

Tough Patch® delivers fast, reliable and consistent pothole repairs for Kier



UltraCrete successfully fills the gap with its first time permanent repair material for planned and reactive maintenance in all weathers.

CONTRACTOR: KIER

MATERIALS: TOUGH PATCH, SCJ

Leading UK construction and infrastructure service suppliers, Kier, are responsible for the maintenance of the major roads in Gloucester, Shropshire, Staffordshire, Warwickshire, Worcester and Herefordshire. This is Kier's largest UK Contract for the Highways Agency.

In order to manage the increasing pothole maintenance issue for these extensive road networks, Kier had been using a mixture of pothole repair products from multiple suppliers, which were giving inconsistent and mixed results, in particular during the winter months.

The infrastructure services company was also under pressure from the Highways Agency to keep road closures and disruption to a minimum whilst undertaking repairs, so were seeking a solution that would provide a first time permanent repair for planned and reactive maintenance to address this.

The UltraCrete team met with Kier's Operations and Enhanced Customer Response Unit (ECRU) teams to help them find a solution to standardising their patch and pothole repair methods.

Having analysed the issues, Tough Patch® was recommended by the UltraCrete team due to its consistent reliability and quick installation.



Tough Patch® is a PTS PAS approved, cold lay surface material for road repairs, which utilises a reactive binder that rapidly cures to create a first time, permanent repair that will accept traffic immediately after installation. By utilising Tough Patch®, the amount of time needed for closures on a highway can be reduced, resulting in a significantly safer working environment for the Kier operatives carrying out the work.

Tested in accordance with MCHW SHW Volume 1 Clause 104.15 and 104.16, Tough Patch® has been proven to provide a permanent repair in a variety of environments and weather.

As well as complying with all the test requirements of the revised Specification for Highway Works (SHW) Clause 946 and as defined in Specification for the



Reinstatement of Openings in Highways (SROH), Tough Patch® has been proven to outperform these standards in a number of areas.

SROH requires all cold lay materials to be capable of being cored within 6 months of installation and thanks to its superior formulation, Tough Patch® surpasses these requirements, allowing cores to be taken after 24 hours.

In addition to the SHW and SROH test requirements, Tough Patch® 6mm and 10mm grades have been assessed for wheel tracking and permanent deformation at 60°C – the standard is only 45°C – and both grades demonstrated enhanced performance to classify as suitable for “very heavily stressed sites requiring very high rut resistance.”

Tough Patch® permanent surface repair material can be used in all weathers and is proven to last the life of the road, eliminating costly repeat visits to site.

UltraCrete SCJ was also recommended to be used in conjunction with Tough Patch®. This product prolongs the life of the repairs, improves bond, prevents water ingress and is BBA HAPAS approved.

The UltraCrete team demonstrated Tough Patch® at the meeting and subsequent trials of the product were undertaken by Kier between December 2019 and February 2020.

The trials were successful and Tough Patch® has been adopted by Kier to use on major roads in Gloucester, Shropshire, Staffordshire, Warwickshire, Worcester and Herefordshire.

Gary Wood, Senior Storeman at Kier praised the UltraCrete product and team commenting: “The interaction and collaborative working relationship between the operatives and supplier has resulted in a product that will now be used across Gloucester, Shropshire, Staffordshire, Warwickshire, Worcester and Herefordshire. We

invited the UltraCrete team along to view our side of the process and in doing so; they have helped us to implement improvements across the board.”