

DuraCrete®

Technical data sheet

1.0 Identification

DuraCrete – High-strength concrete

Uniclass: Pr_20_31_16_37 High-strength concretes Primary

CAWS: E10/181 Proprietary high-strength concrete

1.1 Product overview

High-performance, high strength concrete specially engineered to support demanding construction projects.

1.2 Key benefits

- Offers superior durability and resistance to harsh environmental conditions, like freeze-thaw cycles and damaging chemicals
- Early strength - strengths can exceed 100 N/mm²
- Builds long-lasting, resilient structures with enhanced performance and sustainability.
- Early drying
- Underwater durability
- Withstands environmental extremes
- Provides impact and abrasion resistance
- Quality-assurance
- Better bond strength between paste and aggregates
- Better resistance of concrete to attack from sulphates
- Enhanced water tightness

1.3 Applications

DuraCrete's adaptable formulation makes it ideal for various specialised uses such as:

- Bridges
- High-rise buildings
- Loading bays
- Scrap yards
- Warehouse floors
- Service yards
- Waste recycling yards
- Agricultural applications
- Coastal defence systems
- Foundry floors
- Hot material storage areas

2.0 Technical Data

2.1 Product overview

Colour: Grey, other

Finish: Smooth

Shape: Formless

Length / width / height: Bespoke

2.2 Standards and Accreditations

RMC producer third party accreditation: Currently certified by a body accredited by UKAS (PAS 2080)

Third party accreditation: Proof that the concrete conforms to Quality Scheme for Ready-Mixed Concrete (QSRMC).

Standards: to BS EN 206 and BS 8500

2.3 Specification data

Optional structural fibres to BS 14889

Compressive Strength, 28 days - BS EN 12390-3: 40 – 50 MPa or stronger

Compressive Strength class: From C40/50 or stronger

Flexural strength, 28 days - BS EN 12390-5:
Specify if required

Density - BS EN 12390-7: Normal Weight to EN 206 (2000-2600kg/m³)

Consistency Class of self-compacting concrete:
As required by contractor, suggested minimum S3 to ensure compaction

Workability period: Specified to BS 8500-1

Aggregates nominal size (max): Dmax 10mm or 20mm

Aggregates colour: Specify if required

Aggregates texture: Specify if required

Use of recycled aggregates: Permitted, compliant with BS8500 requirements

Source of recycled aggregates: BS EN 12620 Compliant

Binder: Manufacturer's standard

Reaction to fire - BS EN 13501-1: Non-combustible

3.0 Sustainability

Contains Red List materials: No

Primary country of material origin: United Kingdom

Country of product manufacture: United Kingdom

A1-A3 Production stage: A1-A3 GWP Data provided upon request

Recyclability As defined in BS EN ISO 14021: 100% recyclable

Expected Life: To specified BS8500 Design Life

EPD available: Yes, contact

concrete.technical@heidelbergmaterials.com

Further information

enquiries@uk.heidelbergmaterials.com

4.0 Installation procedures

Minimum depth: Project specific, typically >100mm

Maximum depth: na

Follow standard concrete site practice.