



# Asphalt Solutions

A more sustainable approach to  
highway and road infrastructure





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Our road infrastructure is crucial to economic and social development. With over 33 million\* cars on our roads, it provides communities with the links they need to access health, education, food and jobs. The construction of new, and maintenance of existing, highways ensures we can stay connected.



Part of Cemex's investment includes developing a more sustainable approach to highway maintenance. We can do this by reducing carbon emissions, using innovation, and incorporating waste sources from other streams into our materials. By making these investments, we can build a better future for everyone, now and for generations to come.

In the UK alone, there are around 40 million used tyres generated each year creating 450,000 tonnes<sup>1</sup> of used rubber to dispose of.

And an estimated 98.66 kilograms of plastic per capita thrown away per year. Of the plastic generated, only 44.2% is recycled, and 25% is sent to landfill<sup>2</sup>. More than half of all plastic waste comes from food or other goods packaging<sup>3</sup>.

The amount of both used tyres and plastic waste presents a major challenge for the UK as it seeks to reduce waste from going to landfill.

Our range of sustainable asphalt solutions address some of these challenges by incorporating waste materials into our asphalt mixes, reducing the amount going to landfill and yet maintaining the products performance.

1 [nationaltyrerecycling.co.uk](http://nationaltyrerecycling.co.uk)

2 [statista.com/topics/4918/plastic-waste-in-the-united-kingdom-uk/#editorsPicks](https://www.statista.com/topics/4918/plastic-waste-in-the-united-kingdom-uk/#editorsPicks)

3 [commonslibrary.parliament.uk/research-briefings/cbp-8515/](https://commonslibrary.parliament.uk/research-briefings/cbp-8515/)

RUBBER**MIX** ASPHALT (RMA) transforms used tyres into new functional roads, enabling end-of-life tyres to be reused, all helping to offset the environmental impact of highway maintenance through the circular economy.

RUBBER**MIX** ASPHALT is a solution, which works with Cemex branded asphalt products\* incorporating crumb rubber granules into the existing asphalt mix.

\* Excluding VIAPAVE and VIATEX



# A new lease of life for old, worn tyres.

## WHAT IS CRUMB RUBBER?

Waste tyres are modified into crumb rubber by shredding the tyres into granules and producing new functional material. It is commonly used to produce new football pitches and soft play floors.

The crumb rubber used in our RUBBERMIX ASPHALT is from tyres fully recycled in the UK, with one tyre per tonne of asphalt, giving the potential to recycle up to 500 tyres per kilometre of road (depending on layer thickness).

With the addition of the crumb rubber, the quality and product performance you'd expect from our range of asphalt products is maintained.



RUBBERMIX  
ASPHALT

Property	Water Sensitivity	Stiffness	Deformation Resistance	
Test Method	BS EN 12697-12	BS EN 12697-26	BS EN 12697-22 Procedure B 60	
	ITSR	ITSM	WTS <sub>AIR</sub>	PRD <sub>AIR</sub>
SMA 10 Surf 40/60	84%	4000 MPa	0.3mm	11%
SMA 10 Surf 40/60 + Crumb Rubber	80%	3900 MPa	0.2mm	9%

\* The above is a typical comparison between a Stone Mastic Asphalt Surface Course with and without the addition of Crumb Rubber.

## APPLICATIONS

- Motorways.
- Urbanised Roads.
- Pavements.
- Driveways.

## FEATURES AND BENEFITS

- Higher resistance to ageing.
- Smoother ride (comparable to standard asphalt).
- Sustainable.
- Contains recycled rubber.

# Combine with VIALOW WARM**MIX** asphalt

Combine RUBBER**MIX** ASPHALT (RMA) solution with VIALOW WARM**MIX** ASPHALT, a low temperature, lower carbon asphalt solution from Cemex. Available in all equivalent conventional and proprietary mixes enabling embodied carbon reductions of up to 20%. The remaining CO<sub>2</sub> emissions can be offset with our zero option.

For more information visit [cemex.co.uk/vialow](https://cemex.co.uk/vialow)



## KEY FACTS

**Reduces CO<sub>2</sub>e emissions** that would otherwise be released through alternative **incineration**.

We recycle approximately **one used tyre per tonne** of RUBBER**MIX** ASPHALT.

All RUBBER**MIX** ASPHALT tyres are **fully recycled in the UK**.

There's the potential to recycle over **4,000 tyres** per kilometre of **new build road**.



RUBBER**MIX**  
ASPHALT

Non-recyclable plastic waste is a significant problem for the environment, causing long-term harm.

By finding new ways to use this waste, we can reduce the amount that ends up in landfill or being burnt in incinerators, which in return lowers carbon emissions

PLASTIC**MIX** ASPHALT (PMA) utilises this non-recyclable plastic and gives it purpose, using it to construct vital infrastructure for local communities, including supermarket car parks, local roads, industrial areas and essential road maintenance.

In addition, the asphalt is recyclable, and once it's planed/milled out it can be used in the construction of new roads, creating a truly circular economy.

PLASTIC**MIX** ASPHALT is a solution, which works with Cemex branded asphalt products.\*

\* Excluding VIAPAVE and VIATEX

PLASTIC**MIX** ASPHALT  
mitigates the negative  
impact of non-recyclable  
plastic waste, converting  
it into a useful material in  
asphalt mixes.

Our plastic modified asphalt  
uses small amounts of plastic  
in the asphalt binder, whilst not  
compromising the performance  
of the asphalt mix.

Sourced locally, PLASTIC**MIX**  
ASPHALT uses a small amount  
of plastic per 1 tonne of asphalt,  
and has the potential to use  
the plastic equivalent of half  
a million one-litre milk cartons  
per new car park\*.

\* Calculated based on the approximate size  
of a new car park with 500 parking bays.

PLASTIC**MIX**  
ASPHALT

Property	Water Sensitivity	Stiffness	Deformation Resistance	
Test Method	BS EN 12697-12	BS EN 12697-26	BS EN 12696-22 Procedure B 60°C	
	ITSR	ITSM	WTS <sub>AIR</sub>	PRD <sub>AIR</sub>
AC 10 Close Surf 100/150	87%	3000 MPa	0.16mm	7%
AC 10 Close Surf 100/150 + Plastic	90%	3600 MPa	0.10mm	4%

\* The above is a typical comparison between an Asphalt Concrete Surface Course with and without the addition of plastic.

## APPLICATIONS

- Car parks.
- Driveways.
- Industrial areas.
- Utility reinstatement.
- Urbanised roads.
- Road maintenance.

## FEATURES AND BENEFITS

- Aids circular economy by using waste products reducing the reliance on natural resources.
- Supports alternative uses for plastic waste reducing the impact to the environment.
- Performance of asphalt remains the same.
- Reduces carbon emissions.
- Asphalt can be recycled at end-of-life.

## KEY FACTS

A new 500-bay car park made with PLASTIC**MIX** ASPHALT could incorporate up to the same amount of plastic as **half a million one-litre milk cartons.**

The same car park could save up to **21 tonnes of CO<sub>2</sub>e emissions** that would otherwise be released through alternative incineration.

All PLASTIC**MIX** ASPHALT plastic is fully recycled in the UK.

There's the potential to recycle up to **12 tonnes of plastic per kilometre of road.**






PLASTIC**MIX**  
ASPHALT



In addition to our asphalt solutions, three of our asphalt branded mixes are included under the Vertua brand.

Our Vertua family is a portfolio of products and solutions that address the pressing need to build a future that is carbon neutral, sustainable, and circular, incorporating five key attributes:

-  **LOWER CARBON**
-  **ENERGY EFFICIENCY**
-  **WATER CONSERVATION**
-  **RECYCLED MATERIALS**
-  **DESIGN OPTIMISATION**

The products and solutions covered by these 5 sustainable attributes collectively contribute to our vision of **'Building a Better Future'**.

## VIA COURT®

A free-draining 6mm asphalt concrete surface course designed for outdoor sports applications. The blend of carefully graded aggregate and bitumen binder produces a mix that is porous enough to allow water to pass through, while maintaining a smooth surface for tennis courts and multiple use games areas (MUGAs).

VIACOURT is fully compliant with the Sports and Play Contractors Association requirements for sports surfaces.

## VIA FLOW®

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.

## VIA LOW®

WARM MIX ASPHALT, a low temperature, lower carbon asphalt solution from Cemex. Available in all equivalent conventional and proprietary mixes enabling embodied carbon reductions of up to 20%. The remaining CO<sub>2</sub> emissions can be offset with our zero option.



For more information on our asphalt mixes visit [cemex.co.uk/asphalt-range](https://cemex.co.uk/asphalt-range)

## THE CIRCULAR ECONOMY

Our commitment to sustainability is a fundamental pillar of our business strategy.

On a planet with finite resources, we cannot continue with the current growth model based on the linear economy. There is a need to implement a development model that optimises the use of resources and minimises waste: **The Circular economy.**

We believe a circular economy is essential for environmental sustainability. By transforming waste materials into invaluable solutions, carbon emissions are reduced along with with additional environmental benefits.

For more information on CEMEX's commitment to sustainability visit [cemex.co.uk/future-in-action](http://cemex.co.uk/future-in-action)



For technical services and product support,  
contact our Asphalt Support Team on 0345 155 6367  
or visit [cemex.co.uk/rubbermix\\_asphalt-range](https://cemex.co.uk/rubbermix_asphalt-range)

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

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