

Foster Yeoman

Fuel resistant Stratagem Fuelsafe is the latest addition to Foster Yeoman's impressive array of niche products intended to meet every asphalt need.

Innovation key to specialist products

Poor binder resistance to spilt fuel once limited the areas where conventional asphalts could be used but Foster Yeoman's new Stratagem Fuelsafe asphalt offers a safe viable alternative to concrete. Key to the performance of Fuelsafe – currently undergoing rigorous trials in the UK – is a specially designed binder developed by Shell.

Stratagem Fuelsafe is just one of a number of products which have been developed by Foster Yeoman to give its customers not just solutions for problem areas but also bespoke materials for individual sites. The company's range of niche products covers a wide spectrum of applications from aesthetics and demarcation through to high performance road surfacings.

Foster Yeoman's new Stratagem Fuelsafe surfacing is the latest material to emerge from its ongoing product development which started five years ago with Premierpave. The Premierpave family of mixes is a range of proprietary thin surfacings for a variety of applications from

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John Bullock

motorways and trunk roads through to estate roads and private drives.

The 14mm variant of Premierpave has Highways Agency Type approval and is expected to receive full BBA approval under the Highway Authorities Product Approval Scheme (HAPAS) in the very near future.

Stratagem is the company's proprietary thin surfacing for use where a layer thickness of 25mm or less is required. It uses a superior SBS modified binder for enhanced resilience and performance creating a low noise and spray reducing surface. Stratagem Fuelsafe takes the principles of thin surfacing mixture design further to provide a fuel resistant asphalt surface. This removes the problems associated with the use of alternative materials such as concrete.

"Conventional asphalt binders break down when in contact with fuel. This destroys the bond between aggregate particles, but Shell's specially developed binder actively resists the degradation effects of spilt fuel," says Foster Yeoman Quality & Technical Manager John Bullock.

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Foster Yeoman's working philosophy is to find ways of continually developing its products to improve both performance and quality as well as find new applications for its advanced materials. This philosophy has also been followed in aesthetics and recycling applications which has brought the development of Synergy and Foamix (see box) respectively.

"Synergy has been designed primarily for demarcation or for decorative use on lightly trafficked roads and footways. A mixture using a

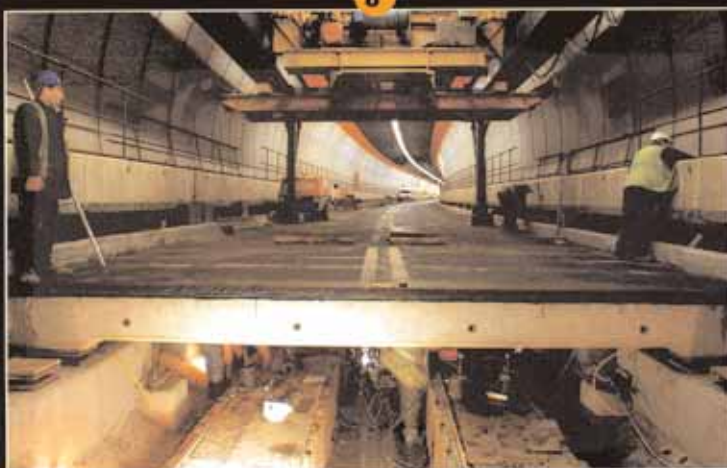
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1. **Stratagem Fuelsafe actively resists damage from spilt fuel and offers a safe viable alternative to concrete.**

2. **Some vibrantly coloured asphalts are prone to alteration by UV light but Foster Yeoman's Redpave uses a red binder and pink aggregate to give maximum impact without fading.**

3. **Stratagem was recently used to replace the existing road base in the Bartford Tunnel. Its rut resistance allowed it to be trafficked for 10 months before the wearing course was laid.**

4. **Before...**

5. **...and after. Foamix uses cold mix technology and a variety of secondary aggregates, such as road planings, for carriageway reconstruction.**

buff coloured crushed rock aggregate is available for more onerous applications," says Foster Yeoman Sales Director Chris Phillips.

Synergy uses a straw coloured resin based binder which was jointly developed by Foster Yeoman and BP to give the material maximum colour impact without becoming opaque. Some more vibrantly coloured asphalts, such as red, are more sensitive to the effects of UV light and can fade with time. However, Foster Yeoman has overcome the problem by introducing Redpave which uses a red pigmented binder and pink aggregate to produce a stronger, more resilient shade of red.

Foster Yeoman is now planning to look at developing all of its niche products to the next level with greater emphasis on use of recycled materials and sustainability.

"For instance, although high PSV mixes are essential for some high stress sites we would like to

Foamix's green credentials continue to grow

Glass is the latest material to be trialed in Foamix, Foster Yeoman's well established environmentally friendly cold mix, cold lay asphalt which can be produced with up to 95% of recycled material.

Foamix was developed in the early 1990s using a foamed bitumen binder produced by BP and these latest trials using glass are part of Foster Yeoman's ongoing product development.

"Our aim has always been to design Foamix to incorporate whatever waste our customers have to hand," says Foster Yeoman Marketing & Business Development Manager Dennis Buffrey. "In the past we have successfully used road planings, furnace bottom ash and sewerage sludge as an alternative to virgin aggregates.

"However, many local authorities now have stockpiles of excess recycled glass, particularly green glass, because there

is a limited market for its reuse. As this material is readily available throughout most of the UK it made sense to put its potential for use in Foamix to the test."

Initial trials show that up to 20% glass can be incorporated into the mix to produce a material which displays the same benefits as other Foamix products such as a high performance and up to a 30 day shelf life.

Foamix also has a high resistance to rutting making it ideal for carriageway reconstruction and, although it is not designed as a surface course, in low stress situations it can be trafficked for up to 10 days without adverse effects.

The storability of the product also means that it can be used in any of its guises in trench reinstatement, haunch repair and for carrying out localised patching.

promote the use of slightly lower PSV aggregates for the majority of sites to make the use of aggregates in

our roads more sustainable," says Phillips.

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