

ADMIXTURES

Over the years, CEMEX admixtures have developed materials for all our associated businesses. These include:

CONCRETE

- Readymixed concrete: Normal, self-compacting and waterproof
- Mortar
- Screed retarders, SBR

TRANSPORT

- Truck wash
- Truckclear

CONCRETE PRODUCTS

- Artificial stone
- Block making
- Paving
- Flooring
- Railway sleeper

CEMENT

- Grinding aids

The experience gained in these areas has proved invaluable in the development of admixture solutions for the construction industries.

These materials are produced in accordance with BS EN 934 and are CE marked under the BSI Certificate of Factory Production Control.

In addition, the admixture production facility operates to BS EN ISO 9001:2000, with each batch of admixture undergoing stringent conformity control and evaluation to ensure compliance with the relevant industry standards and specifications.

6 Readymix concrete

7 Paving, walling and decorative aggregates for garden landscaping

8 Airfield pavements

9 Beam and block flooring systems

10 Precast concrete



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ADMIXTURES

FOR THE CONCRETE INDUSTRY





- 1 The admixture production process is computer controlled and monitored throughout
- 2 Admixtures are evaluated to ensure a match to strict specifications
- 3 The admixtures production factory at Rugby
- 4 Samples are taken from the mixing vessels at regular intervals during the manufacturing process
- 5 High performance, admixture-enhanced concrete specifically designed and delivered to meet your on-site requirements

ABOUT CEMEX ADMIXTURES

CEMEX admixtures was established in 2001 in response to the demands of our own sister companies within the UK.

Our production facilities are based in Rugby, Warwickshire, close to the convenient motorway network, giving our delivery fleet quick and effective transport links to the whole of the UK.

Our research and development facilities are based in Southam, and we also have access to the expertise of the CEMEX Group R&D laboratories in Biel, Switzerland. In both locations development and testing of admixtures, specialist concretes, mortars, screeds and cement are undertaken.

CEMEX admixtures operates in 8 locations across Europe, serving the main markets in readymixed concrete, mortar and screed, cement, building and precast products across 12 different countries.

The UK facility has the capability to produce in excess of 10 million litres of admixture per annum.

WATER REDUCING PLASTICISING



High performance liquid admixtures, used to improve the consistence of concrete mixes or to permit effective reductions in free water content.

FEATURES/BENEFITS

- Specified strengths can be achieved at reduced cement contents or increased consistence
- Water reductions in the region of 8-10% can be achieved, significantly improving strengths at all ages and enhancing durability through production of lower permeability concrete
- Can minimise the risk of segregation and bleeding, even in harsh mixes, and aids the production of a dense, closed-texture surface, improving durability
- Is effective over a wide range of cement types and contents
- Very low chloride ion content, safe for use in pre-stressed and reinforced concrete

APPLICATIONS

Incorporating plasticisers into the concrete can be used to increase consistence without the need to add further water therefore not compromising specified strengths. Plasticisers can also be used as water reducers to reduce the quantity of mixing water required to meet a particular class of consistence.

SUPERPLASTICISING



Superplasticisers are high performance liquids or powders designed to function as high range water reducers or superplasticisers and as such, can be used to produce flowing or high strength concretes.

FEATURES/BENEFITS

- Specified strengths can be achieved at high workabilities
- Water reductions in the region of 15-35% can be achieved, significantly improving strengths at all ages and enhancing durability through production of lower permeability concrete
- Faster placing with reduced labour and equipment costs
- Low permeable concrete leading to enhanced durability

APPLICATIONS

Incorporating superplasticisers to increase the consistence to a high level can ensure that:

- Heavily reinforced sections can be poured easier
- Deep sections where normal compaction is difficult are easier to compact
- High quality finishes can be achieved
- Pumping concrete over longer distances is achievable

SELF-COMPACTING SUPERPLASTICISING



These are specifically designed high quality liquid admixtures used to produce self-compacting concrete with high consistence values. They are particularly useful in the areas of precast operations, flooring and when pouring into intricate or heavily congested areas of reinforcement.

FEATURES/BENEFITS

- High early age strengths can be achieved at very high consistence
- Produces cohesive low bleed concretes
- High quality finishes
- Faster placing with reduced labour and equipment costs
- Reduction in striking times

APPLICATIONS

Incorporating self-compacting superplasticising admixtures can be of benefit in:

- Precast concrete where high early age strengths are required
- Precast concrete where early striking/stressing operations are required
- Large area flooring
- Quick efficient pouring of foundations

AIR ENTRAINING



High performance entraining agents designed for use in the production of air entrained concretes.

FEATURES/BENEFITS

- Improves freeze/thaw durability
- Stable air system with minimum loss throughout the life of the plastic concrete
- Reduces bleeding
- Improves cohesion of mixes which may normally be susceptible to segregation
- Air contents are less susceptible to variations in fine aggregates grading and silt content
- Good finishing characteristics
- Complies with Clause 4.5 BS 8500:2

APPLICATIONS

- Driveways and paths
- Concrete roads
- Yards and aprons
- Most other external ground slabs and paved areas
- Separate foaming admixtures can be used to produce low-density free flowing concretes and mortars

MORTAR



RETARDERS – A ready-to-use liquid mortar retarder for use in conjunction with mortar air entraining admixtures to produce set controlled, ready-to-use mortars. This product can also be used to produce set controlled screed.

FEATURES/BENEFITS

- Retardation can be controlled up to a period of 24-72 hours or as required
- Reduces bleeding
- Produces cohesive workable mortar
- Enhances finishing characteristics

APPLICATIONS

- Screed retarders
- Brick and block laying
- Internal first-coat plaster
- External render

AIR ENTRAINERS – Mortar air entrainers are high performance admixtures for use in the production of ready-to-use or dry silo mortar. They are normally used in conjunction with retarders or stabilisers.

FEATURES/BENEFITS

- Stable air system with minimum loss throughout the life of the plastic mortar
- Reduces bleeding
- Cohesive workable mortar
- Air contents are less susceptible to variations in fine aggregate grading and silt content

BLOCK AND SEMI-DRY



Admixtures used in semi-dry processes such as block, tile and pavior operations.

FEATURES/BENEFITS

- Increased strengths without the need for additional cement
- More uniform texture
- Shorter production/dispatch cycle
- Reduced mould wear
- Sharper edge details
- Reduced water absorption
- Reduced efflorescence
- Improved green strengths
- More uniform strengths

APPLICATIONS

- Block and tile making