

## INSTARMAC PERMANENT COLD LAY SURFACING MATERIALS

### ULTRACRETE INSTANT ROAD REPAIR 10 MM

This HAPAS Certificate Product Sheet<sup>(1)</sup> is issued by the British Board of Agrément (BBA), supported by Highways England (HE) (acting on behalf of the Overseeing Organisations of the Department for Transport; Transport Scotland; the Welsh Government and the Department for Infrastructure, Northern Ireland), the Association of Directors of Environment, Economy, Planning and Transport (ADEPT), the Local Government Technical Advisers Group and industry bodies. HAPAS Certificates are normally each subject to a review every three years.

(1) Hereinafter referred to as 'Certificate'.

This Certificate relates to Ultracrete Instant Road Repair<sup>(1)</sup> 10 mm, for use as a bituminous permanent cold-lay surfacing material (PCSM) in any position in footways, footpaths and cycle tracks and as a permanent cold-lay surface course (PCSC) in Type 3 and 4 carriageways.

(1) Ultracrete Instant Road Repair is a registered trade mark.

#### CERTIFICATION INCLUDES:

- factors relating to compliance with HAPAS requirements
- factors relating to compliance with Regulations where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.



#### KEY FACTORS ASSESSED

**Performance** — the product satisfies the requirements of the *Guideline for the Approval and Certification of Permanent Cold-Lay Surfacing Materials (PCSMs)* for the reinstatement of openings in footways, footpaths and cycle tracks (PCSM), and as a surface course in Type 3 and 4 carriageways (PCSC) (see section 6).

**Durability** — the results of tests and an assessment of the product in-service performance indicate that it can be used as a first-time reinstatement of openings in footways, footpaths and cycle tracks (PCSM), and as a surface course in Type 3 and 4 carriageways (PCSC) (see section 8).



The BBA has awarded this Certificate to the company named above for the product described herein. This product has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Third issue: 23 June 2020

Originally certificated on 22 March 2002



Hardy Giesler  
Chief Executive Officer

*The BBA is a UKAS accredited certification body – Number 113.*

*The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at [www.bbacerts.co.uk](http://www.bbacerts.co.uk)  
Readers **MUST** check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.*

*Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.*

## Requirements

In the opinion of the BBA, Ultracrete Instant Road Repair 10 mm, when assessed in accordance with the *Guideline for the Approval and Certification of Permanent Cold-Lay Surface Materials (PCSMs)* and used in accordance with the provisions of this Certificate, is suitable for use as a PCSM in footways, footpaths and cycle tracks and as a PCSC in Type 3 and 4 carriageways as defined in the *New Roads and Street Works Act 1991 : Specification for the Reinstatement for Openings in Highways*.

## Regulations

### Construction (Design and Management) Regulations 2015

### Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

See section: 3 *Delivery and site handling* (3.1, 3.2 and 3.5) of this Certificate.

## Technical Specification

### 1 Description

1.1 Ultracrete Instant Road Repair 10 mm is a bituminous, cold lay surfacing material consisting of graded gritstone, coarse aggregate and fines to BS EN 13043 : 2002, and Instarmac Z binder.

1.2 Instarmac Z binder comprises a paving grade bitumen to BS EN 12591 : 2009 modified with polymers and chemical additives.

1.3 Ultracrete SCJ Seal and Tack, a spray-applied sealant for priming and sealing surfaces prior to installation, is available for use with the product.

### 2 Manufacture

2.1 Ultracrete Instant Road Repair 10 mm is manufactured using conventional asphalt production methods.

2.2 As part of the assessment and ongoing surveillance of product quality, the BBA has:

- agreed with the manufacturer the quality control procedures and product testing to be undertaken
- assessed and agreed the quality control operated over batches of incoming materials
- monitored the production process and verified that it is in accordance with the documented process
- evaluated the process for management of nonconformities
- checked that equipment has been properly tested and calibrated
- undertaken to carry out the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control being operated by the manufacturer are being maintained.

2.3 The management systems of Instarmac Group plc have been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by National Quality Assurance Ltd (Certificate 6987/1).

### 3 Delivery and site handling

3.1 The product is supplied in pre-packed, ready-to-use, 25 kg foil bags or plastic tubs. The product packaging is stamped with the product name and aggregate size, weight, storage information, handling and usage instructions plus Health and Safety information. In addition, there is a batch number for traceability to the date of production.

3.2 Ultracrete SCJ Seal and Tack is supplied in 750 ml spray cans.

3.3 Ultracrete Instant Road Repair and Ultracrete SCJ Spray and Tack must be stored in cool, well-ventilated, dry conditions, protected from frost and high temperatures.

3.4 When stored correctly in the sealed container, the product will have a storage life of at least six months in bags or six months in plastic tubs.

3.5 The Certificate holder has taken the responsibility of classifying and labelling the product under the *CLP Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures*. Users must refer to the relevant Safety Data Sheet(s). Material Safety Data Sheets and COSHH risk assessments for the works should be deposited with the purchaser and be maintained on site.

## Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Ultracrete Instant Road Repair 10 mm.

## Design Considerations

### 4 Use

Ultracrete Instant Road Repair 10 mm is satisfactory for use as a PCSM and a PCSC in accordance with the *New Roads and Street Works Act 1991 : Specification for the Reinstatement of Openings in Highways (SROH)*, Third Edition, April 2010, Appendix A2.4.

### 5 Practicability of installation

The product is designed to be installed by a competent installer experienced with this type of product.

### 6 Performance

The results of two-year performance trials and tests to determine the air voids content, resistance to permanent deformation and indirect stiffness modulus were satisfactory and comply with the requirements of the *Guideline for the Approval and Certification of Permanent Cold-Lay Surfacing Materials (PCSMs)* (see section 12 of this Certificate).

### 7 Maintenance

The product is not subject to any routine maintenance requirements, but any damage should be repaired.

### 8 Durability

The product has been used in the UK since 1998. The results of two-year performance trials and a survey of users indicate that the product can be used as a PCSM, in any position, in all reinstatements in footways, footpaths and cycle tracks and as a PCSC in all reinstatements in Type 3 and 4 carriageways, in accordance with the SROH.

## Installation

### 9 General

Ultracrete Instant Road Repair 10 mm must be installed in accordance with the Certificate holder's instructions, this Certificate and the relevant requirements of the SROH.

### 10 Preparation of the substrate

10.1 All surfaces must be clean and free from loose material, oil, grease, standing water and any other contamination.

10.2 The substrate and vertical edges must be spray-coated with Ultracrete SCJ Seal and Tack and prepared in accordance with any additional relevant requirements of the SROH.

## 11 Application

11.1 Sufficient Ultracrete Instant Road Repair must be placed in the opening, allowing a 50% surcharge of material to allow for compaction.

11.2 The material is compacted to the surrounding level using a suitable compactor/roller in accordance with the Certificate holder's instructions, and with the SROH, Section S10 and Appendix A8 *Compaction Requirements*.

## Technical Investigations

## 12 Tests

12.1 Laboratory performance tests were carried out on the product in accordance with the requirements of the *Guideline for the Approval and Certification of Permanent Cold-Lay Surfacing Materials (PCSMs)*. The results were satisfactory (see Table 1).

*Table 1 Laboratory performance tests and requirements*

Test	Requirements	Method
Air voids content (%) <sup>(1)</sup> - carriageway and footway	2–10	Guideline Document (Table A.1)
Elastic stiffness at 20°C (MPa) <sup>(2)</sup>	>3800 <sup>(1)</sup>	
Resistance to permanent deformation <sup>(3)</sup> at 30°C (microstrain)	<20000	

(1) Measurements recorded on cores removed and tested at six months.

(2) 40/60 Pen hot laid equivalence.

(3) 3600 load applications.

12.2 A two-year performance trial was conducted using the product with basalt aggregate in Type 3 and 4 carriageways. Visual and surface profile assessments of the surface were made in accordance with the requirements of the Guideline Document, Table A.2, and reported as satisfactory.

## 13 Investigations

13.1 The manufacturing process was evaluated, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

13.2 An assessment was made of data resulting in the issue of the following Certificates issued by the Highway Authorities and Utilities Committee (HAUC):

- Certificate No 98/00150/0 awarded to 10 mm Instant Road Repair Material
- Certificate No 98/00148/0 awarded to Z Binder System.

## Bibliography

BS EN 12591 : 2009 *Bitumen and bituminous binders — Specifications for paving grade bitumens*

BS EN 13043 : 2002 *Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas*

BS EN ISO 9001 : 2015 *Quality management systems — Requirements*

*Guideline for the Approval and Certification of Permanent Cold-lay Surfacing Materials (PCSMs)*, September 2010

*New Roads and Street Works Act 1991 : Specification for the Reinstatement of Openings in Highways*, Code of Practice, Third Edition (England), April 2010

### 14 Conditions

#### 14.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- is valid only within the UK
- has to be read, considered and used as a whole document – it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

14.2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

14.3 This Certificate will remain valid for an unlimited period provided that the product/system and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

14.4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

14.5 In issuing this Certificate the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product/system or any other product/system
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product/system
- actual installations of the product/system, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product/system is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product/system, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to CE marking.

14.6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.