

High Performance Concrete

Self-compacting concrete is gradually becoming the preferred formulation worldwide for many applications such as foundations, floors, walls and complex structures. It combines great strength and superb finishes with the opportunity to make serious project productivity improvements, advances in health & safety and in sustainability.

About CEMEX

CEMEX is a growing global building solutions company pursuing innovative industry advancements whilst promoting a sustainable future. Annual sales in over 50 countries exceed US\$ 15 billion. The company is one of the world's leading suppliers of ready-mixed concrete, one of the largest producers of aggregates, and among the world's top traders of cement and clinker. CEMEX employs over 50,000 people worldwide.

In the UK, CEMEX is a £1bn turnover building solutions business and a leading provider of readymix concrete, aggregates, cement and asphalt. CEMEX UK also has a significant share of the roof tile, concrete block paver and concrete block markets, and is the leading supplier of concrete sleepers to the rail industry.

For more information contact the Evolution™ Helpline

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Or visit our website at

www.cemex.co.uk/evolution

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IMAGINATION MADE CONCRETE



FLOWING CONCRETE FOR FLOWING LINES AND SPACES

// We have nothing to lose but a vision to gain. //
Mark Rothco



- Fluidity
- Speed
- Economy
- Finish
- Strength
- Hardness
- Consistency
- Efficiency
- Modernity
- Simplicity
- Elegance
- Performance
- Appearance
- Durability
- Sustainable
- Versatile



CEMEX Evolution™ High Performance Concrete brings new levels of performance to architecture. With it comes new possibilities for turning leaps of the imagination into structures that capture the eye and lift the human spirit.

Concrete is the world's most versatile, and efficient, building material. Now the latest formulations combine exceptional fluidity with great strength. Free-flowing Evolution™ concrete can be cast into shapes that conventional concrete simply cannot achieve. The strength of the material when set allows the architect to use this flexibility to create structures of great harmony and beauty, with elegance of form and effortless strength.

Close-up, Evolution™ concrete continues to please the eye. It can produce a satisfyingly smooth surface, with minimal finishing, and with superbly even texture. Evolution™ also has excellent environmental credentials. It's manufactured and delivered with sustainability in mind.

This is the flowing concrete for the 21st Century architect looking for ways to turn ground-breaking designs into structures that delight.



FROM THE FREEDOM TO DREAM TO THE FINISHING TOUCH

- Fluidity Evolution™ heralds a new generation of branded High Performance
- Speed Concretes. It delivers economic, social and environmental benefits as well as state of the art performance.
- Economy Its self-levelling, self-compacting properties allow it to be placed fully compacted without segregation and with no vibration.
- Finish
- Strength
- Hardness
- Consistency Evolution™ is the complete High Performance Concrete solution. From original idea onwards the ability of Evolution™ to create slim columns with superior strength helps the architect to preserve the purity of design. All the way through design development and structural engineering, to the delivery of precise and consistent mixes on site, to construction with unbeatable economy, to the realisation of an idea brought to life, Evolution™ supports the architect with complete technical, product and logistics solutions.
- Efficiency
- Modernity
- Simplicity
- Elegance
- Performance Evolution™ graces finished structures with a smooth finish (depending on the formwork) and outstanding elegance in form and function. Whatever the application, every Evolution™ formulation brings side benefits in sustainability, health & safety and construction speed.
- Appearance
- Durability
- Sustainable
- Versatile



Architecture is
inhabited sculpture.
Constantin Brancusi

EVOLUTIONARY SOLUTIONS FOR PROGRESSIVE CONSTRUCTION

The Evolution™ concept begins with self-compacting concrete having a high degree of fluidity, and excellent structural performance in strength, durability and finish. Moreover, Evolution™ covers the full range of on-site and precast concrete requirements because it can be tailored to match the exact requirements of each application.

Evolution™ offers exciting opportunities for architects with formulations and subtle variations of properties that can be individually specified to provide an ideal solution. Viscosity is fine-tuned to suit the application. Characteristic strengths well in excess of C50/C60 are achievable with careful mix design.

With Evolution™ the architect can scale new heights in the creation of elegant space-saving columns, suspended floors and soaring cantilevers. And although Evolution™ can set with a surface that needs minimal finishing, it could also be polished, pigmented and made watertight. For structural elements and detailing, the exceptional fluidity and self-levelling characteristics of Evolution™ mean that it pours easily to build walls, beams, buttresses, basements, and cores.



// We must be as familiar with the functions of our buildings as with our materials. //

Mies van der Rohe //



TOTAL SUPPORT FROM INSIGHT TO CONSTRUCTION SITE

CEMEX offer total support for specifiers and users of Evolution™ High Performance Concrete. This includes technical information, case studies, on-site training and an after sales care service to answer questions and provide advice.

Self compacting concrete is already in widespread use elsewhere in the world. In Denmark and Sweden, for example, self compacting concrete has a 15% share of the concrete market. One reason for slower adoption in the UK has been a shortage of data and information. Evolution™ changes all that. CEMEX offer a comprehensive technical data and support service.

As the name suggests, Evolution™ is continually developing. New subtleties of formulation constantly enhance performance and innovative uses spark new ideas.

This quality of in-depth support extends throughout the construction industry with case examples, calculations and technical advice in all aspects of handling and placing Evolution™.



// The job of buildings is to improve human relations. //

Ralph Erskine //



WORKING FOR SUSTAINABILITY IN THE BUILT ENVIRONMENT

The elimination of vibration equipment improves the working environment wherever Evolution™ concrete is being placed, by reducing the exposure of workers to noise and the risk of ‘vibration white finger’. These improved practices and health & safety benefits, make Evolution™ an attractive solution for both precast concrete and civil engineering design and construction.

CEMEX UK strives to be socially, economically and environmentally responsible in everything we do. For example, we’re aiming to reduce CO₂ emissions by investing in trials of a sustainable fuel that can replace fossil fuels by up to 30%. ‘Road Load’ makes sure our lorries are at 95% payload before they travel. ‘24/7 Load’ delivers non-urgent materials out-of-hours, further helping to reduce road congestion. We also use materials from other industries that would otherwise go to landfill.

To encourage environmentally positive thinking, we engage our employees in sustainability initiatives. We also work closely with local communities.

To drive these activities we have a commitment to data collection and the measurement of environmental performance. We also restore land used for extraction and recycle water used for stone washing and aggregate reclamation. It all adds up to industry leading environmental performance.

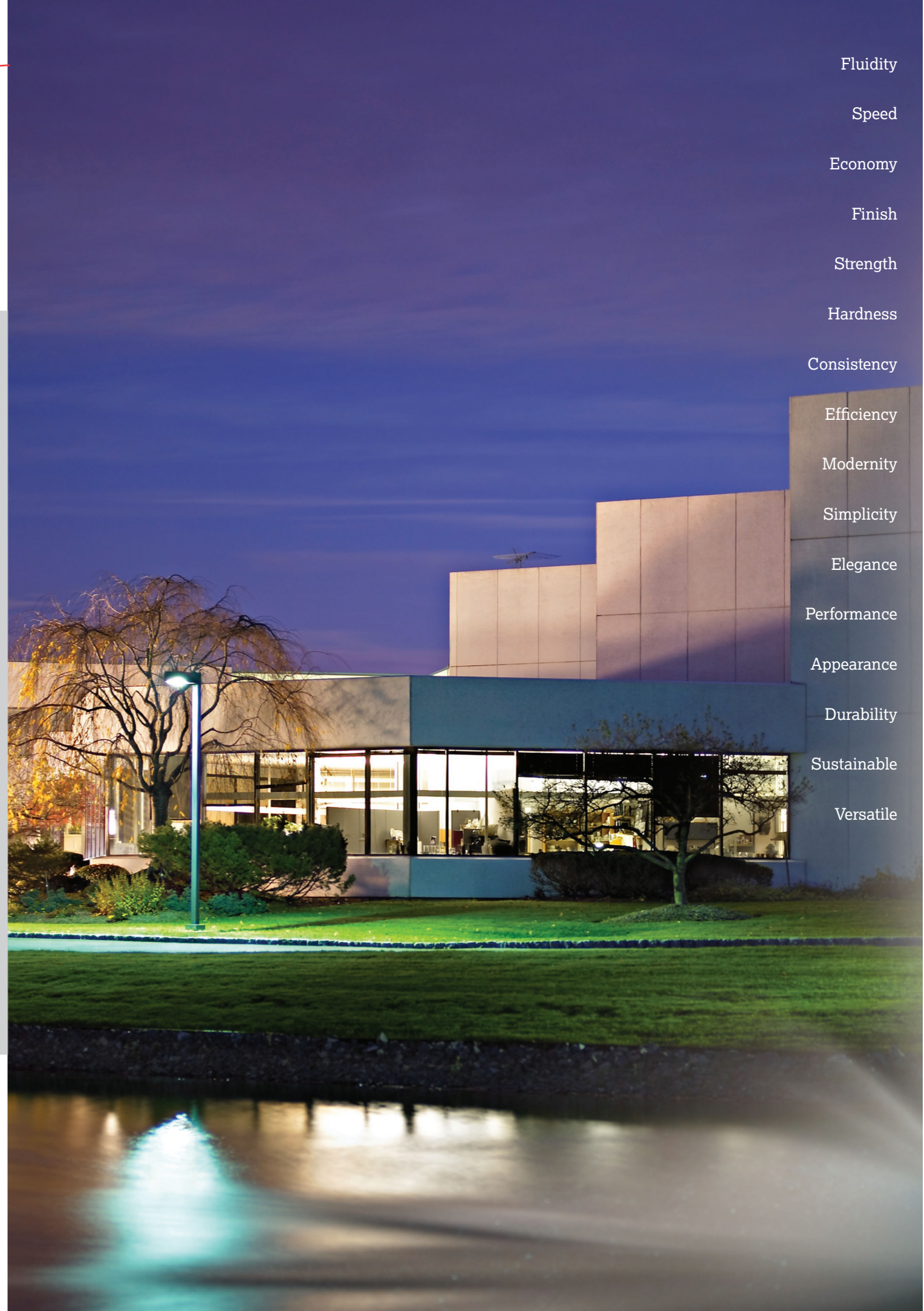


CEMEX is the first company to introduce major freight transport on the River Severn in over 30 years. Over 10 years, a total of nearly 3 million tonnes of aggregate will be carried by barge saving 34,000 lorry journeys.



The award-winning Attenborough Nature Reserve, restored from an old CEMEX quarry.

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// The supreme reality of our time is the vulnerability of this planet. //

John F. Kennedy //