

# TOUGH PATCH®

## Permanent Cold Lay Surface Course 10mm grade

**ULTRA  
CRETE**

Cold Lay Asphalt Concretes



For permanent repairs in type 3 & 4 roads and temporary / emergency repairs in higher category roads.

- Certified for use through the Product Assessment Scheme (PAS)
- First time permanent, emergency and temporary repairs
- Rapid curing, instantly trafficable
- High deformation performance and rut resistance
- Can be cored after 24 hours
- Use in all weather
- Innovative reactive binder
- Contains renewable binder materials
- Solvent free
- Easy to use and apply

### Description

Tough Patch 10mm Grade is a rapid curing, permanent cold-lay surfacing material (PCSM) suitable for defect repairs, potholes, trench reinstatement, utility installations, patching in car parks, driveways and other local repairs. Ideally suited for use on bituminous / asphalt and cementitious paving and road substrates.

It uses an innovative reactive binder that rapidly cures to provide a first time permanent repair, this binder is based on renewable materials and contains no solvents. The rapid curing reaction is activated by sprinkling water over the product before compacting. Once compacted the installation can be instantly opened to traffic and is able to be cored for assessment after 24 hours. The product can be used in all weather conditions. Tough Patch 10mm can also be used for emergency or temporary repairs where a rapid response is required to prevent risk to operatives, pedestrians, cyclists and motorists.

### Conformance

Tough Patch 10mm complies with all the test requirements of the revised Specification for Highway Works (SHW), Clause 946 and as defined in the Specification for the Reinstatement of Openings in Highways (SROH). Assessment of the product to meet such requirements is listed under PTS PAS Certification Ref PA 946 0005 issued by Pavement Testing Services LTD (PTS Ltd).

Certification acknowledges product suitability for use on UK road network as follows:

Tough Patch 10mm grade is specified as a permanent repair to footways, footpaths & cycle tracks as a PCSM. Can also be used as a temporary / emergency repair on the same applications in addition to Class 3 & 4 carriageways.

### Preparation & Application.

1. Permanent repairs require best practice in saw cutting around the defect or opening to ensure straight, vertical edges that support compaction of material when installed.
2. Remove any debris, mud, silt or ice from within the defect.
3. To enhance the longevity of the repair, seal the vertical cut edges and base of asphalt defect or opening with Ultracrete SCJ Seal & Tack. This is essential when the substrate is concrete.
4. Apply Tough Patch from the bag or bucket using the layer method (see below) which ensures uniform compaction and longevity of repair.
5. Loosely spread each layer uniformly into the defect or opening using a shovel or rake.
6. Before compacting each layer, sprinkle water over the complete surface at the approximate ratio of 1litre per 25kg bag of Tough Patch – this will activate the curing process.
7. Mechanically compact the material in accordance with Appendix 8 of the SROH and repeat the process for all layers ensuring the material final layer is slightly proud of the surrounding area and fully compacted.
8. For Emergency repairs, saw cutting (step 1) and thorough cleaning (step 2) may not be able to be fully undertaken due to traffic management requirements, therefore the material can be used in an emergency / reactive maintenance programme to prevent pedestrian, vehicle or cycle harm or damage, with the knowledge that a more permanent

solution can be carried out at a later date. In such instances, the repair may be filled in one application. Compact using a suitable tamping device or in areas where there is limited traffic management in place, allow traffic to compact. It is the responsibility of the user to satisfy themselves on the effectiveness of the application.

NB: Layer installation method:

Tough Patch 10mm for paving is generally installed at a max 100mm depth in accordance with SROH. This is applied in layers as follows:

- Apply product to a depth of 45mm and compact to 30mm for first layer.

- Repeat process

Finally apply a 60mm layer and compact to 40mm to provide the final surface course

## Product Specification

Product:	Tough Patch – 10mm Grade
Appearance:	Black coated aggregate
Aggregate grade:	Nominal 10mm
Unit Size:	25kg Foil Bags & 25kg Buckets
Coverage:	1 unit covers 1sqm at 12mm to 15mm depth compacted depending on the surface regularity of the reinstatements
Curing time:	Can be cored within 24 hours
Application Temperature:	-5°C to 40°C
Shelf Life:	Bags & buckets: 6 months from date of manufacture in sealed units, stored in the above conditions. Once opened, all material should be used up.
Storage	Store in a dry, well ventilated place at temperatures above 5°C and below 30°C

## Health, Safety and Environmental

Please ensure that appropriate PPE is used when preparing, mixing and applying products. Always wash your hands before consuming food and make sure that materials are kept safely out of reach of children and animals. Please dispose of packaging and waste responsibly and in accordance with local authority requirements. A full material datasheet relating to this product is available from instarmac.co.uk

## Quality assurance

All products are manufactured in a plant whose quality management system is certified / registered as being in conformity with BS EN ISO 9001, 14001, and OHSAS 18001. Our products are guaranteed against defective materials and manufacture, and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept any liability arising from the application or use of our products because we have no direct or continuous control over where and how our products are used. All products are sold subject to our conditions of sale, copies of which may be obtained on request.

## Technical Specification

## Typical Result

Polished Stone Value (PSV) BS EN 1097-8	minimum 65
Mean Air Voids (%): BS EN 129697-6 & 8	7.8%
Mean Wheel Track Slope. (mm/10 <sup>3</sup> load cycles): BS EN 12697-22 (B)	0.04 (at 45°) Class 1. Mod-heavy 0.04 (at 60°) Class 2. Very Heavy
Mean Rut Depth. (mm/10,000 cycles): BS EN 12697-22 (B)	1.4 (at 45°) 1.4 (at 60°)
Mean Proportional Rut Depth (% /10,000 cycles): BS EN 12697-22 (B)	3.0 (at 45°) 2.3 (at 60°)
Mean Indirect Tensile Stiffness Modulus (MPa): BS EN 1297-26 (C)	1621
Mean Texture Depth (mm): BS EN 13036-1	1.6
Mean Corrected Pendulum Test Value (PTV) BS EN 13036-4	84

## Contact Us

Instarmac® Group plc, Birch Coppice Business Park, Danny Morson Way, Dordon, Tamworth, Staffordshire, B78 1SE, United Kingdom

Tel: +44 (0) 1827 254400

Email: email@instarmac.co.uk Order: orders@instarmac.co.uk Website: instarmac.co.uk

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