Evolution® Structural is a self-compacting concrete with low viscosity and free flowing characteristics designed for pouring into walls, columns, beams and precast applications.

It sets with a smooth surface that needs no vibrating and no further finishing. Eliminating vibration makes Evolution Structural a very attractive solution for any work above ground level or in precast factories.

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 Structural can flow into formwork or precast moulds from a single point, is self-levelling, self-compacting 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
- Columns
- Walls
- Cores
- Beams
- Suspended floors
- Basements
- Precast

ADVANTAGES
- Easily placed and economical
- Can generally be poured from a single discharge point
- 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
- No vibration necessary
- Reduced noise and health & safety issues
- Meets or exceeds the relevant British and European Standards

* N.B. Dependant on quality formwork and placement
TECHNICAL SPECIFICATION

<table>
<thead>
<tr>
<th>Characteristic strength</th>
<th>C50/60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical category</td>
<td>Self-levelling and self-compacting high performance concrete with a high quality finish</td>
</tr>
<tr>
<td>Material flow behaviour</td>
<td>SF2+/VS1 or VS2, medium/high consistence 700-750+/-50mm*</td>
</tr>
<tr>
<td>Other characteristics</td>
<td>Maximum aggregate top size governed by reinforcement</td>
</tr>
<tr>
<td>Applications</td>
<td>All structural precast or formwork components requiring a quality and/or high standard strength finish</td>
</tr>
</tbody>
</table>

*Where pump applications are required please note material flow behaviour may need changing. Note: For bespoke designs contact our Technical Department.

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 CO₂ emissions, while increasing the use of alternative fuels and by-products in the manufacturing of building materials.

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. Does the formwork need to be specially designed?
A. The formwork needs to be liquid tight and capable of sustaining nearly hydrostatic pressure as during placement the complete section could be fluid concrete. Formwork should be as permeable as possible. If using steel the correct type of release agent must be used and applied as thinly as possible. The formwork faces must be kept spotlessly clean if optimum finish is required.

Q. What placement controls are needed?
A. Evolution Structural must be placed and not allowed to free-fall into formwork, particularly if a quality finish is required. Tremmie pipes should be used to about 10cm above the concrete surface and the concrete placed in a smooth continuous pour allowing air to be pushed to the sides of the moulds and allowed to escape upwards.

Q. Can Evolution Structural be pumped?
A. Yes, but if very high heads are required, then Evolution Ultimate will be required as additional design measures will need to be taken. If the application demands pump placement, then please contact us so that we can ensure that the product supplied is suitable for the application.

Q. When can I strip the formwork?
A. This depends on many factors including temperature, mix design, use of retarders etc. However, normal Evolution Structural will usually be able to be stripped at 16 hours (following day) and should then be protected to enable curing to take place (or sprayed with a curing compound) and to ensure that it does not get damaged.