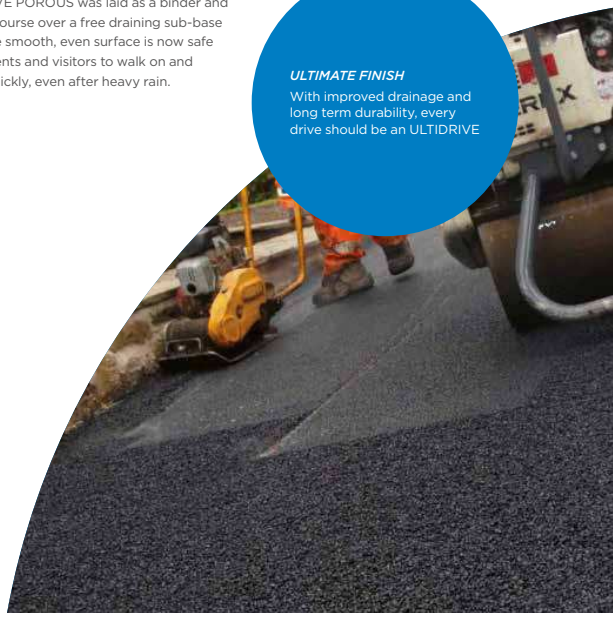
ULTIDRIVE POROUS was recommended as offering a safe, well drained surface that could be installed quickly using standard paving methods.

RESULT

ULTIDRIVE POROUS was laid as a binder and surface course over a free draining sub-base layer. The smooth, even surface is now safe for residents and visitors to walk on and drains quickly, even after heavy rain.

ULTIMATE FINISH

With improved drainage and long term durability, every drive should be an ULTIDRIVE



TYPICAL APPLICATIONS

Where site conditions or planning requirements make drainage a priority, ULTIDRIVE POROUS offers the solution. It requires less groundwork and excavation than alternative rainwater management systems, helping to save time on site and reduce disruption for clients.

FOR DRIVEWAYS:

- 6mm porous surface course (recommended at 30mm thickness) suitable for hand lay.
- 20mm porous binder course.

FOR CAR PARKS:

- 10mm porous surface course (recommended at 35mm thickness).
- 32mm porous base/binder course for larger car parks.

SPECIALIST BASE AGGREGATE:

Tarmac's ULTIFLOW sub-base aggregate is recommended, for a complete permeable pavement solution.

TECHNICAL DATA

ULTIDRIVE POROUS	Typical Air Voids	Typical Stiffness (ITSM)	Typical Water Sensitivity (ITSR)	Typical Hydraulic Conductivity
Relevant standard	BS EN 12697-8	BS EN 12697-26	BS EN 12697-12	DD229
ULTIDRIVE POROUS 6mm	16.0%	3300MPa	85%	8100mm/hr (min 5000)
ULTICOLOUR POROUS 6mm	16.0%	1700MPa	83%	8100mm/hr (min 5000)
ULTIDRIVE POROUS 10mm	16.5%	1100MPa	89%	9700mm/hr (min 6000)
ULTICOLOUR POROUS 10mm	16.5%	2500MPa	92%	9700mm/hr (min 6000)
ULTIDRIVE POROUS 20mm	23.0%	1200MPa	N/R	13000mm/hr (min 6000)
ULTIDRIVE POROUS 32mm	25.0%	1200MPa	N/R	25000mm/hr (min 7000)

COMPARATIVE RAINFALL

- Worst recorded UK rainfall: 341mm in one day (averaging 15mm/hr for 22 hrs) in Cumbria in December 2015.
- A Hydraulic Conductivity of 5300mm/hr (above the 5000mm/hr min. requirement for 6mm) would take ≈94 seconds to drain 15mm of water.
- A Hydraulic Conductivity of 11000mm/hr would take ≈44 seconds to drain 15mm of water.

OUR SUPPORT

FAQs

How does ULTIDRIVE POROUS improve drainage?

Available as a surface and binder course, the open structure of ULTIDRIVE POROUS allows surface water to flow quickly into the structure and thereafter slowly released into the ground.

How does ULTIDRIVE POROUS achieve a long lasting finish?

ULTIDRIVE POROUS uses high grade aggregates and each design is engineered to ensure that the optimum binder content for the specific aggregate is selected. Together with the advanced binder technology, this ensures the long term durability of the completed surface.

Why is ULTIDRIVE POROUS a safer solution?

ULTIDRIVE POROUS eliminates the problem of surface water and reduces the rate of formation of ice during winter months. It also avoids the tripping hazards associated with uneven block paving.

Is ULTIDRIVE POROUS available in other colours?

ULTIDRIVE POROUS is available in black or red as standard. However the Tarmac ULTICOLOUR range also offers porous asphalt in various other colours, for driveways and a wide range of other applications.

What other driveway and parking surfaces are available?

In addition to ULTIDRIVE and ULTIDRIVE POROUS, Tarmac supply ULTIFASTPAVE for fast, single pass resurfacing of high traffic sites. For historic buildings and heritage sites we also supply Ultifinish, a specialist asphalt with the classic appearance of a loose gravel.

What other drainage solutions do Tarmac supply?

ULTIFLOW is a range of drainage aggregates with a proven history of effective performance. Our contracting division can also design and install ULTISuDS, a complete sustainable drainage system.

Does ULTIDRIVE POROUS offer improved oil resistance?

The modified binder in ULTIDRIVE POROUS provides improved resistance to oil spillage compared to conventional asphalts.
Tarmac ULTISHIELD is also available for areas where regular oil spillage is anticipated and the impact of such is the key concern.

How can I be sure that ULTIDRIVE POROUS is laid correctly?

ULTIDRIVE POROUS is only available for installation by accredited contractors who have full access to our expert training, advice and technical support.

MORE ANSWERS

For more information about Tarmac ULTIDRIVE POROUS contact your local regional office or visit tarmac.com

A&A/SBN/0917

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Solihull Birmingham B37 7BQ

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ULTIPHALT HD

The ultimate tougher asphalt

ULTIPHALT HD

The ultimate tougher asphalt

Using proven SMA technology and an advanced modified binder, ULTIPHALT HD has been specially designed to offer long term durability and performance in challenging locations.

ULTIMATE RESISTANCE

High grade aggregates and a modified binder facilitate excellent compaction and strong aggregate interlock, thereby providing enhanced resistance to deformation and turning stresses from heavy vehicle movements.

PROVEN PERFORMANCE

A 10mm product laid 40mm thick, ULTIPHALT HD is proven to deliver lasting performance in the most challenging environments, including lorry parks, ports and distribution centres.

EXCEPTIONAL CONTROL

Our stringent quality control processes, from design, to laying, ensure exceptional control over the quality and consistence of finished asphalt surfaces.

ULTIMATE SUPPORT

At Tarmac, technical excellence comes as standard. ULTIPHALT HD is available for installation by accredited contractors or by our own expert Contracting division who evaluate each site to ensure our clients get the right solution and then deliver it to the highest industry standards.

To find out how ***ULTI****PHALT HD* can help you achieve longer-lasting results, quickly and cost effectively call ***0800 1 218 218***

TARMAC.COM

3905/0715

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CE		
0086		
Tarmac Trading Limited Site Address: Hayes Works, Pump Lane Hayes UB3 3LZ	19	
	0086-CPR-532227	
	Asphalt Concrete for roads, airfields and other trafficked areas	
	AC 20 OPEN BIN 100/150	
	Hayes Asphalt	
	13946	
BS EN 13108-1		
GENERAL		
Target composition	31.5mm	100
	20mm	99
	14mm	68
	6,3mm	26
	2mm	16
	0.063mm	4.0
Target binder content	Binder Actual (B act)	B act 3,7
	Binder Min (B min)	B min 3,8
Mix temperature	Min mix temp	125°C
	Max mix Temp	170°C

This document relates to material supplied	
Plant code (plant name)	D131 (Hayes Asphalt)
Material code (material description)	120A217 (AC 20 OPEN BIN 100/150)
Date	15/05/2019
Time	16:00

Need help? Call us on 0800 1 218 218 or email us at ce@tarmac.com

TARMAC
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Asphalt

DECLARATION OF PERFORMANCE	
Certificate ID	13946
Unique identification code of the product type:	120A217
Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11 (4)	AC 20 OPEN BIN 100/150
Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer	Asphalt Concrete for roads, airfields and other trafficked areas
Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5)	Hayes Asphalt, Hayes Works, Pump Lane, Hayes, UB3 3LZ
System of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex V	System 2+
In case of the declaration of performance concerning a construction product covered by a harmonised standard	BSI Ltd, notified FPC certification body No. 0086, performed the initial inspection of the manufacturing plant and of FPC and the continuous surveillance, assessment and evaluation of FPC and issued the certificate of conformity of the FPC No. 0086-CPR-532227.

ESSENTIAL CHARACTERISTICS		
1. Adhesion of binder to aggregate	4. Resistance to fatigue	7. Reaction to fire
2. Stiffness	5. Skid resistance	8. Dangerous substances
3. Resistance to permanent deformation	6. Resistance to abrasion	9. Durability

BS EN 13108-1

ESSENTIAL CHARACTERISTICS	PERFORMANCE		
2, 3, 4, 5	Grading	31.5mm	100
		20mm	99
		14mm	68
		6,3mm	26
		2mm	16
		0,063mm	4.0
1, 2, 3, 4, 5, 6	Binder Content		B min 3,8
1, 2, 4, 5	Void Content	Minimum	NPD
		Maximum	NPD
1	Water Sensitivity		NPD
1, 2, 3, 4	Mixture Temperature	Minimum	125°C
		Maximum	170°C
2	Stiffness IT-CY	Minimum	NPD
		Maximum	NPD
3	Resistance to permanent deformation	Small device: Slope	NPD
		Small device: Rut depth	NPD
		Large device: Rut depth	NPD
3	Maximum creep rate		NPD
4	Resistance to fatigue		NPD
6	Resistance to abrasion		NPD
7	Reaction to fire		NPD
8	Dangerous substances	www.tarmac.com	NPD
9	Resistance to fuel		NPD
9	Resistance to de-icing fluid		NPD

DECLARATION			
The performance of the product is in conformity with the declared performance issued under the sole responsibility of Tarmac Trading Limited.			
Authorised by David Markham Senior Manager – Asphalt Technology-Wolverhampton	Signed D. E Markham	Plant code	D131
		Material Code	120A217
		Date	15/05/2019
		Time	16:00

Need help? Call us on 0800 1 218 218 or email us at ce@tarmac.com

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CE		
0086		
Tarmac Trading Limited Site Address: Hayes Works, Pump Lane Hayes UB3 3LZ	19	
	0086-CPR-532227	
	Porous Asphalt	
	ULTIDRIVE POROUS 10 SURF PMB H/S	
	Hayes Asphalt	
	16380	
BS EN 13108-7		
GENERAL		
Target composition	14mm	100
	10mm	97
	6,3mm	34
	4mm	18
	2mm	16
	0.063mm	5.0
Target binder content	Binder Actual (B act)	B act 5,0
	Binder Min (B min)	B min 6,2
Mix temperature	Min mix temp	160
	Max mix Temp	185

This document relates to material supplied	
Plant code (plant name)	D131 (Hayes Asphalt)
Material code (material description)	126B5NDA (ULTIDRIVE POROUS 10 SURF PMB H/S)
Date	15/05/2019
Time	16:00

Need help? Call us on 0800 1 218 218 or email us at ce@tarmac.com

TARMAC
A CRH COMPANY

Asphalt

DECLARATION OF PERFORMANCE	
Certificate ID	16380
Unique identification code of the product type:	126B5NDA
Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11 (4)	ULTIDRIVE POROUS 10 SURF PMB H/S
Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer	Porous Asphalt
Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5)	Hayes Asphalt, Hayes Works, Pump Lane, Hayes, UB3 3LZ
System of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex V	System 2+
In case of the declaration of performance concerning a construction product covered by a harmonised standard	BSI Ltd, notified FPC certification body No. 0086, performed the initial inspection of the manufacturing plant and of FPC and the continuous surveillance, assessment and evaluation of FPC and issued the certificate of conformity of the FPC No. 0086-CPR-532227.

ESSENTIAL CHARACTERISTICS		
1. Adhesion of binder to aggregate	4. Resistance to fatigue	7. Hydraulic conductivity
2. Stiffness	5. Skid resistance	8. Reaction to fire
3. Resistance to permanent deformation	6. Resistance to abrasion	9. Noise absorption

BS EN 13108-7

ESSENTIAL CHARACTERISTICS	PERFORMANCE		
2, 3, 4, 5, 6, 8	Grading	14mm	100
		10mm	97
		6,3mm	34
		4mm	18
		2mm	16
		0,063mm	5.0
1, 2, 3, 4, 5, 6, 7, 9	Binder content		B min 6,2
2, 3, 4, 5, 7, 9	Void content	Minimum	NPD
		Maximum	NPD
1	Water sensitivity		NPD
1, 2, 3, 4	Mixture temperature	Minimum	160
		Maximum	185
1, 6	Particle loss		NPD
4, 6	Binder drainage		NPD
7	Permeability		NPD
8	Reaction to fire		NPD
10	Dangerous substances	www.tarmac.com	NPD

DECLARATION			
The performance of the product is in conformity with the declared performance issued under the sole responsibility of Tarmac Trading Limited.			
Authorised by David Markham Senior Manager – Asphalt Technology-Wolverhampton	Signed D. E Markham	Plant code	D131
		Material Code	126B5NDA
		Date	15/05/2019
		Time	16:00