

*ULTI*LOW

The ultimate solution for faster completion
and carbon footprint reduction



ULTILOW reaches appropriate traffic temperatures quicker, so roads can be opened earlier, reducing delays and disruption.

Pressure from road users to keep busy roads moving and requirements for higher standards of safety and sustainability are driving the adoption of innovative, high performance asphalt solutions.

For many project managers, low temperature asphalts offer a valuable combination of faster completion times, lower costs and improved sustainability that can help them meet even the most demanding project requirements.

ULTILOW is a range of low temperature asphalts, manufactured and supplied to comply with TRL Report PPR 666, within the 'Warm Mix' category. ULTILOW asphalts use proven technology to ensure that the material supplied performs as well as conventional hot asphalts, but with the added benefits of enhanced workability, improved sustainability and earlier reopening times to traffic.

***ULTIMATE
SOLUTIONS***

ULTIMATE RESULTS

Ultimate Speed

ULTILOW is supplied at temperatures typically 40°C lower than a hot equivalent, reaching appropriate trafficking temperatures quicker than hot asphalt for earlier reopening of carriageways. This feature is particularly valuable when thick construction layers are necessary.

Ultimate Convenience

Faster construction times keep busy roads moving, minimising disruption to road users.

Ultimate Productivity

Where time is restricted, larger sections of pavement can be laid and still opened to traffic as required, reducing the overall contract programme duration and potentially reducing plant, labour and traffic management costs.

Ultimate Availability

ULTILOW is not seasonal and can be supplied and laid all year round.

Ultimate Sustainability

ULTILOW asphalts deliver carbon footprint savings compared to hot equivalents.

Ultimate Safety

Lower temperatures mean less risk of burns and reduced fumes and steam on site, which can sometimes impact on visibility. This is particularly evident during cold and /or wet weather and during night shift operations.

ULTILOW TECHNOLOGY

ULTILOW asphalts are produced by either foaming the bitumen or by using a warm mix additive during manufacture.

The ULTILOW range is based on tried and tested technology that is proven to deliver equivalent performance to conventional hot asphalts on key performance criteria.

Bitumen foaming is when a small quantity of water injected into hot bitumen becomes converted into steam. The bubbles of steam create a foaming effect which increases the volume of the bitumen, temporarily reducing the viscosity and making it easier to fully coat the aggregate.

Warm Mix additives are designed to reduce the surface tension of the bitumen itself, allowing the mix to be manufactured and compacted at lower temperatures.

Both processes produce comparable warm mix products, for enhanced workability and earlier completion times.

Many asphalts in the Tarmac Ultimate range are now available with ULTILOW binder technology, contact your local Tarmac regional office for more details

PROVEN PERFORMANCE



Derbyshire County Council, Newshaw Lane, Glossop

CHALLENGE

Derbyshire County Council were looking for alternative materials to help meet their challenging targets for reducing carbon footprint.

In this case another key consideration was minimal public disruption outside the Glossopdale Community College where access had to be maintained.

SOLUTION

ULTILOW warm mix asphalt was supplied as a 20mm dense binder course and a 10mm close graded surface course subsequently applied shortly afterwards before re-opening to traffic.

RESULT

ULTILOW warm mix asphalt achieves savings in greenhouse gases through the lower manufacturing temperature and also allowed the road to be opened to traffic sooner than with conventional hot mix materials. Traffic was flowing on the new surface only 30 minutes after completion of surfacing.

Highways Agency / AOne+, A46, Cossington Leicestershire

CHALLENGE

The Highways Agency requested a demonstration installation site be supplied with Low Temperature Asphalt to demonstrate 'business as usual' in terms of site operations and equivalence of product performance compared to hot mix equivalents.

SOLUTION

The materials specified in the contract were a 20mm dense binder course 40/60 pen to clause 929 and a 14mm thin surface course to clause 942.

ULTILOW solutions are available for most requirements and the 20mm dense binder course and UltiPave 14mm clause 942 surface course were produced in both hot mix and warm mix versions.

Areas of the base layer requiring reconstruction were planed out and Tarmac's UltiFoam cold recycled base solution was also manufactured from the road planings.

RESULT

The site was supplied without issue or any need to adjust normal site practices. Testing carried out on both the hot mix and the ULTILOW warm mix materials, demonstrated that equivalent performance can be achieved for all the specified parameters such as surface texture, voids and resistance to rutting.





EXPERT ADVICE AND SUPPORT

At Tarmac, technical excellence comes as standard. To ensure our customers get the best possible results, expert support is never more than a phone call away.

Typical Applications

ULTILOW is now available throughout the UK as an alternative to conventional asphalts.

Many Tarmac 'Ultimate' branded solutions are available as warm mix asphalts with ULTILOW binder technology. This includes ULTIMAT/ULTILAYER our flexible, crack resisting asphalts and ULTIPHALT/ULTIPAVE SINGLE LAYER our durable, single layer surfacing solutions.

As a result, they offer the same benefits of improved sustainability, better on-site visibility, shorter programme times and earlier reopening to traffic. Ask your local Tarmac representative for full details of the range of warm mix asphalts available in your region.

OUR SUPPORT

FAQs

Can ULTILOW reduce my construction programme?

Yes, as ULTILOW is supplied and laid at lower temperatures, the material can be reopened to traffic earlier.

Can I order any conventional asphalt as an ULTILOW product?

With the exception of an HRA that requires application of a pre coated chipping, all other products are available as an ULTILOW.

Do I need any additional equipment if I choose to use ULTILOW?

No, ULTILOW can be laid using conventional laying techniques with no need for any additional equipment on site.

Where is ULTILOW available from?

Our range of ULTILOW asphalts are now available from Tarmac sites throughout the UK. For full details check with your local Tarmac office.

Does ULTILOW provide sustainability benefits?

Yes, by using less fuel during the manufacturing process, ULTILOW reduces the carbon footprint of asphalt.

Are Low Temperature Asphalts being used anywhere else in the world?

Yes, prime examples are in the USA and France where LTAs currently form 33% and 9% of their total asphalt markets respectively.

What are the key benefits of LTA?

Reduced onsite construction costs, earlier reopening to the public and improved visibility in testing weather conditions.

Do ULTILOW products have any seasonal restrictions?

No, ULTILOW products are available all year round and can actually provide particular advantages during cold winter periods where temperatures can be slightly raised on request if necessary to assist in overcoming anticipated site difficulties.



MORE ANSWERS

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

Portland House Bickenhill Lane
Solihull Birmingham B37 7BQ

0800 1 218 218 TARMAC.COM

