

Betonex[®]

Plasticized Expanding Grout and Mortar Admixture

Uses

Betonex is an admixture for cementitious grouts where a reduced water/cement ratio and positive expansion is required. Applications include bed grouting, duct grouting, non-shrink infilling and jointing.

Advantages

- Gaseous expansion system compensates for plastic shrinkage and settlement in properly designed cementitious grout.
- Reduced water/cement ratio mixes in the grout mix ensures low permeability and long term durability in service.
- Gives high grout fluidity with low water/cement ratio, thus making placement or injection of the grout easy.
- No metallic iron content to corrode and cause staining or deterioration due to rust expansion in the grout.
- Composition allows high early strength development in grouts, without the use of chlorides.

Standards compliance

Betonex is a suitable pre-stressing grout admixture when complying with BS 8110, Part 1:1985, section 8.9.4.6.

Description

Betonex is supplied as a powder admixture. The material is a combination of a plasticizing agent and a gas producing expansion medium.

The plasticizing agent allows the use of a reduced water/cement ratio with consequent increased strengths and durability.

The expansive medium counteracts the natural settlement and plastic shrinkage of the grout and aids stability and cohesion.

Sufficient restrained expansion is developed to ensure a high degree of interfacial contact.

Typical dosage

The optimum dosage of Betonex to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use. The normal dosage range is 0.5 Kg/100 kg of cementitious material to achieve expansion up to 4%.

Properties

Appearance	Light Brown powder
Chloride	Nil to BS5075

Instructions for use

Compatibility:

Betonex is compatible with other Capco admixtures used in the same concrete mix. All admixtures should be added to the mix separately and must not be mixed together prior to addition. The resultant properties of mixes containing more than one admixture should be assessed by the trial mix procedure recommended on this data sheet. Betonex is suitable for use with all types of Portland cements and

cement replacement materials such as PFA, GGBFS and microsilica.

Dispensing:

The correct quantity of Betonex should be measured by means of a suitably accurate device; and then added to the mortar during the mixing process either by hand, or mechanically.

Limitations

Betonex is not compatible with High Alumina Cement (Portland cement type V).

Packaging

Betonex is available in 250 gr bags.

Storage

Betonex has a minimum shelf life of 12 months at 35°C if kept in a dry store in the original, unopened packs. The shelf life will be reduced at higher ambient temperatures.

Precautions

Health and safety:

Betonex is mildly alkaline and should not come into contact with skin and eyes. Avoid inhalation of dust during mixing. Gloves, goggles and dust mask should be worn. If contact with skin occurs, wash with water. Splashes to eyes should be washed immediately with plenty of clean water and medical advice sought.

Fire:

Betonex is non-flammable.