evolution | flooring

Evolution® Flooring is a self-levelling and self-compacting concrete with low viscosity and free flowing characteristics designed for all types of flooring applications.

It sets with a smooth surface that needs no vibration and minimal further finishing. That's what makes Evolution Flooring an attractive solution for domestic, commercial and industrial flooring. Self compacting concrete is gradually becoming the preferred formulation worldwide for many applications such as foundations, floors, walls and complex bespoke structures because it combines great strength and superb finishes with the opportunity to make serious project productivity improvements. The Evolution range fine tunes the high performance concept to provide outstanding solutions for specific applications.

ABOUT EVOLUTION HIGH PERFORMANCE CONCRETE

Self-compacting concrete is gradually becoming the preferred formulation worldwide for many applications such as foundations, floors, walls and complex bespoke structures because it combines great strength and superb finishes with the opportunity to make serious project productivity improvements. The Evolution range fine tunes the high performance concept to provide outstanding solutions for specific applications.

A COST COMPETITIVE SOLUTION

The product cost of high performance concrete can be more than offset by significant productivity and performance gains. Evolution Flooring can flow onto floor areas from a single point, is self-levelling and eliminates the need to hire expensive vibration equipment, the cost of placing the concrete can be significantly reduced. In addition to the cost benefits there is also the improved on-site health and safety to take into consideration.

APPLICATIONS

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

ADVANTAGES

- Easily placed and economical
- Self-levelling and needs no compacting
- Reduced labour required for placing
- Sets with a smooth surface that requires minimal further finishing*
- Enhanced workability and excellent strength characteristics
- Reduced noise and health & Safety issues
- Meets or exceeds the relevant British and European Standards
- Meets NHBC and Local Authority requirements
- No vibration necessary

* N.B. Dependant on quality formwork and placement

TECHNICAL SPECIFICATION

Characteristic strength	C28/35 (with air) or C32/40
Technical category	Low viscosity self-levelling and self-compacting high performance concrete
Material flow behaviour	SF3/VS1, very high consistence 800+/-50mm*
Other characteristics	Maximum aggregate top size 14mm, suitable for pumping and level retention
Applications	Floor slabs, suspended floor slabs, pre-tensioned slabs (Cl level specified)

*Where pump applications are required please note material flow behaviour may need changing.

DELIVERY

The standard CEMEX Readymix truck mixer is ideal for straightforward deliveries to site, always ensure the area has suitable vehicle access and that sufficient labour is organised to handle the order. Where access or ground conditions may be a problem contact your local sales office well in advance. CEMEX Readymix also offers a range of flexible options for concrete delivery, including pumping.

SPECIFICATIONS & STANDARDS

All CEMEX Readymix products meet or exceed the relevant British and European standards. Certification is available on request.

RESPONSIBILY SOURCED

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 CO_2 emissions, while increasing the use of alternative fuels and by-products in the manufacturing of building materials.

BES 6001
Responsible Sourcing

HEALTH & SAFETY

The elimination of vibrating 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' caused by vibration. These improved practices and health & safety benefits, make Evolution an attractive solution for both precast concrete and civil engineering design and construction.

Contact with concrete may cause irritation, dermatitis or severe alkali burns. There is serious risk of damage to the eyes. Wear suitable waterproof protective clothing, gloves and eye/face protection. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. After contact with skin, wash immediately with plenty of clean water. Keep out of reach of children. Contains Chromium (VI), which may cause an allergic reaction.

FAQ'S

Q. Can Evolution Flooring be used externally for concrete pads?

A. Yes, Evolution Flooring with air-entrainer is equivalent to a PAV 2 to meet XF4 and so can be used for external concrete slabs.

Q. Can I power float finish?

A. Yes, but the concrete will need to be carefully monitored to determine the correct point at which the concrete is ready for floating.

Q. Can I have fibres in it?

A. Yes, request the fibres at the time of order because the mix design is sometimes adjusted for them.

Q. Can Evolution Flooring be pumped?

A. Yes, but if very high heads are required, then the Evolution Ultimate will be required as additional design measures will need to be taken.

Q. What control measures do I need to take to reliably pump this concrete?

A. Evolution Flooring will compact in the lines if left for any period of time. Consequently good pump practice is very important and if there is a delay between loads then the pipework should have the "pig" put through. Any serious pump application must use as large a pump as possible, and of the positive displacement type, to apply minimum energy to the concrete. Auger or small bore, unless for very short distances, are not recommended.
If the application demands pump placement, please contact us so that we can ensure the product supplied is suitable for the application.

Q. What curing is required?

A. Floors must be properly cured to control plastic shrinkage cracking. For example in high rise ensure that there are wind deflectors around the side of the floor to prevent the wind blowing directly across the surface. Also use a spray on curing membrane applied in accordance with the manufacturers recommendations.

For further information please contact Customer Services on:
Tel: 0800 667 827
E-mail: gb-enquiries@cemex.com

CEMEX UK Operations Ltd,
CEMEX House, Evreux Way,
Rugby, Warwickshire CV21 2DT
www.cemex.co.uk