

evolution



**FLOWING
CONCRETE
TRANSFORMS
WORKFLOW**





CEMEX has a rich history of improving the global markets it serves through efforts to pursue new industry solutions and efficiency advancements, and to promote a sustainable future.

CEMEX are a leading supplier of construction materials within the UK, with extensive experience in supplying materials and constructions solutions to a diverse range of projects and schemes.

Our portfolio includes provision of materials to large-scale framework contracts and major projects to the provision of smaller quantities for one off projects and maintenance work.

Backed by our technical expertise and our materials design ability our innovative products make us one of the UK's leading solutions providers. CEMEX works with the majority of leading construction companies within the UK given our excellent national coverage and extensive range of materials, including cement, concrete, screed, mortar, aggregates, asphalt and building products.

CEMEX plants are registered with the Quality Scheme for Ready Mixed Concrete (QSRMC) ensuring that:

- Orders are correctly interpreted
- Mix designs are accurate
- Materials delivered comply with relevant standards or specifications
- Plants perform routine sampling and testing to ensure concrete conformity and performance ordering assistance



QSRMC

Innovation In concrete

Self-compacting concrete is a highly flowable, non-segregating concrete that can easily be placed, fill formwork, and encapsulate even the most congested reinforcement by means of its own weight, with little or no vibration.

Self-compacting concrete is ideal for use in casting heavily reinforced sections or placement where there can be no access to vibrators for compaction and in complex shapes of formwork which may otherwise be impossible to cast. Since self-compacting concrete can flow from a single point (note: on large pours more than one point may be required), is self-levelling, self-compacting and eliminates the need to use vibration equipment, it can be placed with less labour and in a shorter time than traditional placing techniques.

In an ever more demanding and extremely competitive environment, with tight deadlines and even tighter margins, speed and efficiency which save time are critical.

Evolution[®], from CEMEX, is a self-levelling concrete solution that can help save valuable time and labour cost.

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COST BENEFITS FLOW FROM **IMPROVED PROJECT PRODUCTIVITY**

The cost benefit of using Evolution High Performance Concrete flows from a product performance that simplifies the placing, levelling, compacting and finishing of concrete.

Evolution saves money by cutting building and construction times.

Free-flowing Evolution is both self-levelling and self-compacting. It saves money by flowing concrete into foundations, and across floors from a single point (on large pours more than one point may be required), cutting down the requirements of a skilled labour force and therefore saving time. There is no need for expensive vibration equipment and operators. That saves more money and also cuts costs associated with site noise abatement. Evolution can deliver a smooth surface that needs minimal finishing (subject to formwork and placement), further reducing cost.

These savings can more than offset the cost of using a High Performance Concrete. That's how Evolution can help you make major improvements to project productivity.



HOW TO EASE OF USE & FLOWABILITY SOLVES **CHALLENGING DESIGNS**

The secret of Evolution concrete's high performance is its exceptional flowing characteristics. That delivers several technical advantages for the contractor and structural engineer. The most important being filling performance, handling stability, finish and economy.

Evolution's low viscosity and high flow provides the contractor with excellent filling ability. It flows evenly, filling all spaces in the formwork under its own weight, leaving no voids. Passing ability is also very good, the concrete flowing through and around confined spaces between reinforcing bars and other intrusions without segregation or blocking. In fact Evolution retains stability in all conditions and remains homogenous both during transport and placing.

Evolution is a self-compacting, self-levelling, problem solver, producing a quality surface finish whilst enhancing on-site health and safety. These advantages come with superior strength and rapid setting that speeds up completion.

Fluidity

Speed

Economy

Finish

Strength

Hardness

Consistency

Efficiency

Modernity

Simplicity

Elegance

Performance

Appearance

Durability

Sustainable

Versatile



EVOLUTIONARY CONCRETE SOLUTIONS

evolution | foundation

FLOWS EASILY INTO FOUNDATIONS

Evolution Foundation is a high performance, self-levelling concrete with exceptional fluidity. These properties make it the ideal concrete for laying foundations. It can be poured into trenchworks from a single point. And because it is self compacting, there is no need for noisy and time consuming vibration. Furthermore, Evolution Foundation is ready to take brickwork in 24 hours.

TYPICAL APPLICATIONS

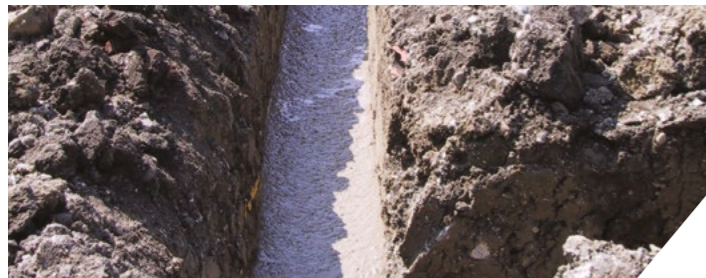
- House, garage, conservatory and wall foundations
- Commercial mass foundations
- Industrial trench fill

TECHNICAL DESCRIPTION

Evolution Foundation achieves its unique flow characteristics with a specially designed formulation based on a coarse and fine aggregate. The result is an exceptionally free-flowing and workable concrete with minimal segregation and excellent Slump Flow behaviour. Evolution Foundation is delivered readymixed.

TECHNICAL SPECIFICATION

Characteristic strength	C20
Technical category	Self-levelling, high performance concrete.
Other characteristics	Mixes available for varying aggressive ground conditions.
Applications	Mass fill and trench fill foundations.



evolution | flooring

FLOWS ACROSS FLOORS

Evolution Flooring is a high performance self-compacting, self-levelling concrete with exceptional fluidity. It delivers an excellent finish to expanses of concrete with minimum effort. The advantages of Evolution Flooring include: no need for vibration and the noise that goes with it. It saves times and reduces man/hour requirements. Evolution Flooring is also a flexible application. It is easy to place and produces a quality surface finish as it sets, without the need for power floating.

TYPICAL APPLICATIONS

- Domestic floors and basements
- Commercial floor slabs
- Industrial floor slabs

TECHNICAL DESCRIPTION

Evolution Flooring combines a high degree of strength with special flow and self-compacting characteristics. That makes it ideal for all types of flooring work. The result is an exceptionally free-flowing and workable concrete with minimal segregation and excellent Slump Flow behaviour. Evolution Flooring produces an excellent surface as it sets.

TECHNICAL SPECIFICATION

Characteristic strength	C28/35 (with air) or C32/40
Technical category	Self-levelling and self-compacting high performance concrete with excellent surface finish.*
Other characteristics	Maximum aggregate top size 14mm, suitable for pumping and level retention. Reinforcement.
Applications	Floor slabs, suspended floor slabs, pre-tensioned slabs (CI level specified).



evolution | structural

FLOWS INTO WALLS AND COLUMNS

Evolution Structural is a high performance self-compacting, self-levelling concrete with fluidity characteristics that make it the ideal concrete for structural elements. It can be poured into walls, columns and in precast applications from a single point, reducing construction time. Evolution produces elegant structures of exceptional strength that need very little, if any, further finishing.

TYPICAL APPLICATIONS

- Walls
- Columns and beams
- Formwork
- Suspended floors
- Basements
- Precast

TECHNICAL DESCRIPTION

Evolution Structural combines a high degree of strength with special flow and self-compacting characteristics. The resulting structures carry high loads with minimal cross-sections. The result is an exceptionally free-flowing and workable concrete with minimal segregation and excellent Slump Flow behaviour. Evolution Structural produces a surface straight out of the formwork that needs very little further finishing.

TECHNICAL SPECIFICATION

Characteristic strength	C50/60
Technical category	Self-compacting high performance concrete with excellent surface finish.*
Other characteristics	Maximum aggregate top size governed by reinforcement.
Applications	Columns, walls, cores, beams and precast.



evolution | ultimate

ULTIMATE FLOWS THROUGH TIGHT SPACES

Evolution Ultimate offers the highest possible specification in High Performance self-compacting, self-levelling concrete with high strength and a fluid form that allows the concrete to flow through complex structures or detailed formwork with outstanding results. Wherever design challenges the performance of concrete with congested work areas, complex reinforcement and convoluted formwork, Evolution Ultimate is the natural choice.

TYPICAL APPLICATIONS

- Specialist structures
- Innovative and bespoke designs
- Complex formwork

TECHNICAL DESCRIPTION

Evolution Ultimate combines high strength and fluidity with special flow and self-compacting characteristics. It's formulated to cope with challenging shapes by ensuring complete filling of complex formwork under its own weight. Evolution Ultimate will also pass through and around confined spaces between reinforcing bars without segregation or blocking. Evolution Ultimate produces a quality surface straight out of the formwork that needs very little further finishing.

TECHNICAL SPECIFICATION

Characteristic strength	As required
Technical category	Self-compacting high performance concrete with excellent surface finish formulated for specific applications.*
Other characteristics	Can be made watertight, pumped or upgraded to high strength developed to your specification.
Applications	All challenging specialist applications.



*Dependent on quality formwork and placement.

RESPONSIBLY SOURCED READYMIX CONCRETE

CEMEX UK operates in a highly regulated sector and recognises its Sustainability and Environmental obligations.

We continually invest and innovate to become an environmentally friendly, sustainable leader – enabling a low-carbon and resource-efficient circular economy.



All CEMEX products have achieved BES6001 Responsible Sourcing accreditation.

BES6001 accreditation means that all our readymix concrete products are responsibly sourced, to an independently verified standard that addresses the social, economic and environmental impacts across the entire supply chain.

CEMEX's commitment to sustainable development and ethical and responsible sourcing has been formally recognised through this official accreditation.

By using CEMEX UK readymix products with the BES6001 certification our customers can score more credits under BREEAM, the most widely used environmental assessment method for business.

The BES6001 certification complements a range of other ongoing initiatives at CEMEX UK to reduce waste, water, energy use and CO₂ emissions, while increasing the use of alternative fuels and by-products in the manufacturing of building materials.

As a global company, ecologically responsible construction is a priority for CEMEX and it is fully committed to the United

Nations Sustainable Development Goals, of which five are directly related to our company's business. Furthermore, the United Nations' established 2030 global goals have been embedded into our business model and inform the decisions we make and the work we do every day.

We understand and agree with the need for production of cement and concrete to be as sustainable as possible and are committed to contributing to a net zero carbon society. It is important to remember that while global cement production (of which over half takes place in China) is responsible for 7% of global CO₂ emissions, UK cement emissions are amongst the lowest in the world at less than 1.5% of all UK emissions; testament to the dedication of the industry to decreasing its impact on the environment.

EVOLUTION IN HEALTH & SAFETY

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.

Evolution has been designed to carefully control viscosity with precisely graded materials. Many sites are subjected to noise and working hour restrictions and are forced to introduce 'quiet periods' that effect productivity. Doing away with vibration equipment eliminates these obstacles and allows contractors to work more flexibly.

Not only does Evolution flow across floor spaces to form superb smooth surfaces but it also follows the shape of formwork so closely that it requires very little additional finishing, if any at all.

In these ways Evolution transforms workflow and on-site health and safety providing a far safer working environment and reduces the impact of noise on the local community.





CEMEX
ADMIXTURES

- ✓ IMPROVE PERFORMANCE
- ✓ SAVE TIME
- ✓ REDUCE MATERIAL COSTS
- ✓ INCREASE QUALITY

All Admixtures are produced in accordance with BS EN 934 and are CE marked under the BSI Certificate of Factory Production Control. In addition, the UK admixture production facility operates to BS EN ISO 9001: 2000.

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