

High Rise-Crete®



High Rise-Crete® is the high strength, high performance, cost efficient concrete alternative to the constraints of steel construction. Sophisticated structures having minimal environmental impact can be achieved using High Rise-Crete®.

Detailed assistance on the specific engineering properties of the mixes can be obtained from our experienced technical support network.

High Rise-Crete is based on carefully selected aggregates as well as controlled binders and admixtures, distinguished by a number of enhanced and special technical properties for a purpose-made high rise concrete solution.

High Rise-Crete when correctly specified will deliver:

- **Strength:** A range of strengths are readily available from most of our operations

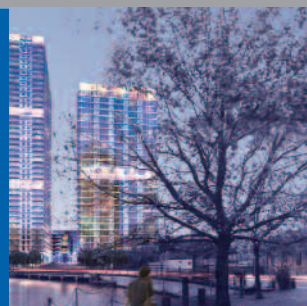
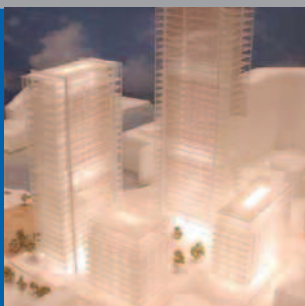
Standard	C50-C80 N/mm ²
Super	C85-C100 N/mm ²
Ultra	C105+ N/mm ²

- **Fire resistance:** High Rise-Crete is completely non-combustible (classified an A1 fire resistant material under EN 13501-1) and has a slow rate of heat transfer, making it a highly effective barrier to the spread of fire

- **Carbon efficient structure:** Each specific mix design for High Rise-Crete will be developed for environmental suitability as well as performance. The new Aggregate Industries Carbon Calculator and Mixer Desk tool developed in association with BRE, compares the carbon footprint, Ecopoint score and likely Green Guide rating of different concrete mixes and structural elements, all of which can achieve the same strength. By using this software, we can help clients choose the most sustainable concrete for their purposes
- **Placement by pump:** Mixes are designed to enable placement by pump based on our experience of pumping concrete as high as 40+ floors in one pass
- **Thermal mass:** A High Rise-Crete structure has a high thermal mass. Exposed soffits allow fabric energy storage (FES), regulating temperature swings. This can reduce initial plant costs and ongoing operational costs, while converting plant space to usable space. With the outlook of increasingly hot summers, it makes sense to choose

a material that reduces the requirement for energy intensive, high maintenance air conditioning

- **Acoustics:** The inherent qualities of High Rise-Crete make for good acoustic performance. Concrete is a good barrier to transmission of sound, even when the source of the sound is impact on the concrete itself
- **Technically the best:** As all projects will have different requirements the need for a technical back up service offering design help with concrete mixes is essential. We have locally based teams on hand to give quick expert guidance
- **Aesthetics:** High Rise-Crete can be coloured to match your project colour schemes
- **Self compacting:** In keeping with casting intricate shapes, High Rise-Crete can be designed to be self compacting.



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Applications

High Rise-Crete can be utilised in all forms of concrete frame construction and in situations where vertical pumping to high levels is necessary. We have yet to encounter an application or specification, who's requirements exceed the capability of High Rise-Crete. Similarly there are no known limits to the type of finish that may be achieved or supplied.

Manufacturing standard

High Rise-Crete with the requirement of European standard BS EN 206-1:2001 Concrete - Part 1: Specification, performance, production and conformity and with the requirements of BS 8500-1 and BS 8500-2 2006.

As with all Aggregate Industries products High Rise-Crete is manufactured under independently monitored third party quality assurance schemes in accordance with ISO 9001 and with factory environmental compliance to ISO 14001.

Typical performance and technical data

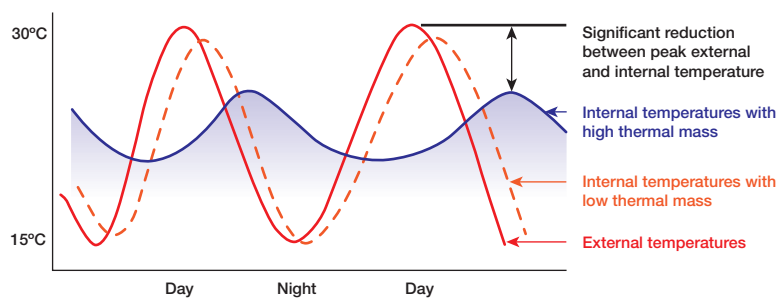
Our technical teams are available to discuss the detailed requirements of your specification:

- Compressive strength range

Standard	C50-C80 N/mm ²
Super	C85-C100 N/mm ²
Ultra	C105+ N/mm ²

(Ultra will require a notice period of up to two weeks, and may require design checks before commencing supply).

Stabilising effect of thermal mass on internal temperature



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Sustainability and local sourcing

Responsible sourcing: Aggregate Industries is the first company in the world to achieve a BES 6001:2008 Responsible Sourcing Certificate from BRE Global. Products are assessed on:

- quality management
- environmental management
- health and safety management
- greenhouse gas emissions
- minimising raw material usage
- labour practice
- biodiversity
- community engagement.

Energy use: Aggregate Industries is at the forefront of sustainability and has committed to reduce carbon emissions by 20% by 2016 based on a 2012 base line.

Manufacturing location: produced in the UK, with locally sourced materials under strict environmental and social legislation, for local supply.

Recyclable: the product can be designed for a life in excess of 120 years and is fully recyclable.

Key aggregate and recycled content

This product may be supplied containing a recycled or secondary aggregate to achieve a reduced environmental impact and increased Green Guide ratings for structural elements and assist in achieving BREEAM waste credits.

The raw materials used in the manufacture of the binders may be obtained from processes where they form from a co-product.

Policies

Aggregate Industries' policies on the environment and community, health and safety and sustainable solutions for different product applications can be viewed on our website www.aggregate.com.

COSHH data

Full COSHH data on our concrete range of products is available on request.

Technical support

Detailed guidance and assistance with the preparation of specifications and use of our concrete range of products is available through the sales offices. A free technical service is also available.

Call our concrete Technical Services at the nearest sales location to your contract.

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www.aggregate.com/strike



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