

# HAPAS

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## HAPAS Certificate 24/H7196

Product Sheet 1 Issue 1

### INSTARMAC REPAIR MORTARS

### ULTRACRETE QC10 RAPID STRENGTH CONCRETE

This Product Sheet<sup>(1)</sup> is issued by the British Board of Agrément (BBA). The Highways Authorities Product Approval Scheme (HAPAS) is supported by National Highways (NH) (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.

(1) Hereinafter referred to as 'Certificate'.

This Certificate relates to UltraCrete QC10 Rapid Strength Concrete, used as a backfill component in the installation and reinstatement of ironwork, up to and including Group 4 of BS EN 124-1 : 2015, in footways, footpaths, cycle tracks and Types 2, 3 and 4 carriageways where rapid trafficking is required, in accordance with the Manual of Contract Documents for Highway Works (MCHW), Volume 1, Series 500, Clause 507 Chambers, 24 (i) to (iv).



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 complying with the requirements of the BBA HAPAS Certification Scheme according to the assessments set out in this Certificate.

On behalf of the British Board of Agrément

Date of issue: 21 February 2025

Hardy Giesler  
Chief Executive Officer

*This BBA HAPAS Certificate is issued under the BBA's accreditation to ISO/IEC 17065 (UKAS accredited Certification Body Number 0113).*

*Clauses marked † are additional information outside the scope of accreditation.*

*Readers MUST check the validity and latest issue number of this BBA HAPAS Certificate by referring to the BBA website or contacting the BBA directly.*

*The Certificate should be read in full as it may be misleading to read clauses in isolation.*

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

#### British Board of Agrément

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## 1 Product Description

1.1 The Certificate holder specifies the product under assessment, Ultracrete QC10 Rapid Strength Concrete, as a backfill component in the installation and reinstatement of ironwork, up to and including Group 4 of BS EN 124-1 : 2015, in footways, footpaths, cycle tracks and Types 2, 3 and 4 carriageways where rapid trafficking is required, in accordance with the *Manual of Contract Documents for Highway Works* (MCHW)(1), Volume 1, Series 500, Clause 507 Chambers, 24 (i) to (iv).

(1) The MCHW is operated by National Highways (NH) (acting on behalf of the Overseeing Organisations of the Department for Transport; Transport Scotland; the Welsh Government; and the Department for Infrastructure, Northern Ireland).

1.2 UltraCrete QC10 Rapid Strength Concrete is a two-part, fast-setting cementitious concrete used for backfilling around ironwork installations

1.3 Ultracrete QC10 Rapid Strength Concrete is part of the Instarmac Ultracrete Ironwork System for the installation and reinstatement of ironwork, and consists of the following components:

- Ultracrete Envirobond CD534 (the subject of BBA Certificate 24/H7192)
- Ultracrete Envirobond CD534 Flowable (the subject of BBA Certificate 24/H7193)
- Ultracrete PY4 SG and Ultracrete PY4 WG (the subject of BBA Certificate 24/H7194)
- Ultracrete M60 (the subject of BBA Certificate 24/H7195)
- Ultracrete M60F (the subject of BBA Certificate 24/H7292)
- Ultracrete QC10 Rapid Strength Concrete
- Ultracrete QC10F Rapid Strength Concrete (Flowable) (the subject of BBA Certificate 24/H7197)
- Ultracrete Instant Road Repair (the subject of BBA Certificate 01/H060)

†1.4 The Certificate holder recommends Ultracrete Seal and Tack, a spray applied, cold joint sealant, applied to the vertical edges and surfaces at joint interfaces, for use with the product, but this material has not been assessed by the BBA and is outside the scope of this Certificate.

## 2 Requirements

Requirements for the product are outlined in the BBA HAPAS Certification Scheme and Technical Specifications Documents, and have been established from the following specification documents:

- the *Manual of Contract Documents for Highway Works* (MCHW), Volume 1, Series 500, Clause 507, 24 (i) to (iv)
- the MCHW, Volume 2, Series NG 500, Clause 507.

(1) The DMRB is operated by the Overseeing Organisations: National Highways (NH), Transport Scotland, the Welsh Government and the Department for Infrastructure (Northern Ireland).

## 3 Summary of Product Assessment

The product was assessed on the basis of the following characteristics in accordance with HAPAS requirements.

### 3.1 Performance characteristics

**Table 1 Performance characteristics**

Product assessed	Assessment method	Requirement	Outcome
UltraCrete QC10 Rapid Strength Concrete	Shrinkage to a BBA Method	< 0.5% after 48 hours	Pass
	Compression strength to BS 6319-3 : 1990	> 20 N·mm <sup>-2</sup> within 2 hours <sup>(1)</sup>	Pass
	Compression strength to BS 6319-3 : 1990 following freeze/thaw resistance	No significant deterioration	Pass

(1) This requirement has been identified from HD 27/15. This document has been withdrawn in March 2020 and superseded by CD 226, however this document does not specify a requirement for compression strength, and therefore the previous requirement has been maintained.

The assessment showed that the product complies with HAPAS requirements for these characteristics.

### 3.2 Durability

3.2.1 Provided the surrounding pavement remains structurally sound, the product will have an anticipated service life of up to five years.

## 4 Summary of Process Assessment

<b>Manufacturing process and quality control</b>	Complies with HAPAS requirements
<b>Delivery and site handling</b>	Complies with HAPAS requirements
<b>Installation</b>	Complies with HAPAS requirements

### 4.1 Manufacture

4.1.1 The BBA has undertaken the following tasks for the assessment of product manufacture and has established that the manufacture complies with BBA HAPAS Certification Scheme requirements:

- the BBA has recorded and evaluated the manufacturer's documentation of the methods adopted for quality control procedures and product testing against HAPAS requirements
- the BBA has assessed the quality control operated over batches of incoming materials and formulations against HAPAS Requirements
- the BBA has evaluated the process for management of non-conforming work
- the BBA has audited the production process and verified that it is in accordance with the documented process
- the BBA has checked that equipment has been properly tested and calibrated.

4.1.2 The BBA has undertaken to review the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

†4.1.3 The management system of the manufacturer has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by NQA, Certificate 6987.

### 4.2 Delivery and site handling

†4.2.1 The Certificate holder states that the product is delivered to site in the packaging and weight given in Table 2.

**Table 2 Packaging and weight**

Component	Weight	Packaging type
UltraCrete QC10 Rapid Strength Concrete	25 kg	Bags

4.2.2 To achieve the performance described in this Certificate, delivery and site handling must be performed in accordance with the Certificate holder's instructions and this Certificate, including:

- When handling the product on site, the normal health and safety procedures associated with cementitious materials must be observed.
- Health and Safety Data Sheets and the Control of Substances Hazardous to Health Regulations 2002 (COSHH) risk assessments for the works must be available to the purchaser and be maintained on site.

### 4.3 Installation

4.3.1 The Certificate holder's instructions for installation of the product were confirmed as meeting the BBA HAPAS Certification Scheme requirements.

4.3.2 To achieve the performance described in this Certificate, the system must be installed in accordance with the Certificate Holder's Agreed Installation Method Statement, at between 5°C and 30°C, at a thickness of between 30 and 250 mm.

†4.3.3 The Certificate holder's instructions advise the following:

4.3.3.1 Any holes within the frame are infilled and the flanges of the frame enveloped by a minimum thickness of 10 mm of the bedding material.

4.3.3.2 Exposed surfaces of the bedding material around the frame are flat finished, ensuring any voids or loose material are removed, and the inside surface pointed to a smooth finish.

4.3.3.3 The area to be infilled is wetted and the material placed immediately to 60 mm or whatever depth is needed to fulfil local compliance below the required surface fill level, then compacted, ensuring no voids are present (see Figure 1).

*Figure 1 Backfilling using UltraCrete QC10*



4.3.3.4 The final surface is then rough floated to achieve a textured level surface ready to receive UltraCrete Instant Road Repair.

4.3.3.5 To achieve the performance described in this Certificate, installation of the product must be carried out by specialist operatives familiar with this type of product.

### 4.4 Maintenance

† The Certificate holder advises the product is not subject to any routine maintenance requirements, but any damage should be repaired as soon as is practicable.

## 5 Fulfilment of Requirements

5.1 The conclusion of this BBA assessment is that UltraCrete QC10 Rapid Strength Concrete, when used in accordance with the provisions of this Certificate, complies with the BBA HAPAS Certification Scheme requirements.

5.2 In order for the product to continue to meet Scheme requirements, it must be installed, used and maintained as per the Certificate holder's instructions and as detailed in the Certificate.

## 6 Validity of Certificate

Continuing validity of this Certificate is dependent on the following factors:

- continuing compliance with product or process requirements, as described in the HAPAS Scheme document, and the specification documents referred to therein
- ongoing BBA surveillance of factory production control, to verify that the specifications and quality control being operated by the manufacturer are being maintained
- formal triennial Review of the Certificate, and Reissue for required technical or non-technical updates
- compliance with ongoing Certificate obligations by the Certificate holder and manufacturer(s).

## †7 Additional 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.

### **CLP Regulations**

The Certificate holder has taken the responsibility of classifying and labelling the product under the GB CLP Regulation and the CLP Regulation (EC) No 1272/2008 – Classification, Labelling and Packaging of Substances and Mixtures. Users must refer to the relevant Safety Data Sheet(s).

## 8 Bibliography

BS EN 124-1 : 2015 *Gully tops and manhole tops for vehicular and pedestrian areas – Definitions, classification, general principles of design, performance requirements and test methods*

BS 6319-3 : 1990 *Testing of resin compositions for use in construction – Methods for measurement of modulus of elasticity in flexure and flexural strength*

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

Manual of Contract Documents for Highway Works (MCHW), Volume 1 Specification for Highway Works, Series 500 Drainage and Service ducts (03/20)

Manual of Contract Documents for Highway Works (MCHW), Volume 2 Notes for Guidance on the Specification for Highway Works, Series NG 500 Drainage and Service ducts (02/20)

DMRB, CD 534 Chamber tops and gully tops for road drainage and services (05/22)

## 9 Conditions of Certification

### 9.1 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.

9.2 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.

9.3 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.

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

9.5 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 UKCA marking and CE marking.

9.6 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.

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